SIGAR

Special Inspector General for Afghanistan Reconstruction

SIGAR 17-11 Audit Report

Afghanistan's Road Infrastructure: Sustainment Challenges and Lack of Repairs Put U.S. Investment at Risk



остовек **2016**

SIGAR

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WHAT SIGAR REVIEWED

Since 2002, the United States, through programs initiated by the U.S. Agency for International Development (USAID) and the Department of Defense (DOD), has spent approximately \$2.8 billion building and maintaining Afghanistan's road infrastructure, while working to implement more than \$150 million in other road-related programs to improve the Afghan Ministry of Public Works' (MOPW) management of road construction and maintenance.

The objectives of this audit were to determine the extent to which (1) U.S. agencies have fully accounted for the road construction they funded in Afghanistan; (2) selected U.S.-funded roads have been maintained and what the current condition of a subset of those roads is; (3) U.S.-funded road construction and capacity-building programs achieved program goals and are sustainable; and (4) challenges, if any, exist to the Afghan government's ability to perform and self-fund road maintenance.

October 2016

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WHAT SIGAR FOUND

Since 2002, USAID and DOD have spent approximately \$2.8 billion to construct and repair Afghanistan's road infrastructure, and perform capacity-building activities. USAID spent at least \$1.9 billion on eight programs dedicated to building Afghanistan's road infrastructure. Additionally, USAID has developed plans to spend more than \$150 million on three road-related programs. Finally, USAID implemented two broader stability programs—known as Community Development Programs—that provided at least \$335 million for short-term employment programs, including road construction, in support of counterinsurgency efforts. Although USAID could account for the program costs and locations for seven of the eight dedicated road construction programs, it could not provide precise location data for a \$366 million Secondary Roads program. For its part, DOD spent at least \$847 million on road-related projects funded under the Commander's Emergency Response Program (CERP). SIGAR previously identified limitations in DOD's tracking of certain projects, and these limitations prevented SIGAR from determining how much DOD spent on 462 of 4,687 road-related projects the department implemented. The limitations included a lack of unique project identifying numbers that could be used to track the costs for each CERP project implemented between fiscal year (FY) 2004 and FY 2006, and an inability to determine what proportion each bulk-funded project was spent on road-related activities, an issue DOD resolved in FY 2010 and FY 2011. However, DOD was able to provide the required location information for SIGAR's selection of 57 road-related CERP projects worth \$126 million.

SIGAR selected and assessed the condition of 1,640 kilometers of U.S.funded national and regional highways, or approximately 22 percent of all paved roads in Afghanistan. The results indicate that most of these highways need repair and maintenance. For example, SIGAR performed inspections of 20 road segments and found that 19 segments had road damage ranging from deep surface cracks to roads and bridges destroyed by weather or insurgents. Moreover, 17 segments were either poorly maintained or not maintained at all, resulting in road defects that limited drivability. MOPW officials acknowledged that roads in Afghanistan are in poor condition. In August 2015, an MOPW official stated that 20 percent of the roads were destroyed and the remaining 80 percent continue to deteriorate. The official added that the Kabul to Kandahar highway is beyond repair and needs to be rebuilt. USAID estimated that unless maintained, it would cost about \$8.3 billion to replace Afghanistan's road infrastructure, and estimated that 54 percent of Afghanistan's road infrastructure suffered from poor maintenance and required rehabilitation beyond simple repairs.

USAID and DOD spent billions of dollars on road construction in Afghanistan, but have had only limited success in ensuring the long-term sustainability of those roads. In 2007, in an effort to provide road maintenance and build capacity at the MOPW, USAID initiated a road maintenance and capacity-building program known as Task Order 14. Although Task Order 14 did fund road maintenance operations, it was unsuccessful in establishing a sustainable road maintenance plan and program because: (1) performing capacity-building programs alongside the road maintenance programs caused a disincentive for the MOPW to improve its capacity, and (2) the MOPW was unwilling to reorganize itself in an effective manner to create a sustainable road maintenance program.

In November 2013, in an effort to continue capacity building at the MOPW, USAID initiated the Road Sector Sustainability Program (RSSP). RSSP focuses on capacity-building activities through the creation of new entities within the MOPW and does not concurrently finance road maintenance activities. The success of RSSP will ultimately be contingent on USAID receiving and maintaining buy-in and tangible commitment from the Afghan government to implement necessary reforms. So far, the MOPW has demonstrated its commitment to reforms by proposing legislation that would establish a Road Authority, a Road Fund, and a Transportation Institute, all of which were recommended under RSSP. However, there is no guarantee that the Afghan Parliament will pass legislation to create these entities or that the proposed Road Authority will be independent as intended.

As demonstrated by the failure of Task Order 14, continuing to fund Afghan road maintenance could be a disincentive for the MOPW to implement reforms. When discussing the road maintenance needs for Afghanistan, one MOPW official stated that Afghanistan was working to conduct and fund its own road maintenance, but also insisted that donors would fund and perform necessary road maintenance if it could not. Without the firm commitment from all relevant elements of the Afghan government, the reforms proposed under RSSP may be unsustainable, waste taxpayer dollars, and ultimately prove unsuccessful in developing the Afghan government's capacity to maintain its roads.

DOD followed guidance requiring that it obtain assurances from the Afghan government that road projects funded through CERP would be sustained. Unfortunately the assurances given by the Afghan government were often unrealistic. SIGAR has previously raised concerns regarding the sustainment of CERP road projects. In response to a 2009 SIGAR inspection report, U.S. Forces–Afghanistan acknowledged that the Afghan government was unable to sustain DOD-funded roads at the time, and noted that it strived "for a balance between static inaction and dynamic reconstruction efforts that move the Afghanistan people forward." The department cited an "unwritten obligation to make progress with respect to reconstruction efforts," with the expectation that the Afghan government would one day be able to fulfill its sustainment agreements. According to a former U.S. Forces–Afghanistan official who was second in command of CERP during FY 2015, DOD was aware that the Afghan government would always sign the required sustainment memorandum acknowledging that it had the responsibility and capability to sustain a project, despite not always having the capability to do so. The official also noted that the Afghan government was consistently unable to sustain CERP projects, even when it gave assurances that the projects could be sustained. Following the peak in CERP spending in FY 2009, funding for road-related CERP projects began to decrease.

Weak capacity, corruption, funding issues, and insecurity limit the MOPW's ability to maintain Afghanistan's road infrastructure. The lack of technical capacity within the ministry is a long-standing challenge. In May 2015, USAID issued its most recent assessment of the MOPW's operations, practices, and management, and found that prior donor initiatives failed to achieve meaningful reforms and that donor capacity-building efforts did not have a significant or lasting impact. The assessment concluded that the MOPW was in need of structural reform, citing ongoing critical weaknesses, including a lack of skilled staff, poor communication, antiquated systems and processes, and a lack of will to implement necessary reforms.

Corruption continues to be a problem that hampers the ministry's ability to maintain roads. A February 2012 USAID assessment of the MOPW found that employees were hired based on nepotism and personal connections, noting that high-paying positions were offered to people with personal connections. Another USAID assessment completed in

January 2015 noted that nepotism and favoritism were still apparent in the appointment of managers and staff, and that donors lacked confidence in the MOPW's ability to be effective, efficient, transparent, lawful, and professional. Corruption has had a direct impact on the activities and financing of MOPW activities. For example, according to a senior MOPW official, the MOPW stopped collecting tolls on the roads due to high levels of corruption. The official explained that since the tolls were collected in cash, drivers would pay bribes to the toll collectors in exchange for reduced tolls. A similar type of bribe was being paid at weigh stations, where drivers of overweight trucks would pay bribes to avoid fines. In response to these problems, the official stated that the MOPW implemented new controls, such as random checks of stations, the use of undercover employees, and increased tracking of vehicle weights as they exit and enter different weigh stations, the implementation of which increased revenues at one weigh station 400 to 600 percent.

The MOPW also does not have adequate funding to perform necessary road maintenance. MOPW officials stated that it would cost \$100 million annually to carry out the necessary emergency, routine, periodic, and winter maintenance on Afghanistan's road infrastructure. However, according to data provided by the ministry officials, between 2011 and 2016, it received, on average, \$21.3 million annually from the Afghan Ministry of Finance (MOF). In December 2015, USAID reported that the MOF had raised concerns about the MOPW's ability to manage its budget and operate in an effective, efficient, and transparent matter. The MOPW's continued inability to maintain Afghanistan's road infrastructure threatens to waste the billions of dollars that the U.S. government has already invested in Afghanistan's road infrastructure since 2002.

Finally, in addition to being maintained to a drivable standard, Afghanistan's roads must be safe enough from insurgent attack to allow for travel and maintenance. MOPW officials told SIGAR that security conditions vary throughout the country, and the ministry could perform maintenance only where security conditions allowed. SIGAR noted that 6 of the 20 road segments it inspected had insurgent activity and identified 13 insurgent checkpoints. The ministry officials stated that, in order to address maintenance needs, the MOPW is beginning to use local Afghan contractors to perform road work, because they have fewer problems with insurgents than international contractors. They noted that Afghanistan's road infrastructure plays an important role in the country's development and governance, and if the Kabul to Kandahar highway were to become impassable, the central government would collapse. However, the same MOPW officials were confident that the Afghan National Defense and Security Forces would increase security if the situation got worse.

WHAT SIGAR RECOMMENDS

To ensure the remaining activities of the RSSP, as well as any future road programs, address the shortcomings of previous programs and increase the MOPW's capacity to maintain Afghanistan's roads, we recommend that the USAID Administrator condition future RSSP and MOPW funding to the successful creation of an independent Road Authority, Road Fund, and Transportation Institute. USAID concurred with the recommendation. DOD stated that its road construction and maintenance activities in Afghanistan have largely concluded and that while project sustainment was desired, other goals sometimes outweighed the potential risk that a project might not be sustained.

October 27, 2016

The Honorable Ashton B. Carter Secretary of Defense

The Honorable Gayle E. Smith Administrator, U.S. Agency for International Development

The Honorable P. Michael McKinley U.S. Ambassador to Afghanistan

Mr. Herbert B. Smith USAID Mission Director for Afghanistan

This report discusses the results of SIGAR's audit of U.S. efforts to support Afghanistan's road infrastructure. We determined the extent to which (1) U.S. agencies have fully accounted for the road construction they funded in Afghanistan; (2) selected U.S.-funded roads have been maintained and what the current condition of a subset of those roads is; (3) U.S.-funded road construction and capacity-building programs achieved program goals and are sustainable; and (4) challenges, if any, exist to the Afghan government's ability to perform and self-fund road maintenance. The report focuses on efforts implemented from 2002 through 2016.

We are making one recommendation to the Administrator of the U.S. Agency for International Development (USAID). Specifically, we recommend that the USAID Administrator condition future funding for the Road Sector Sustainability Program and the Afghan Ministry of Public Works to the successful creation of an independent Road Authority, Road Fund, and Transportation Institute. We received written comments on a draft of this report from USAID, which are reproduced in appendix III. USAID concurred with the recommendation. Additionally, USAID provided technical comments, which we incorporated into this report, as appropriate.

We also received written comments on a draft of this report from the Department of Defense's (DOD) Office of the Deputy Assistant Secretary of Defense for Afghanistan, Pakistan, and Central Asia, which are reproduced in appendix IV. DOD stated that its road construction and maintenance activities in Afghanistan have largely concluded and that while project sustainment was desired, other goals sometimes outweighed the potential risk that a project might not be sustained. DOD also provided oral and written technical comments, which we incorporated into this report, as appropriate.

SIGAR conducted this work under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended; and in accordance with generally accepted government auditing standards.

John F. Sopko

Special Inspector General

for Afghanistan Reconstruction

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ABBREVIATIONS

ADS Automated Directives System

Amec Foster Wheeler Environment & Infrastructure Inc.

CERP Commander's Emergency Response Program

DOD Department of Defense

FY fiscal year

GAO U.S. Government Accountability Office

MAAWS-A Money As A Weapon System Afghanistan

MOF Ministry of Finance

MOPW Ministry of Public Works

RSSP Road Sector Sustainability Program

USAID U.S. Agency for International Development

Since 2002, the United States, through the U.S. Agency for International Development (USAID) and the Department of Defense (DOD), has spent approximately \$2.8 billion building and repairing Afghanistan's road infrastructure. During that time, the U.S. government also obligated an additional \$150 million in capacity-building initiatives to develop Afghanistan's Ministry of Public Works (MOPW), which is responsible for building and maintaining much of the country's road infrastructure. In 2008, the Afghan government and its international donors created the Afghanistan National Development Strategy. One aim of the strategy was to build a sustainable system for road maintenance by 2008, and a fully upgraded and maintained road infrastructure connecting Afghanistan's largest cities and neighboring countries by 2009.¹ Despite the United States' and international donors' investment in Afghanistan's road infrastructure, according to a 2015 World Bank report, 85 percent of the road infrastructure is in poor condition.² USAID and the Asian Development Bank have estimated it would cost \$8.3 billion to replace Afghanistan's road infrastructure if not maintained properly.³

The objectives of this audit were to determine the extent to which (1) U.S. agencies have fully accounted for the road construction they funded in Afghanistan; (2) selected U.S.-funded roads have been maintained and what the current condition of a subset of those roads is; (3) U.S.-funded road construction and capacity-building programs achieved program goals and are sustainable; and (4) challenges, if any, exist to the Afghan government's ability to perform and self-fund road maintenance.

To accomplish our objectives, we reviewed USAID and DOD contract and planning documents, summary reports, technical assessments, close-out lessons learned reports, and other contract deliverables the agencies and their implementing partners prepared. We reviewed previous SIGAR audits and inspections of U.S.-funded roads in Afghanistan, reports by the U.S. Government Accountability Office (GAO) and the DOD Office of Inspector General, and white papers prepared by foreign donors. Furthermore, we performed inspections on a selection of U.S.-funded road segments totaling 1,640 kilometers, which represent about 22 percent of all paved roads in Afghanistan.^{4,5} We also reviewed Afghan decrees and laws pertaining to road maintenance and associated excise tax and fees, and the MOPW's mission statement, budgets, and historical cost information. Furthermore, we interviewed officials from USAID, DOD, the U.S. Army Corps of Engineers, USAID's implementing partner Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec), the MOPW, the Ministry of Finance (MOF), the Asian Development Bank, the World Bank, and the United Kingdom's Department for International Development. We conducted this work from May 2015 to October 2016 in accordance with generally accepted government auditing standards. A more detailed discussion of our scope and methodology is in appendix I.

BACKGROUND

USAID's December 2015 Final Road Fund Study estimated there were more than 123,000 kilometers of roads in Afghanistan, of which approximately 7,600 kilometers were paved.⁶ Afghanistan's road infrastructure is

¹ Government of Afghanistan, Afghanistan National Development Strategy, Transportation and Civil Aviation Strategy, Pillar III. Infrastructure, 2008.

² World Bank, Afghanistan Country Snapshot, October 2015.

³ USAID, Final Road Fund Study (Component 3), Technical Assistance to the Ministry of Public Works, December 9, 2015, which cites Asian Development Bank, Strategic Roadmap for Development Partner Support to O&M of Afghanistan Roads, August 2015.

⁴ The inspections involve assessing the general physical condition of the road segments, documenting the type of road surfaces, number of lanes, the types of defects observed, types of defects repaired, traffic conditions, and the overall security condition.

⁵ The roads we selected for inspection consisted of U.S.-funded national and regional highways that connected cities to each other or to the ring road, which connects several major cities in across Afghanistan.

⁶ USAID, Final Road Fund Study (Component 3) Technical Assistance to the Ministry of Public Works, December 2015.

comprised of regional and national highways, provincial roads, rural roads, and city roads. Regional highways are paved roads that connect Afghanistan's largest cities and its neighboring countries. National highways are paved roads that connect the provincial capitals to the regional highways. Provincial roads are paved or gravel roads that connect district centers within provinces to the provincial capital. Rural roads are smaller gravel roads that connect remote areas with district centers.

The MOPW and the MOF have primary responsibility for Afghanistan's road infrastructure. The MOPW is responsible for constructing and maintaining the regional, national, and provincial highways and roads, while the MOF is responsible for approving the MOPW's budget requests and collecting revenues generated from the fuel excise tax and other road user charges, such as tolls and fines, and providing them to the MOPW to pay for maintenance. Since 2002, USAID, DOD, and other international donors, including the World Bank, the Asian Development Bank, the United Kingdom's Department for International Development, and the Japanese International Cooperation Agency, have spent billions to construct and repair Afghanistan's roads and build the Afghan government's capacity to do such work itself.

U.S. Road Construction, Maintenance, and Capacity-Building Efforts

As part of its road development efforts since 2002, USAID spent approximately \$2.1 billion on eight dedicated road construction programs and three road-related maintenance and development programs. USAID also implemented two bulk-funded Community Development Programs totaling more than \$335 million that included road construction projects; however, the road construction costs could not be reliably distinguished from the other program costs, and as such, those costs could not be precisely calculated.⁸ According to USAID, these programs built more than 2,000 kilometers of Afghanistan's national highways, linking the five largest cities and connecting the 80 percent of Afghanistan's population that lives within 50 kilometers of a national highway, while also building the MOPW's capacity.

For its part, DOD has spent at least \$847 million on approximately 4,700 road-related projects funded through the Commander's Emergency Response Program (CERP). In commenting on a draft of this report, DOD noted that more than 2,800, or 60 percent, of these projects were for small-scale road repairs, such as repairing potholes and damage caused by improvised explosive devices, snow removal, or dust suppression. According to DOD officials familiar with CERP, CERP financed road projects in two primary ways: (1) U.S. military personnel in Afghanistan, in coordination with local Afghan officials, initiated small road projects for local communities, or (2) DOD used the funds in collaboration with USAID to finance different sections of larger road projects.

Table 1 shows the total amounts disbursed for USAID- and DOD-funded dedicated road programs since 2002. It does not include U.S.-funded roads constructed under the two USAID bulk-funded Community Development Programs.

⁷ Afghanistan's Ministry for Rural Rehabilitation and Development is responsible for maintaining the country's rural roads. Our audit focused on the regional, national, and provincial highways, and as such, only discusses the operations of the MOPW.

⁸ Bulk-funded programs use one funding stream to implement multiple smaller projects. An example is a program broadly designed to increase local employment that includes funding for road projects that provide short-term employment.

⁹ CERP enables military commanders to respond to urgent humanitarian relief and reconstruction requirements by carrying out projects that are intended to immediately assist the indigenous population and can be sustained by the local population or government. See U.S. Forces – Afghanistan (USFOR-A), *Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program (CERP) SOP*, USFOR-A Pub 1-06, updated December 2009.

¹⁰ We have an ongoing audit examining CERP. The audit focuses on the sufficiency of the data contained in CERP databases and the effectiveness of the CERP program.

Table 1 - Known Amounts Disbursed for USAID- and DOD-Funded Road Programs

Agency	Program Category	Program	Description	Total Disbursed	
USAID					
	Other:	Salang Bypass	Feasibility survey for the expansion of the Salang Pass	\$4,375,543	
		Total		\$4,375,543	
	Construction:1	Gereshk to Kajakai	Road construction program	5,599,843	
		Doshi Road	Road construction program	8,776,148	
		Uruzgan Bridges	Road construction program	15,323,676	
		Kunduz	Road construction program	125,885,750	
		Gardez to Khowst	Road construction program	175,671,736	
		Secondary Roads	Road construction program	365,882,638	
		Strategic Provincial Roads	Road construction program	497,535,342	
		Rehabilitation of Economic Facilities and Services	Road construction program	750,829,659	
		Total		\$1,945,504,792	
	Road Maintenance and	Task Order 14	Road maintenance and capacity building program	53,610,623	
	Capacity Building:	Road Sector Sustainability Program ²	Road maintenance and capacity building program	96,486,058	
		Total		\$150,096,681	
		USAID Total		\$2,099,977,016	
DOD					
		CERP	Road-related construction and maintenance	847,260,394	
		DOD Total		\$847,260,394	
	GRAND TOTAL				

Note:

Source: USAID and DOD provided data.

Source: USAID- and DOD-provided data

On November 1, 2007, in an effort to maintain existing roads and build technical capacity at the MOPW, USAID awarded a cost-plus-fixed-fee road maintenance and capacity-building program, known as Task Order 14, to the Louis Berger Group Inc./Black & Veatch Special Projects Corporation Joint Venture. Initially, Task Order 14 was valued at \$32 million with a completion date of October 31, 2010. However, various modifications increased the total to over \$53 million and extended the contract completion date to December 31, 2011. The program's objectives were to develop a new independent organization, the Road Management Unit, within the MOPW to manage road maintenance subcontracts, plan annual maintenance work, and develop a sustainable road maintenance program for Afghanistan. On December 30, 2011, USAID ended Task Order 14 and transferred the program's activities to the Afghan government.

In November 2013, at the request of the Afghan government, USAID initiated the \$96.5 million Road Sector Sustainability Program (RSSP). According to USAID officials, applying the lessons learned from Task Order 14, RSSP has been focused on building the MOPW's capacity by establishing three independent Afghan government entities intended to improve the MOPW's accountability and effectiveness in road planning, development, and maintenance.

USAID and **DOD** Guidance on Program Turnover and Sustainability

Both USAID and DOD have published guidance on the turnover and sustainability of reconstruction programs in Afghanistan. USAID relied on the Automated Directives System (ADS), various policies and procedures governing the agency's programs, as well as supplemental guidance. In June 2011, USAID released the Administrator's Sustainability Guidance for USAID in Afghanistan, which built upon previous USAID guidance.

¹ Not shown are two USAID bulk-funded programs totaling \$335,204,373, which included road construction projects. USAID could not separate the road project costs for these two programs, thus the disbursed amounts are not shown.

 $^{^{2}% \}left(-1\right) =0$ Denotes estimated contract cost.

This guidance calls for the creation of conditions that allow for the successful and lasting transition of USAID programs to the Afghan government. To achieve that, the guidance established three principles: (1) increase Afghan ownership and capacity; (2) contribute to Afghanistan's stability and confidence; and (3) operate effectively, programmatically, and fiscally, which requires USAID to identify recurring costs for development programs and obtain assurances that Afghan partners have the willingness, resources, and capacity to sustain the agency's investments into the future. To this end, upon the completion of road construction programs, USAID transferred to the MOPW the documents that are necessary for road maintenance, such as technical specifications. In addition, *USAID Policy Framework 2011-2015* states that sustainability planning should be an operational principle from the start and should include building skills, knowledge, institutions, and promoting incentives that can make development processes self-sustaining.¹¹

To promote sustainability, USAID uses "conditions precedent" to require ministries to meet milestones or other triggers before releasing program funding. In 2012, the Tokyo Mutual Accountability Framework reaffirmed the joint responsibility of the Afghan government and the international community for the economic development of Afghanistan through the international community's continued assistance to Afghanistan, as well as the monitoring of development and governance benchmarks in a transparent manner, and increasing funding to the World Bank's Afghanistan Reconstruction Trust Fund through incentive mechanisms. In October 2014, the U.S. Senate Committee on Foreign Relations issued a report that stated,

The U.S. should also condition a higher percentage of its funding: if done properly by ensuring Afghan buy-in, conditioning U.S. assistance can improve the accountability of our aid, strengthen reformers and institutions in the Afghan government and result in better development outcomes.¹²

Since 2009, DOD required planned CERP projects to have a sustainability component built into each project from its inception, when applicable. DOD guidance explicitly made project sustainability the responsibility of the end user—in this case, the Afghan government. In the CERP guidelines, DOD made it a requirement for the local community or government to sustain CERP construction projects once completed. To fulfill this requirement, DOD officials were required, for projects costing more than \$50,000 and which required sustainment, to document the operating and sustainability costs each project would incur and obtain a signature from an appropriate Afghan official acknowledging his or her understanding and commitment to budget for the sustainment of the project once it was completed. DOD guidance also required documentation of each project's location. Pecifically, the guidance required the Global Positioning System starting and ending coordinates for each planned project, so its exact location would be recorded.

USAID AND DOD CANNOT DETERMINE THE COST OR LOCATION OF SOME U.S.-FUNDED ROADS

USAID and DOD can account for and locate most of the roads they constructed through dedicated road programs and through CERP. However, USAID was not able to provide the precise locations of roads it constructed under one roads program worth almost \$366 million. Previously reported issues with CERP data

¹¹ USAID Policy Framework 2011-2015.

¹² U.S. Senate Committee on Foreign Relations, *Afghanistan in Transition: U.S. Civilian Presence and Assistance Post-* 2014, S. Rep 113-29 at 1 (2014).

¹³ U.S. Forces–Afghanistan, *Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program Standard Operating Procedure*, December 2009. According to DOD officials, not all CERP projects require sustainment. For example, road-related projects such as bomb blast or other emergency repairs, snow removal, or dust suppression are intended to improve road conditions in the short term and do not require long-term sustainment.

¹⁴ U.S. Forces – Afghanistan (USFOR-A), Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program (CERP) SOP, USFOR-A Pub 1-06, updated December 2009.

prevented us from fully accounting for the cost of all road-related CERP projects. ¹⁵ However, DOD was able to provide the locations of all 57 road-related CERP projects worth over \$500,000. ¹⁶

The Federal Acquisition Regulation requires that agencies, such as USAID, maintain contract files that contain specific details about a program's cost and location. 17 To comply with these regulations, USAID has procedures within its ADS and supplemental guidance describing how to maintain contract files and the information they are required to contain, including location data for programs. 18 USAID was able to provide the cost information for all eight of its dedicated road programs, with costs totaling more than \$1.9 billion, and precise location coordinates for seven of those programs, totaling more than 1,300 kilometers. However, for the \$366 million Secondary Roads Program, USAID provided road locations at the district level, but could not provide more precise location data because specific Global Positioning System coordinates were not required at the time of the contract. Therefore, we could not determine the precise location of the roads constructed under the program. In addition to the eight dedicated road construction programs the agency funded, USAID funded two broader, bulk-funded stability programs known as Community Development Programs that supported counterinsurgency efforts through short-term employment projects in Balkh and Kandahar provinces. These programs totaled more than \$335 million in spending and included projects to construct various types of infrastructure, such as roads or dams, and provide training to ensure the projects' sustainment. We attempted to determine the amount of bulk funds spent on road construction and the exact location of the roads constructed, but USAID was unable to provide the contract files for our review. According to USAID's response to a draft of this report, newer contract provisions now ensure specific location data are a part of the monitoring requirements.

Based on our analysis of data on DOD's road construction efforts from fiscal year (FY) 2004 through FY 2014, we found that DOD had spent at least \$847 million on road-related CERP projects throughout Afghanistan.¹⁹ However, as we noted in a prior report, limitations in how DOD tracked certain CERP projects prevented us from determining the actual amount spent for all road-related projects.^{20,21} DOD's Financial Management Regulation requires military officials to track their use of CERP funds using various approved project categories.^{22,23} This CERP requirement meant that DOD categorized road projects under the "transportation"

¹⁵ These limitations included a lack of unique project identifying numbers that could be used to track the costs for each CERP project implemented between FY 2004 and FY 2006, and an inability to determine what proportion each bulk-funded project was spent on road-related activities, an issue DOD resolved in FY 2010 and FY 2011.

¹⁶ We reviewed CERP projects worth more than \$500,000 as those projects required the use of a warranted contracting officer (see U.S. Forces–Afghanistan (USFOR-A), Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program (CERP) SOP, USFOR-A Pub 1-06, updated December 2009).

¹⁷ Federal Acquisition Regulation Subpart 4.8, "Government Contracting Files."

¹⁸ USAID, Automated Directives System, Chapter 302, USAID Direct Contracting, sections 302.2, 302.3, and 302.4.

¹⁹ The projects we identified included road construction, rehabilitation, repair, refurbishment, improvement, and maintenance and the associated infrastructure, such as culverts, designed to restore or maintain the integrity and passable nature of roads or bridges for motor vehicles.

²⁰ We described these same limitations in CERP data in our audit of U.S. efforts to support primary and secondary education in Afghanistan (see SIGAR, *Primary and Secondary Education in Afghanistan: Comprehensive Assessments Needed to Determine the Progress and Effectiveness of over \$759 Million in DOD, State, and USAID Programs*, SIGAR 16-32-AR, April 26, 2016).

²¹ Because DOD did not track bulk funds at the project level, we could not disaggregate how much of a bulk fund went to each individual CERP project. DOD has since resolved the issue in FY 2010 and FY 2011, and now all projects within a bulk fund have a unique identifying number.

²² DOD, Financial Management Regulation, Volume 12, Chapter 27, January 2009.

²³ Initially, DOD required officials to track CERP projects using 15 different categories (see DOD Under Secretary of Defense, Memorandum for Commander in Chief, *U.S. Central Command and the Secretary of the Army: Guidance on the Use of Appropriate Funds for the Commander's Emergency Response Program (CERP)*, November 2003). DOD added additional categories in subsequent years, eventually expanding to 20 categories in 2009 (see DOD, *Financial Management Regulation*, Volume 12, Chapter 27, January 2009).

category. Since DOD was not required to create additional subcategories for projects, such as roads, the department could not easily specify which CERP projects supported road-related activities. Therefore, starting with projects DOD identified as being in the transportation category, we used the project titles and descriptions to determine which projects supported road-related activities and the costs of those projects.²⁴

Based on our analysis, DOD's efforts included 4,687 individual CERP projects that supported a variety of road-related activities. We were able to identify \$847 million in CERP funds used to conduct 4,225 of the 4,687 projects. However, we could not identify exact funding amounts for the remaining 462 projects using the financial data DOD provided for two reasons. First, CERP data between FY 2004 and FY 2006 did not include the unique project identifying numbers needed to track each project's cost, a problem that affected 377 CERP projects. Second, because certain CERP projects were funded with bulk funds, we could not determine how much of each bulk-funded project was spent on roads. This affected 85 CERP road projects constructed between FY 2007 and FY 2011, each worth less than \$5,000.

In addition to analyzing the CERP project cost data, we reviewed road-related CERP projects for required location data. Beginning in December 2009, CERP guidance required that DOD record the starting and ending location coordinates for planned CERP projects.²⁵ We selected and reviewed road-related CERP projects subject to this guidance that were worth more than \$500,000. This selection covered 57 individual projects worth \$126 million. We determined that DOD provided the required location data for all 57 road-related CERP projects. Our analysis indicates that this is an improvement since the GAO reported in 2008 that due to missing documentation and frequent staff rotation, DOD did not know where some CERP-funded roads were built, and the DOD Office of Inspector General reported in 2011 that CERP location data were incomplete, inaccurate, or inconsistent.²⁶

Although USAID provided the location for most of its road construction programs undertaken since 2002, it is impossible to review the condition of those roads for which precise location coordinates are unavailable. Without accurate location data, USAID and the Afghan government will not be able to maintain those roads.

MOST U.S.-FUNDED ROADS IN AFGHANISTAN THAT WE INSPECTED NEED REPAIR

We found that most roads constructed using U.S. funds need various levels of maintenance and repair due to many factors, including weather, insurgency, and a lack of maintenance by the MOPW. During our audit, we selected and reviewed 1,640 kilometers of U.S.-funded national and regional highways, or approximately 22 percent of all paved roads in Afghanistan. Figure 1 shows the roads analyzed in this report.

²⁴ Appendix I contains more details on our methodology for reviewing CERP activities.

²⁵ U.S. Forces–Afghanistan, *Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program (CERP) SOP*, December 2009.

²⁶ GAO, Progress Made in Constructing Roads, but Assessments for Determining Impact and a Sustainable Maintenance Program Are Needed, GAO-08-689, July 8, 2008; and DOD Inspector General, Management Improvements Needed in Commander's Emergency Response Program in Afghanistan, DODIG-2012-023, November 21, 2011.

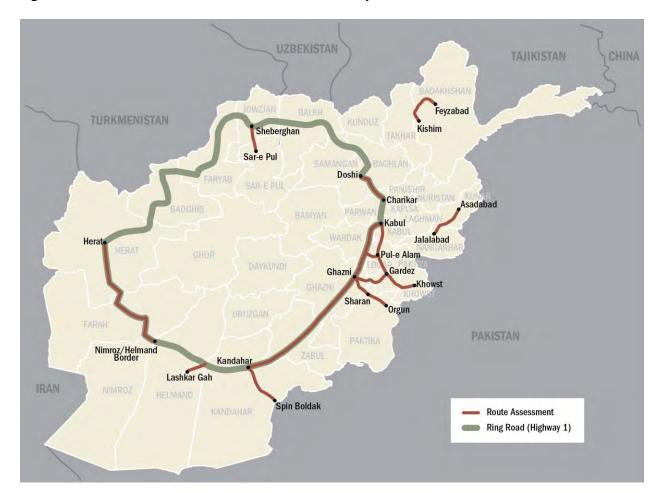


Figure 1 - U.S.-Constructed Roads Included in SIGAR's Analyses

Source: SIGAR analysis

Inspections Showed Most Road Segments Needed Repairs

In November and December 2015, we inspected 1,640 kilometers of U.S.-funded roads divided into 20 segments. Due to security concerns, we could not physically inspect the full 1,640 kilometers of roads and had to perform visible inspections from a car. To track the roads we inspected, we divided them into 20 segments. The distances of these segments ranged from 22 to 173 kilometers. We performed physical inspections, took photographs, and surveyed users for 6 road segments, totaling 465 kilometers, and visually inspected the remaining 14 segments, totaling 1,175 kilometers. We rated the condition of each road segment as bad, fair, good, or very good (see figure 2 for more details).

Figure 2 - Explanation of Road Condition Terminology

Physical Condition of Roads

Maintenance of Roads

Very Good: The road segment has few and minor points of damage and is drivable. **Good:** The road segment has many points of minor damage and is drivable.

Fair: The road segment has many points of minor and few points of major damage along the majority of the segment, making drivability difficult.

Bad: The road segment has many points of minor and major damage along the majority of the road segment, making the road not drivable.

Good: The government performs high quality repairs to the road. **Poor:** The government performs low quality repairs to the road. **None:** The government does not perform any maintenance to

Source: SIGAR, December 2015

We found road damage that varied from surface cracks to destroyed road sections and bridges on 19 of the segments. Specifically, the inspections, based on our analysis, showed that of the 20 segments, 3 were in bad condition, 10 were in fair condition, 5 were in good condition, and 2 were in very good condition. Moreover, our inspections found that either no or poor-quality maintenance had been performed on 17 segments, and 3 segments had evidence of good repair work. Table 2 shows the results of our inspections, noting both the general condition of each segment and the apparent level of maintenance being performed.

Table 2 - Results of SIGAR Inspections

		Physical Condition				Level of Maintenance		
Road Segment	Distance (Kilometers)	Very Good	Good	Fair	Bad	Good	Poor	None
Kandahar-Tarin Kot	173							
Charikar-Doshi	120							
Chorah-Gizab	120							
Maidan Shahr-Ghazni	104							
Ghazni-Moqur	104							
Feyzabad-Kishim	101							
Gardez-Khowst	101							
Sherzad-Azrah	100							
Qala-e Gelzai-Duro	97							
Ghazni-Paktiya	90							
Jaghuri-Malistan	70				-			
Kabul-Logar	65					-		
Herat-Adraskan	64							
Logar-Qasemkhel	60							
Ghazni-Sharana	60							
Logar-Gardez	55							
Sheberghan-Sar-e Pul	54							
Duro-Kandahar	40							
Shinwar-Dur Baba	40							
Kabul-Maidan Shahr	22							

Photo 1 illustrates minor surface cracks that require maintenance to avoid further deterioration of the road due to continued use, rain, or snow, but do not affect the drivability of the road segment between Herat and Adraskan. In contrast, photo 2 illustrates a section of road that had washed away, reducing the width and limiting drivability of the 104-kilometer segment between Maidan Shahr and Ghazni. We also found that the 101-kilometer Gardez-to-Khowst road segment had five areas where the road was destroyed and two areas where portions were washed away, despite USAID having completed this road segment in December 2015, shortly before our site inspection. On the Faizabad-to-Kishum road segment located in a mountainous region, some sections had surface damage, some were damaged by soil erosion, and others were washed out as the road passed over, or next, to riverbeds. Photo 3 illustrates a bridge that collapsed along this road segment. Photo 4 illustrates a portion of the Kabul-to-Kandahar highway where only half of the two-lane road was repaved as part of maintenance efforts, while the other half had been allowed to deteriorate to the point that it has appeared to revert to a gravel road.

Photo 1 - Minor Defects Needing Repair on Road Segment between Herat and Adraskan



Source: SIGAR, November 17, 2015

Photo 3 - Collapsed Bridge on Road Segment between Faizabad and Kishum



Source: SIGAR, November 9, 2015

Photo 2 - Section of Road Washed Away on Road Segment between Maidan Shahr and Ghazni



Source: SIGAR, November 3, 2015

Photo 4 - Road Maintenance Performed on One Side of Road on the Kabul-to-Kandahar Highway



Source: SIGAR, November 2, 2015

USAID AND DOD HAVE NO ASSURANCES THAT AFGHANISTAN'S ROAD INFRASTRUCTURE WILL BE SUSTAINED, AND USAID'S CAPACITY-BUILDING EFFORTS HAVE NOT ACHIEVED PROGRAM GOALS

As a result of the MOPW's lack of capacity, many U.S.-funded roads lack needed maintenance and are deteriorating. USAID and DOD have developed guidelines to ensure the sustainability of programs that they implement. However, both agencies have had little success ensuring that the roads they constructed would be sustained. Furthermore, DOD often relied on unrealistic sustainment assurances from the Afghan government.

USAID's Road Sector Sustainability Program May Lack Sufficient Commitment from the Afghan Government to Reform the MOPW

USAID has issued regulations and guidance calling for agency programs to account for sustainability needs before starting programming. For example, the USAID Administrator's Sustainability Guidance advises the agency to determine if the Afghan government can maintain USAID's investment, or, if it does not demonstrate sufficient commitment to do so, modify, end, or postpone programs. However, despite these precautions, USAID's road construction programs may be unsustainable without formal and tangible Afghan government commitment to reform how the MOPW operates.

Since 2007, USAID has been working with the MOPW to strengthen the ministry's capacity to maintain Afghanistan's road infrastructure. Unfortunately, USAID has only had limited success in this regard, and the relative lack of progress in this area threatens the sustainability of the new roads international donors have built. For example, a 2008 GAO report stated that the Afghan government did not have a fiscally sustainable road maintenance program and would likely need to rely on international donors to maintain those roads.²⁷ Without a sustainable road maintenance program, GAO concluded that newly constructed roads would likely deteriorate, the expected benefits from the donor-provided road infrastructure would likely not be realized, and billions of dollars spent on road construction would be wasted. GAO also noted that the Afghan government's support for road maintenance had been limited by the lack of human capacity and organization to carry out tasks such as budgeting, procurement, and contract administration, all of which are necessary to implement a road maintenance program.

Task Order 14 was USAID's first attempt at reforming the MOPW so that it could eventually take over the management and funding of road maintenance. The task order began in 2007 and was intended to create an independent Road Maintenance Unit within the ministry to manage road contracts and budgets, as well as plan and schedule annual maintenance work, thereby creating a sustainable road maintenance program. As part of the program, the MOPW was to transfer staff to the road maintenance unit, while USAID's contractor was to further enhance the unit's capacity by training those employees. However, after 4 years and \$53 million spent, USAID terminated the program.

According to USAID's Task Order 14 Performance Evaluation report and interviews with Amec and World Bank officials, Task Order 14 did not meet its reform goals due to a lack of cooperation from the MOPW's senior leadership. The report concluded that, by providing funding for road maintenance without regard to whether the MOPW implemented needed organizational reforms, the program inadvertently created a disincentive for the MOPW to make those reforms. The report also found that because USAID directly funded and managed contracts for emergency road maintenance, the MOPW became less concerned with capacity building because road maintenance was being performed. Additionally, the report mentioned that the ministry lacked the political will to reorganize itself in a manner that would allow for the creation of an effective road management unit.

²⁷ GAO, Progress Made in Constructing Roads, but Assessments for Determining Impact and a Sustainable Maintenance Program Are Needed, GAO-08-689, July 2008.

In an effort to continue capacity building—and at the Afghan government's request—USAID designed a second program in 2013, the \$96.5 million RSSP, to reform the MOPW. In compliance with the ADS, USAID obtained a signed endorsement from the Minister of Public Works for the program's activities, thus documenting the government's official agreement to undertake identified reforms.²⁸ USAID designed RSSP's activities to be implemented sequentially to gradually increase the MOPW's responsibility for managing funds and activities for road maintenance. USAID and Amec officials explained that with the exception of a relatively small emergency road maintenance fund, known as Activity 1, the success of each program activity, is contingent on the success and sustainability of the preceding activities.

- Activity 1 USAID directly entered into and managed contracts with four Afghan construction firms— BCURA Construction Company, Faizi Masroor Construction Company, State Women Corporation, and Omid Afghanistan Construction and Engineering Company—to provide up to \$5 million in emergency road maintenance over a 1-year period. The MOPW was responsible for requesting road maintenance under these contracts.
- Activity 2 USAID contracted directly with Amec to provide \$25.5 million in technical assistance to the MOPW through the design of a new organizational structure for the MOPW. The primary objective of this activity is to improve the management, financing, and efficiency of the road sector in Afghanistan, and to shift road construction and maintenance functions from the MOPW to a commercialized system implemented by private contractors. To accomplish this objective, Amec conducted surveys of other nations' road management bodies and designed and proposed three new independent institutions: the Road Authority, the Road Fund, and the Transportation Institute. The Road Authority would be responsible for managing Afghanistan's road infrastructure by planning maintenance and developing policies and standards. The Road Fund would be responsible for funding the Road Authority's activities. Finally, the Transportation Institute would develop standards, construction manuals, and quality assurance and quality controls procedures, and research and adopt new technologies to create a safe, sustainable transportation system.

According to the contract documents and work plan for Activity 2, it was split into two phases. Phase 1 consisted of designing and presenting options for the creation of the Road Authority, the Road Fund, and the Transportation Institute to the MOPW. Phase 2, scheduled to begin once the Afghan government established the three new entities, would consist of Amec providing training to MOPW employees on the new roles of the Road Authority, Road Fund, and Transportation Institute. An Amec official stated that in January 2016, Amec presented the MOPW with several options for establishing the three entities, including draft legislation. However, as of August 2016, the Afghan Parliament had yet to approve the creation of the Road Authority, the Road Fund, and the Transportation Institute.

- Activity 3 USAID stated that Activity 3 would provide \$33 million to an implementing partner to help
 the MOPW develop the Road Authority, the Road Fund, and the Transportation Institute through
 capacity building at the newly established entities.
- Activity 4 The MOPW directly manages \$33 million in funding provided by the Afghanistan Infrastructure Trust Fund, which is administered by the Asian Development Bank, for the Road Authority and Transportation Institute.

Thus far, USAID has only initiated Activity 1 and phase 1 of Activity 2 of RSSP.

The MOPW demonstrated its commitment to reform in May 2016 by agreeing to legislation that would establish the Road Authority, the Road Fund, and the Transportation Institute. Furthermore, in June 2016, the Afghan government convened the Inter-Ministerial Project Steering Committee to endorse RSSP and the establishment of the Road Authority, the Road Fund, and the Transportation Institute through a new standalone law.²⁹ Additionally, in July 2016, the Chief Advisor to the President on Infrastructure, Human Capital, and

²⁸ USAID, Automated Directives System, Chapter 201, USAID Planning, section 201.3.16.3(d).

²⁹ The committee is comprised of various ministries and representatives, including the MOPW, the MOF, and the Ministry of Justice.

Technology endorsed RSSP and the selection of the legislative option for the creation the Road Authority, the Road Fund, and the Transportation Institute. However, there is no guarantee that the Afghan Parliament will consider the proposed legislation in the current or future sessions, or whether it will enact them. Furthermore, Amec estimates that once the laws are introduced, it could take 2 years to receive Parliament's approval. As of August 2016, the proposed laws have yet to be introduced in the Afghan Parliament, raising concerns regarding the viability of this approach to MOPW reform and the future of RSSP.

An additional concern is that even if the Afghan Parliament does pass legislation creating the Road Authority and the Road Fund, those entities will not be as fully independent as RSSP intended. Both the RSSP contract and USAID's Final Road Fund Study state that the Road Authority and Road Fund are to be independent authorities. Without full autonomy, the Road Authority and the Road Fund could be subject to political interference by the MOPW or bureaucratic pressures. However, the official endorsement letter by the President of Afghanistan's Chief Advisor on Infrastructure, Human Capital, and Technology referred to the Road Authority and the Road Fund "as semi-autonomous." Additionally, a July 2016 USAID document describing ongoing RSSP efforts also stated that the Road Authority and the Road Fund will be semi-autonomous. This raises questions as to whether the Road Authority and the Road Fund, if created, would be able to successfully reform the MOPW and improve road conditions in Afghanistan.

In fact, USAID's Road Fund Final Study stated that "Boards of directors of Road Funds should be autonomous in administrative and financial matters, to decrease the risk of bureaucratic and political interference." According to the study, "Most first-generation Road Funds [Boards of Directors] were dominated by public sector representatives and chaired by ministers or other senior officials accountable first to their governments and second to the Road Fund, which sometimes resulted in biased decisions not in line with road users' interests."

Furthermore, without an autonomous Road Fund, the Road Authority could be under similar funding restraints as the current MOPW. Amec, foreign donors, and MOPW officials stated that the MOF is not providing sufficient funds, or even all of the collected road user charges, to the MOPW. Without an autonomous Road Fund collecting road user charges under its own budget, the MOF may underfund the Road Authority.

USAID's Task Order 14 final performance evaluation underscored the need to separate efforts to reform Afghan institutions from funding the activities those entities are supposed to perform. Applied to the MOPW, this would mean separating efforts to reform the ministry from efforts to maintain Afghan roads. According to USAID officials, the work plan for Activity 2, and contract documents, Activity 2 of RSSP is intended to lead to the creation of the Road Authority, the Road Fund and the Transportation Institute. If USAID were to initiate Activities 3 and 4 prior to the establishment of those entities, that could create a disincentive for the MOPW to reform. In fact, one Amec official told us that USAID should not fund Activity 3 until the Afghan Parliament passes the proposed legislation establishing the Road Authority, the Road Fund, and the Transportation Institute. The official also stated that USAID must ensure that other donors do not provide funding to the MOPW until the ministry is reformed.

By withholding funding for future activities until the Afghan Parliament passes the proposed legislation, USAID would be acting in manner consistent with the Administrator's Sustainability Guidance, which requires the Afghan government to have the willingness, resources, and capacity to sustain USAID programs. For example, USAID has used conditions precedent in other situations as a form of conditionality in which a program must meet milestones before releasing additional funds to the host government. Withholding funds until necessary steps are taken to reform the MOPW would also be consistent with congressional and international donor guidelines.

The principles laid out in the Tokyo Mutual Accountability Framework reaffirm the use of incentive mechanisms when providing funding to the Afghan government. Finally, the U.S. Senate Committee on Foreign Relations reaffirmed the Tokyo Mutual Accountability Framework by stating that the U.S. "should condition a higher percentage its funding" and that "if done properly by ensuring buy-in from the Afghan government, conditioning U.S. assistance can improve the accountability of our aid, strengthen reformers and institutions in the Afghan

government and result in better development outcomes."³⁰ As demonstrated by the failure of Task Order 14, continuing to fund Afghan road maintenance without a proper amount of conditionality could lead to disincentives for reform within the MOPW. In fact, when discussing the road maintenance needs for Afghanistan, an MOPW official stated that although Afghanistan was working to conduct and fund its own road maintenance, foreign donors would fund and perform necessary road maintenance if the MOPW could not, due to the necessity of the country having a functioning road infrastructure.

Without a firm commitment from all relevant elements of the Afghan government, including the MOPW, the MOF, and the Afghan Parliament, the reforms developed under RSSP may remain unimplemented or, if enacted, may be unsustainable. The failure to properly implement the reforms proposed under RSSP could result in a continued lack of sufficient maintenance and a waste of taxpayer dollars.

DOD-Funded CERP Road Projects Faced Challenges to Sustainment

We found that DOD faced numerous challenges getting the Afghan government to sustain CERP-funded road projects. Although DOD followed its own guidance requiring officials to obtain assurances that the Afghan government would sustain CERP-funded road projects, those assurances were often unrealistic. The MAAWS-A stated that, in coordination with Afghan officials, DOD needed to take into account project sustainability by ensuring that the project met a perceived need by the population, providing ongoing costs to Afghan officials, and ensuring that local Afghan officials would maintain the project in the future.³¹ For construction projects costing more than \$50,000, the MAAWS-A required DOD to receive a sustainment memorandum agreement signed by a local government official acknowledging that the Afghan government was responsible for sustaining the project once it was completed. The MAAWS-A concluded that if a local official was not willing to protect the U.S. investment by sustaining the project, it should not be funded.³² While CERP guidance required local Afghan government officials to assume the responsibility for the sustainment of projects, those assurances are not legally binding.

We have previously identified concerns about the sustainment of CERP road projects. During the height of CERP spending in FY 2009, we found that the Afghan government did not have the resources necessary to maintain a CERP-funded road, despite the MOPW's assurances to the contrary.³³ In its response to our inspection, U.S. Forces–Afghanistan acknowledged that the Afghan government was unable to sustain the roads that had been transferred to it, and noted that it strived "for a balance between static inaction and dynamic reconstruction efforts that move the Afghanistan people forward." The response further stated that there was an "unwritten obligation to make progress with respect to reconstruction efforts" while following regulations, with the expectation that the Afghan government one day could sustain the projects that it said it could.³⁴ Following the peak in CERP spending in FY 2009, funding for road-related CERP projects began to decrease. In commenting on a draft of this report, DOD noted that spending on CERP-funded transportation projects significantly decreased after FY 2009, dropping by more than 80 percent from FY 2009 to FY 2010, according to obligation data DOD reported to Congress.

³⁰ U. S. Senate Committee on Foreign Relations, *Afghanistan in Transition: U.S. Civilian Presence and Assistance Post-* 2014, S. Prt. 113-29 at 1 (2014).

³¹ U.S. Forces–Afghanistan (USFOR-A), Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program (CERP) SOP, USFOR-A Pub 1-06, updated December 2009, Section 3(B)(1).

³² U.S. Forces – Afghanistan (USFOR-A), Money As A Weapon System Afghanistan (MAAWS-A): Commander's Emergency Response Program (CERP) SOP, USFOR-A Pub 1-06, updated December 2009, Section 4(B)(5)(A).

³³ SIGAR, Inspection of Mahmood Raqi to Nijrab Road Project in Kapisa Province: Contract Requirements Met; But Sustainability Concerns Exist, SIGAR Inspection 09-02, October 2, 2009.

³⁴ SIGAR, Inspection of Mahmood Raqi to Nijrab Road Project in Kapisa Province: Contract Requirements Met; But Sustainability Concerns Exist, SIGAR Inspection 09-02, October 2, 2009.

In a 2011 report that examined CERP-funded asphalt road projects in Laghman Province, we found similar sustainment issues. ³⁵ This report examined nine CERP-funded asphalt road projects initiated between November 2007 and December 2009. Two projects were completed, and the remaining seven were ongoing when we conducted our fieldwork in 2010. In all cases, the projects lacked adequate assurances that the Afghan government had the resources to maintain them. We recommended that U.S. Forces–Afghanistan work with Afghan officials to develop sustainment plans for CERP projects that were not being sustained and identify steps for local Afghan officials to take to ensure transferred CERP projects could be sustained before committing additional CERP funds. In its response, U.S. Forces–Afghanistan acknowledged the limited ability of local Afghan governments to maintain infrastructure projects and that U.S. Forces–Afghanistan would continue to use the sustainment memorandum to address sustainment issues.

Although CERP road spending has decreased significantly since FY 2009, multiple U.S. Forces–Afghanistan officials involved in the approval of 2015 CERP projects said the Afghan government could not sustain every CERP-funded project. For example, according to a U.S. Forces–Afghanistan official who was second in command of all CERP programs during 2015, DOD was aware that the Afghan government would always sign the required sustainment memorandum acknowledging that it had the responsibility and capability to sustain a project, despite not always having the capacity to do so. Another U.S. Forces–Afghanistan official, who was the overall program coordinator for all CERP projects in 2015, told us that DOD may not have intended for all CERP road projects to be sustainable. The official stated that construction standards for roads varied depending on how long the road was needed and that building a road designed to last 1 year could be an appropriate use of CERP funds, as long as the road met the identified needs of the users.

In commenting on a draft of this report, DOD noted that CERP is a tool for commanders to use to improve security and stability within their areas of responsibility. According to DOD, while maximizing the value and usefulness of projects through maintenance efforts is desired, there are times when other goals outweigh the potential risk of poor sustainment. For example, paving a road makes it more difficult for insurgents to place improvised explosive devices in roadways. A commander, therefore, may decide to pave a section of road to reduce the threat of IEDs even if there is a risk the asphalt may not be properly maintained over time.

WEAK CAPACITY, CORRUPTION, FUNDING ISSUES, AND INSECURITY HAMPER THE MOPW'S ABILITY TO MAINTAIN AFGHANISTAN'S ROAD INFRASTRUCTURE

Afghan Government Acknowledges Road Infrastructure Needs Repair

An MOPW official told us in August 2015 that 20 percent of Afghanistan's roads were destroyed and the remaining 80 percent continue to deteriorate. This MOPW official specifically cited the Kabul-to-Kandahar highway, stating that it needs to be rebuilt due to improvised explosive device blasts, washouts, and wear, which is similar to what we found during our inspection.

USAID's December 2011 closeout report for Task Order 14 noted that, if not properly maintained, it would cost \$8.3 billion to replace Afghanistan's road infrastructure.³⁶ USAID's December 2015 Final Road Fund Study cited an Asian Development Bank road maintenance road map that estimated the value of Afghanistan's roads at \$8.3 billion in 2010, but concluded that the value had decreased by \$3.6 billion, or 44 percent, due to poor

³⁵ SIGAR, Commander's Emergency Response Program in Laghman Province Provided Some Benefits, but Oversight Weaknesses and Sustainment Concerns Led to Questionable Outcomes and Potential Waste, SIGAR Audit 11-7, January 27, 2011.

³⁶ USAID, Final Closeout Report, TO 14 – Road Operations and Maintenance (O&M) and Capacity Building Program, December 2011.

maintenance, and 54 percent of the road infrastructure needed more than simple repairs.³⁷ As part of the inspections we conducted, we surveyed 174 Afghans on six separate road segments about their perceptions about, and experiences on, Afghanistan's road infrastructure, specifically their perception of road conditions, maintenance efforts, and security. Our survey found that 52 percent of respondents felt road conditions had gotten worse in the past year, and 67 percent believed they would continue to get worse in the next year.

The MOPW's Capacity Problems Remain

In an attempt to build technical capacity at the MOPW, USAID and other donors have spent more than \$60 million on capacity-building training efforts. However, according to USAID, donor assessments, and MOPW officials, these efforts have not succeeded. This conclusion is borne out in multiple studies USAID and other donors have conducted since 2012. See appendix II for a summary of the results from each study.

A February 2012 USAID assessment of the MOPW's ability to perform road maintenance found numerous issues limiting its capacity, including poor communication, a lack of processes and coordination, a lack of an inventory of Afghanistan's roads, and non-transparent contracting practices.³⁸ USAID concluded that the MOPW was unable to provide effective routine road maintenance. A February 2012 Ernst & Young assessment of the MOPW, conducted under a contract with USAID, evaluated the MOPW's financial systems and identified 35 corrective measures the ministry would have to implement before it would be capable of managing direct assistance.³⁹ Ernst & Young concluded that the MOPW was unable to manage on-budget assistance.

Later studies by international donors found similar capacity issues at the ministry. For example, USAID's Final Organizational Assessment of the MOPW summarized a July 2013 study by Australia's Agency for International Development that found that donors' capacity-building efforts were not being sustained by the MOPW, and a July 2014 World Bank training needs assessment found that the ministry had limited capacity to plan and perform road maintenance or use engineering software.⁴⁰

In May 2015, USAID issued its Final Organizational Assessment of the MOPW, an assessment of the ministry's operations, practices, and management.⁴¹ This assessment found that prior donor initiatives did not achieve meaningful reforms and noted that donor capacity-building efforts did not have a significant or lasting impact. This assessment concluded that the MOPW needed structural reform, citing ongoing critical weaknesses including lack of a skilled staff, poor communication, antiquated systems and processes, and a lack of will to implement necessary reforms.

The lack of technical capacity at the MOPW impacts the transition and sustainability of donor efforts. For example, according to a World Bank official, capacity issues prevented the World Bank from transferring its

³⁷ USAID, Final Road Fund Study (Component 3), Technical Assistance to the Ministry of Public Works, December 9, 2015, p. 26; and Asian Development Bank, Strategic Roadmap for Development Partner Support to O&M of Afghanistan Roads, August 2015.

³⁸ USAID, Evaluation of the Ministry of Public Works Capacity to Conduct Roadway Operations and Maintenance (O&M), February 11, 2012.

³⁹ Ernst and Young, *Report on Pre-Award Assessment of Ministry of Public Works*, February 2012, pp. 9–10. In January 2013, we reported on this and other assessments USAID conducted itself or contracted for to determine whether various ministries were capable of managing direct assistance funds (see SIGAR, *Direct Assistance: USAID Has Taken Positive Action to Assess Afghan Ministries' Ability to Manage Donor Funds, but Concerns Remain*, SIGAR 14-32-AR, January 30, 2014). Direct assistance is a form of on-budget assistance, which is funding channeled through a host nation's national budget.

⁴⁰ USAID, Final Organizational Assessment of Ministry of Public Works (Component 1), USAID RSSP Technical Assistance to Ministry of Public Works, January 2015; Australian Agency for International Development, Diagnostic Report for MoPW Under USAID and Ministry of Finance for DAFA III Program to Support the Public Financial Management Program in 4 Ministries: MoPW, MoE, MAIL, and MoPH for a staged Capacity Building Model, July 2013; and World Bank, Training Needs Assessment Report, National and Regional Corridors Program (NRRCP), July 16, 2014.

⁴¹ USAID, Final Organizational Assessment of Ministry of Public Works (Component 1), USAID RSSP Technical Assistance to Ministry of Public Works, January 2015.

rural road maintenance program to the ministry because it lacks the ability to manage road infrastructure and develop and execute contracts. This official concluded that the MOPW largely remains non-functional. In a second example, in December 2015, USAID transferred the final segment of the Gardez to Khowst highway to the MOPW. When we inspected the road later than same month, we found that it already suffers from poor maintenance and has major road defects affecting its drivability.

Corruption at the MOPW Remains an Issue

USAID, donor assessments, and an MOPW official said corruption continues to be an issue that hampers the ministry's ability to maintain roads. USAID's February 2012 assessment of the MOPW found that employees were hired based on nepotism and personal connections, noting that high-paying positions were offered to people with personal connections. ⁴² The organizational assessment of the MOPW also found that nepotism and favoritism were still apparent in the appointment of managers and staff, and that donors lacked confidence in the MOPW's ability to be effective, efficient, transparent, lawful, and professional. Furthermore, the assessment recommended that future transition activities should take these findings into account.

Corruption can have a direct impact on the activities and financing of MOPW activities. For example, a senior MOPW official told us that the MOPW stopped collecting tolls on the roads due to high levels of corruption. The official explained that since the tolls were collected in cash, drivers would pay bribes to the toll collectors in exchange for reduced tolls. The official stated that a similar type of bribe was being paid at weigh stations, where drivers of overweight trucks would pay bribes to avoid fines. According to this official, in response to these problems the MOPW implemented new controls, such as random checks of stations, the use of undercover employees, and increased tracking of vehicle weights as they exit and enter different weigh stations. The MOPW official said following the implementation of these controls, revenues increased 400 to 600 percent at one weigh station alone.

The MOPW Lacks Sufficient Funding and Ability to Manage Budgets to Perform Necessary Road Maintenance

USAID and donors have found that the MOPW does not have adequate funding to perform necessary road maintenance. MOPW officials stated that it would cost \$100 million annually to carry out the necessary emergency, routine, periodic, and winter maintenance on Afghanistan's road infrastructure. However, according to data provided by the ministry officials, between 2011 and 2016, it received, on average, \$21.3 million annually from the MOF. The officials said the lack of funding has resulted in the deterioration of roads, and that the roads will continue to deteriorate if the ministry does not receive funding at a level closer to annual road maintenance costs.

An MOPW official told us that the ministry annually requested far less than it determined it needed to perform road maintenance because the MOF was unwilling to approve the actual amount necessary. However, Amec and other donor officials stated that the MOPW needed to improve how it requested funding, and MOF officials said the MOPW often did not spend all of the development budget allocated to it annually.⁴³ An MOPW official said MOF officials have directed the MOPW to use unspent developmental funds for road maintenance; however, according to this MOPW official, because Afghan law prohibits the MOPW from reallocating those funds for operational needs, Afghanistan's road maintenance needs continue to be underfunded.

USAID's December 2015 Final Road Fund Study report corroborated the MOPW's assertions, noting that the ministry's budget allocation emphasized road construction rather than maintenance, and concluded that the

 $^{^{42}}$ USAID, Evaluation of the Ministry of Public Works Capacity to Conduct Roadway Operations and Maintenance (0&M), February 11, 2012.

⁴³ The MOPW's overall budget contains a developmental and operational budget category. According to an MOPW official, the developmental budget can be carried over from one year to the next and is meant for new road development, while the MOPW's operational budget must be spent annually and is meant for maintenance and operation expenses.

Afghan government needed to use its budget better by increasing the allocation for road maintenance. 44 Additionally, the report stated that that the MOF had raised concerns about the MOPW's ability to manage its budget, and that the MOF is concerned with the MOPW's ability to operate in an effective, efficient, and transparent matter. According to the USAID report, these concerns resulted in the MOF being reluctant to increase funding for the MOPW without meaningful change. The report concluded that road maintenance remains highly underfunded, and the MOPW needs to develop additional revenue streams or rely on donors to make up a \$500 million budget shortfall anticipated for the next 5 years.

To increase funding for road maintenance, Afghanistan instituted a tax on imported fuel and created road user fees, the revenues from which are supposed to be specifically earmarked for road maintenance. Despite these efforts, MOPW officials said the MOF—the Afghan ministry which collects revenue—has not provided all earmarked revenues to the MOPW and violates the law by not using the revenues exclusively for road maintenance and possibly uses the revenues to fill Afghanistan's other budget gaps. The United Kingdom's Department for International Development and Amec officials, along with a December 2015 USAID report, corroborated the MOPW's claims, stating that the MOF withholds revenues from the fuel tax and road user fees, and possibly uses them to fill Afghanistan's other budget gaps. MOF officials disputed this claim and stated that the MOPW receives all revenues from the fuel tax and road user fees. During the course of this audit, we could not determine whether this was true.

Last, we found various budgetary inconsistencies regarding funding for road maintenance. In examining the MOPW's budget requests, approvals, and income generated by the fuel tax, we identified differences between the funding amounts cited by the MOPW, the MOF, and Amec. For example, the MOPW provided us with budget information on various occasions, and none of the information was consistent. Additionally, officials from the MOPW stated that the ministry's FY 2015 budget was \$17.5 million. However, officials from the MOF stated that it was \$14.9 million. In another example, the MOPW stated that the fuel excise tax generated \$60 million in FY 2014, while the MOF indicated that it was \$17.9 million, and Amec determined it was \$20.5 million. According to MOF officials, in 2015, the tax doubled from 1 afghani per liter to 2 afghanis per liter. Despite this increase, MOF officials estimated that only \$30 million was generated by the fuel excise tax in FY 2015, while Amec estimated that \$120 million was collected for this same time period. Due to these inconsistencies, we could not determine the exact amount of road maintenance funding the MOPW requested, how much the MOF provided, and how much the MOF collected in road user fees.

Security Issues Hamper Road Maintenance Efforts

In addition to being maintained to a drivable standard, Afghanistan's roads must be safe enough from insurgent attack to allow for travel and maintenance. MOPW officials said security conditions vary throughout the country, noting that northern and central Afghanistan do not face the same security challenges as the south, and that the MOPW could perform maintenance only where security conditions allowed. They said that the MOPW is beginning to use local Afghan contractors to perform maintenance because they have fewer problems with insurgents than international contractors.

During our inspections, we noted that 6 of the 20 road segments had insurgent activity and identified 13 insurgent checkpoints. Additionally, through our surveys, we found that when respondents were asked about

⁴⁴ USAID, *Final Road Fund Study (Component 3), Technical Assistance to the Ministry of Public Works*, December 9, 2015. ⁴⁵ In 2011, the Afghan government issued *Ministers Council Approval Number 3*, which implemented a 1 afghani (\$0.02) per liter fuel tax as a road user charge and explicitly earmarking these funds for road maintenance. Afghan law requires the MOF to collect the fuel tax revenue and place it into a special account and transfer the funds to the MOPW for road maintenance. Similarly, *The Afghanistan Road Toll Gazette Publication Number 1091 of 1391* codified the Ministers Council decree and also requires the MOF to collect and place funds from other road user charges, such as tolls and fines, into a special account and to transfer those funds to that MOPW.

⁴⁶ Government of Afghanistan, *The Afghanistan Road Toll Gazette Publication Number* 1091 of 1391, *Article* 6, November 12, 2012.

road security during the day, 69 percent felt that the roads were either "very safe" or "somewhat safe," and that insurgents were the biggest security concern. When asked about security during the night, 59 percent of the respondents felt that the roads were either "very unsafe" or "somewhat unsafe," again with insurgents being the biggest security concern.

Finally, MOPW officials said Afghanistan's road infrastructure plays an important role in the country's development and governance, and if the Kabul to Kandahar highway were became impassable, the central government would collapse. However, the same MOPW officials were confident that the Afghan National Defense and Security Forces would increase security if the situation got worse.

CONCLUSION

USAID, DOD, and other international donors have invested billions of dollars to build an extensive road infrastructure in Afghanistan, with the U.S. contribution totaling approximately \$2.8 billion. However, many of the country's roads are in need of repair. Further, despite past and current efforts, neither USAID's nor other donor's efforts have succeeded in building sufficient technical capacity within the MOPW to enable it to effectively perform its mission of constructing and maintaining Afghanistan's roads.

Although USAID's RSSP takes into account the lessons learned from prior programs that failed to develop or reform the MOPW, the risk remains that the Afghan government will not embrace the reforms proposed as part of this ongoing program. Without tangible Afghan government action to support the needed reforms, including the passage of legislation to establish an independent Road Authority, Road Fund, and Transportation Institute, the effective management and sustainment of Afghanistan's road infrastructure will remain an elusive goal. The MOPW continues to lack the capacity to fund and perform effective road maintenance. Therefore, the creation of these three agencies is necessary to lessen the risk that RSSP will become another program that simply pays for the maintenance of Afghanistan's roads, but does not prepare the MOPW to take the lead in maintaining Afghanistan's roads. Furthermore, the continued deterioration of the road infrastructure could weaken the Afghan government's reach throughout the country, inhibit commerce, and restrict the freedom of movement of Afghans. Unless USAID, along with its other donor partners, takes additional action to demand needed reforms, and the Afghan government demonstrates a commitment to implementing those reforms, Afghanistan will continue to rely on donor funding for road maintenance and reconstruction for the foreseeable future.

RECOMMENDATION

To ensure the remaining activities of the RSSP, as well as any future road programs, address the shortcomings of previous programs and increase the MOPW's capacity to maintain Afghanistan's roads, we recommend that the USAID Administrator condition future RSSP and MOPW funding to the successful creation of an independent Road Authority, Road Fund, and Transportation Institute.

AGENCY COMMENTS

We provided a draft of this report to USAID and DOD for review and comment. USAID and DOD, through the Office of the Deputy Assistant Secretary of Defense for Afghanistan, Pakistan and Central Asia, provided written comments which are reproduced in appendices III and IV, respectively. USAID and DOD also provided oral and written technical comments, which we incorporated into this report, as appropriate.

USAID Comments

USAID concurred with our recommendation and stated that the recommendation aligns with its "current approach, which ensures that any future road programs address the shortcomings of previous programs and increase the MOPW's capacity to maintain Afghanistan's roads." USAID also stated that the Afghan government has taken steps to demonstrate its commitment to reform, including formally endorsing the creation of a Road Authority, Road Fund, and Transportation Institute. Furthermore, USAID noted that "the newly released Afghanistan National Peace and Development Framework specifically identified road sector reform as a key component of the energy and infrastructure development and growth strategy for the country." Based on this information, USAID Afghanistan requested that SIGAR close the recommendation.

While we are encouraged by USAID's commitment to learning from the mistakes of prior programs, we disagree with USAID's request to close the recommendation. As evidenced by the existence and goals of the RSSP, the establishment of an independent Road Authority, Road Fund, and Transportation Institute is necessary to reform the MOPW and ensure the mistakes of the past are not repeated. Moreover, as discussed in the report, USAID's own guidance, the Tokyo Mutual Accountability Framework, and statements from the U.S. Senate Committee on Foreign Relations all suggest that by placing conditions on future funding for Afghan ministries, USAID will create incentives for the Afghan government to implement desired reforms. However, if USAID proceeds to fund activities 3 and 4 of RSSP or future road programs prior to Afghanistan passing legislation to establish an independent Road Authority, Road Fund, and Transportation Institute, the agency could end up repeating the shortcomings of Task Order 14 and create disincentives for reform. Therefore, we will keep the recommendation open until we obtain evidence that future RSSP and MOPW funding is conditioned on the establishment of the Independent Road Authority, Road Fund, and Transportation Institute.

DOD Comments

In its comments on a draft of this report, DOD noted that its road construction and maintenance activities in Afghanistan have largely concluded. DOD reiterated that while maximizing the value and usefulness of projects through future sustainment was desired, other goals sometimes outweighed the potential risk that a project might not be sustained in the long-term. However, DOD stated that it was encouraged by the recent developments summarized in the report indicating that the Afghan government continues to demonstrate its commitment toward reform and the creation of a Road Authority, Road Fund, and Transportation Institute that will help the Afghan government establish a self-supporting, commercialized transportation system.

APPENDIX I - SCOPE AND METHODOLOGY

This audit examined U.S. government efforts to construct and sustain roads, and build capacity within the Afghan government to perform road maintenance from 2002 through June 2016. The objectives of this audit were to determine the extent to which (1) U.S. agencies have fully accounted for the road construction they funded in Afghanistan; (2) selected U.S.-funded roads have been maintained and what the current condition of a subset of those roads is; (3) U.S.-funded road construction and capacity-building programs achieved program goals and are sustainable; and (4) challenges, if any, exist to the Afghan government's ability to perform and self-fund road maintenance. We focused on roads the U.S. Agency for International Development (USAID) and Department of Defense (DOD), the principal U.S. agencies that fund road construction and maintenance programs in Afghanistan, constructed for civilian use, and capacity building programs specific to USAID.

To determine the extent to which USAID has fully accounted for the road construction it has funded in Afghanistan, we requested that the agency identify all programs and initiatives specifically pertaining to road construction, road maintenance, and building the capacity of the Afghan government to maintain its road infrastructure implemented from 2002 to June 2016. We specifically requested a name and description for each program, amounts disbursed for completed programs, amounts obligated for ongoing programs, and location data. To analyze the location of specific road programs, we assessed whether the program's Global Positioning System coordinates were within the identified province, district, or village, and located on or near a road.

To determine the extent to which DOD has fully accounted for the road construction it has funded in Afghanistan, we analyzed project and funding data from Commander's Emergency Response Program (CERP) annual fourth quarter reports to Congress from fiscal year (FY) 2004 through FY 2015. Because the reports contained obligation and disbursement data valid as of the report dates only, we obtained updated obligation and disbursement data from the Defense Finance and Accounting Service, and consolidated the data to create a single, aggregated dataset that joined project information with final expenditure data. We used this consolidated CERP dataset to identify 4,687 projects that supported road construction and maintenance by conducting key word searches of project titles and descriptions. The projects we identified included construction, rehabilitation, repair, refurbishment, improvement, and maintenance of roads and their associated infrastructure, such as culverts, designed to restore or maintain the integrity and passable nature of roads or bridges for motor vehicles. We used the same consolidated dataset to identify 57 projects that were completed after December 1, 2009, disbursed more than \$500,000 each, and were required to have geo-coordinates to determine if DOD had recorded the geo-coordinates of its road projects. We compared the results against the locations documented in the Combined Information Data Network Exchange database—the database where CERP project files are kept—and determined if the project's Global Positioning System coordinates were within the stated province, district, or village and located on or near a road.

To determine the extent to which selected U.S.-funded roads have been maintained and the current condition of a subset of those roads, we conducted site inspections to assess the general physical condition of 1,640 kilometers of road divided into 20 segments. The inspections documented the types of road surfaces used, the number of lanes, the types of defects observed and repaired, traffic conditions, and the overall security condition, to include levels of insurgent activity and solicited bribes. Six inspections included photography of the road segment's conditions and surveys of the segment's users. We did not collect photographic and testimonial evidence for the remaining 14 segments due to security considerations.

In December 2014, SIGAR entered into a cooperative agreement with Afghan civil society partners. Under this agreement, our Afghan partners conduct specific inspections, evaluations, and other analyses. In this regard, Afghan inspectors and engineers inspected 1,640 kilometers of roads from October 2015 through November 2015. We developed a standardized inspection checklist that included the items previously noted. We compared the information our Afghan civil society partners provided to accepted engineering practices, relevant standards, regulations, laws, and codes for quality and accuracy. In addition, as part of our monitoring and quality control process, we:

- met with the Afghan engineers to ensure that the approach and planning for the inspection were consistent with the objectives of our inspection and the terms of our cooperative agreement;
- · discussed significant inspection issues with them;
- monitored our partners' progress in meeting milestones and revised contract delivery dates as needed; and
- conducted oversight of them in accordance with SIGAR's policies and procedures to ensure their work resulted in impartial, credible, and reliable information.

To determine the extent to which the U.S.-funded road construction and capacity-building programs achieved program goals and are sustainable, we reviewed USAID and DOD documents, including contracts and task orders, and planning documents, lessons learned reports, and other contract deliverables USAID, DOD, and their implementing partners prepared. Specifically, to determine if U.S.-funded capacity building programs met their stated outcomes, we reviewed contract close-out documents. We also reviewed our prior audits on CERP and road-related efforts, prior Government Accountability Office and the DOD Office of Inspector General reports, as well as assessments and reports prepared by various foreign donors. Furthermore, we interviewed officials from USAID, DOD, U.S. Army Corps of Engineers (USACE), USAID's implementing partner Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec), the Afghan Ministry of Public Works (MOPW), the Afghan Ministry of Finance (MOF), the Asian Development Bank, the World Bank, and the United Kingdom's Department for International Development.

To determine the extent to which challenges, if any, exist to the Afghan government's ability to perform and self-fund road maintenance, we reviewed assessments and evaluations, close-out lessons learned reports, and other contract deliverables USAID, DOD, and their implementing partners prepared. We also interviewed officials from USAID, DOD, USACE, Amec, the MOPW, the MOF, the Asian Development Bank, the World Bank, and the United Kingdom's Department for International Development.

Although we did not use computer-processed data from USAID, we relied on computer-processed data from DOD to identify the road construction and maintenance programs the department implemented in Afghanistan from FY 2004 through FY 2015. We concluded that although DOD's data had limitations when used alone, consolidating that data with updated funding data from Defense Finance and Accounting Services allowed us to create a sufficiently reliable data set for the purposes of this report. We also assessed internal controls to determine the extent to which DOD and Defense Finance and Accounting Services had systems in place to track and report on their efforts in Afghanistan. The results of our assessment are included in the body of the report.

We conducted our audit work in Kabul, Afghanistan, and Washington, D.C., from May 2015 to October 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. This audit was performed by SIGAR under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended.

⁴⁷ For example, SIGAR, Commander's Emergency Response Program in Laghman Province Provided Some Benefits, but Oversight Weaknesses and Sustainment Concerns Led to Questionable Outcomes and Potential Waste, SIGAR Audit 11-7, January 27, 2011; GAO, Progress Made in Constructing Roads, but Assessments for Determining Impact and a Sustainable Maintenance Program Are Needed, GAO-08-689, July 2008; Department of Defense Inspector General, Management Improvements Needed in Commander's Emergency Response Program in Afghanistan, DODIG-2012-023, November 21, 2011; and The World Bank, Training Needs Assessment Report, National and Regional Resource Corridors Program, July 16, 2014.

APPENDIX II - ASSESSMENT PERFORMED ON THE MOPW'S CAPACITY

Since 2012, the U.S. Agency for International Development (UASID) and its implementing partners completed multiple assessments of the Ministry of Public Works' (MOPW) capabilities. We reviewed these assessments during the course of our audit and summarized the objectives and findings of the assessments the table below.

Table 3 - Summary of Assessments of MOPW Capacity

Assessment Completed by Assessment Objective

Tetra-Tech, Inc., Evaluation of the Ministry of Public Work's Capacity to Conduct Operation and Maintenance, February

The objective of the evaluation was to assess the MOPW's road maintenance capacity and assist USAID in the development of capacity building program.

Organization:

- Weak personnel management and managerial skills among the staff.
- Lack of internal and external communication and coordination within the MOPW.

Assessment Findings

- Lack of authority for the staff to act and decide and enforce laws.
- Lack of expertise to provide input in design and construction for donor projects.
- Lack of experience in routine/periodic maintenance and contracting out services.

Equipment:

- Lack of sufficient and new equipment to maintain roads and bridges.
- Lack of basic day to day equipment and field supplies to perform work.

Standards:

- Lack of general standards for road construction.
- Lack of complete road and bridge inventory.
- Newly constructed roads are not reported to the MOPW by donors.

Personnel Management and Training:

- Lack of personnel with knowledge in road maintenance and Pavement Management System.
- Capacity building training programs have been ineffective; MOPW leadership are unhappy with training programs.
- Trainings offered to wrong people or failed to involve existing ministry staff.
- Wages and compensation remain low compare to other ministers
- Staff hired based on nepotism and do not have the necessary qualifications.
- Contracts are awarded to unqualified contractors.

Ernst & Young Ford Rhodes The assessment objective Sidat Hyder, Pre Award Assessment Ministry of Public Works, February 2012.

was to determine if the MOPW's Financial System meets USAIDs' Financial Requirement for on-budget assistance.

Corporate Governance:

- An Internal Audit charter and terms of reference should be developed and approved by the minister
- The internal audit plan should be risk based.
- Standard audit programs and checklists should be developed for internal audits.
- Internal audit teams should be trained on carrying out risk based internal audits.
- A mechanism for identification and compliance of changes in applicable rules and regulations should be in place.

Financial management, budgeting and accounting

- Ability to budget for sub activities and individual phase of the projects, taking in to account the assessment of expenditures for the sub codes and individual activities for the projects.
- Put a process in place for budget variance analysis, which should include monthly reporting of budgeted versus the actual expenditure with an explanation for material variances.
- Need for documented Terms of Reference for the budget committee.
- Documented minutes of the budget committee.
- Budget module should be implemented in the system.
- Linking the financial budget with the strategic plan.
- Need to develop procedure manual for the finance function detailing specific procedures followed at the head office/provincial/district level in respect to financial management and
- Need to document delegation of authority matrix specifying the authorities/offices assigned with various financial audits.
- To strengthen the fixed management process, the MOPW should implement tagging of all fixed assets and verification of all fixed assets.

Personnel Policies and Procedures:

Need to put in place a formal process for reference checks, whereby when a new employee is being recruited, a letter or email should be forwarded to a reference automatically.

Procurement and Purchasing Systems:

Need to develop procedures manual for the procurement function detailing specific procedures in compliance with applicable procurement laws of Afghanistan.

Program Management, and Monitoring:

- Need to develop a formal monitoring plan and a monitoring mechanism to ensure such plan is being followed.
- Process should be put in place whereby updated information relating to projects should also be forwarded to the monitoring and evaluation department, in order to facilitated effective planning.

 $Continue\ on\ following\ page$

Assessment Completed by	Assessment Objective	Assessment Findings
Amec Foster Wheeler Environment & Infrastructure, Inc. Final Organizational Assessment of the MOPW, May 2015	The objective of the assessment was to perform an initial evaluation of the MOPW's functions and organizational structure.	Staff Training and Capacity Building: Lacks skills and expertise to set policies, guidelines, and produce strategic work plans. Trainings offered have not been effective in supporting the MOPW's mission. Lacks resources to conduct research and develop best practice guidelines for design, rebuilding and maintenance of roads, apply new technologies and apply modern road construction and road maintenance techniques.
		Funding and Financing: The MOPW's Infrastructure Master Plan and Afghanistan National Development Strategy is out of date and there is no policy to update these documents. The fuel tax for road maintenance is not provided for road maintenance, and instead it's directed to General Funds of the Ministry of Finance. Road Development and Road Operation and Maintenance: The Development Department struggles to achieve on time delivery and quality projects. The trainings offered have been ineffective and the department faces institutional weakness and inconsistencies with basic technical engineering processes are evident. Data collection for planning annual road maintenance is ineffective. Provincial offices involvement in projects developed in Headquarters is limited. Procurement: The MOPW relied on Afghanistan Reconstruction Development Service for technical support for procurement of its projects which created capacity gap for procurement staff in the MOPW. The MOPW lacks effectiveness and efficiency within the procurement system.
Department for International Development and United Nation Office for Projects, Keep Afghan Connected Program, Review of Training and Development at the MOPW, November 2013	The objective of the assessment was to evaluate the MOPW's training and development programs.	 The MOPW is underperformed in its budget due to the delays and timely procurement. Trainings offered to some attendees that were not their field of specialization. Training was not planned strategically. Training courses were organized on an ad-hoc basis and were not properly sequenced for development of competencies, and suffered from a low participation rate. An overall evaluation of sustainability of training not conducted due to in appropriate system of record-keeping of trainings. For all the training provided, assessments revealed that manuals and guidelines prepared or drafted, especially in the Operations and Maintenance Directorate, have not been properly applied in their works. There was no follow-up on the impact of training provided to ensure it was contributing to improved performance.
Development Assistance Facility for Afghanistan Administration & Finance Department Review, July 2013.	The objective of the assessment was to perform a review of Administration & Finance Department to identify capacity gaps in Public Financial Management and to improve infrastructure.	 Planning and project design functions are weak. For example, there are no preliminary notes or appropriately justified proposals submitted to the Ministry of Finance. Project screening is not being effectively managed by the Internal Budget Committee. No procedural manuals or standard templates exist to support the preparation of concept notes and project proposal preparation. Weak systems and individual deficiencies in capacity is effecting project planning and design. The absence of key project documentation and weaknesses identified in the planning process results in "a wish list" at key stages. This in turn leads to inefficient allocation of limited funds as priority projects are not explicitly identified and implemented.
World Bank, Training Needs Assessment of MOPW For National and Regional Resources Corridors, July 2014.	The objective of the assessment was to assess the training needs and capacity gaps for National and Regional Resource Corridors Program and based on the findings build the capacity of "Tashkeel" staff of the MOPW.	 Inability or low capability in program planning, road maintenance, or using engineering software, and project reporting. Inability or low capability in project/program planning, survey and design, Quality Assurance /Quality Control, construction management, engineering software, project reporting. Inability or low capability in survey, design & software, safety technology, international standards of Quality Assurance /Quality Control, engineering materials laboratory, asphalt & concrete mix designs, and technical specifications. Inability or low capability in survey, design & software, project economic analysis, some engineering software. Inability or low capability in project/program planning, proposal writing and project reporting.

Note: The Keep Afghan Connected and Development Assistance Facility for Afghanistan Administration & Finance Department Review assessments are summarized by Amec Foster Wheeler Environment & Infrastructure, Inc.

Source: SIGAR summary of data provided by USAID, the World Bank, United Kingdom Department for International Development, and Australian Agency for International Development assessments of the MOPW between 2008 and 2015

APPENDIX III - COMMENTS FROM THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT



MEMORANDUM

October 18, 2016

TO: John F. Sopko

Special Inspector General for

Afghanistan Reconstruction (SIGAR)

FROM: Herbert Smith, Mission Director

USAID/Afghanistan

SUBJECT: Mission Response to Draft SIGAR Report titled

"Afghanistan's Road Infrastructure: Sustainment Challenges and Lack of Repairs Put Nearly \$3 Billion U.S. Investment at Risk" (SIGAR Report 17-XX

under Code 107A)

REF: SIGAR/GTonsil Transmittal email dated 03/22/2016

USAID thanks SIGAR for the opportunity to comment on this report. Since 2002, USAID has supported the development of Afghanistan's road network, recognizing that roads serve as catalysts for development by connecting communities across Afghanistan to public services and economic opportunity. The long term goal of both USAID and the Afghan government is to establish a self-supporting commercialized transportation system.

As indicated by the USAID assessments in 2012 and 2015 SIGAR cites in the audit, USAID transitioned away from road construction to equip the Afghan Ministry of Public Works (MoPW) with the technical proficiency needed to operate and maintain Afghanistan's roads. Under the National Unity Government, the MoPW has demonstrated a renewed will to take on this responsibility, including formally endorsing USAID's Road Sector Sustainability Project (RSSP) in June 2016. The newly released Afghanistan National Peace and Development Framework (ANPDF) specifically identified road sector reform as a key component of the energy and infrastructure development growth strategy for the country. USAID's RSSP project is designed to assist the Afghan government in taking on ownership of Afghanistan's road network through the establishment of a Road Authority to manage operations and

U.S. Agency for International Development Great Massoud Road Kabul, Afghanistan Tel: 202-216-6288 / 0700-108-001 Email: <u>kabulusaidinformation@usaid.gov</u> http://afghanistan.usaid.gov maintenance activities, a Road Fund to provide funds for these activities, and a Transportation Institute to develop national standards, research new technologies, and provide quality assurance.

USAID's Technical Comments

SIGAR Draft Report, page 5, para. 1: "...for the \$366 million Secondary Road Program, USAID provided road locations at the district level but could not provide more precise location data. Therefore, we could not determine the precise location of the roads constructed under the program."

USAID's Comment: USAID requests that the sentence be amended to a more accurate, "...for the \$366 million Secondary Road Program, USAID provided road locations at the district level, as specific GPS coordinates were not required at the time of the contract; newer contract provisions now make sure specific location data are a part of the monitoring requirements."

SIGAR Comment 1

SIGAR Draft Report, page 2 of the Summary section, page 11-12 of the draft report: "However, there is no guarantee that Afghan parliament will consider the proposed legislation in the current or future sessions or whether it will enact them."

USAID's Comment: USAID found these statements inaccurate. USAID requests that the sentence be deleted since SIGAR has not provided significant justification in the report to support the above statement.

SIGAR Comment 2

SIGAR Recommendation

To ensure the remaining activities of the RSSP, as well as any future road programs, address the shortcomings of previous programs and increase the MOPW's capacity to maintain Afghanistan's roads, we recommend that the USAID Administrator link future RSSP and MOPW funding to the successful creation of an independent Road Authority, Road Fund, and Transportation Institute.

USAID Comments: Mission concurs with SIGAR's recommendation.

Actions Taken/Planned: This is in line with the mission's current approach, which ensures any future road programs address the shortcomings of previous programs and increase the MOPW's capacity to maintain Afghanistan's roads.

While the RSSP sub-activities 3 and 4 are not strictly conditioned upon the Government of Afghanistan enacting laws to authorize the new Road Authority, Road Fund and Transportation Institute (Activity 2), the Mission believes that the governmental approvals are proceeding and that the Afghan Parliament will enact the necessary laws to implement the road sector sustainability reforms.

The Afghan Government has taken continued steps to sufficiently demonstrate their commitment toward the reform. One noteworthy step was the Third Inter-Ministerial Project Steering Committee (IMPSC), held on June 19, 2016. At this event, the President's Special Representative for Reform and Good Governance in the Office of Presidential Administrative Affairs (OPAA) and chair of the Road Sector Reform project, His Excellency Ahmad Zia Massoud, formally announced the IMPSC's endorsement for the reforms and support for the creation of the three new agencies. The endorsement letter was signed by representatives from:

- Ministry of Public Works
- · Ministry of Finance
- · Ministry of Justice
- · Ministry of Transport and Civil Aviation
- Ministry of Rural Rehabilitation and Development
- Ministry of Urban Development Affairs
- Independent Directorate of Local Government
- Independent Administrative Reform and Civil Service Commission
- . H.E. Ahmad Zia Massoud

A formal endorsement letter for the reforms was also issued by Dr. Qayoumi, Chief Advisor to the President on Infrastructure, Human Capital and Technology on July 22nd, 2016.

USAID has previously provided SIGAR, in response to the audit Statement of Facts, both documents on the Inter-Ministerial Project Steering Committee, and the Endorsement Letter.

Finally, the newly released Afghanistan National Peace and Development Framework (ANPDF) specifically identified road sector reform as a key component of the energy and infrastructure development growth strategy for the country. The five year strategic plan notes that, "Work is underway to improve transportation authorities by establishing systems that would allow them to harmonize responses to the country's expanding transport needs." This includes the establishment of a Road

Authority, a Road Fund, and a Transport Institute (see Attachment # 1, Section D- page 19: Energy and Infrastructure Development).

Closure Request: Based on the above, the Mission believes that the final action has been taken and requests SIGAR concurrence for closure of Recommendation No. 1.

Attachment:

Afghanistan National Peace and Development Framework.

cc: U.S. Embassy

SIGAR Response to USAID Comments

- 1. We reviewed USAID's comment and revised the sentence identified as follows:
 - However, for the \$366 million Secondary Road Program, USAID provided road locations at the district level, but could not provide more precise location data because specific Global Positioning System coordinates were not required at the time of the contract... According to USAID's response to a draft of this report, newer contract provisions now ensure specific location data are a part of the monitoring requirements.
- 2. We disagree with USAID's assertion that our statement is inaccurate and unsupported. Our report notes that multiple officials within the Afghan government have voiced support for the reforms proposed by the RSSP. However, as of the date of this report, the Afghan Parliament has not passed legislation to formally establish an independent Road Authority, Road Fund, and Transportation Institute. If USAID has information showing that passage of the reform legislation is in fact guaranteed, we will consider that information.



OFFICE OF ASSISTANT SECRETARY OF DEFENSE 2700 DEFENSE PENTAGON WASHINGTON, D.C. 20301-2700

The Honorable John Sopko Special Inspector General for Afghanistan Reconstruction 1550 Crystal Drive, 9th Floor Arlington, VA 22202

Dear Mr. Sopko:

Thank you for the opportunity to review the Special Inspector General for Afghanistan Reconstruction (SIGAR) draft audit, "Afghanistan's Road Infrastructure: Sustainment Challenges and Lack of Repairs Put U.S. Investment at Risk."

The majority of the Department of Defense's (DoD's) road paving projects covered in the report were undertaken during the peak years of the counterinsurgency effort in Afghanistan when the United States and the international community focused on connecting the Afghan people to the central government and improving economic conditions by, among other means, improving transportation networks. As our counterinsurgency efforts wound down, DoD stopped using the Commander's Emergency Response Program (CERP) to fund such projects, the last of which occurred in 2013. DoD is not currently planning to implement similar projects in the future. According to the report, 17 of the 20 inspected road segments are in fair or better condition, but poor quality maintenance by the Afghan government has resulted in defects that has limited drivability in areas. Although road conditions and maintenance levels may not be up to the highest standards, they represent an improvement over what existed prior to these efforts.

As the report documents, U.S. Forces-Afghanistan (USFOR-A) implemented thousands of road-related projects after CERP was introduced in Afghanistan in fiscal year (FY) 2004. Most of these cost less than \$5,000 and typically involved hiring local Afghans for small repair projects, which included fixing damage caused by improvised explosive devices and repairing culverts to prolong road life. DoD also funded larger road reconstruction projects, including paving roads and re-grading and compacting dirt roads. These efforts supported the U.S. Government Integrated Civilian-Military Campaign Plan and were intended to provide market access for agricultural development, increased access to health facilities, mobility for increased trade, and security and service delivery for the Afghan people.

Funding of these larger transportation projects spiked during FY 2008-09. In fact, of all the CERP funds DoD obligated for transportation projects in Afghanistan through FY 2016,

¹ The statistics on project numbers and costs in this response are based on obligation data that DoD regularly reports to Congress.



nearly 80 percent were for projects initiated between FY 2004 and FY 2009. Spending fell dramatically in the years that followed. The average obligation of a CERP-funded transportation project through FY 2009 was more than \$800,000; after FY 2009, the average fell to less than \$65,000 per project.

With respect to sustainment of the larger road projects, the report highlights the challenges that DoD, the U.S. Agency for International Development (USAID), and international donors faced when implementing these efforts. As USFOR-A noted in responses to past audits, it tried to strike a balance between protecting U.S. resources and supporting reconstruction efforts that had the potential to increase security and stability in Afghanistan. Sustainment was one of many factors military commanders considered before approving CERP-funded road projects. Although maximizing the value and usefulness of projects through future sustainment would always be desirable, other important goals sometimes counseled in favor of approving projects even when there was potential risk that it might not be sustained in the long-term. For example, the short-term goal of paving a road to decrease the threat posed by improvised explosive devices at times outweighed the risk that the road may not be properly maintained over time.

Finally, the overwhelming majority of the larger CERP-funded road improvement projects were initiated in the era when USAID began its efforts to strengthen the capacity of the Ministry of Public Works, which is responsible for maintaining much of Afghanistan's road infrastructure. As the report documents, these capacity development efforts faced their own challenges. We are encouraged, however, by the recent developments summarized in the report that indicate the Afghan government continues to demonstrate its commitment to reform and the creation of a Road Authority, Road Fund, and Transportation Institute that will help the Afghan government establish a self-supporting, commercialized transportation system.

I would like to thank the SIGAR audit team for working closely with DoD during the development of this report and for the effort made to understand how DoD's programs, policies, procedures, and systems evolved over time.

Thank you for your continued commitment to the success of the mission in Afghanistan.

Sincerely,

Jedidiah P. Royal

Deputy Assistant Secretary of Defense (Acting) Afghanistan, Pakistan, and Central Asia

APPENDIX V - ACKNOWLEDGMENTS

Christopher Borgeson, Senior Program Manager Adriel Harari, Auditor-in-Charge Ahmad Fawad, Program Analyst Margaret Tiernan, Program Analyst This performance audit was conducted under project code SIGAR-107A.

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