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Iraq After US “Withdrawal:” Economy, Demographics, Budget and Trade

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in Strategy

*Revised September
1, 2010*

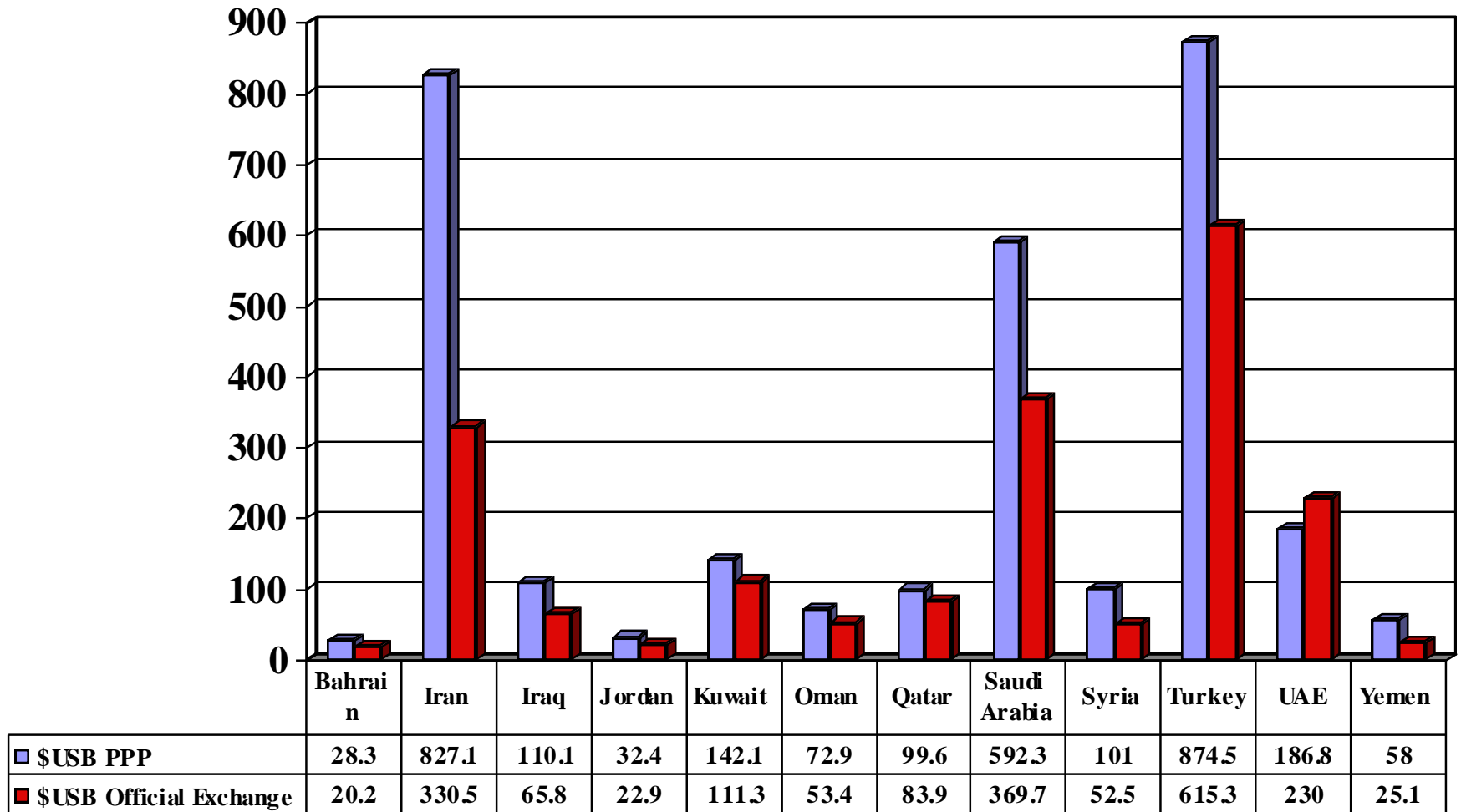
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Key Challenges in 2010

- **Paralysis by democracy : lack of national unity government**
- **Lack of government effectiveness and capacity at every level**
- **Remnants of insurgency and possible revival**
- **Sectarian and ethnic challenges**
- **Budget crisis, crippled economy, loss of foreign aid**
- **Halt in progress in developing Iraqi security forces**
- **Coming US withdrawal**
- **Uncertain neighbors**

Trends in Iraqi Economy and Demographics

Iraq: GDP as a Measure of Comparative Strength (\$US Billions)



The Truth About Iraq's Oil Wealth: Poverty on the Surface; Potential Underground

Iraq is 159th in world in per capita income vs. 87th for Iran, 60th for Saudi Arabia, 2nd for Qatar, 7th for Kuwait.

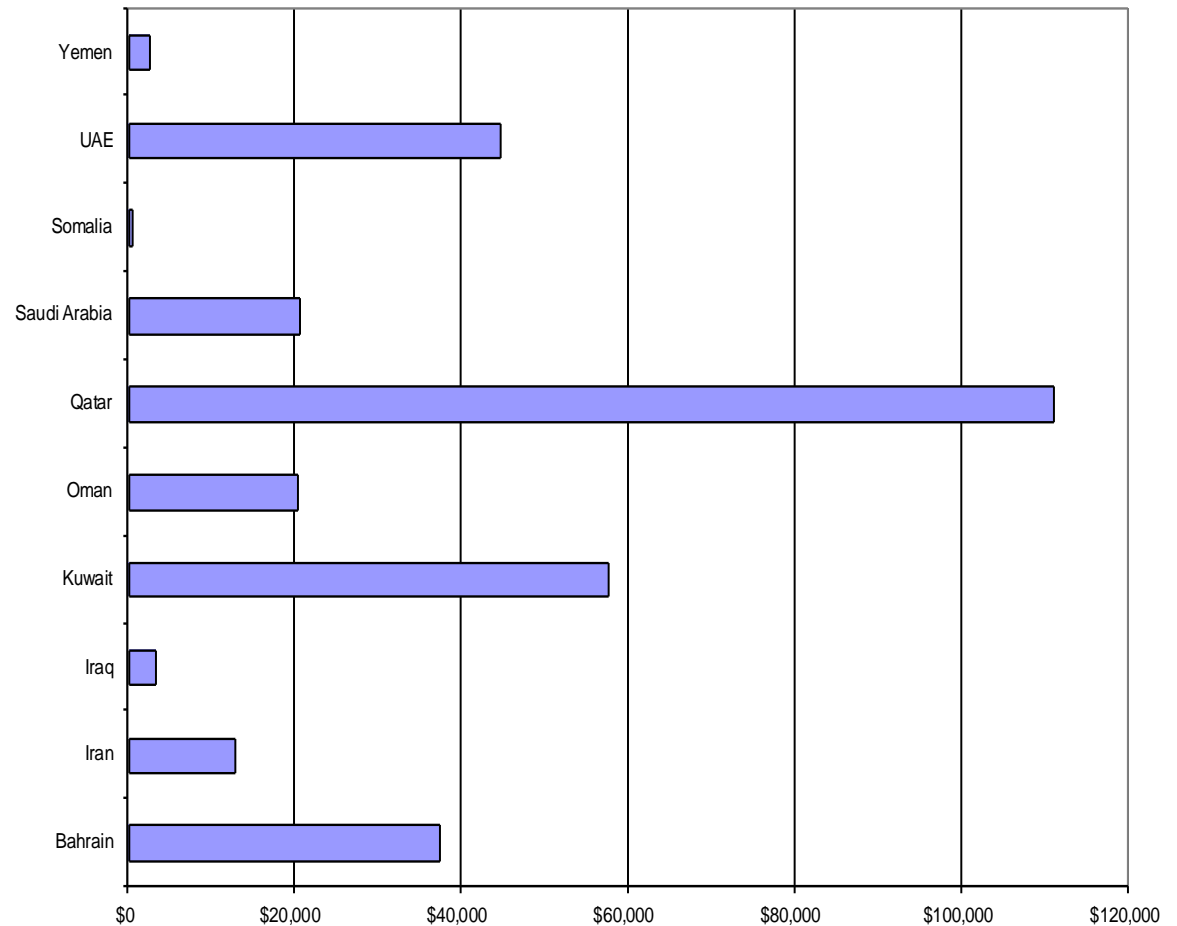
One of World's lowest ranking countries and close to Gaza and West Bank

Official unemployment rate – 15.2%; unofficial unemployment rate – 30%

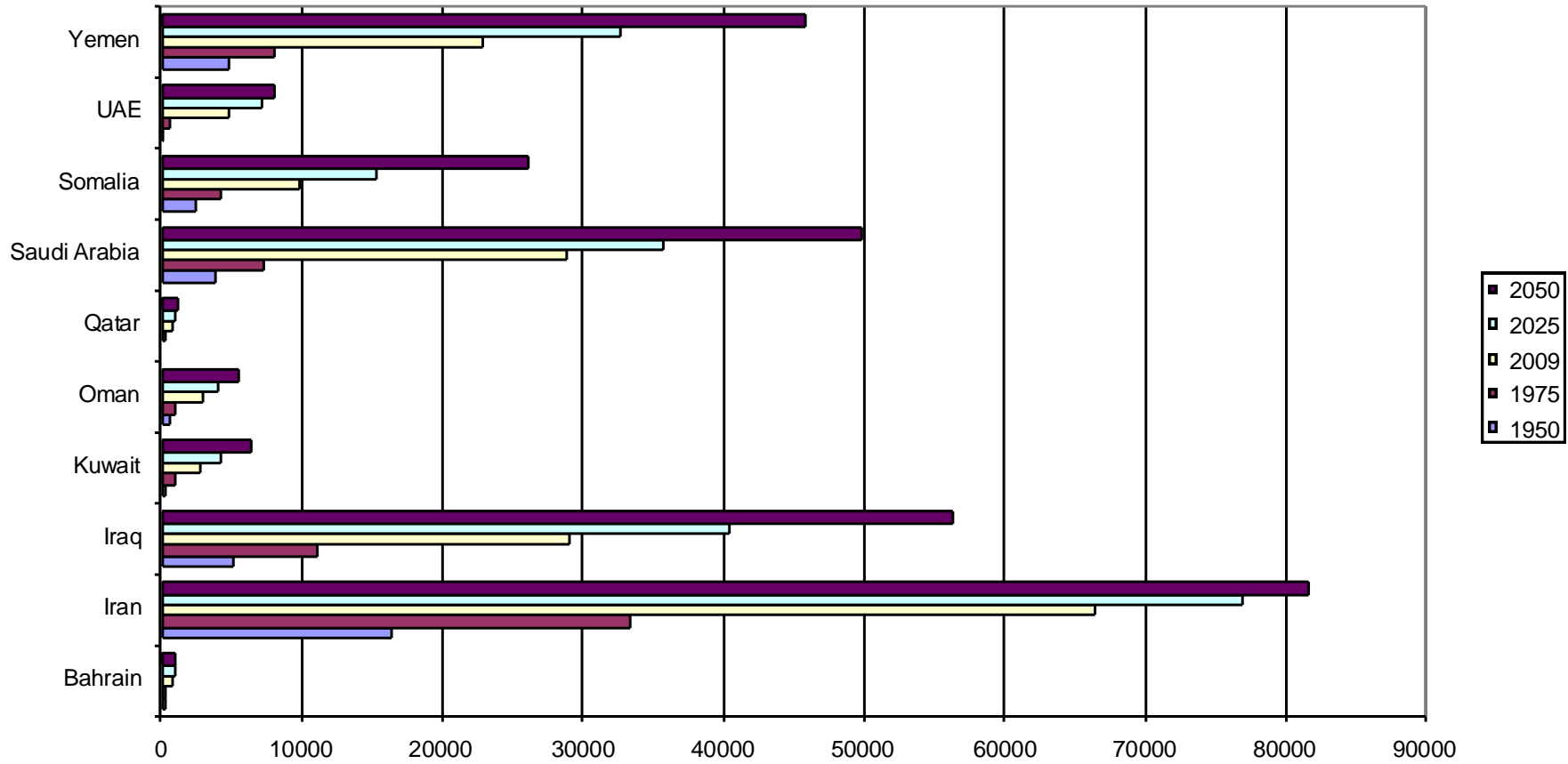
Education and Health systems in collapse

2 million IDPs and more than 1 million outside Iraq -- including much of elite

GDP Per Capita (US\$ in ppp terms)

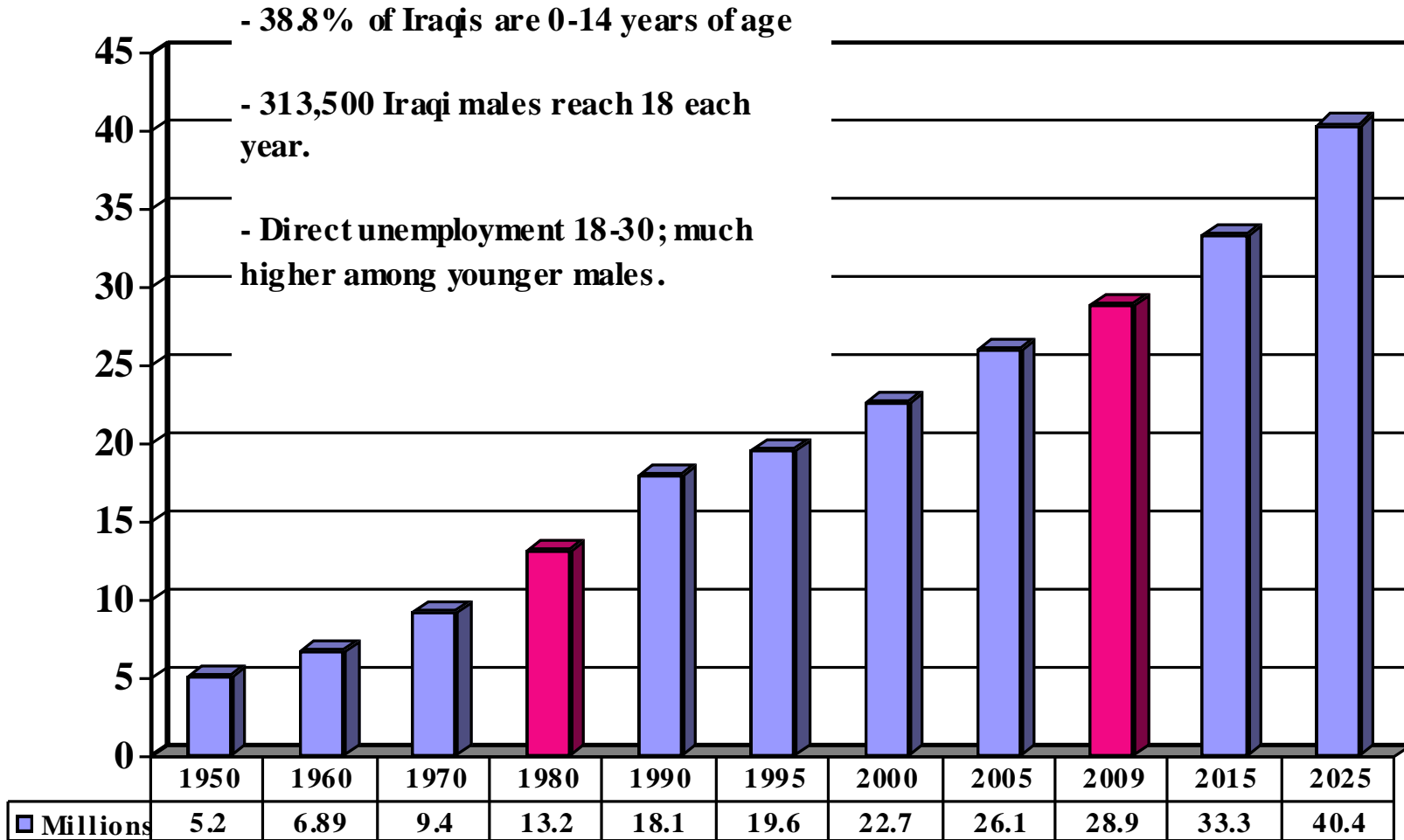


Iraq's Role in the Regional Youth Explosion (Growth in Total Population n 1,000s)



■ 2050	980	81,490	56,316	6,383	5,402	1,116	49,830	26,025	8,019	45,781
▣ 2025										
▣ 2009										
■ 1975										
▣ 1950										

The Challenge of Demographic Pressure

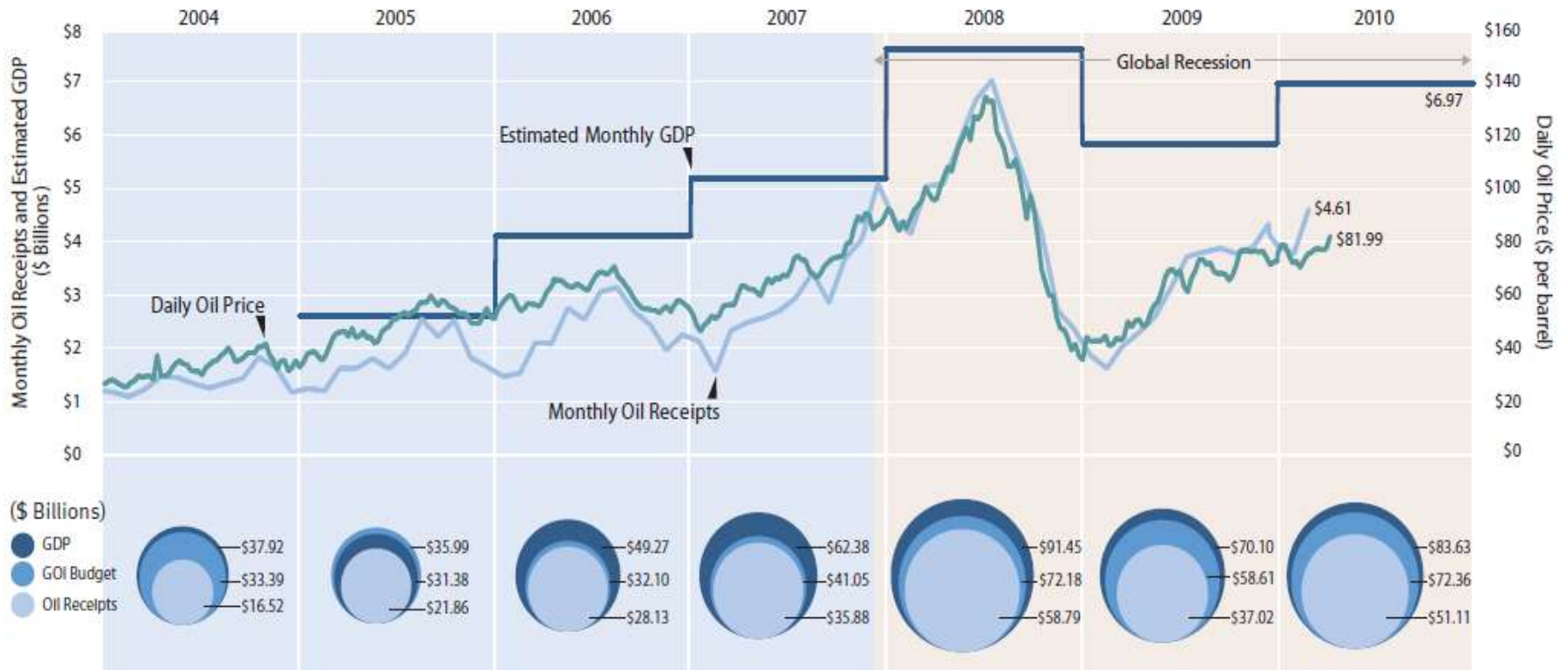


Source: US Census Bureau, IDB, 28-7-09; CIA World Factbook, "Iraq," April 2010

Iraqi Economy 2004 - 3/2010

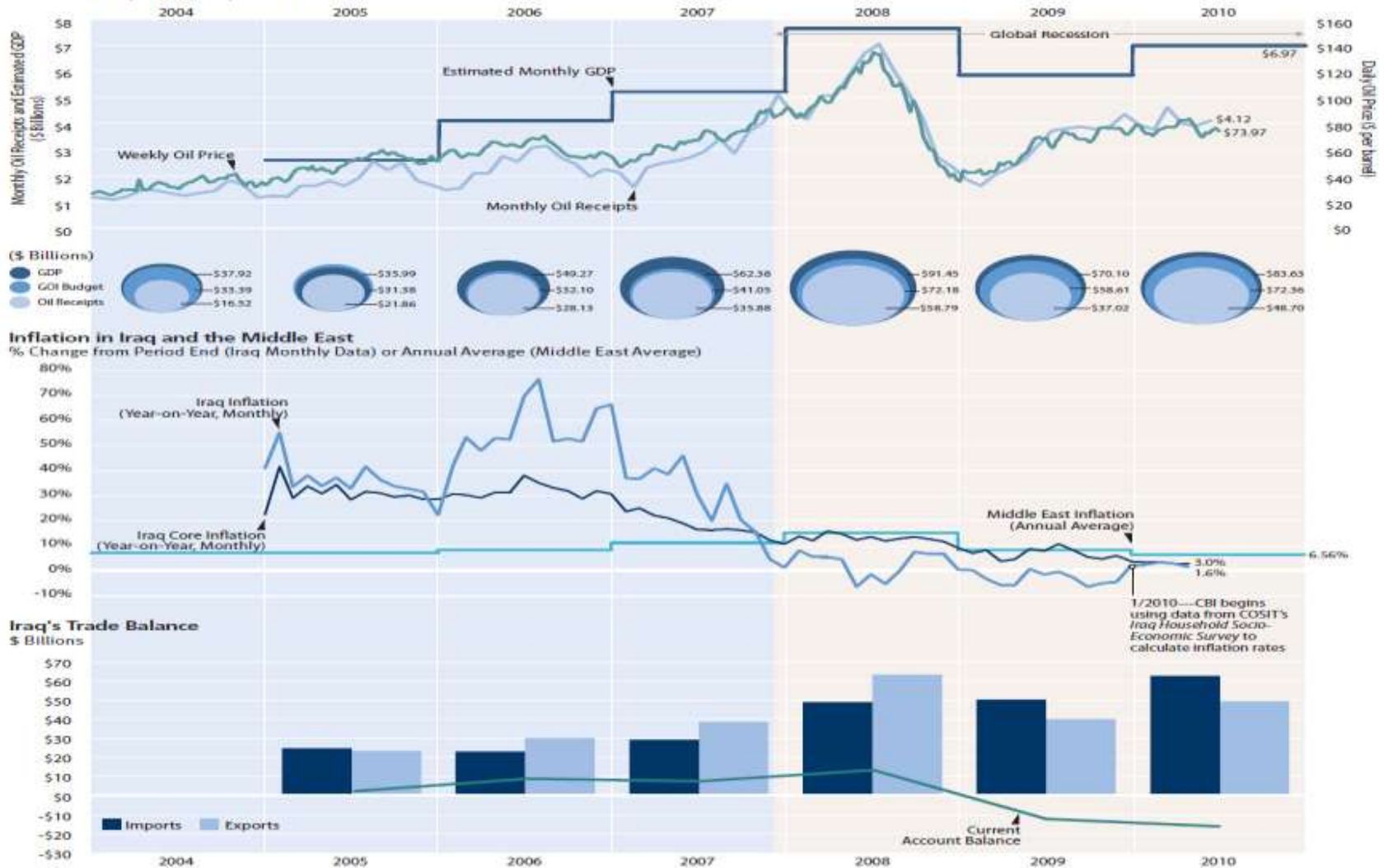
THE IRAQI ECONOMY, 2004-2010

Oil Price, Iraqi Oil Receipts, and GDP



Iraqi Economy 2004 - 7/2010

FIGURE 2.44
THE IRAQI ECONOMY, 2004-2010
Oil Price, Iraqi Oil Receipts, and GDP

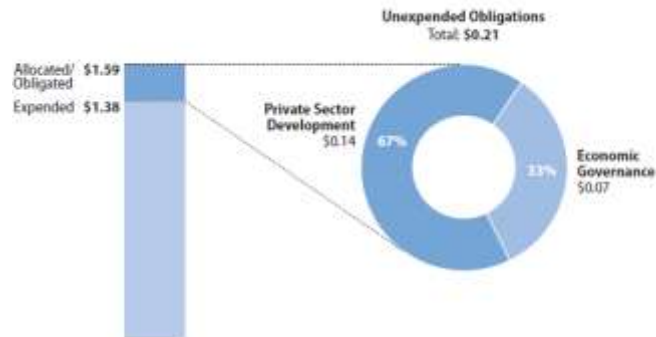


Note: Data not audited. Numbers affected by rounding. Daily oil price represented by Weekly Iraq Kirkuk netback price at U.S. Gulf, as of 7/9/2010. All dollar values are in current prices. Iraq GDP is not available from the IMF for 2004; GDP figures from 2008-2010 and oil receipts for 2010 are estimates. 2010 trade balance estimated by IMF.

Sources: U.S. Embassy-Baghdad, Treasury Attaché, responses to SIGIR data call, 6/8/2010 and 7/13/2010; IMF, *World Economic and Financial Surveys: World Economic Outlook Database*, 10/2009, www.imf.org/external/pubs/ft/weo/2009/02/weodata/index.aspx, accessed 7/8/2010; and "Weekly Iraq Kirkuk Netback Price at U.S. Gulf," www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PETS&v=0&f=K&t=W, accessed 7/13/2010; GOI, CBI, "Key Financial Indicators," 6/23/2010, www.cbi.iq/documents/kyz_financial.xls, accessed 7/8/2010.

Iraqi Trade and Aid: 2005 - 2010

ECONOMY: STATUS OF FUNDS
\$ Billions



Note: Data not audited. Numbers affected by rounding. OSD does not report CERP obligation and expenditure data for project categories on a quarterly basis for all fiscal year appropriations. SIGIR pulls CERP project category data from the IRMS, which lags in reporting by one quarter. Therefore, category totals found in the Funding subsection of this Report may not match top-line values found in the four subsections on major reconstruction areas.

Sources: IRMS, USF-I CERP Category Report, 4/14/2010; NEA-I, response to SIGIR data call, 4/2/2010; U.S. Treasury, response to SIGIR data call, 4/2/2009; USAID, response to SIGIR data call, 4/13/2009; USTDA, response to SIGIR data call, 4/2/2009.

SIGIR, Quarterly Report, April 2010. p. 90

ECONOMY: STATUS OF FUNDS, BY SECTOR, WITH SELECTED PROGRAMS
\$ Millions

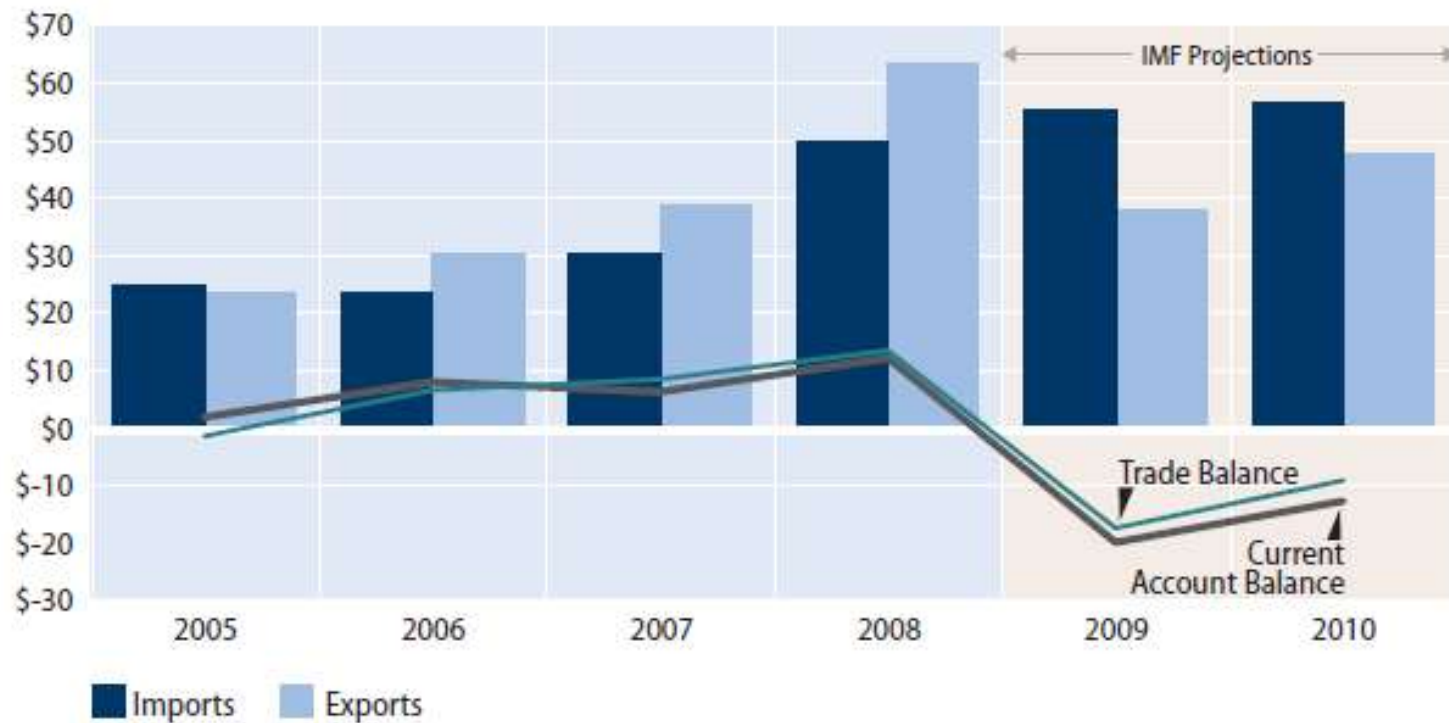
SECTOR	PROGRAM	STATUS OF FUNDS		QUARTERLY CHANGE	
		OBLIGATED	EXPENDED	OBLIGATED	EXPENDED
Economic Governance	Economic, Financial, and Management Improvements (CERP)	120.9	84.4	3.4 (3%)	5.1 (6%)
	Private Sector Development — Market-Based Reforms (IRRF 2)	135.0	109.9	0.0 (0%)	-8.7 (-7%)
	Other	571.4	563.2	0.0 (0%)	0.0 (0%)
	Subtotal	827.3	757.5	3.4 (0%)	-3.5 (0%)
Private Sector Development	Agriculture (CERP)	111.1	90.0	11.1 (11%)	18.2 (25%)
	Provincial Economic Growth (ESF)	85.8	38.1	0.0 (0%)	-10.6 (-22%)
	Other	563.4	493.0	0.0 (0%)	1.9 (0%)
	Subtotal	760.2	621.0	11.1 (1%)	9.6 (2%)
Total		1,587.5	1,378.6	14.5 (1%)	6.0 (0%)

Note: Data not audited. Numbers affected by rounding. Programs listed in this table had at least \$5 million in combined quarterly obligations and expenditures. Appendix C shows the status of programs in the "Other" categories, which had nominal or no quarterly change. OSD does not report CERP obligation and expenditure data for project categories on a quarterly basis for all fiscal year appropriations. SIGIR pulls CERP project category data from the IRMS, which lags in reporting by one quarter. Therefore, category totals found in the Funding subsection of this Report may not match top-line values found in the four subsections on major reconstruction areas.

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Iraq's Trade Balance: 2005 - 2010

IRAQ'S TRADE BALANCE
\$ Billions



Source: IMF, *Regional Economic Outlook: Middle East and Central Asia*, 10/2009, pp. 55–57.

Trends in Iraqi Budget

Budget & Economy

- **Iraq's GDP growth has slowed to 4.3% in 2009 from 10.3% in 2008. (SIGIR Quarterly Report, April 2010, p. 11)**
- **Iraq's real GDP forecasted to grow by an annual average of 6.3%. (SIGIR Report, July 30, 2010. p. 10)**
- **This February, Iraq's oil exports reached 2.05 million barrels per day (MBPD). Overall, exports averaged 1.93 MBPD. (SIGIR Quarterly Report, April 2010, p. 11)**
- **Iraq's Presidency Council ratified a \$72.36 billion budget for 2010.**
 - **19.0 % increase from 2009, based on 2 assumptions about oil exports and revenues**
 - **PRICE → Assumes that the average price per barrel of oil is \$62.50 and 25% increase from \$50 assumed for the 2009 budget.**
 - **As of April 9, 2010 the price of Oil per barrel was \$81.99**
 - **EXPORT → Anticipates that Iraq's oil exports will average about 2.15 million barrels per day (MBPD) – and increase of 7.5% from the 2 MBPD assumed for 2009. As of April of 2010, exports averaged 1.93 MBPD.**
 - **In February Iraq's oil export levels reached 2.05 MBPD**
 - **It then dipped in March to 1.84 MBPD due to bad weather and rough seas**
 - **This quarter, Iraq received \$12.66 billion in total revenue from the export of crude oil; \$0.63 billion (5%) was reserved for war reparations to Kuwait, leaving \$12.03 billion in oil export receipts for GOI funding. (SIGIR Report, July 30, 2010. p. 98)**
- **Extended Natural Gas negotiations with Royal Dutch Shell for an additional 6 months**
- **Electricity production rises 14% since 2009**
- **As of June 30, 2010, the United States had allocated \$1.67 billion, obligated \$1.62 billion, and expended \$1.48 billion to support Iraq's economic governance and private sector development. (SIGIR Report, July 30, 2010. p. 98)**
- **Iraq received \$12.66 billion in total revenue from the export of crude oil; \$0.63 billion (5%) was reserved for war reparations to Kuwait, leaving \$12.03 billion in oil export receipts for GOI funding. (SIGIR Report, July 30, 2010. p. 99)**
- **The inflation rate remains stable, close to 3%. (SIGIR Report, July 30, 2010. p. 99)**

Growing Iraqi Budget Deficits: 2007-2010

COMPARISON OF GOI BUDGETS, 2007-2010

\$ Billions

	MINISTRY/AGENCY	2007	2008	2009	2010
Revenue	Oil	31.00	63.10	36.50	47.91
	Other	2.40	7.00	6.20	4.86
Total Revenue		33.38	70.10	42.70	52.77
Operating Expenditures	Finance	14.57	25.69	9.74	10.55
	Education	1.53	1.99	3.91	4.31
	Interior	3.14	5.16	5.27	5.89
	Defense	4.09	4.92	3.85	4.52
	Trade	0.03	0.04	3.62	4.03
	Justice	0.11	0.22	0.25	0.45
	KRG	3.19	4.24	5.07	6.03
	Other	4.34	8.81	14.17	15.82
	Subtotal	31.00	51.07	45.89	51.59
	Capital Investment	Oil	2.38	2.26	2.21
Electricity		1.38	2.32	1.08	3.49
KRG		1.56	3.71	1.95	2.72
Defense		0.05	4.92	0.27	0.38
Interior		0.04	0.54	0.22	0.26
Justice		0.01	0.02	0.11	0.13
Provinces (Non-KRG)		2.10	6.40	2.17	2.18
Other		2.53	10.13	4.73	7.89
Subtotal		10.05	21.11	12.73	19.70
Total Expenditures		41.05	72.18	58.61	71.30
Surplus/Deficit		-7.67	-2.08	-15.91	-18.53

Note: Data not audited. Numbers affected by rounding. Revenue and expenditure figures reflect amounts budgeted by the GOI; they do not necessarily align with actual revenue and expenditures.

Iraq: The Budget Crisis in 2009

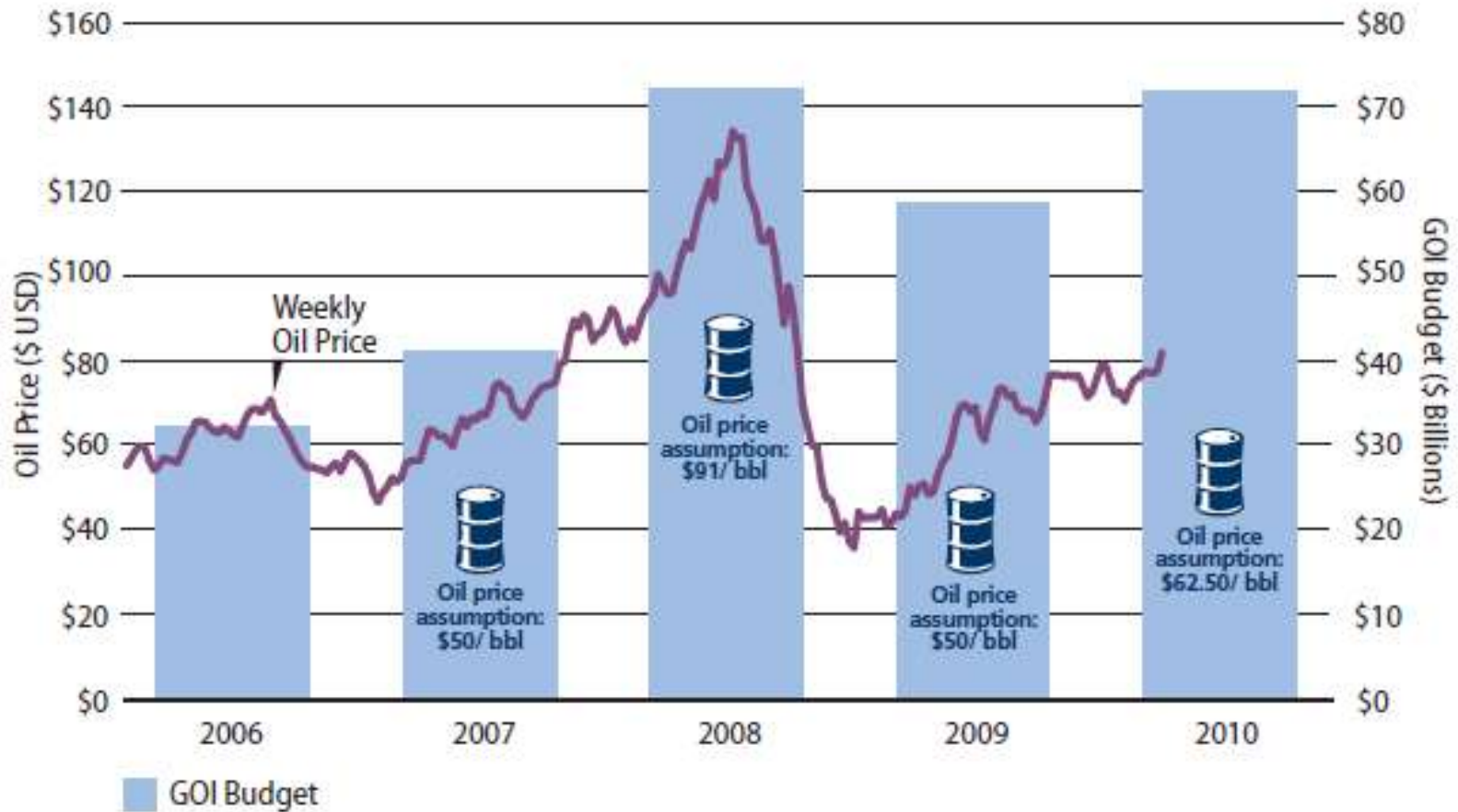
- **Budget reduced from \$80B to \$58.6B in 2009.**
 - Avg. oil production in 2009 1.59M bpd -- prices rise put production drops.
 - Freeze on ISF manning leads to serious cuts in Iraqi Army and Police manning and development.
- **No supplement or continued spending for 2009. Budget not properly spent. Many development and aid projects not funds or properly transferred.**
- **Budget for 2010: \$72.4B**
 - Based on oil price of \$65.50 per barrel; output level of 2.15M bpd
 - Predicted budget deficit of \$19.6B
 - Will not allow Iraq to fund effective Iraq force development or cost of economic reconstruction and development.
 - Will need significant US military aid and target economic aid.
- **Budget for 2011: no draft as of yet**

Budget Structure in 2010

- \$72.36 billion budget for 2010 is made up of two parts
 - **Operating Expenditures** of \$52.12 billion – 72% of the budget
 - Goes to Salaries, benefits, and other overhead costs
 - Ministries with the largest operating budgets are Finance, Interior, Defense, Education, and Trade.
 - **Capital Expenditures** of \$20.24 billion – 28% of the budget
 - Ministries with the largest capital budgets are Electricity (largest gross increase), Oil, Finance, Municipalities and Public Works, and Health
- Real world allocation unclear until new government in place

Iraqi Budget Assumptions

WEEKLY OIL PRICE, GOI BUDGET, AND OIL PRICE ASSUMPTIONS, 2006–2010



Note: Oil prices reflect the average weekly price of Kirkuk crude oil.

The Iraqi Budget: Crisis in 2009, Near Crisis in 2010

(\$ in billions)	2006	2007	2008	2009**	2010
Base Budget	34.0	41.1	49.9	58.6	72.4
<i>Capital Expenditures</i>	27.8	10.1	13.1	12.7	20.3
<i>Operating Expenditures</i>	6.2	31.0	36.8	45.9	52.1
Supplemental Budget	N/A	N/A	22.3	N/A	N/A
<i>Capital Expenditures</i>			8.0		
<i>Operating Expenditures</i>			14.3		
Budget Total	34.0	41.1	72.2	58.6	72.4
Mol Security Budget	1.9	3.2	5.7	5.5	6.14
<i>Capital Expenditures</i>			0.5	0.2	0.3
<i>Operating Expenditures</i>			5.2	5.3	5.9
MoD Security Budget	3.4	4.1	5.3	4.1	4.9
<i>Capital Expenditures</i>			0.4	0.3	0.4
<i>Operating Expenditures</i>			4.9	3.8	4.5
Security Budget Total	5.3	7.3	11.0	9.6	11.0
Base Execution	23.0	27.0	47.9	28.0	N/A
Supplemental Execution			2.6		
Execution Total	23.0	27.0	50.5*	28.0***	N/A

Source: U.S. Treasury Report

*2008 total expenditures include base and supplemental budgets. The supplemental was not passed until late in 2008, limiting execution.

**The 2009 budgets reflect the significant decrease in oil prices from mid-2008.

***2009 expenditures through September 2009 – most current accurate data available.

Continuing Budget Pressures

Projected Revenue & Deficit

- GOI revenues for 2010 are projected to be \$52.77 billion – more than 90% expected to come from the sale of their oil.
- Iraq would then run a deficit of \$19.59 billion
 - By march 31, 2010 GOI stated that it had received \$12.32 billion total in oil receipts since jan, 2010. – mainly due to the price in oil as it doubled in average than in the first quarter of 2009: \$36.44 → \$73.49
 - Assuming this rate holds, GOI will state that they will receive \$49.28 billion in total annual receipts.
 - About \$2 billion short of CoR's projection, but \$12.26 over the receipts from 2009.

Critical Problems in Infrastructure and Electricity is Only the Tip of the Iceberg

Phase Out of US Infrastructure Aid to Iraq: 7/2010

TABLE 2.18

INFRASTRUCTURE: STATUS OF SELECTED PROGRAMS

\$ Millions

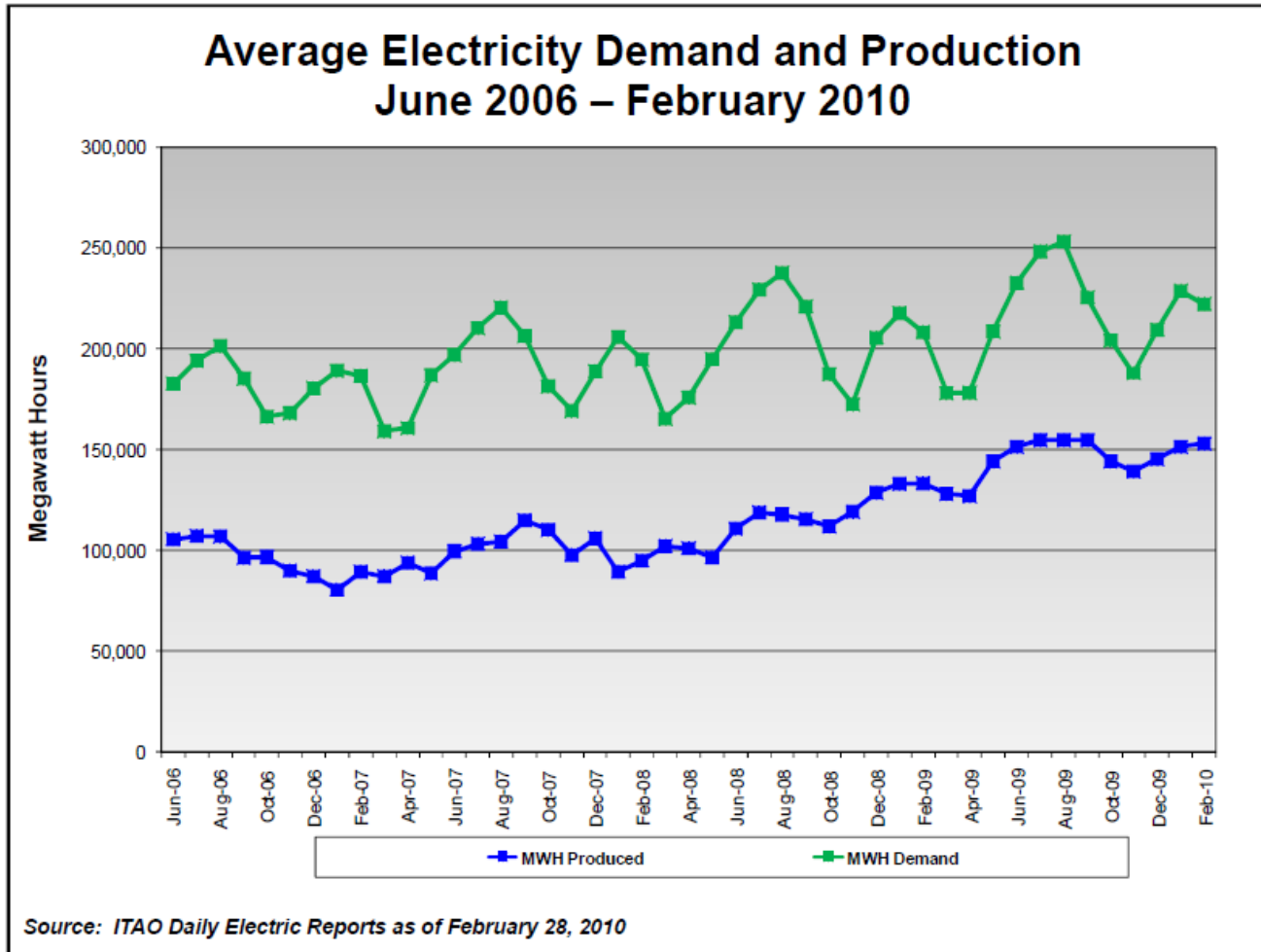
PROGRAM	STATUS OF FUNDS		QUARTERLY CHANGE	
	OBLIGATED	EXPENDED	OBLIGATED	EXPENDED
Water Resources & Sanitation - Potable Water (IRRF)	1,338.4	1,332.5	-0.8 (0%)	15.3 (1%)
Transportation & Telecommunications Projects - Railroad Rehab and Restoration (IRRF)	196.1	196.1	0.0 (0%)	10.4 (6%)
Electric Sector - Transmission (IRRF)	1,023.1	1,012.6	3.1 (0%)	6.4 (1%)
Infrastructure Security Protection - Electricity (ESF)	27.0	24.1	4.3 (19%)	1.9 (9%)
Transportation (CERP)	357.2	303.9	3.1 (1%)	0.0 (0%)
Transportation & Telecommunications Projects - Iraqi Communications Systems (IRRF)	52.9	40.0	-0.2 (0%)	2.6 (7%)
Plant-Level Capacity Development & Technical Training - Communication (ESF)	4.2	2.1	2.2 (104%)	0.1 (7%)
Electricity (CERP)	381.5	330.7	1.3 (0%)	0.5 (0%)
Water & Sanitation (CERP)	690.2	625.7	1.8 (0%)	0.0 (0%)
Other	7,982.3	7,898.2	-10.3 (0%)	-1.9 (0%)
Total	12,052.9	11,766.0	4.4 (0%)	35.3 (0%)

Note: Programs listed in this table had changes of at least \$1 million in combined quarterly obligations and expenditures. Appendix C shows the status of all programs funded by the four major funds, including those in the infrastructure reconstruction area that are grouped in the "Other" category here. OSD does not report CERP obligation and expenditure data for project categories on a quarterly basis for all fiscal year appropriations. SIGIR pulls CERP project category data from the IRMS, which lags in reporting. Therefore, category totals found in the Funding Sources subsection of this Report may not match top-line values found in the other subsections.

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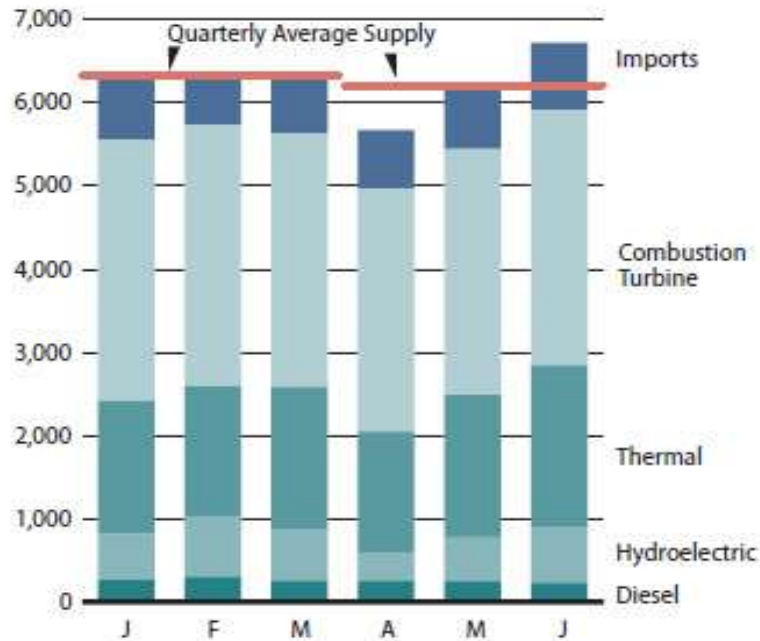
Source: SIGIR Report, July 30, 2010. p. 67.

The Electricity Crisis: 2/2010



The Electricity Crisis: 7/2010

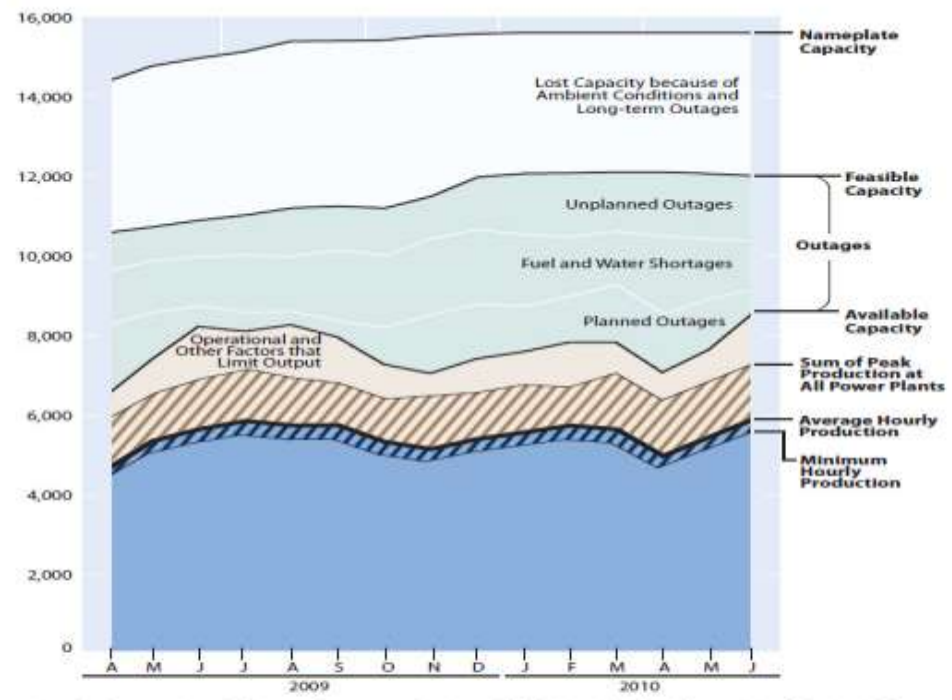
FIGURE 2.28
ELECTRICITY SUPPLY, BY MONTH AND QUARTER,
1/2010–6/2010
 MW



Sources: ITAO/ESD, *Electric Daily Performance Reports*, 1/1/2010–6/30/2010.

- June 2010 was the highest monthly average ever—6,721 megawatts (MW), or 161,304 megawatt-hours (MWh) per day.
- Electricity production from Iraq’s power plants this quarter averaged 5,435MW—a 4% decrease from last quarter.
- Over the past year, the nameplate capacity of power plants increased by more than 900MW.

FIGURE 2.29
FACTORS LIMITING PRODUCTIVITY OF IRAQ’S POWER PLANTS,
BY MONTH, 4/2009–6/2010
 MW



Note: This figure is intended to provide a general picture of the factors that limit the output of electricity from Iraq’s power plants. It is based on data provided by the MOE and reported in the ITAO/ESD *Electric Daily Performance Reports*. Data for production, nameplate capacity, feasible capacity, and the three categories of outages is taken directly from those reports. However, because of uncertainties about the accuracy of some data, as well as the technical complexities of power production, the figures should not be viewed as a precise representation of power generation in Iraq. *Nameplate capacity* is the maximum rated output of all the generating units on the grid when operating under specific, optimal conditions designated by the manufacturers of those units. *Feasible capacity* is an estimate of maximum output that can be expected from the generating units taking into account actual conditions at the power plants. *Lost capacity because of Ambient Conditions* is the difference between nameplate capacity and feasible capacity; it is not a category in the reports but is shown here to help explain why feasible capacity is lower than nameplate capacity. In this context, ambient conditions include weather, type of fuel used, physical condition of the plant, and other factors that limit the units’ output. *Available capacity* also is not a category in the reports; it is the feasible capacity of those units that are actually in service. *Operational and Other Factors that Limit Output* also is not a category in the reports; it is the amount that remains after subtracting production from available capacity. The most likely factor causing the difference between available capacity and average production is that units cannot prudently be operated continuously at full capacity. As demand fluctuates throughout the day (usually reaching its peak in the late afternoon), system operators monitor and adjust the actual output from the generating units. Thus, at any given moment, actual production could be closer to, or further from, available capacity than indicated by the average hourly production line in this figure. When actual daily peak production from all generating units is added together, the gap between available capacity and average hourly production is reduced. The *Sum of Peak Production* line is based on the day in each month when the sum of peak output from power plants was the highest.

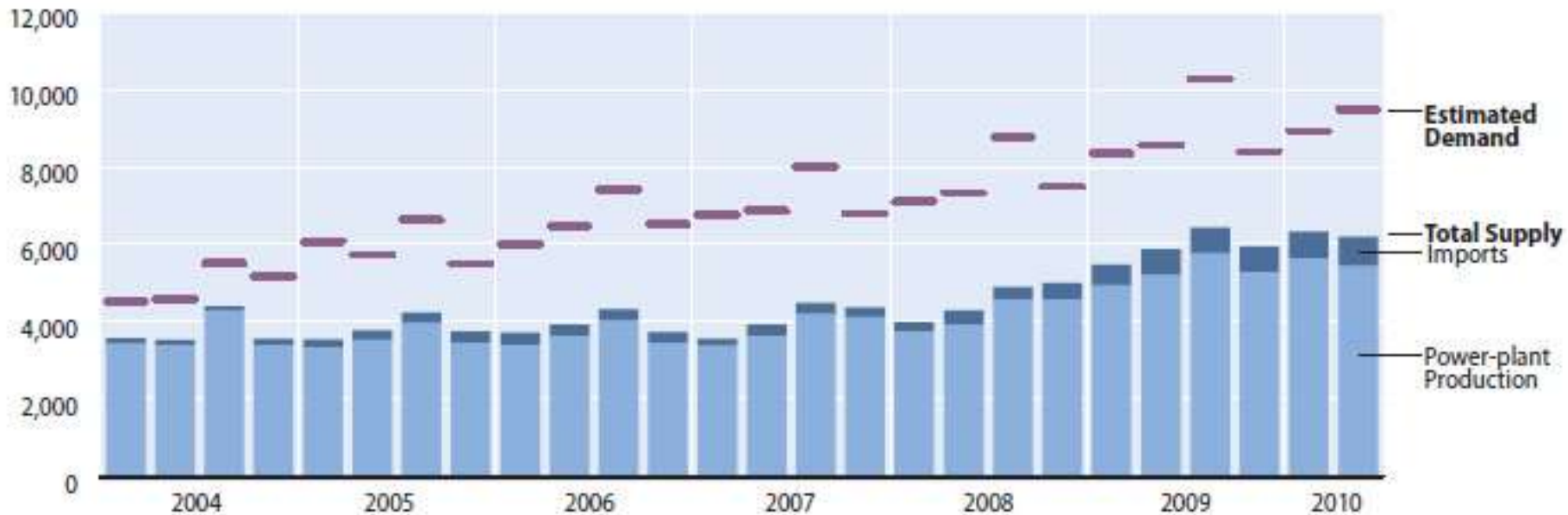
Sources: SIGIR analysis based on ITAO/ESD, *Electric Daily Performance Reports*, 4/1/2009–6/30/2010.

Source: SIGIR Report, July 30, 2010. p. 71,72.

Electricity Demand Growth Outpaces Supply: 7/2010

FIGURE 2.30

AVERAGE IRAQI ELECTRICITY SUPPLY AND ESTIMATED DEMAND, BY QUARTER, 1/2004–6/2010
MW



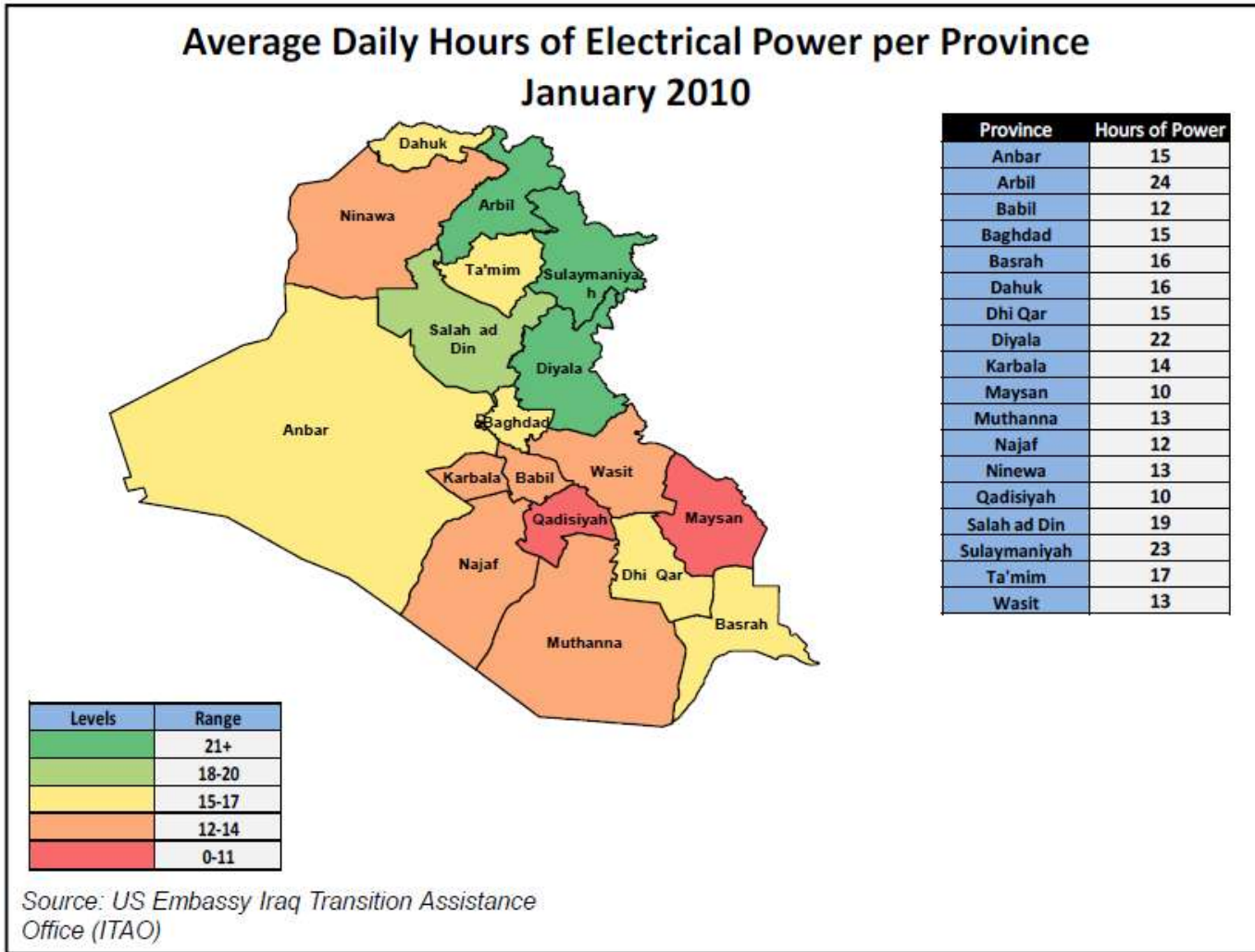
Sources: ITAQ/ESD, *Electric Daily Performance Reports*, 6/1/2006–6/30/2010; DoS, *Iraq Status Reports*, 10/25/2006, slide 11, and 5/9/2007, slide 11.

- Supply in June met 62% of estimated demand.
- For the quarter, supply met 66% of estimated demand—down from 71% last quarter and from 68% during the same quarter last year.
- Because of the supply-demand imbalance, many areas of Iraq reportedly receive just four hours of electricity per day.

Source: SIGIR Report, July 30, 2010. p. 73.

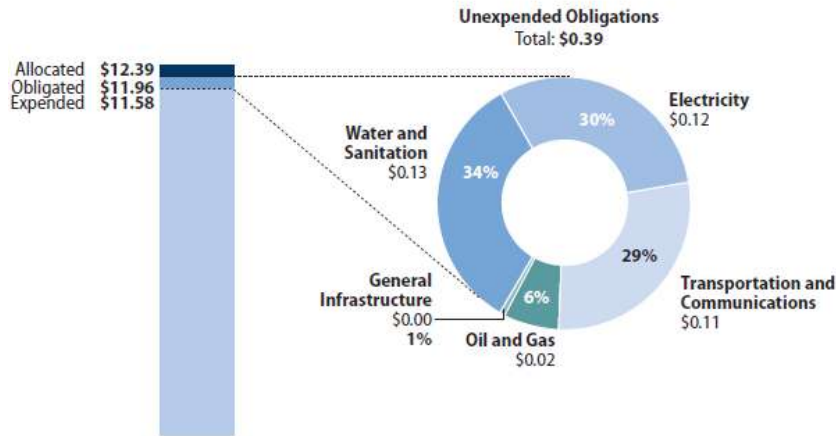
Power Varies by Province

Average Daily Hours of Electrical Power per Province
January 2010



Uncertain Progress in Infrastructure Security

INFRASTRUCTURE: STATUS OF FUNDS
\$ Billions

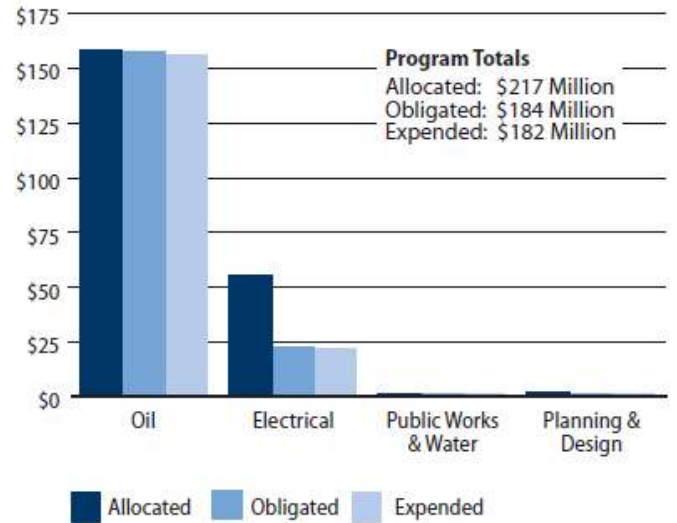


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SIGIR, Quarterly Report, April 2010. p. 60

INFRASTRUCTURE SECURITY PROGRAM: ALLOCATIONS, OBLIGATIONS, AND EXPENDITURES
\$ Millions



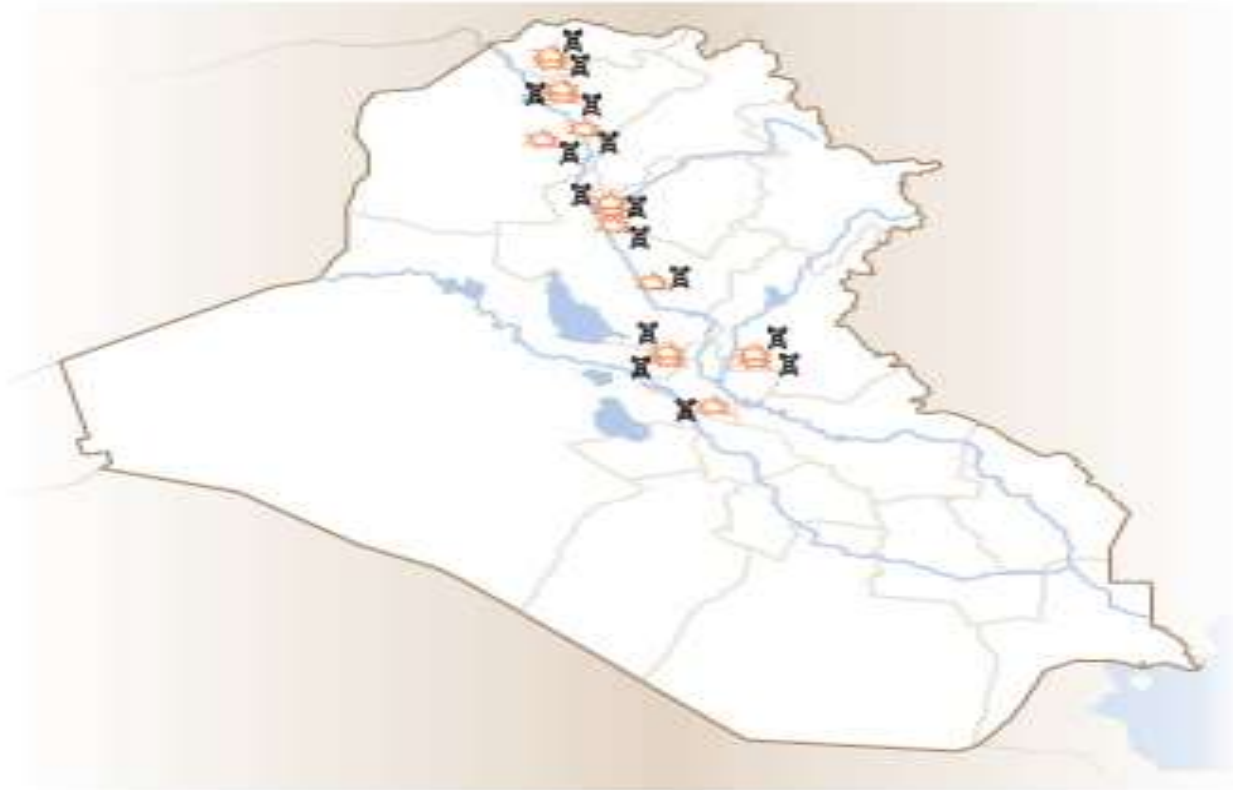
Note: Numbers affected by rounding.

Source: USACE, response to SIGIR data call, 4/1/2010.

SIGIR, Quarterly Report, April 2010. p. 63

Attacks on Transmission Lines

FIGURE 2.31
ATTACKS ON POWER TRANSMISSION LINES,
4/1/2010–6/30/2010



Source: USF-I, response to SIGIR data call, 7/1/2010.

Source: SIGIR Report, July 30, 2010. p. 74.