

United States Government Accountability Office

Report to the Chairman, Committee on Foreign Relations, U.S. Senate

September 2016

INTERNATIONAL CASH-BASED FOOD ASSISTANCE

USAID Has Established Processes to Monitor Cash and Voucher Projects, but Data Limitations Impede Evaluation

GAO Highlights

Highlights of GAO-16-819, a report to the Chairman, Committee on Foreign Relations, U.S. Senate

Why GAO Did This Study

For more than 60 years, the United States provided assistance to foodinsecure countries primarily in the form of food commodities procured in the United States and transported overseas. In recent years, the U.S. government has increasingly provided food assistance in the form of cash transfers or food vouchers. In fiscal years 2010 through 2015, USAID funding for Emergency Food Security Program (EFSP) for cash transfers and food voucher projects grew from about \$76 million to nearly \$432 million.

GAO was asked to review USAID's monitoring and evaluation of cashbased food assistance. This report examines, among other things, (1) USAID's and implementing partners' processes for monitoring cash transfer and food voucher projects and (2) the extent to which monitoring data reported to USAID can be used to evaluate the performance of such projects. GAO analyzed program data, interviewed relevant officials; and conducted fieldwork in Kenya and Liberia, selected on the basis of criteria such as funding and types of projects. GAO also reviewed the final reports for a nonprobability sample of closed cash transfer and food voucher projects.

What GAO Recommends

USAID should (1) take steps to ensure compliance with its requirements for data in final reports and (2) strengthen the indicators it uses to measure the timeliness, cost-effectiveness, and appropriateness of cash transfer and food voucher projects. USAID concurred with GAO's recommendations.

View GAO-16-819. For more information, contact Thomas Melito at (202) 512-9601 or MelitoT@gao.gov.

INTERNATIONAL CASH-BASED FOOD ASSISTANCE

USAID Has Established Processes to Monitor Cash and Voucher Projects, but Data Limitations Impede Evaluation

What GAO Found

The United States Agency for International Development (USAID) and its implementing partners have established processes to monitor cash transfer and food voucher projects. To monitor the implementation of these projects, USAID has assigned monitoring roles and responsibilities to staff, is developing country monitoring plans and monitoring tools, and is working to verify information that partners have provided through actions such as conducting site visits, and speaking with beneficiaries. To ensure that assistance is delivered according to their procedures and to the targeted beneficiaries, implementing partners monitor distributions, and interview beneficiaries regarding the distribution of the assistance. In addition, implementing partners conduct postdistribution surveys to gather information about the relevance, efficiency, and effectiveness of the assistance (see figure).

USAID Implementing Partner Representatives Surveying Beneficiaries of Cash Transfer Projects



Representative conducting a distribution survey for a cash transfer project in Liberia.

Source: GAO. | GAO-16-819



Representative conducting a postdistribution survey for a cash transfer project in Kenya.

Incomplete reporting and weaknesses in certain performance indicators limit USAID's ability to use monitoring data to evaluate cash transfer and food voucher projects' performance. GAO's review of 14 final reports, which USAID requires for each project, found that a majority of the reports lacked required data elements, such as prices for key staple foods. Only 1 report included all 12 required data elements, and the other reports were missing up to 8 elements. As a result, USAID has limited ability to assess the overall performance of these projects. Further, GAO found weaknesses in USAID's indicators for measuring cash and voucher projects' timeliness, cost-effectiveness, and appropriateness. USAID's indicator for timeliness does not track delays in implementation. In addition, the indicator for cost-effectiveness does not include a standardized unit for measuring project costs. Further, the indicator for project appropriateness does not have associated benchmarks for measuring cash transfer and food voucher projects' impact on local markets. As a result, USAID lacks information that would be useful for evaluating the projects' effectiveness relative to that of in-kind food aid. According to standards for internal control in the federal government, management should use quality information, including relevant data from reliable sources, to achieve an agency's objectives.

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Abbreviations

APS	Annual Program Statement
DCI	data collection instrument
DRC	Democratic Republic of the Congo
EFSP	Emergency Food Security Program
FFP	Office of Food for Peace
IDA	International Disaster Assistance
LRP	locally and regionally procured food aid
NGO	nongovernmental organization
USAID	U.S. Agency for International Development
WFP	World Food Programme

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W. Washington, DC 20548

September 20, 2016

The Honorable Bob Corker Chairman Committee on Foreign Relations United States Senate

Dear Mr. Chairman:

The United States is the largest donor of international food assistance to food-insecure countries around the world. In recent years, this assistance has been used to address food emergencies resulting from, among others, the Ebola crisis in West Africa, the Syria humanitarian crisis, and drought in countries stricken by the effects of El Niño. For more than 60 years, the United States provided this assistance primarily in the form of in-kind food aid (i.e., commodities purchased in the United States and transported overseas). More recently, the U.S. government has also provided several modalities of cash-based assistance: cash transfers and food vouchers, which recipients can use to purchase food on their own, as well as locally and regionally procured food aid (LRP).¹

According to the U.S. Agency for International Development's (USAID) Office of Food for Peace (FFP), which manages the majority of U.S. international food assistance, it uses cash-based assistance when, for example, U.S. in-kind assistance cannot arrive in time to respond to an emergency and when cash transfers or food vouchers may be more appropriate because of local market conditions and beneficiaries' preferences. In fiscal year 2015, FFP provided about \$432 million for cash transfer and food voucher projects through its emergency cashbased food assistance program, the Emergency Food Security Program (EFSP),² with funding from the International Disaster Assistance

¹This review focuses on cash transfers and food vouchers but does not review LRP. For a discussion of LRP, see GAO, *International Food Assistance: Local and Regional Procurement Can Enhance the Efficiency of U.S. Food Aid, but Challenges May Constrain Its Implementation*, GAO-09-570 (Washington, D.C.: May 29, 2009).

²In fiscal year 2015, FFP provided \$464 million for LRP projects through EFSP.

account.³ In the same year, USAID provided about \$1.07 billion for emergency food aid, primarily in-kind assistance, authorized by Title II of the Food for Peace Act.⁴ For fiscal year 2017, the administration has requested additional flexibility to respond to international food emergencies by expanding the use of cash-based assistance.

In light of proposals for U.S. food aid reform that call for expanded use of cash-based assistance, monitoring and evaluation are fundamental to assessing and demonstrating—with timely and credible evidence—the effectiveness of the various approaches that the United States employs to deliver such assistance.⁵ This is the second of two reports that you requested on USAID's use of cash transfers and food vouchers.⁶ In this report, we (1) examine USAID's and implementing partners' processes for monitoring cash transfer and food voucher projects; (2) analyze the extent to which monitoring data that partners reported to USAID can be used to evaluate the performance of such projects; and (3) review studies that examined the relative impacts of cash transfers, food vouchers, and food

⁵In this report, *monitoring* refers to the systematic collection of data to determine whether projects are implemented as intended and, by regularly tracking performance indicators, whether projects are achieving their expected outputs and targets. *Evaluation* refers to the review, on a periodic or ad hoc basis, of the extent to which a project's objectives are achieved as well as the factors that influenced outcome achievement.

⁶We published a previous report about cash transfer and food voucher assistance in March 2015. See GAO, *International Cash-Based Food Assistance: USAID Has Developed Processes for Initial Project Approval but Should Strengthen Financial Oversight*, GAO-15-328 (Washington, D.C.: Mar. 26, 2015).

³The International Disaster Assistance (IDA) account funds programs authorized by Chapter 9 of the Foreign Assistance Act of 1961, as amended (22 U.S.C. §2292 et seq.), and receives appropriations pursuant to annual appropriations acts for Foreign Operations. Appropriations for fiscal years 2013 through 2016 included Overseas Contingency Operations resources within IDA for the purpose of addressing humanitarian crises, including the Syria crisis.

⁴Title II expenditures are reauthorized through the Farm Bill approximately every 5 years and are funded through the U.S. Department of Agriculture's budget. Section 3001 of Pub. L. No. 110-246, the Food, Conservation, and Energy Act of 2008, changed the title of the underlying legislation from the Agriculture Trade Development Assistance Act of 1954 (also known as P.L. 480) to the Food for Peace Act. Title II of the Food for Peace Act, administered by USAID, addresses donation of agricultural commodities for humanitarian purposes. Other U.S. food assistance programs are administered through the U.S. Department of Agriculture, including Food for Peace Title I, Food for Progress, and the McGovern-Dole International Food for Education and Child Nutrition programs.

transfers⁷ on food security outcomes⁸ and the relative costs of these modalities.

To address our objectives, we analyzed data and reviewed documents provided by USAID and its implementing partners, including the United Nations World Food Programme (WFP) and selected nongovernmental organizations (NGO). We met in Washington, D.C., with USAID officials and with implementing partner officials representing NGOs that received USAID EFSP grants. We also met in Rome, Italy, with officials from WFP and the U.S. Mission to the United Nations. In addition, we visited Kenya and Liberia, where we conducted reviews of cash and voucher projects implemented by USAID partners in three countries—Kenya, Liberia, and Somalia. We selected these countries using criteria that included the amount of EFSP funding received, the type of project (cash transfer or food voucher), and the type of implementing partner. While in Kenya and Liberia, we met with USAID officials from the U.S. missions; with representatives of implementing partners, vendors, and financial institutions; and with beneficiaries, among others.9 In addition, we took the following steps to address each of our three objectives (see app. I for further details):

- To examine USAID's and implementing partners' monitoring of cash transfer and food voucher projects, we reviewed USAID's and implementing partners' activities and relevant documentation. We also interviewed seven FFP field officers from eight countries where EFSP cash transfer and food voucher projects were ongoing in fiscal year 2016.
- To analyze the extent to which reported data can be used to evaluate the performance of cash transfer and food voucher projects, we examined the final reports that implementing partners submitted to

⁷Food transfers may consist of in-kind food aid or LRP. The studies we reviewed did not distinguish between these modalities.

⁸In this report, "food security outcomes" includes the following eight outcome categories: value and volume of food, caloric intake, dietary diversity, food consumption score, nutrient number and levels, caloric value, experiential measures, and nutritional status. (See apps. I and II for details.)

⁹We interviewed staff from USAID and its implementing partners in Nairobi who had responsibility for oversight of the EFSP-funded operations in both Kenya and Somalia.

USAID for a sample of 14 projects. In each report, we reviewed data responding to minimum programmatic reporting requirements in USAID's 2013 Annual Program Statement (APS) and grant agreements. Because the 14 projects represent a nonprobability sample, our findings may not be generalized to all USAID EFSP projects. In addition, we reviewed the indicators and data USAID uses to measure cash transfer and food voucher projects' timeliness, cost effectiveness, and appropriateness—namely, time from award to distribution, cost per beneficiary, and food price data.

To review studies examining the relative impacts and costs of food assistance modalities, we searched the relevant literature and identified 14 rigorous studies¹⁰ that (1) compared cash transfers, food vouchers, food transfers with at least one other modality; (2) evaluated at least one food security outcome; and (3) considered food security outcomes by means of randomized control trials or groups, carefully selected comparison groups, or a quasi-experimental design that used statistical techniques to make precise comparisons. These studies—examining projects in Bangladesh, the Democratic Republic of the Congo (DRC), Ecuador, Ethiopia, Malawi, Mexico, Niger, Sri Lanka, Yemen, and Uganda—evaluated whether cash transfers, food vouchers, or food transfers were more successful in achieving intended impacts on food security outcomes in situations where at least two modalities were implemented and could be compared. Our review of the studies was not intended to assess any individual donor such as USAID, and thus the conclusions we analyzed cannot be inferred to assess the performance of USAID's projects. In addition, several of the projects examined were pilots conducted to assess the comparative performance of multiple modalities on household food security. We analyzed the 14 studies using a data collection instrument that examined the studies' design, quality, and major findings. Further, after determining that 11 of the 14 studies considered the modalities' costs, we reviewed those studies' conclusions regarding the least expensive modality.

We conducted this performance audit from June 2015 to September 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain

¹⁰We defined "rigorous studies" as those that either randomly assigned beneficiaries to recipient groups for each modality or that used statistical controls to simulate the effects of random assignment.

sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

In 2015, FFP provided EFSP funding for cash transfer and food voucher projects in 30 countries (see fig. 1). To deliver assistance through these projects, USAID's implementing partners employ a variety of mechanisms. These mechanisms include (1) distributing cash manually or electronically through accounts at banks or other financial institutions and (2) distributing paper or electronic food vouchers that entitle the holder to buy goods—typically, approved items from participating vendors—or services up to the voucher's designated cash value. The value of the cash transfers and food vouchers is generally based on a formula that attempts to bridge the gap between the beneficiaries' food needs and their capacity to meet those needs.



Figure 1: Countries Where USAID Funded Cash and Voucher Projects through the Emergency Food Security Program in Fiscal Year 2015 and Project Funding Levels for Fiscal Years 2010-2015

Source: GAO analysis of U.S. Agency for International Development (USAID) data; Map Resources (map). | GAO-16-819

Notes: In addition to awarding EFSP funding for cash and voucher projects from the International Disaster Assistance (IDA) account in fiscal years 2010 through 2015, USAID awarded funding from the IDA Overseas Contingency Operations in fiscal years 2013 through 2015 for programs in Yemen and to address the humanitarian crisis in Syria. Also, in fiscal years 2015, USAID awarded IDA funding made available in the Consolidated and Further Continuing Appropriations Act (Pub. L. No. 113-235) for response and preparedness to address emergency food security needs resulting from the Ebola outbreak.

	Additionally, in fiscal years 2010 through 2015, USAID funded the following EFSP regional awards for cash transfer and food voucher projects: (1) the Syria Regional Award, in countries hosting Syrian refugees—Egypt, Iraq, Jordan, Lebanon, and Turkey—awarded each year since 2012; (2) the Central America Drought Award—for Guatemala, El Salvador, and Honduras—awarded in 2014; and (3) the Ebola Regional Response—for Guinea, Sierra Leone, and Liberia—awarded in 2015.
USAID EFSP Funding since 2010	In fiscal years 2010 through 2015, USAID awarded EFSP grants totaling about \$3.27 billion, including \$1.42 billion for cash transfer and food voucher projects. Awards for such projects grew from about \$76 million in fiscal year 2010 to nearly \$432 million in fiscal year 2015 (see fig. 2). In fiscal years 2010 through 2015, awards for cash transfers increased from about \$42 million to approximately \$119 million, while awards for food vouchers increased from about \$34 million to approximately \$312 million. ¹¹ During the same period, USAID awards of Title II funding for emergency food aid—primarily in-kind assistance—decreased from about \$1.52 billion to approximately \$1.07 billion. ¹²

¹¹These awards included funding from IDA and the IDA Overseas Contingency Operations accounts.

¹²According to USAID, the decrease in awards of Title II funding for emergency food aid in fiscal years 2010 through 2015 reflects, in part, the fact that the funding appropriated through Title II for 2010 included a supplemental appropriation for the Haiti earthquake response while appropriations for subsequent years did not.





Source: GAO analysis of U.S. Agency for International Development (USAID) data. | GAO-16-819

USAID Requirements for Proposing Emergency Cash-Based Food Assistance Projects

Since 2010, USAID's APS for International Emergency Food Assistance has outlined agency requirements for EFSP cash-based food assistance proposals.¹³ The APS, which serves as a primary source of information for prospective applicants for EFSP grants, requires applicants to explain the rationale for the assistance modality they propose—cash transfer, food vouchers, LRP, in-kind food aid, or some combination of these modalities. Since 2011, the APS has required grant applicants to provide justification for a proposed project that includes cash-based assistance or

https://www.usaid.gov/sites/default/files/documents/1866/FY15%20APS%203-23.pdf.

¹³Since 2010, USAID has issued four versions of the EFSP APS (in 2010, 2011, 2013, and 2015). For the current APS, see U.S. Agency for International Development, Bureau for Democracy, Conflict, and Humanitarian Assistance, Office of Food for Peace, *Annual Program Statement for International Emergency Assistance*, Opportunity Number APS-FFP-15-000001 (Mar. 23, 2015), accessed July 5, 2016,

in-kind food aid, in terms of the project's timeliness, cost-effectiveness, or appropriateness.¹⁴

- Timeliness. Since 2011, the APS has required grant applicants to explain whether in-kind food aid or prepositioned stocks can arrive in a sufficiently timely manner through the regular ordering process to address urgent or emergency needs.¹⁵
- Cost-effectiveness. Since 2011, the APS has required grant applicants to provide cost-effectiveness information that affected their choice of modality. Further, according to the APS, in certain cases the cost of cash-based food assistance may be lower than that of in-kind assistance, while in other cases the difference may be negligible.
- Appropriateness. Since 2011, the APS has required grant applicants to explain why cash transfers or food vouchers, or both, may be more appropriate than in-kind food distributions. For example, potential beneficiaries may have physical access to functioning markets but lack sufficient purchasing power. (Fig. 3 shows other examples of reasons that EFSP grant applicants have cited for deeming cash transfer or food voucher projects to be most appropriate.) The 2015 APS states that, depending on market conditions, cash-based food assistance may be deemed more or less appropriate than in-kind food aid to address specific emergency food security needs. Since 2015, the APS has required applicants to justify their selection of either cash transfers or food vouchers as the preferred modality.

¹⁴*Cost-effectiveness* measures the extent to which a project may achieve, or has achieved, desired outcomes given available funds.

¹⁵Through prepositioning, USAID orders stocks of U.S. in-kind food commodities utilizing Title II resources before they are required and stores them in warehouses in several overseas and domestic locations in or near regions with historically high food needs. For more information, see GAO, *International Food Aid: Prepositioning Speeds Delivery of Emergency Aid, but Additional Monitoring of Time Frames and Costs Is Needed*, GAO-14-277 (Washington, D.C.: Mar. 5, 2014).

Figure 3: Examples of Reasons Cited by USAID Implementing Partners for Deeming Cash Transfers or Food Vouchers to Be More Appropriate Than In-kind Food Distributions

Market conditions: Partners may determine that local markets are functioning and beneficiaries have physical access to markets but they lack sufficient purchasing power.



Liberia

After the outbreak of the Ebola virus, Liberia faced an economic slowdown and disruption in food production. Although local markets started to recover after the government reopened borders and lifted curfews, demand remained low. One implementing partner determined that cash was the most appropriate modality because it could provide beneficiaries with income to purchase food while the markets recovered.

Host government policy: Partners may weigh the receptiveness of the host government towards the type of assistance that is proposed for a given situation.



Jordan, Lebanon, and Palestine

In Jordan, Lebanon, and Palestine, 13 partners coordinated a joint effort to provide cash-based assistance to Syrian refugees and vulnerable Palestinian populations. According to one partner, host government officials preferred food vouchers to cash transfers because vouchers would better complement their own national social safety net platforms, favor local economies, and align with immediate security concerns, among other reasons. Beneficiary preference and protection: Partners consider the preferences of the beneficiaries and whether the choice of one particular modality over another could put beneficiaries at risk.



Niger

After four food crises since 2000, northern Niger has been food insecure due to poor harvests and a reduction in livestock. An implementing partner determined that vouchers were the most appropriate modality because of local preference and the desire to support local food vendors through local procurement. According to the partner, beneficiaries preferred vouchers because they could be used only for food, removing the temptation and pressure to use the assistance for other purposes such as paying for rent or other household expenses.

Source: GAO. | GAO-16-819

USAID released a draft revision of the APS in May 2016 for public comment; according to USAID officials, the revised version will be finalized in the autumn of 2016. The draft APS requires grant applicants proposing EFSP projects to provide a justification that addresses how market appropriateness, feasibility, project objectives, and cost-efficiency influenced the modality selection. According to the draft APS, when addressing how feasibility influenced the selection of the assistance modality, applicants are to consider the time-sensitive nature of the emergency, including availability of rapid-response options such as prepositioned commodities or prenegotiated cash transfer or voucher response mechanisms.

USAID Monitoring Requirements for Cash Transfer and Food Voucher Projects

Monitoring and evaluation perform two separate but interrelated functions. Monitoring is the collection of data to determine whether projects are being implemented as intended and the tracking of progress with preselected indicators throughout the life of a project. Data collected through monitoring can be used by project managers to make incremental changes and adjustments to project implementation. Evaluations consist of ad hoc or periodic studies to assess whether and how projects achieved their expected goals. An evaluation may also identify outcomes that can be attributed to the project and may assess the project's costeffectiveness. Evaluations may rely on a range of quantitative and qualitative measures in addition to preselected indicators, comprehensive research designs, and appropriate statistical analysis of data, including data collected through monitoring activities. Results of evaluations can provide program managers with critical evidence for future program design.

USAID's APS contains monitoring and evaluation–related requirements for cash transfer and food voucher grant applications as well as minimum reporting requirements for data in projects' final reports.¹⁶

 Requirements for grant applications. Since 2010, the APS has required grant applications to include a monitoring and evaluation plan. In addition, the 2015 APS required that the monitoring and evaluation plan include a logical framework showing the causal linkages between activities, outputs, outcomes, and goals; identify assumptions and potential risks that are critical to the success of a project; and specify key indicators with proposed targets to track the project's performance. In 2015, the APS also began requiring grant applicants to plan and budget for a baseline survey and a final evaluation survey for projects that propose an implementation period of greater than 12 months. Under the 2015 APS, such projects that

¹⁶In addition, USAID officials told us that EFSP award agreements require implementing partners to immediately report on any issues and problems affecting the project. Specifically, they noted that EFSP award agreements require implementing partners to submit notifications of (1) developments that have a significant impact on the activities supported by the agreement; and (2) problems, delays, or adverse conditions that materially impair the ability to meet the objectives of the agreement. The notifications are to include a statement of the action taken or contemplated and any assistance needed to resolve the problem. Further, USAID officials noted that the agreements require partners to investigate, document, and notify the agency of any loss, damage, or theft to equipment or agricultural commodities.

include activities to influence beneficiary behaviors must also include at least one high-level food security or nutrition outcome indicator for each project purpose.

Minimum reporting requirements for project final reports. Since 2010, the APS has required implementing partners to submit final reports containing monitoring data that meet minimum programmatic reporting requirements.¹⁷ The reports are to include data on the number of beneficiaries targeted and reached: the cost per beneficiary; retail price information on key staples (before, during, and after project implementation); and the actual number and value of cash transfers or food vouchers distributed and redeemed by beneficiaries. The reports are also to include information about beneficiaries' use of resources provided through cash transfer projects. In addition, since 2011, the APS has required that final reports include the time from donor-signed agreement to first distribution; a description of how the program addressed gender needs; the planned number and value of cash transfers or food vouchers distributed to, and redeemed by, beneficiaries; and information on the types and quantities of commodities they procured with food vouchers. Further, in 2015, USAID began requiring final reports to include the average cost per beneficiary per month for each modality as well as learning on the appropriateness of selected modalities.

¹⁷The APS also requires implementing partners to submit interim reports. Under the 2010 APS, interim reports were due on a 6-month basis for any project with a duration exceeding 6 months. However, in 2011, USAID began requiring interim reports on a quarterly basis (typically due within 30 days after the end of each calendar quarter, unless the reporting period ends before 45 days from the effective date of the award or less than 1 month from the estimated completion date of the award). In the 2013 APS, USAID changed the due date from within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a calendar quarter to within 30 days after the end of a fiscal year quarter. Prior to the 2015 APS, USAID had not established data reporting requirements for interim reports. We did not review interim reports for cash transfer or food voucher projects.

USAID and Implementing Partners Have Established Processes for Monitoring Cash and Voucher Projects	USAID has established a process for monitoring implementation of EFSP cash transfer and food voucher projects by assigning monitoring roles and responsibilities to headquarters and in-country mission staff, developing country monitoring plans, and developing tools to assist its field staff. USAID's process includes actions such as visiting distribution and project sites, speaking with beneficiaries and retailers, and meeting regularly with partners' in-country staff. Implementing partners have established processes to monitor cash and voucher projects during and after distributions of assistance. To ensure that assistance is delivered according to their procedures and to the targeted beneficiaries, implementing partners monitor distributions and interview beneficiaries about the distribution process. In addition, implementing partners conduct postdistribution surveys to gather information about the relevance, efficiency, and effectiveness of the assistance.
USAID Has Established a Process to Monitor Implementation of Cash and Voucher Projects	USAID has assigned monitoring roles and responsibilities to headquarters and in-country mission staff. According to USAID officials, FFP grant officers, in headquarters, are primarily responsible for reviewing implementing partners' quarterly and final reports. ¹⁸ The grant officers are additionally responsible for meeting with implementing partner headquarter officials to discuss project progress and performance. Also, FFP's Monitoring and Evaluation Team is responsible for developing monitoring tools, standards, guidance, implementing partner reporting requirements, and providing training for FFP officers and implementing partners who are responsible for monitoring cash and voucher projects. ¹⁹ The FFP field officers are primarily responsible for verifying information provided by implementing partners, communicating regularly with implementing partners in country, and providing grant officers with information on project progress and performance. The seven FFP field officers we interviewed told us that they conduct various monitoring activities to verify information that partners provide, such as visiting distribution and project sites, completing site visit reports,
	¹⁸ In this report, "grant officers" refers to agreement officers' representatives and FFP

¹⁸In this report, "grant officers" refers to agreement officers' representatives and FFP country backstop officers based in Washington, D.C.

¹⁹According to USAID officials, FFP's 10-person Monitoring and Evaluation Team includes 4 staff based in Washington, D.C., and 6 staff at overseas regional missions.

speaking with beneficiaries and retailers, and meeting regularly with partners' in-country staff.²⁰ In addition, the FFP field officers said they discuss the results of their monitoring efforts and site visit reports with the grant officers on a regular basis. To aid FFP field officers in conducting site visits, the FFP Monitoring and Evaluation Team, in 2015, developed a monitoring tool that includes sample questions for FFP officers to consider when making site visit observations and to ask respondents during monitoring visits. The tool is organized by type of respondent (i.e., implementing partner staff, beneficiaries, service providers, and retailers or market vendors), and the information collected is used to complete trip reports. According to FFP officials, as of December 2015, the Monitoring and Evaluation Team had shared the tool with every USAID field office.

To ensure regular monitoring of all FFP programs in a country, the FFP Monitoring and Evaluation Team began training FFP field officers in developing country monitoring plans in 2014, according to USAID officials. Agency officials said the country monitoring plans use a riskbased approach to prioritize the monitoring of country projects across the FFP portfolio (including EFSP and Title II projects), to establish the number of site visits per month and year, to determine which monitoring activities to conduct, and to allocate staff resources. In addition, USAID officials said they plan to institute a requirement that FFP officers in missions with FFP programs must complete country monitoring plans and report periodically on progress in implementing objectives identified in the country monitoring plan. As of June 2016, USAID had developed monitoring plans for 26 of 28 countries.²¹ According to the FFP officers we spoke with, country monitoring plans have helped them prioritize monitoring site visits for both Title II and EFSP projects despite challenges such as limited embassy resources (e.g., motor-pool availability and staffing shortfalls), adverse operating conditions (e.g., road closures or weather), and security concerns. According to USAID officials, to mitigate security-related constraints, FFP has awarded

²⁰We conducted interviews with seven FFP country officers who were responsible for monitoring EFSP projects in Haiti, Jordan, Kenya, Liberia, Mali, Niger, Somalia, and Syria.

²¹According to FFP officials, monitoring plans have been developed for Burkina Faso, the Central African Republic, Chad, the Democratic Republic of the Congo, Djibouti, Egypt, Ethiopia, Guatemala, Iraq, Jordan, Kenya, Lebanon, Liberia, Madagascar, Malawi, Mali, Mauritania, Nepal, Niger, Senegal, Sierra Leone, South Sudan, Sudan, Syria, Turkey, and Zimbabwe.

	contracts to third-party monitors in countries where USAID has limited access. For example, for Somalia, USAID contracted with a third-party monitor to verify project activities and conduct post-distribution surveys on a monthly basis for 20 percent of the project sites. According to a representative of the monitor, it uses a risk-based approach to monitoring, prioritizing site visits and rotating the sites visited on a monthly basis.
Implementing Partners Have Established Processes to Monitor Cash and Voucher Projects during and after Distribution of Assistance	To monitor projects and collect required information, implementing partners have established processes to monitor activities during and after distributions of EFSP cash transfer and food voucher projects. ²² • <i>Distribution monitoring</i> . According to implementing partner representatives for projects in Kenya, Liberia, and Somalia, their monitoring processes include observing distribution processes to ensure that the cash transfers and food vouchers are delivered according to standard procedures, for the stated purposes, and to targeted beneficiaries. The representatives said that during distribution, monitors collect information on the actual number of beneficiaries served, the actual transfer value provided, the timing of the distribution, and beneficiary participation by gender and age. They also collect information about the distribution site and other aspects of the distribution process, such as queue management, waiting time, beneficiary verifications, access, security, and safety. In addition, implementing partner monitors may speak with beneficiaries about their satisfaction with the distribution process. Implementing partners also monitor financial service providers to ensure that their implementation of the cash transfer is according to plan. In addition, implementing partner representatives monitor the voucher process at the vendor or retailers' level.

Figure 4 shows implementing partner representatives conducting distribution monitoring for a cash transfer project in Liberia.

²²USAID requires implementing partners to monitor implementation of cash transfer and food voucher projects and to report required data elements in final reports.

Figure 4: Implementing Partner Representatives Conducting Distribution Monitoring for a USAID Emergency Food Security Program Cash Transfer Project in Liberia



Implementing partner representative verifying that a beneficiary received the planned amount of cash transfer assistance.

Implementing partner representative interviewing beneficiaries about the cash transfer distribution process.

Source: GAO. | GAO-16-819

Postdistribution monitoring. According to implementing partner representatives for programs in Kenya, Liberia, and Somalia, their processes include surveying beneficiaries and non-beneficiaries at their residences after the assistance is distributed. According to the implementing partners, postdistribution surveys are one of the main information sources for assessing the relevance, efficiency, and effectiveness of the assistance provided. During the surveys, implementing partner representatives gather information about beneficiary households, including, among others, income, expenditures, food security outcomes, coping strategies, perceived problems with the assistance, and modality preferences. In addition, implementing partner representatives said their processes also include monitoring markets after distributions by sampling traders, shops, and markets for changes in commodity prices. Further, for food voucher projects, implementing partner representatives for the project in Somalia said that they also monitor vendors or retailers to collect information on food voucher use and availability of commodities, accuracy of commodity price displays, and to determine if the food vouchers are used for intended purposes.

We observed implementing partner representatives using technology and tools that may enhance the collection and analysis of monitoring data. For example, implementing partner representatives for the project in Somalia, based in Nairobi, Kenya, were using beneficiary management systems to register beneficiaries and were remotely monitoring beneficiary purchases and redemptions, and vendor sales and activities, for an EFSP food voucher project in Somalia.²³ In Kenya and Liberia, we observed representatives of implementing partners for projects in those countries using mobile devices with standardized forms to conduct on-site distribution monitoring, postdistribution monitoring, and market monitoring surveys (see fig. 5). Implementing partner representatives showed us the tablets and standardized forms they use for collecting monitoring information for their projects in Somalia. According to the implementing partners, using this technology enables rapid aggregation and analysis of the data collected. We also observed implementing partner representatives conducting remote phone-based surveys with beneficiaries for projects in Kenya and Somalia. The survey included a short series of questions on household food consumption and coping strategies. Further, the implementing partners established hotlines in Kenya and Somalia for beneficiaries to provide feedback, including complaints, about project implementation and the assistance provided.

²³We met with, and observed, WFP Somalia representatives at WFP's Somalia Office in Nairobi, Kenya, where they were remotely monitoring activities for an EFSP voucher project in Somalia. U.S. government travel restrictions prevented us from visiting project sites in Somalia. (See app. I for more information.)

Figure 5: Implementing Partner Representatives Conducting Postdistribution Monitoring for USAID Emergency Food Security Program Cash Transfer Projects in Kenya



Implementing partner representative using a tablet to conduct postdistribution monitoring.

Implementing partner representative conducting postdistribution monitoring through a phone-based survey.

Source: GAO. | GAO-16-819

Data Gaps and Indicator Weaknesses Limit USAID's Ability to Evaluate the Performance of Cash and Voucher Projects

Incomplete reporting of data that USAID requires, as well as weaknesses in USAID's performance indicators, limits the agency's ability to evaluate the projects' performance. Our review of the final reports for 14 cash transfer and food voucher projects found that most of the reports lacked some of the required data that are necessary for performance evaluation. In addition, the indicators that USAID uses to assess projects' timeliness, cost-effectiveness, and appropriateness—three criteria that it considers in approving grant applications—have weaknesses. For example, USAID's indicator for timeliness does not capture delays in actual implementation against what was planned. Moreover, USAID's indicator for costeffectiveness—cost per beneficiary—does not produce data that can be compared across projects or modalities, because it does not include a standardized unit for measuring costs. Additionally, USAID has not set a benchmark for assessing market appropriateness based on market prices. These limitations affect USAID's ability not only to evaluate the overall performance of cash transfer and food voucher programs but also to learn from experience and make informed decisions on future projects.

Most Final Reports We Reviewed Lacked Required Data about Project Performance

Our review of the final reports submitted for the 14 cash transfer and food voucher projects found that most of the reports lacked some data about the projects' performance that USAID's APS required. According to USAID officials, implementing partners may have communicated the missing information through other means, such as during meetings or in e-mails or quarterly reports; however, the 2013 APS, to which the projects were subject, required partners to submit the information in their projects' final report. The APS required the final report for each project to include the number of beneficiaries targeted and reached, disaggregated by sex and age, and to verify that the program assessed and addressed gender needs and issues. In addition, the APS required the final report to list the planned and actual number and value of food vouchers or cash transfers that implementing partners distributed and beneficiaries redeemed. Further, the APS required the final report to include information on how the beneficiaries used cash transfers as well as information on the types and quantities of commodities that beneficiaries procured with food vouchers. Finally, the APS required the final report to include data that the agency will use to measure projects' overall performance in terms of timeliness, cost-effectiveness, and appropriateness: the time from donorsigned agreement to first distribution to beneficiaries; the cost per beneficiary; and retail price information on key staples in the area of the program before, during, and after the distribution.

While most of the 14 final reports that we reviewed included most of the required data on project beneficiaries, only 1 report, for a food voucher project in Sudan, included all 12 data elements required by USAID; the other reports lacked up to 8 of the required elements. Figure 6 shows the required data elements that were included in the 14 final reports that we reviewed.

Figure 6: Required Data Included in Final Reports for 14 USAID Emergency Food Security Program Cash Transfer and Food Voucher Projects, Fiscal Years 2013-2014

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Final report	Burundi	Chad-1	Chad-2	DRC	Haiti	Philippines	Somalia-1	Somalia-2	Somalia-3	Somalia-4	Somalia-5	Sudan	Yemen	Zimbabwe
Data on beneficiaries														
Beneficiaries targeted		۲				\bigcirc		۲		0				۲
Beneficiaries reached						۲		۲						
Beneficiaries' sex														
Beneficiaries' age		\bigcirc				\bigcirc	\bigcirc	\bigcirc						
Gender needs assessed and addressed	۲	0	۲	0		۲	O	۲		۲		۲	۲	0
Data on assistance distributed and re	deemed		1	1	1					1	1	1	1	
Planned value of cash transfer or number of food vouchers distributed	\bigcirc				0	0	0	0	0	0			۲	۲
Actual value of cash transfer or number of food vouchers distributed	\bigcirc					۲		\bigcirc		۲		۲		
Actual value of cash transfer or number of food vouchers redeemed	\bigcirc	0			0	0	O	0	0	0			0	
Commodities purchased with cash or voucher ^a	\bigcirc	\bigcirc	\bigcirc		\bigcirc	\bigcirc	\bigcirc	\bigcirc			\bigcirc		\bigcirc	
Data on timeliness, cost-effectiveness	s, and app	propriatene	ess											
Timeliness: Time from award to distribution	\bigcirc	0	0		0	0	0	0	0	0	0	۲	0	0
Cost-effectiveness: Cost per beneficiary	۲		0		0	۲	O	0	0				0	
Appropriateness: Retail price information (before, during, and after)	\bigcirc	0	0	0	0	\bigcirc	O	0	0	0			0	0
Cash transfer project				·	d data ele ed data ele		DRC	: Demo	cratic Rep	oublic of C	ongo			

Both cash transfer and food voucher project

Source: GAO analysis of U.S. Agency for International Development's (USAID) implementing partners final reports for cash transfer and food voucher projects. | GAO-16-819

Notes: We reviewed 14 final reports for cash transfer and food voucher projects in, respectively, Burundi, Chad (two projects), the Democratic Republic of the Congo (DRC), Haiti, the Philippines, Somalia (five projects), Sudan, Yemen, and Zimbabwe.

The data elements shown are those that USAID's 2013 Annual Program Statement requires implementing partners to include in final reports for Emergency Food Security Program cash transfer and food voucher projects.

^aIncludes required information on beneficiaries' use of cash transfers and on the types and quantities of commodities beneficiaries procured with food vouchers.

Data on beneficiaries. All 14 final reports that we reviewed included data on the number of beneficiaries reached, although several reports were missing other required data about the beneficiaries who received the cash transfers or food vouchers. The reports indicated that cash transfer or food voucher projects reached almost 926,000 beneficiaries in Burundi, Chad, the DRC, Haiti, the Philippines, Somalia, Sudan, Yemen, and Zimbabwe. Two reports did not list the number of beneficiaries targeted by the project. In the 12 reports that listed these data, our analysis found that 9 of the 12 projects reached or exceeded their target numbers. However, 4 reports did not enumerate beneficiaries by age range and 4 reports did not describe how gender needs were assessed and addressed, as USAID requires.²⁴

Data on assistance distributed and redeemed. Half of the 14 reports we reviewed did not list the planned value of cash transfers or the number of food vouchers distributed as the APS requires. Only 5 reports—for projects in Chad, DRC, Somalia, Sudan, and Zimbabwe—included all required information about the actual number and value of cash transfers or food vouchers distributed and redeemed. Further, of the 4 final reports for cash transfer projects, only 1 report included the required information about beneficiaries' use of the transferred cash. Of the 8 final reports for commodities that beneficiaries procured with their vouchers. Only 1 of 2 projects that comprised both cash transfer and food vouchers included the required information on the beneficiaries' use of the cash and types and on quantities of commodities procured with the vouchers.

Data on timeliness, cost-effectiveness, and appropriateness. Most of the 14 reports we reviewed were missing required data that USAID uses to analyze the timeliness, cost-effectiveness, and appropriateness of cash transfer or food voucher projects.

²⁴The 2013 APS defined beneficiaries age ranges as (1) 6 to 23 months, (2) 23 to 59 months, (3) 5 to 18 years, and (4) greater than or equal to 18 years.

	• <i>Timeliness.</i> Twelve of the 14 reports did not list the number of days from the award agreement date to the cash transfer or food voucher distribution date. In addition, 5 of the 14 reports did not list the first date of distribution, making it difficult to determine the time from the partner's signing of the agreement with USAID to the first distribution of the cash transfers or food vouchers. We requested any data that implementing partners had submitted through other documents, such as e-mails or quarterly reports; however, USAID did not provide such data.
	• <i>Cost-effectiveness.</i> Six of the 14 final reports did not list a cost per beneficiary as required by USAID. According to a country officer, the final report for one project excluded the cost per beneficiary because the project, which was jointly funded by FFP and the Office of U.S. Foreign Disaster Assistance (OFDA), used an OFDA award mechanism that does not require this calculation.
	• Appropriateness. Twelve of the 14 final reports did not list retail price information on key staples in the area of the program before, during, and after the cash transfer or food voucher distribution as required by USAID. Some of the 12 reports listed commodity prices during distributions but did not list the prices 2 weeks before the program began or 2 weeks after it ended. According to USAID, country officers do not request additional price data from partners if there is no evidence of projects' having a negative impact on the local market.
USAID's Current Indicators for Assessing Cash and Voucher Projects' Timeliness, Cost- Effectiveness, and Appropriateness Have	USAID's indicators for measuring cash transfer and food voucher projects' timeliness, cost-effectiveness, and appropriateness have weaknesses that limit the agency's ability to evaluate these aspects of projects' performance. ²⁵ USAID's indicator for timeliness produces data that show how quickly the distribution occurs after the award agreement is signed; however, the indicator does not compare actual and planned distribution schedules, which would identify delays in project

implementation. Moreover, USAID's indicator for cost-effectiveness does not produce data that can be compared across projects or modalities,

Weaknesses

²⁵USAID's APS requires that proposals for projects that include cash-based or in-kind food assistance, or a combination of modalities, provide justification for the proposed modality in terms of timeliness, cost-effectiveness, or appropriateness. The APS also requires implementing partners for such projects to report data for the indicators that USAID uses to evaluate the projects' timeliness, cost-effectiveness, and appropriateness after implementation.

because it does not include a standardized unit for measuring costs. Further, USAID does not have a benchmark for the market appropriateness indicators that measure the impact of cash or voucher assistance on local markets. According to federal standards for internal control, management should use quality information, including relevant data from reliable sources, to achieve an agency's objectives.²⁶ As a result of the weaknesses in these indicators, USAID and its implementing partners have limited ability to fully evaluate cash transfer and food voucher projects' timeliness, cost-effectiveness, and appropriateness and may miss opportunities to learn from past experiences to improve the program.

The indicator that USAID and its implementing partners use to assess cash transfer and food voucher projects' timeliness provides a measure of how guickly assistance is delivered after an award is signed, but it does not systematically capture any delays in project implementation. Since 2011, USAID's APS has required that the final report for each cash transfer and food voucher project include, as an indicator of the project's timeliness, the number of days between grant approval and distribution of assistance. According to USAID officials, the agency uses this measure to determine how guickly assistance can be provided under different modalities. USAID also told us that it considers the duration of time between award and first distribution, based on the proposed project timeline, as a general indicator of implementing partners' initial progress in starting a project. USAID officials noted that anecdotal evidence suggests that the number of days between grant approval and first distribution of assistance has generally decreased for cash transfer and food voucher projects.

The number of days between grant approval and first distribution of assistance does not register delays in project implementation—an important aspect of timeliness, since delays in implementing cash and voucher projects can have a severe impact on beneficiaries who rely on the assistance for their livelihood. USAID does not systematically collect data that would show cash transfer and food voucher project delays, such as the planned dates of distribution for comparison with the actual dates.

USAID's Indicator for Timeliness Does Not Track Implementation Delays

²⁶See GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sept. 10, 2014).

Since 2011, the APS has not required partners to list in their final reports the planned date of first distribution, which appears in the implementing partner's award proposal. Delays have been noted for many EFSP projects. For example, a recent USAID Inspector General report compared the planned and actual distribution dates for four cash transfer and food voucher projects in West Africa during the Ebola response and concluded that delays in distribution—resulting from delays in award approvals and challenges in staff recruitment and coordination—averaged 3 months.²⁷ We requested and obtained the planned first-distribution dates for the 14 cash transfer and food voucher projects we reviewed and then compared the planned dates with the actual dates listed in the projects' final reports. We found that for 7 of the 14 projects, first distribution of assistance was delayed by an average of 2 months.²⁸

The indicator that USAID uses to measure the cost-effectiveness of cash transfer and food voucher projects does not include a standardized unit for measuring cost. As a result, USAID is unable to use the cost data it collects to assess the relative cost-effectiveness of its EFSP cash transfer and food voucher projects or to compare the cost-effectiveness of such projects with that of projects that used other modalities. Since 2011, USAID's APS has required that the final report for each cash or voucher project include, as an indicator of cost-effectiveness, the cost per beneficiary. This cost is calculated by dividing the aggregate cost of providing assistance by the actual number of beneficiaries of a cash transfer or food voucher project.

We found that in the 8 final reports that listed the cash transfer or food voucher project's cost per beneficiary—USAID's indicator for costeffectiveness—the reported costs could not be used to compare the projects' cost-effectiveness because the cost units were not standardized. In these 8 reports, the reported costs ranged widely, from \$10 to \$219 per beneficiary. According to USAID, per-beneficiary costs may range widely for a number of reasons, including variance in the size of the transfers,

USAID's Indicator for Cost-Effectiveness Does Not Produce Comparable Data

²⁷U.S. Agency for International Development, Office of Inspector General, *Audit of Select Activities from the USAID/Food for Peace Response to the Ebola Crisis in West Africa*, Audit Report No. 7-962-16-003-P (Dakar, Senegal: Mar. 16, 2016).

²⁸Reasons for delays noted in final reports include, among others, lack of expertise and capacity, and changes in government procedures.

the frequency of the transfers, the presence of complementary services, the overall scale of the projects, and overhead costs for each project. For example, given economies of scale, a project that prints vouchers for 50,000 beneficiaries may have lower overhead costs than a project that prints vouchers for 10,000. Also, indirect costs, such as for security or transportation, may be higher for projects that require additional security or are located in remote, less accessible districts. In addition, according to an implementing partner responsible for a cash transfer project and a food voucher project in Liberia, its cost-per-beneficiary calculation for the voucher project did not include indirect costs because they were included in its calculation for the cash transfer project. USAID officials acknowledged that without a standardized cost unit, partners have applied different methods to calculate the cost per beneficiary for cash transfer and food voucher projects.

To weigh the cost-effectiveness of various food aid modalities during project design, one of USAID's implementing partners, the United Nations World Food Programme (WFP), uses a method that compares different modalities' costs for delivering the same numbers of calories and for delivering the same nutritional values.²⁹ Using this method—known as the Omega tool analysis-to compare potential costs, WFP determined that in Burkina Faso and Niger, food transfers could deliver the same nutritional value at a lower cost than cash transfers or food vouchers. However, WFP's analysis show that in both cases, combining modalities could deliver the same nutritional value at a lower cost than using a single modality. In Senegal, WFP determined that food vouchers or a combination of food transfers and cash transfers or food vouchers could deliver the same nutritional value at a lower cost than food transfers. According to WFP officials, as of July 2016, WFP had used this tool while designing projects in 24 countries and plans to rely on this tool to assess cost-efficiency and cost-effectiveness.³⁰ WFP officials also noted that

²⁹The nutritional value is a numeric calculation of the energy from macronutrients, such as protein, and micronutrients, such as iron and vitamins, either in the in-kind food rations or in the commodities that beneficiaries are expected to purchase with the cash or voucher they receive.

³⁰Cost-efficiency comparisons assess the costs or inputs that two or more interventions use to achieve the same outputs. Cost-effectiveness comparisons assess the extent to which two or more interventions achieve the desired outcome with the same amount of funding.

WFP's country offices planned to use this tool to validate cost-efficiency assumptions at the close of programs.

According to a USAID official, the agency is considering revising the APS to require grant applicants to use the cost of a food ration for cash-based and in-kind food aid projects when estimating potential cost-effectiveness. The official indicated that the change is intended to standardize methods for justifying proposed projects on the basis of cost-effectiveness. The draft version of the APS that USAID released for public comment in May 2016 provides more explicit parameters for estimating cost-effectiveness that could enable the agency to compare proposed modalities during the application process.

USAID has not required implementing partners to establish benchmarks for measuring cash transfer and food voucher projects' impact on prices in local markets—an indicator it uses to measure the projects' appropriateness. Since 2010, the APS has required that implementing partners' final reports include retail price information on key staples in the area around the project before the project begins, monthly during the project, and after the project ends. However, USAID has not required the partners to establish any associated benchmarks for this indicator and as a result, USAID and implementing partners may not be able to assess whether market price fluctuations are within acceptable ranges.

> Implementing partners are using different thresholds to assess market impact. For example, WFP's policy is to reassess the value of the assistance provided if prices for staple foods fluctuate by 10 percent or more. According to WFP officials, WFP may also change the assistance modality as a result of price fluctuations. Representatives of other implementing partners told us that they reassess project implementation when prices fluctuate by 20 percent or more. Implementing partner representatives also stated that, because of a lack of guidance on this topic, they were unsure of how USAID assesses the market information they submit. As of the end of June 2016, USAID's draft revisions to the APS included a reference to market monitoring guidance for implementing partners. According to this guidance, implementing partners are to set price thresholds as a basis for determining when price changes must be investigated and explained. The guidance also states that when prices increase or decrease beyond this set parameter, the change should be flagged and the cause should be investigated. The draft revisions to the APS also require partners to include market analysis information and any significant changes in their guarterly and final project

USAID's Indicator for Cash and Voucher Projects' Appropriateness Lacks Associated Benchmarks for Market Impact

	reports. The draft revisions to the APS do not explicitly require partners to report the price thresholds in their final reports.
Studies Showed Cash, Vouchers, and Food Transfers Can Improve Food Security, and Contextual Factors May Explain Impact Variations	Our review of 14 rigorous studies of the relative impacts of cash transfers, food vouchers, and food transfers found the studies demonstrate that all three modalities can improve food security outcomes for people facing food emergencies. ³¹ The modalities' impacts on food security outcomes varied by study, with no modality consistently outperforming the others. Contextual factors, such as the severity of the food crisis and the capacity of local markets, may have contributed to this variation. Studies that compared the relative costs of the three modalities generally reported that cash transfers were least expensive, although most of the studies did not account for the full costs associated with the modalities.

³¹For our analysis, we grouped the metrics that the 14 studies used into eight food security outcome categories: value and volume of food, caloric intake, dietary diversity, food consumption score, nutrient numbers and levels, caloric value, experiential measures, and nutritional status. Each study assessed one to six of these outcomes—an average of about three outcomes per study. (See app. II for further details, including the metrics that each outcome category comprised.)

Studies Demonstrated That All Three Modalities Can Improve Food Security Outcomes

Among the studies we reviewed, those comparing recipients of cash transfers, food vouchers, and food transfers with control groups of individuals who received no assistance demonstrated that all three modalities can lead to significant improvements in dietary quantity and quality.³² For example, a study in Ecuador found that, compared with the control group, all recipients of cash transfers, food vouchers, and food transfers experienced significantly improved outcomes in terms of the value and volume of food consumed, caloric intake, and dietary diversity. Similarly, a study in Bangladesh found that all recipients of cash transfers, food transfers, or combinations of the two modalities experienced significantly improved outcomes for value and volume of food and for caloric intake.

Eight of the 14 studies we reviewed included control groups, which allowed us to compare food security outcomes for recipients of cash transfers, food vouchers, or food transfers with outcomes for groups of individuals that did not receive any type of assistance. Among 6 studies that used control groups to examine the value and volume of food provided, 5 studies showed statistically significant improvements as a result of receiving all three types of assistance. Similarly, 3 of 6 studies that used control groups to examine caloric intake also found statistically significant improvements for all three modalities.

³²While our systematic review considered rigorous impact evaluations that compared outcomes by modalities, another body of literature examines the performance of cash transfer and food voucher projects relative to the projects' goals and targets. For example, one 2012 study examined fresh food voucher programs in Bolivia, Kenya, Haiti, Pakistan, and the Palestinian territories. This study concluded that the voucher programs generally met their goals of increasing dietary diversity for beneficiaries, but noted some challenges in the information available to program managers. See Kerren Hedlund et al., Meta-Evaluation of ACF Fresh Food Voucher Programmes, funded through the Cash Learning Partnership and the European Commission on Humanitarian Aid and Civil Protection (ACF International, January 2012). Another study that examined cash transfer and food voucher programs in Somalia found that, despite operating under difficult conditions, households that received both types of assistance were able to purchase food, increase the number of meals consumed each day, and increase dietary diversity. This study also reported on concerns regarding corruption and the diversion of the assistance and made recommendations to reduce these risks. See Sophia Dunn, Mike Brewin, and Aues Scek, Cash and Voucher Monitoring Group: Final Monitoring Report of the Somalia Cash and Voucher Transfer Programme (London: Humanitarian Policy Group, Overseas Development Institute, 2014).

	The studies showed that all three assistance modalities generally led to significantly improved outcomes for the most frequently assessed outcomes in the studies—value and volume of food consumed, caloric intake, and dietary quality. However, the results for some other outcomes were mixed. In particular, 3 of the 4 studies that considered nutritional status showed some modalities leading to significant improvements, while the fourth study showed no modality leading to significant improvements.
Studies Showed the Modalities Had Varying Impacts on Food Security Outcomes	Our analysis of the 14 studies comparing the impacts of cash transfers, food vouchers, and food transfers on food security outcomes found that the modalities' performance varied by study and project. Moreover, none of the three modalities consistently outperformed the others. Contextual differences among the projects may have contributed to the variations in the modalities' impacts. (For detailed results of our literature review, see app. II.)
Modality Performance Varied by Study, and No Modality Consistently Outperformed the Others	Our review of the 14 studies found that the impacts of the modalities on food security outcomes varied by study. For example, the study of the project in Yemen reported that recipients of the cash transfers bought a wider range and higher value of food items, showing that cash transfers provided significantly greater improvements in dietary quality than did food transfers. The Yemen study also found that food transfers provided higher levels of caloric intake than did cash transfers, which the study's authors attributed to the relatively inexpensive staples, such as wheat and oil, included in the food transfers.
	In contrast, a study of a project in Niger found that food transfers resulted in significantly greater improvements in dietary quality than did cash transfers, indicating that, in this instance, food transfers provided a more varied and higher-quality diet. This finding was attributed to the fact that cash recipients in Niger bought significantly cheaper bulk grains with their transfers than food recipients. The study authors determined that the cash beneficiaries purchased these cheap bulk grains in anticipation of seasonal price increases—essentially stocking up on supplies for the "hungry" season. As a result, the food recipients, who relied on the food transfers provided by the project, had a more varied and higher-quality diet.
	In some instances, a modality significantly outperformed one or both of the other modalities for a particular outcome in some countries but not in others. For example, studies of projects in Niger, Sri Lanka, Uganda, and Yemen showed that cash transfers had a greater impact on the value and

	volume of food than food transfers had, but studies of projects in Bangladesh, the DRC, Ecuador, and Mexico showed that the three modalities had comparable impacts on this outcome. Moreover, a study of a project in Niger comparing the impacts of the three modalities found that food transfers provided the greatest dietary diversity, while studies of projects in Malawi, Uganda, and Yemen found that cash transfers provided greater dietary diversity than food transfers. The DRC and Ecuador studies did not find that any modality had a consistently and significantly greater impact on dietary diversity.
Differences in Modality Impacts Were Often Not Statistically Significant	In 11 of the 14 studies, some of the differences in modalities' impacts on food security outcomes were not statistically significant and therefore may have resulted by chance. For example, the study of the Ecuador project found that cash transfers, food vouchers, and food transfers all led to improvements in beneficiaries' dietary diversity. ³³ While statistically significant compared with the control group, the improvements that resulted from each of the three modalities were not statistically different from each other across the metrics studied. Similarly, a study of a project in Mexico noted that both cash transfers and food transfers increased the value and volume of food consumed, and levels of nutrients, with statistically insignificant differences in the two modalities' impacts.
Contextual Factors May Help Explain Variations in Modality Impacts	While we could not determine precisely why the three modalities' impacts varied in the studies we reviewed, contextual differences in the projects the studies examined may help explain such variation. According to researchers we spoke with, the effectiveness of cash transfers, food vouchers, and food transfers are heavily influenced by contextual factors such as the severity of the food crisis, beneficiaries' specific needs when projects began, changes in market prices, and the projects' designs.
	While each of the 14 studies we reviewed controlled for multiple factors when comparing the modalities' impacts on food security outcomes, we noted numerous contextual differences among the evaluated projects that may have contributed to variation in these impacts. The projects' purposes and goals ranged from providing disaster relief to responding to seasonal food emergencies, aiding displaced persons, addressing long-

³³This study considered two metrics for dietary diversity: the household dietary diversity score and the dietary diversity index.

standing emergencies, or helping achieve development objectives. In addition, the projects varied in factors such as the value and frequency of the transfers and whether the assistance was conditional or unconditional. For example, a study in Sri Lanka examined a 3-month project that took place in tsunami-affected regions of the country. The study found that cash transfers had a greater impact than food transfers on dietary quantity. However, its findings are difficult to apply to many other situations because of the post-tsunami conditions that prevailed, the relatively short duration of the emergency relief project, and some unevenness in the frequency of food transfers relative to cash transfers.³⁴

Changes in markets and prices can affect the modalities' relative impacts on food security outcomes. For example, a study of a project in Ethiopia found that both food transfers and a mixture of food and cash transfers significantly outperformed cash-only transfers in reducing the periods of time when beneficiaries experienced food shortages. However, the study's authors noted that the project took place during a period of high food-price inflation that considerably reduced the value of the cash transfers compared with that of the food transfers.³⁵

Moreover, differences in projects' design—specifically, whether the project provided any assistance in addition to the food or cash transfers may have contributed to variation in the modalities' impacts. For example, a study of a project in Bangladesh concluded that aspects of project design, and in particular the use of complementary programs designed to achieve project outcomes, were associated with the greatest impacts. This study found that modalities combined with complementary programs that provided guidance and training on nutrition significantly outperformed cash transfers, food vouchers, and food transfers that were not combined with complementary programs. According to the study's authors, these results help demonstrate that food security outcomes can be improved by including complementary programs designed to achieve those objectives

³⁴This study also reported that the cash transfers led to greater dietary diversity than the food transfers. However, as this finding was not based on a recognized dietary diversity index, Table 1 in app. II does not record this study as formally addressing dietary diversity.

³⁵Table 1 classifies the experiential measure for the project in Ethiopia as "comparable" because the outcomes for food and the mix of food and cash were not statistically different from each other.

and that these improvements occur when such programs are combined with any of the three modalities.

Studies Generally Reported Cash Transfers Were Least Expensive, but Fewer Than Half Considered Full Costs Among the 14 studies we reviewed, 11 considered the relative costs of cash transfers, food vouchers, and food transfers.³⁶ Seven of these 11 studies reported that cash transfers were least expensive, while 1 study reported that food transfers were least expensive. Of the 3 remaining studies that considered the modalities' relative costs, 1 study did not identify the least expensive modality and the other 2 studies had mixed results, depending on the method used to estimate costs.³⁷ The studies considered costs for a range of activities related to delivering the assistance, such as administration, staffing, banking for cash transfers, production for food vouchers, and storage and transportation for food transfers. However, only 3 of the 11 studies considered not only the activity costs related to delivering the assistance but also the costs of purchasing food.

³⁶A number of additional studies have also considered the relative costs of each modality, using a variety of frameworks. For example, a 2015 report comparing the cost-efficiency and cost-effectiveness of food vouchers and in-kind food assistance in Syria concluded that vouchers were more cost-efficient and cost-effective. See Shannon Doocy and Hannah Tappis, Emergency Transfers in Northern Syria: An Economic Evaluation of GOAL food Assistance Projects (Baltimore, MD: The Johns Hopkins University, 2015). Doocy and Tappis defined cost-efficiency as the average administrative cost of a modality per beneficiary per household per month and cost-effectiveness as the cost of each percentage point increase in the number of households that report having sufficient food. Moreover, a January 2016 report by the European Commission's Humanitarian Aid and Civil Protection Department used measures of cost-effectiveness and cost-efficiency to compare cash, vouchers, and in-kind assistance across 163 humanitarian aid projects funded by the European Commission from 2011 through 2014. The report concluded that cash was typically more cost-efficient than food or vouchers. This study defined "costefficient" as less costly per person served and "cost-effective" as less costly per unit of benefit achieved. See Nick Maunder et al., "Evaluation of the Use of Different Transfer Modalities in ECHO Humanitarian Aid Actions 2011-2014," commissioned by the European Commission (January 2016). (See app. III for a list of these additional studies.)

³⁷One of these two studies measured cost-efficiency for five outcomes and found that cash transfers were least expensive for one outcome, food vouchers were least expensive for the four other outcomes, and food transfers were most expensive for all outcomes. See Melissa Hidrobo et al., "Cash, Food, or Vouchers? Evidence from a Randomized Experiment in Northern Ecuador," *Journal of Development Economics*, vol. 107 (2014): 144-156. The other study found that cash transfers were most cost-effective and food transfers were most cost-efficient. See Ahkter Ahmed et al., *Comparing Food and Cash Transfers to the Ultra Poor in Bangladesh*, Research Monograph 163 (Washington, D.C.: International Food Policy Research Institute, 2009).
The three studies that considered the costs of purchasing food reached varying conclusions about the modalities' overall relative costs. One study, of a project in Niger, found that food transfers were least expensive overall. Another study, of a project in Malawi, reported mixed results, finding that cash was more cost-effective but food transfers were more cost-efficient. The third study, of a project in Bangladesh, did not clearly identify the least expensive modality.³⁸

According to researchers, food transfers may be the least expensive modality overall if market conditions allow implementing partners to purchase food at prices low enough to offset the costs of delivering it, since these costs are usually higher than the costs of delivering cash transfers or food vouchers. For example, in some situations, implementing partners' savings from purchasing large amounts of food wholesale—that is, for considerably lower prices than beneficiaries would pay in their local markets—could offset the higher costs of delivering the food.³⁹

Conclusions

With USAID's additional flexibility to choose among modalities of food assistance, the ability to demonstrate the performance of each modality is of increasing importance. Monitoring and evaluation are essential to assessing and demonstrating, with timely and credible evidence, the

³⁹One of the researchers we interviewed noted that it is difficult to establish the equivalency of commodities bought internationally for food transfers with the commodities that beneficiaries normally purchase in their local markets, which makes it challenging to compare the cost-efficiency of different modalities. Another researcher we interviewed has noted that a number of factors affect the comparative cost-efficiency of cash transfers, food vouchers, and food transfers, including the scale of the intervention, the type of humanitarian crisis, delivery mechanisms, transfer size, and procurement costs.

³⁸A 2014 article by Amy Margolies and John Hoddinott examined in greater detail the costs for projects in Ecuador, Niger, Uganda, and Yemen that were the focus of four of the studies we reviewed. Considering only the costs of specific activities related to implementing the projects, the article's authors determined that these costs were lower for cash transfers than for either food vouchers or food transfers in all four countries. However, considering purchasing costs as well as activity costs for the projects in Ecuador and Yemen, the authors reached varying conclusions. For the project in Ecuador, they found cash transfers to be least expensive to deliver and also least expensive overall. For the project in Yemen, they found food transfers to be least expensive overall. See Amy Margolies and John Hoddinott, "Costing Alternative Transfer Modalities," *Journal of Development Effectiveness* (2014): 1-16. Two of the rigorous studies we reviewed did not include purchasing cost data for the projects in Ecuador and Yemen.

	effectiveness of the various modalities employed to deliver assistance, including cash transfers and food vouchers. USAID and its implementing partners have established processes to monitor EFSP cash transfer and food voucher projects. Specifically, USAID has assigned roles and responsibilities and developed monitoring plans and tools to aid FFP field officers who conduct site-visits and meet with implementing partners. Further, implementing partners have developed processes to monitor the effectiveness of their projects through distribution and postdistribution monitoring. However, the incompleteness of required information about project performance in partners' final reports limits USAID's ability to assess whether EFSP cash and voucher projects met their performance goals. In addition, weaknesses in USAID's indicators for measuring EFSP cash transfer and food voucher projects' timeliness, cost, and appropriateness—criteria that USAID considers in approving the projects—limit the extent to which reported data can demonstrate the effectiveness of such projects and be used to evaluate the performance of cash and vouchers relative to in-kind food aid.
	USAID will ensure access to information about each implemented project that it can use in planning future projects—including selecting the appropriate modality—and will help USAID optimize its efforts to respond to continuing food emergencies around the world.
Recommendations for Executive Action	To strengthen USAID's monitoring and evaluation of cash transfer and food voucher projects and help ensure improved program oversight of these projects, we recommend that the USAID Administrator take the following two actions:
	 Take steps to ensure that final reports submitted for cash transfer and food voucher projects comply with USAID's minimum data requirements.
	 Strengthen the indicators USAID uses to measure the timeliness, cost-effectiveness, and appropriateness of EFSP cash transfer and food voucher projects.

Agency Comments and Our Evaluation	We provided a draft of this report to USAID, which provided both written and technical comments. In its written comments, reproduced in appendix IV, USAID agreed with our findings and recommendations. Regarding our first recommendation, USAID agreed to standardize data collected in final reporting by soliciting and hiring program support officers for each of its geographic teams. Regarding our second recommendation, USAID agreed to improve indicators to ensure evaluation and comparison across its emergency food assistance portfolio by updating these indictors in its forthcoming <i>Annual Program Statement for International Emergency Food</i> <i>Assistance</i> . We incorporated USAID's technical comments as appropriate.					
	We are sending copies of this report to the appropriate congressional committees; the Administrator of USAID; and the Secretary of State. The report is also available at no charge on GAO's website at http://www.gao.gov.					
	If you or your staff have any questions about this report, please contact me at (202) 512-9601 or melitot@gao.gov. Contact points for our Offices of Congressional Relations and of Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix V.					
	Sincerely yours,					
	Thomas M					
	Thomas Melito Director, International Affairs and Trade					

Appendix I: Objectives, Scope and Methodology

In this report, we (1) examine the U.S. Agency for International Development's (USAID) and implementing partners' processes for monitoring cash transfer and food voucher projects; (2) analyze the extent to which monitoring data that partners reported to USAID can be used to evaluate the performance of such projects; and (3) review studies that examined the relative impacts of cash transfers, food vouchers, and food transfers on food security outcomes and the relative cost of these modalities.

To address these objectives, we analyzed data and reviewed program documents provided by USAID and its implementing partners for Emergency Food Security Program (EFSP) cash transfer and food voucher projects, including the United Nations World Food Programme (WFP) and nongovernmental organizations (NGOs). We met in Washington, D.C., with USAID officials and with implementing partner officials representing NGOs that received USAID EFSP grants, and we met in Rome, Italy, with officials from WFP and the U.S. Mission to the UN. In addition, we visited Kenya and Liberia, where we reviewed projects that were under way in Kenya, Liberia, and Somalia. We selected these projects using criteria that included the amount of EFSP funding, the type of project (cash transfer or food voucher), and the implementing partner. While in Kenya and Liberia, we met with USAID officials from the U.S. missions; representatives of implementing partners, vendors, and financial institutions; and project beneficiaries, among others.¹

To examine USAID's and implementing partners' processes for monitoring EFSP cash and voucher projects, we reviewed activities that USAID and implementing partners, including WFP and NGOs, undertook. We also reviewed relevant program documents that they provided, such as award agreements, project quarterly and final reports, market monitoring tools, site visit reports, and results of distribution surveys. We interviewed USAID officials in Washington, D.C., including award agreement officers, country backstop officers, and members of FFP's monitoring and evaluation team, among others. We also interviewed FFP regional monitoring officers located in Dakar, Senegal, and in Nairobi, Kenya, and we interviewed FFP field officers responsible for monitoring

¹We interviewed staff from USAID and its implementing partners in Nairobi who had responsibility for oversight and implementation of the EFSP-funded operations in both Kenya and Somalia.

cash and voucher projects in eight countries. In addition, we met in Washington, D.C., with implementing partner officials representing NGOs that were awarded USAID EFSP grants and in Rome, Italy, with officials from WFP and the U.S. Mission to the UN. Further, we visited Kenya and Liberia, where we reviewed EFSP-funded cash and voucher projects under way in Kenya, Liberia, and Somalia. In Kenya and Liberia, we also visited project sites, observed implementing partners conducting monitoring activities, and met with beneficiaries of projects in those countries.²

To examine the extent to which reported data can be used to evaluate the performance of cash transfer and food voucher projects, we reviewed USAID's 2013 Annual Program Statement (APS) for International Emergency Food Assistance and grant agreements for final reporting requirements. In addition, we reviewed 14 final reports that implementing partners submitted to USAID for, respectively, four cash transfer projects, eight food voucher projects, and two projects with both cash transfer and food voucher components. We selected these projects using the following criteria, intended to ensure a diverse sample of implementing partners: (1) the funding was awarded for NGO projects in fiscal years 2013 and 2014 or for WFP projects in fiscal year 2014,³ all of which were subject to USAID's 2013 APS; (2) the award was at least \$2 million for NGO projects or at least \$3 million for WFP projects;⁴ and (3) the projects closed by October 31, 2015. Of the 36 NGO projects funded in fiscal vears 2013 and 2014. 22 received awards of at least \$2 million: of these. only 11 were closed by October 31, 2015, and therefore were included in our review. Of the 18 WFP projects funded in fiscal year 2014, 7 received awards of at least \$3 million; of these 7 projects, only 3 were closed by October 31, 2015, and therefore were included in our review. Because the 14 projects represent a nonprobability sample, our findings may not be generalizable to all USAID EFSP programs. We reviewed the APS and grant agreements to identify minimum programmatic reporting

²U.S. government travel restrictions prevented us from visiting project sites and meeting with beneficiaries in Somalia.

³To ensure that the sample represented a broader range of organizations, we selected NGO projects that received funding in 2 fiscal years.

⁴We set a higher funding threshold for WFP projects than for NGO projects to ensure that WFP's projects were not overrepresented in our sample.

requirements, and we reviewed the final reports for the 14 selected projects for data responding to these requirements. In addition, we reviewed the 14 final reports for data and the indicators that USAID uses to measure cash transfer and food voucher projects' timeliness, costeffectiveness, and appropriateness—namely, time from award to first distribution, cost per beneficiary, and food price data. We met with USAID officials in Washington, D.C., to discuss APS requirements, implementing partner reports, and the quality of indicators.

To review studies' conclusions about the relative impacts of cash transfers, food vouchers, and food transfers on food security and the modalities' relative costs, we took the following steps:

To identify relevant studies, we (1) considered prior reviews of rigorous evaluations related to cash-based humanitarian assistance and food security; (2) conducted our own search of literature using appropriate terms; (3) and asked six researchers who had conducted prior reviews of rigorous evaluations whether they knew of any additional evaluations. We screened the studies identified by these sources to determine whether any of the studies met the following criteria: (1) compared cash transfers, food vouchers, or food transfers⁵ with at least one other modality; (2) evaluated at least one food security outcome; and (3) considered food security outcomes by means of randomized control trials or groups, carefully selected comparison groups, or a guasi-experimental design that used statistical techniques to make precise comparisons. This process resulted in our selecting 14 rigorous studies,⁶ made public since 2006, that evaluated whether cash transfers, food vouchers, or food transfers were more successful in achieving intended impacts on food security outcomes in situations where at least two modalities were implemented and could be compared. These 14 studies examined projects in 10 countries: Bangladesh, the Democratic Republic of the Congo, Ecuador, Ethiopia, Malawi, Mexico, Niger, Sri Lanka, Yemen, and Uganda. (See app. II for a list of these studies.)

⁵Food transfers may consist of in-kind aid or LRP. The studies we reviewed did not distinguish between these modalities.

⁶We defined studies as "rigorous" that either randomly assigned beneficiaries to recipient groups for each modality or that used statistical controls to simulate the effects of random assignment.

- To review the 14 studies we selected, we used a data collection instrument (DCI) designed to examine the studies' design, quality, and major findings. (App. II lists the studies we reviewed and provides a detailed summary of the results of our review.)
- We developed the following eight key food security outcomes based on our analysis of the metrics in the 14 selected studies and on our discussions with researchers with relevant expertise: value and volume of food, caloric intake, dietary diversity, food consumption score, nutrient number and levels, caloric value, experiential measures, and nutritional status. We reviewed each study's results to determine whether any modality demonstrated a statistically significant improvement in one or more of these outcomes compared with the other modality, or modalities, that the study examined. Two independent analysts used the DCI to review the studies, discussing and reconciling any differences in their initial assessments. In some instances, studies presented the results for several metrics for the same outcome, such as a household dietary diversity score and a household dietary diversity index. In those instances, our decision rule was that one modality had to demonstrate a statistically significant improvement over all other modalities examined for all metrics that the outcome comprised. If this criterion was not met, we determined that the modalities' impacts were comparable. We did not consider results for subpopulations, such as by region, income group, gender, or age range, except when results for a particular outcome were reported only for a subpopulation. We also did not consider impacts on factors that did not gualify as costs or food security outcomes, such as beneficiaries' income, assets, and overall consumption. When examining findings about dietary diversity, we relied on indices and metrics that had been created for this purpose; we did not assess results for individual food groupings, as these varied greatly between studies and did not lend themselves to the overall methodology that we employed. (App. II summarizes the results of our review.) The researchers who helped us identify relevant studies that met our criteria generally stated that they believed the 14 studies we selected constituted a reasonable body of evidence that no one modality significantly outperforms the other and that all modalities can lead to improvements in food security. However, one researcher reported that the evidence base does not allow for generalizable conclusions about the situations in which specific modalities are most appropriate.
- We also considered whether the 14 studies examined the relative costs of the modalities, and in the studies that did, we considered which modality was found to be least expensive at delivering the same level of assistance. The studies employed a variety of data and

methods to estimate relative costs. For example, some studies examined cost-efficiency, others examined cost-effectiveness, and still others examined both. In addition, some studies used a costing method adapted from the health economics field that involves identifying the costs of specific "activities" required to implement a modality, such as staffing, banking, and production. Meanwhile, three studies comparing cash and food transfers examined the costs of both delivering the modalities and purchasing the food beneficiaries consumed. If more than one method was used to estimate costs in a study, we considered the results for all methods used and reported that one modality was the least expensive only if all methods used found it so. Otherwise, we reported that the results were mixed. In one instance, a study examined four projects in one country: one project provided food transfers, another provided cash transfers, and two others provided a mix of cash and food transfers. This study examined both the costs and the cost-efficiency of the transfers. In that instance, because the results differed by project and method used, we could not determine which modality was least expensive.

Our review of the 14 studies was not intended to assess any individual donor such as USAID and thus the conclusions we analyzed cannot be inferred to assess the performance of USAID's projects. In addition, several of the projects examined were pilots conducted to assess the comparative performance of food and cash on household food security.

The projects that the studies examined varied in terms of contextual factors such as the projects' purposes and goals, projects' design and outcomes examined. While the studies demonstrate that no modality consistently outperformed the others across a range of settings and situations, this variance does not allow us to determine the precise conditions in which one modality might outperform the others. To obtain context and background, we also considered additional studies on cash-based assistance that did not meet our criteria for inclusion in our systematic review but provided insights into projects that used cash transfers, food vouchers, food transfers, or a combination of these modalities. (See app. III for a list of these additional studies.)

We conducted this performance audit from June 2015 to September 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Summary Results of GAO Literature Review

Table 1 summarizes the results of our review of 14 studies that rigorously compared impacts of cash transfers, food vouchers, or food transfers on selected food security outcomes. (See app. I for a description of our methodology for this review.)

Table 1: Results of GAO Review of 14 Studies Comparing Impacts of Cash Transfers, Food Vouchers, and Food Transfers on Selected Food Security Outcomes

Study details					Modality found to have greatest impact on selected food security outcomes ^a								
					Dietary quantity		Dietary quality						
Project location	Year⁵	Study authors	Modalities examined	Control group	Value and volume of food ^c	Caloric intake ^d	Dietary diversity ^e	Food consumption score ^f	Nutrient number and levels ^g	Caloric value ^h	Experiential measures ⁱ	Nutritional status ^j	
Bangladesh	2009	Ahmed et al. ^k	Cash, food, mixed	No	Comp	Comp	—	_		_		Comp	
Bangladesh	2016	Ahmed et al. ^k	Cash, food, mixed	Yes	Comp	Comp	—	Comp	_	Comp	Comp	Comp	
DRC	2015	Aker	Cash, vouchers	No	Comp	_	Comp	_	_		Comp	—	
Ecuador	2012	Hidrobo et al. ^k	Cash, food, vouchers	Yes	Comp	Comp	Comp	Comp	_	Comp	_	—	
Ethiopia	2010	Sabates-Wheeler	Cash, food, mixed	Yes	—	—	—	—	—	_	Comp	—	
Malawi	2010	Audsley et al.	Cash, food	No		—	Cash	Cash	_	_		_	
Mexico ^l	2008	Skoufias et al.	Cash, food	Yes	Comp	_	_			_		_	
Mexico	2010	Leroy et al.	Cash, food	Yes	_	Food	_	—	Comp	_	—	_	
Mexico ^l	2014	Cunha	Cash, food	Yes	Comp	Comp	_	—	Comp	_	_	Comp	
Niger	2014	Hoddinottt et al. ^k	Cash, food	No	Cash	_	Food	Food	_	_	Food	_	
Niger	2014	Langendor ^f et al.	Cash, food, mixed	No	—	—	—	_		_		Mixed	
Sri Lanka	2006	Sharma ^k	Cash, food	Yes	Cash	Comp	_					_	

Study details					Modality found to have greatest impact on selected food security outcomes ^a								
					Dietary o	juantity		Dietary	quality				
Project location	Year⁵	Study authors	Modalities examined	Control group	Value and volume of food ^c	Caloric intake ^d	Dietary diversity ^e	Food consumption score ^f	Nutrient number and levels ⁹	Caloric value ^h	Experiential measures ⁱ	Nutritional status ^j	
Yemen	2013	Schwab ^k	Cash, food	No	Cash	Food	Cash	Cash			Comp	—	
Uganda	2013	Gilligan et al. ^k	Cash, food	Yes	Cash	Cash	Cash	Cash	_	_	—	Comp	

Legend: Cash = cash transfers, Comp = comparable, DRC = Democratic Republic of the Congo, Food = food transfers, Mixed = mixture of cash transfers and food transfers, Vouchers = food vouchers.

Source: GAO analysis of selected studies. | GAO-16-819

Note: For our review, we selected studies that randomly assigned beneficiaries to a recipient group for each modality examined or that used statistical controls to simulate the effects of random assignment. (See app. I for further details of our methodology.)

^aFor each study, (1) the modality found to produce the most significant improvement in the food security outcome; (2) "Comp" if no modality produced a statistically significant improvement for all metrics included in the outcome relative to the other modalities examined; or (3) "—" if the study did not consider the food security outcome.

^bYear study was published or, if unpublished, year presented or dated.

^cReflects the value of food consumption, food expenditures, the value of food purchased, the quantity of food consumed, bulk grain purchases and the number of meals per day.

^dIncludes measures of calories consumed as well as metrics based on the number of beneficiaries consuming more or less than certain numbers of calories per day.

^eIncludes indices and scores developed to measure the number of different food groups consumed.

^fReflects both diversity of diet and frequency of food consumption, as well as metrics on the number of beneficiaries with food consumption scores above or below certain levels.

^gLevels of minerals or vitamins.

^hMeasure of the quality of food consumed.

ⁱReflect beneficiaries' experiences, such as hunger coping strategies and periods when they have or lack of food.

¹Includes measures of factors such as beneficiaries' body mass, prevalence of anemia, and stunting.

^kAffiliated with the International Food Policy Research Institute.

¹Used data from the Food Support Program (Programa Apoyo Alimentario) in southern Mexico.

The following are the 14 rigorous studies that we reviewed.

- Ahmed, Akhter, Agnes Quisumbing, Mahuba Nasreen, John Hoddinott, and Elizabeth Bryan. *Comparing Food and Cash Transfers to the Ultra Poor in Bangladesh.* Research Monograph 163. Washington, D.C.: International Food Policy Research Institute, 2009.
- Ahmed, Akhter, John Hoddinott, Amy Margolies, Wahidur Quabili, Shalini Roy, and Esha Sraboni. "Which Kinds of Social Safety Net Transfers Work Best for the Rural Ultra Poor in Bangladesh? Operation and Impacts of the Transfer Modality Research Initiative." International Food Policy Research Institute and World Food Programme, 2016.
- Aker, Jenny. Cash or Coupons? Testing the Impacts of Cash versus Vouchers in the Democratic Republic of Congo. Working Paper 320. Washington, D.C.: Center for Global Development, 2013.
- Audsley, Blake, Niels Balzer, and Rikka Halme. "Comparing the Efficiency of Cash and Food Transfers: A Cost-Benefit Analysis from Rural Malawi." *In Revolution: From Food Aid to Food Assistance. Innovations in Overcoming Hunger,* edited by Steven Were Omamo, Ugo Gentilini, and Susanna Sandström. Rome: World Food Programme, 2010.
- Cunha, Jesse. "Testing Paternalism: Cash versus In-kind Transfers." *American Economic Journal: Applied Economics*, vol. 6, no. 2 (2014): 195-230.
- Gilligan, Daniel, Amy Margolies, Estaban Quinones, and Shalini Roy. *Impact Evaluation of Cash and Food Transfers at Early Childhood Development Centers in Karamoja, Uganda.* Final Impact Report. Washington, D.C.: International Food Policy Research Institute, 2013.
- Hidrobo, Melissa, John Hoddinott, Amber Peterman, Amy Margolies, and Vanessa Moeira. "Cash, Food, or Vouchers? Evidence from a Randomized Experiment in Northern Ecuador." *Journal of Development Economics*, vol. 107 (2014): 144-156.

- 8. Hoddinott, John, Susanna Sandström, and Joanna Upton. "The Impact of Cash and Food Transfers: Evidence from a Randomized Intervention in Niger." Discussion Paper 1341. Washington, D.C.: International Food Policy Research Institute, 2014.
- Langendorf, Céline, Thomas Roederer, Saskia de Pee, Denise Brown, Stéphane Doyon, Abdoul-Aziz Mamaty, Lynda W. M. Touré, Mahamane Manzo, and Rebecca F. Grais. "Preventing Acute Malnutrition among Young Children in Crises: A Prospective Intervention Study in Niger." *PLOS Medicine*, vol. 11, no. 9 (2014): 2-15.
- Leroy, Jef, Paola Gadsden, Sonia Rodriguez-Ramirez, and Teresa Gonzáles de Cossío. "Cash and In-kind Transfers in Poor Rural Communities and Mexico Increase Household Fruit, Vegetable, and Micronutrient Consumption but Also Lead to Excess Energy Consumption." *Journal of Nutrition*, vol. 140, no. 3 (2010): 612-617.
- Sabates-Wheeler, Rachel, and Stephen Devereux. "Cash Transfers and High Food Prices: Explaining Outcomes on Ethiopia's Productive Safety Net Programme." *Food Policy*, vol. 35, no. 4 (2010): 274-285.
- 12. Schwab, Benjamin. "In the Form of Bread? A Randomized Comparison of Cash and Food Transfers in Yemen." Paper presented at the 2013 Agricultural & Applied Economics Association's & Canadian Agricultural Economics Society Joint Annual Meeting, Washington, D.C., August 2013.
- Sharma, Manohar P. An Assessment of the Effects of the Cash Transfer Pilot Project on Household Consumption Patterns in Tsunami-Affected Areas of Sri Lanka. Washington, D.C.: International Food Policy Research Institute, 2006.
- Skoufias, Emmanuel, Mishel Unar, and Teresa González-Cossío. The Impacts of Cash and In-Kind Transfers on Consumption and Labor Supply: Experimental Evidence from Rural Mexico. Policy Research Working Paper 4778. Washington, D.C.: World Bank, 2008.

Appendix III: Additional Studies Examining Food Aid Modalities

In addition to reviewing 14 rigorous studies that compared the impacts of cash transfers, food vouchers, and food transfers on food security outcomes, we consulted the following 23 studies for insights into projects that included one or more of these modalities.¹ In some cases, these studies examined large-scale cash transfer or food voucher projects or the relative costs of the modalities and were recommended by food security researchers we interviewed.

- 1. Attanasio, David, Erich Battistin, and Alice Mesanard. "Food and Cash Transfer: Evidence from Colombia." *The Economic Journal*, vol. 122 (March 2011): 92-124.
- Bailey, Sarah, and Paul Harvey. "State of Evidence on Humanitarian Cash Transfer." Background note for the High Level Panel on Humanitarian Cash Transfers, Overseas Development Institute. March 2015.
- Bailey, Sarah, and Sophie Pongracz. "Humanitarian Cash Transfers: Cost, Value for Money and Economic Impact." Background note for the High Level Panel on Humanitarian Cash Transfers, Overseas Development Institute. March 2015.
- 4. Creti, Pantaleo. *The Impact of Cash Transfers on Local Markets: A Case Study of Unstructured Markets in Northern Uganda.* Cash Learning Partnership, April 2010.
- 5. Creti, Pantaleo. *The Voucher Programme in the Gaza Strip: Mid-Term Review (Final Report)*. Commissioned by the World Food Programme and Oxfam, United Kingdom, 2011.
- De Sardan, Jean Pierre, Hannatou Adamou, Oumarou Hamani, Younoussi Issa, Nana Issaley, and Issaka Oumarou. "Cash Transfers in Niger: The Manna, the Norms and the Suspicions." Translation of a paper undertaken by LASDEL and originally published in French. 2013.

¹The additional 23 studies did not meet the criteria we used to select the 14 rigorous studies. See app. I for details on our selection criteria and app. II for a list of the 14 rigorous studies we reviewed.

- 7. Doocy, Shannon, and Hannah Tappis. *Cash-Based Approaches in Humanitarian Emergencies: A Systematic Review*. Funded by the U.K.'s Department of International Development (DFID). Johns Hopkins. 2015.
- 8. Doocy, Shannon, Emily Lyle, and Hanna Teppis. *Emergency Transfers in Northern Syria. An Economic Evaluation of GOAL Food Assistance Programs in Idleb Governorate.* Johns Hopkins, Bloomberg School of Public Health, September 2015.
- 9. Dunn, Sophia, Mike Brewin, and Aues Scek. *Cash and Voucher Monitoring Group: Final Monitoring Report of the Somalia Cash and Voucher Transfer Programme.* London: Humanitarian Policy Group, Overseas Development Institute, 2014.
- Gentilini, Ugo. Our Daily Bread: What is the Evidence on Comparing Cash versus Food Transfers? Social Protection & Labor Discussion Paper No. 1420. Washington, D.C.: World Bank Group, July 2014.
- Gentilini, Ugo. "Revisiting the 'Cash vs. Food' Debate: New Evidence for an Old Puzzle." *World Bank Research Observer*, vol. 31 (2016): 135-167.
- 12. Gentilini, Ugo. *The Other Side of the Coin: The Comparative Evidence of Cash and In-Kind Transfers in Humanitarian Situations.* Washington, D.C.: World Bank Group, July 2016.
- 13. Gilligan, Daniel, Melissa Hidrobo, John Hoddinott, Shalini Roy, and Benjamin Schwab. "Much Ado about Modalities: Multicountry Experiments on the Effects of Cash and Food Transfers on Consumption Patterns." International Food Policy and Research Institute paper prepared for the Agriculture & Applied Economics Association Annual Meeting, Minneapolis, July 2014.
- 14. Hedlund, Kerren, Ben Allen, Maria Bernandez, Muriel Cala, Saul Guerrero, Chloe Milloz Baudy, Juilien Morel, Panos Navrozidis, Silkie Pietzsch, and Michael Yemene. *Meta-Evaluation of ACF Fresh Food Voucher Programmes.* ACF International, with funding from the Cash Learning Partnership and the European Commission on Humanitarian Aid and Civil Protection. January 2012.

- 15. Hoddinott, John, Daniel Gilligan, Melissa Hidrobo, Amy Margolies, Shalini Roy, Susanna Sandström, Benjamin Schwab, and Joanna Upton. Enhancing WFP's Capacity and Experience to Design, Implement, Monitor and Evaluate Vouchers and Cash Transfer Programmes. Study Summary. International Food Policy Research Institute, 2013.
- Husain, Arif, Jean-Martin Bauer, and Susanna Sandström. Economic Impact Study: Direct and Indirect Impact of the WFP Food Voucher Programme in Jordan. World Food Programme, 2014.
- 17. Kardan, Andrew, Ian MacAuslan, and Ngoni Marimo. *Evaluation of Zimbabwe's Emergency Cash Transfer (ZECT) Program—Final Report.* Oxford Policy Management, supported by WFP and Concern Worldwide, 2010.
- Majewski, Brian, Lois Austin, Katherine George, Carol Ward, and Kurt Wilson. WFP's 2008 Cash and Voucher Policy (2008-2014): A Policy Evaluation. Evaluation Report—Volume 1. Konterra Group paper for World Food Programme. 2014.
- 19. Margolies, Amy, and John Hoddinott, "Costing Alternative Transfer Modalities," IFPRI Discussion Paper 01375. International Food Policy Research Institute, September 2014.
- Maunder, Nick, Victoria De Bauw, Neil Dillon, Gabrielle Smith, and Sharon Truelove. "Evaluation of the Use of Different Transfer Modalities in ECHO Humanitarian Aid Actions, 2011-2014." *Analysis for Economic Decisions*. Evaluation commissioned by the European Commission. 2016.
- Michelson, Hope, Christopher Barrett, Laura Cramer, Eric Lentz, Megan McGlinchy, Mitchell Morey, and Richard Mulwa. "Cash, Food, or Vouchers? An Application of the Market Information and Food Security Response Analysis Framework in Urban and Rural Kenya." *Food Security*, vol. 4 (2012): 455-469.
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Appendix IV: Comments from the U.S. Agency for International Development



- 3 has developed indicators to measure the timeliness, cost effectiveness, and appropriateness of these interventions. USAID/FFP continually seeks to improve the relevance of required indicators to evaluate and improve emergency food assistance programming, and will incorporate updated indicators in its upcoming solicitation, the Annual Program Statement for International Emergency Food Assistance.

Appendix V: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments	In addition to the individual named above, Joy Labez (Assistant Director), Sushmita Srikanth (Analyst-in-Charge), David Blanding, Carol Bray, Ming Chen, Martin De Alteriis, Neil Doherty, Mark Dowling, Reid Lowe, Julia Ann Roberts, and Shannon Roe made key contributions to this report.

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