
STROCK

triking the RIGHT BALANCE

BY JENNIFER SPILLANE

The Direct Connection between Infrastructure and Security in Iraq

Editor's note: Construction Executive *interviewed Lieutenant General Carl A. Strock in August before Hurricane Katrina devastated the Gulf Coast states of the country. A future issue will cover the rebuilding efforts in Alabama, Mississippi and Louisiana.*

An 18-year-old steps out of his house in Baghdad and sees his younger brother and sister playing in raw sewage after spending a night without electricity. He must wait a day in line for five gallons of gas and then he's told at the mosque that his situation is because of the Americans.

This scenario is played out in Iraq today, Lieutenant General Carl A. Strock, commander and chief of engineers for the U.S. Army Corps of Engineers (USACE) told *Construction Executive* in a recent interview.

"But, if we put him to work in the streets installing the sewer systems or electrical lines, then he'll see a difference," Strock says. "And it will be easier for us to establish security if we can make a difference in infrastructure. The two are combined. Without security it's tough to establish infrastructure, and without infrastructure it's tough to establish security. We are working very hard to make that happen."

JEFFREY PREHN

The USACE is one of the agencies on the team responsible for Iraqi reconstruction. The USACE and contractors working to reconstruct Iraq face ongoing challenges of security and worker safety due to a war-ravaged nation, cultural differences and language barriers. But reconstruction teams don't let security threats prevent them from being effective in their work. "It's also about striking the right balance," Strock says.

Balancing security remains a big challenge, although 14 of the 18 Iraqi provinces are relatively calm. The areas to the west and north of Baghdad can be tough neighborhoods for Americans. "A lot of resources go into security," Strock says. "If we can improve the infrastructure, then the folks putting security in will have it easier."

Meanwhile, the USACE is accomplishing its tasks, Strock says. The Corps plans, designs, builds and operates water resources and other civil works projects; designs and manages the construction of military facilities for the Army and Air Force; and provides design and construction management support for other defense and federal agencies. Reconstruction efforts in Iraq are moving at a slow, but steady pace—for a lot of reasons, he says.

First, the basic condition of the infrastructure in the country was unexpected, Strock says.

"We went in with the expectation that we would simply fix what we broke during the fighting," Strock says. "We were very careful in targeting infrastructure to minimize damage because we knew that eventually people would rely on it for humanitarian needs to rebuild the country."

For example, Strock explains that the U.S. military chose to snip power lines and cut relays rather than bombard the Baghdad power plant in order to take out the communications system and power supply during the war. This strategy would prevent millions of people from having to live without power.

"We also anticipated a certain level of looting and sabotage because when you have a transition of government with a lot of frustrated people like you had in that country, we expected there would be some of that.

"We were not prepared for the magnitude," Strock continues. "And so, what we found was a disruption of infrastructure—some very intentional and some just happened because of looting, and that was a challenge early on."

Government estimates say the Iraqis need between $60 billion and $80 billion of investment to get them to a reasonable state, Strock says. The United States contributed about $18 billion, and about $11 billion of that has gone to infrastructure.

"So what you see is about $11 billion against a $60-billion requirement, which is about 20 percent of the need," Strock explains. "Iraqis have prioritized where they want that spent. Take power for example, we think at the $60-billion level, about $12 billion should go to power. We're investing about $4 billion. So clearly, it's not going to get them where they need to be. But, we are getting that job done in an effective way."

The Corps has committed its resources to about 3,000 projects that the Iraqis developed and prioritized, Strock says. The projects range from very small to very large ones across six sectors—security and justice; public works and water; oil; buildings, health and education; transportation; and communication and electricity. (See p. 20.)

In June 2004, 200 projects were under way. This June, 2,600 projects were in progress. The Corps has completed about 1,500 projects and expects by the end of this calendar year to have all projects started. Only 300 projects are expected to remain unfinished by December, Strock says.

"Again, that is not enough," he stresses. "International donors have pledged $13 billion to $30 billion, but not much is flowing in."

In addition, the Iraqis themselves cannot contribute to the effort at this time, as they are developing their own economy.

"We are doing our part and that's the good news," Strock says. "The bad news is that there is not much else happening from other nations. And so when we finish, there will be a plateau and that is a concern we have."

> **"Without security it's tough to establish infrastructure, and without infrastructure it's tough to establish security. We are working very hard to make that happen."**

CONTRACTORS STEP UP IN IRAQ

Reconstruction in Iraq has opened up to international competition and U.S. contractors have won most of the work because of their capability and capacity, Strock says.

"We recognize that we could not do this without the private sector to provide management services," Strock says. "Architectural engineering firms are in there taking the priority requirements from the Iraqis, turning those into projects, and those are handed off to the Corps to oversee for construction."

Contractors are working in all six sectors and seeing success, but the success does not come without its challenges.

Working directly for military forces has its advantages. Contractors perform their work inside a military perimeter. The military provides the secure environment for them, Strock says. But if contractors are working outside the military, the contractors must provide their own security.

Most of the work in Iraq is on a cost-plus basis. Contractors arrange for their own security and then as part of their cost

of doing business, they are reimbursed through the contract price.

"In some areas of the country, you might see that 50 percent of the cost is just security," Strock says. "Across the board, we expected security to be about 10 percent. And we are seeing about 15 percent of the cost going to security, which is a shame because it should be going to schools and bricks and mortar."

While security is a top issue, it has not gotten in the way of contractors doing their jobs. In many sectors, huge improvements have been made, but there is still work to be done.

"Things are not where they need to be in Iraq. There's no question. But, there are areas in which it's a lot better," he says.

Take for example, electricity. The Corps and contractors have gone in and tried to modernize the system when possible and build redundancy into it, Strock says.

"So, we haven't seen a dramatic improvement in power," he says. "It's something you don't see in terms of hours of power, but it's absolutely essential to get where we need to be. We are about up to where they were pre-war."

In the process of modernizing the system, about 9,000 kilometers of transmission lines have been added. Where one line ran before, two or three now run. And in the early days, the insurgents could snip a line and cut off a city completely. Now, if they cut a line, power can run a different direction.

The Corps and contractors also are seeing a tremendous growth in demand for services. "Saddam would use basic services to reward and punish his people," Strock says. "So, if you were part of a favored community, like the Sunni, in Baghdad and the Northwest, they would receive more power, better water, better services, than the South."

In Baghdad, for example, residents typically received 22 to 24 hours of power a day. But 100 kilometers away, Iraqis might receive two to six hours of power a day.

Today, in the heat of the summer, power in Baghdad runs around 12 hours a day, in a city accustomed to 24-hour electricity.

"And that is devastating to a capital city, and we know that," he says. "But, what you'll see now is the people in Alkut and Nasirhiyah are also getting the same amount of power. We have distributed power in an equitable way across the country, so that generally, 80 percent of the Iraqis today have more electrical power than they had under Saddam."

More electricity means a better life. The insurgents understand that if life improves for the Iraqi people, then it's going to make it more difficult for them to get their way, Strock says.

"If the people are seeing a positive difference, then they will attribute that to the demise of Saddam and the presence and support of the Western powers," he explains. "But, if things are worse, they can say that this is because of the interference of foreign powers. So the insurgents are working very hard to undo everything we do."

Despite the insurgents' actions, the Corps continues to work to improve communications. In the last eight months, the Reconstruction Operations Center (ROC), a service to coordinate the activities of the military and the contractors, became operational.

There's a lot of movement of people

and goods now associated with reconstruction, Strock says. And the Corps had no real way to inform the reconstruction teams about the potential hazards they might face as they were moving around the country, he says.

"So, we set up this ROC that works with the military forces," he says. "It takes our military intelligence and declassifies it and puts it out in an open forum so that people can get a sense of the dangers they might run into in different parts of the country."

The ROC allows the Corps to track movements of vehicles, supplies and contractors. It also informs the military about when people will be in the area and whether they are friendly. If someone does encounter trouble, the ROC allows them to contact the Corps, notify the military and a reaction force is dispatched along with any medical service needed, Strock explains.

The ROC is just one part of the big picture in Iraq, striking the right balance between the big projects, and the small projects. "People want to see a difference now," Strock says. "If you tell them that they will have power for 24 hours a day in two years, that's not good enough."

The American people and the Iraqi people need to understand what is happening over there, Strock explains.

"All too often the only thing we see is the sensational aspects of things," he says. "We read it. We buy the papers. We are glued to the TV when we hear about bombings and all these terrible things that are happening. We aren't necessarily attracted to headlines that say, 'Baghdad had power last night.'"

Yet, those are the things that need to be done and those are the projects that dedicated contractors are working on.

"But my concern is that if all we hear are negative things, then people will say, 'why are we there?,'" Strock says. "Then we could walk away from this for the wrong reasons if we don't understand that there is some very positive work that is being done in Iraq—and we are making a difference."

Spillane is senior writer for *Construction Executive*.

THE U.S. ARMY CORPS OF ENGINEERS

Lt. Gen. Carl A. Strock, commander of the U.S. Army Corps of Engineers, receives an aerial tour of various reconstruction projects during a recent trip to Iraq.

Six Sectors of Reconstruction in Iraq

- Security and Justice—896 projects in border forts, points of entry, military facilities, police facilities, fire facilities and prisons and courts.
- Public Works and Water—358 planned projects in water treatment, sewer projects and water resource projects.
- Oil—80 projects in restoration, water-injection pump stations, plant refurbishment and dedicated power.
- Buildings, Health and Education—1,102 projects, including schools, primary health care centers, hospitals and public buildings.
- Transportation and Communication—294 projects in village roads, expressways, bridges, airports, ports, railroad stations, postal facilities, communications and other transportation projects.
- Electricity—470 projects, nationwide, in generation, transmission and distribution.

Source: U.S. Army Corps of Engineers, information as of Aug. 3