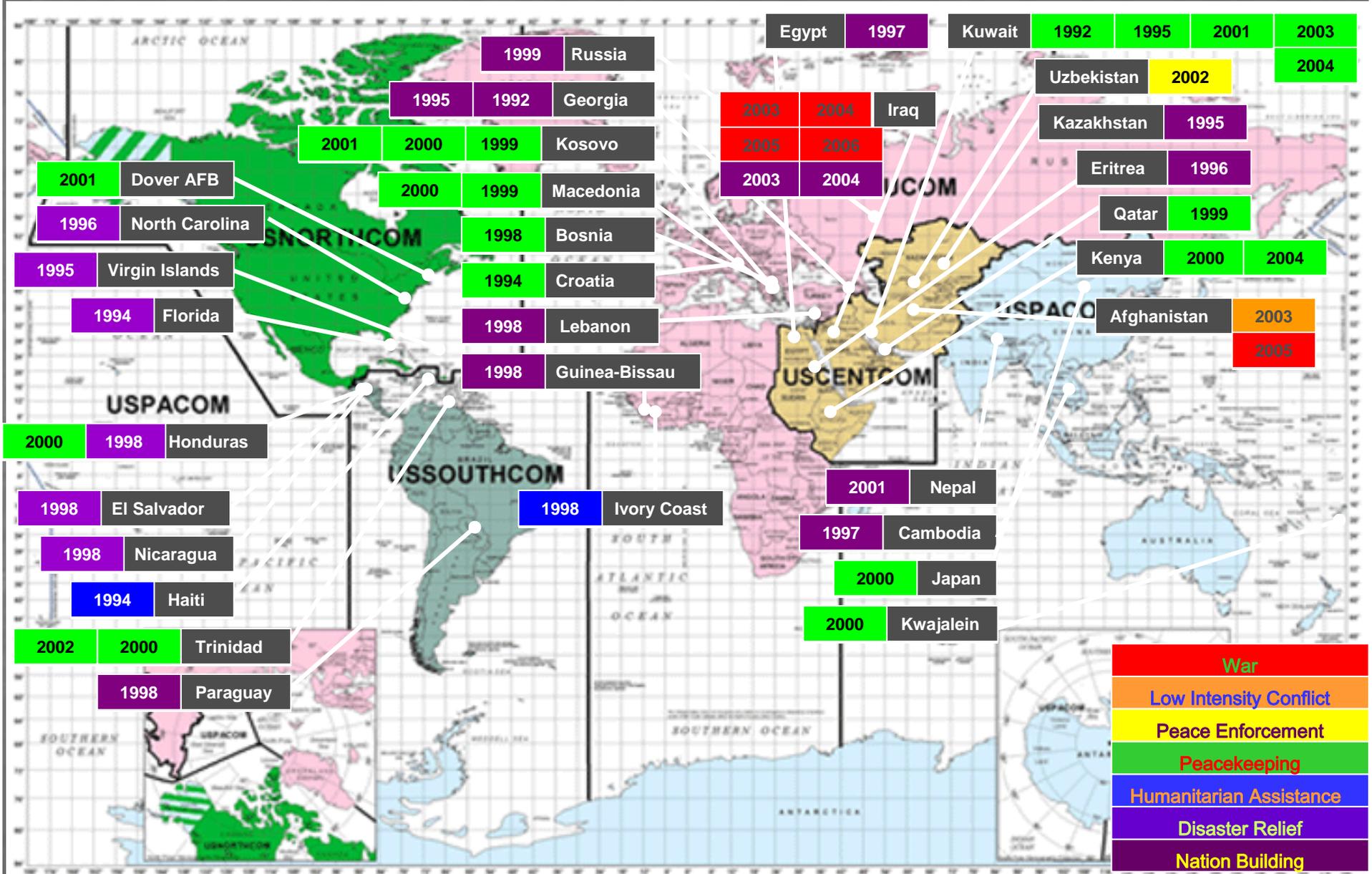


DOD Health Facility Planners in Operation Iraqi Freedom



USAHFPA Deployments 1992-2006



3 Primary Missions of DOD Health Facility Planners in Iraq

- Planning the reconstruction effort for the Iraqi healthcare system
- Planning and executing the US/ Coalition Military and Detainee healthcare system
- Planning and executing the Iraqi Military and Police Forces healthcare system

Planning and Programming The Reconstruction of the Iraqi Healthcare System

Photo:
Damage at the
National Spinal
Cord Injuries
Center the day
after the
first UN
Bombing,
Aug 2003





The Situation: August 2003

- We didn't know the inventory
- Many independent players with own agendas
- We didn't know all the players
- We didn't know the real problems
- Significant Cultural differences
- Significant language barrier
- Political pressure to show quick progress
- We needed a program in 6 weeks



The Situation: August 2003

- “Wild West”
- No phones
- No mail
- No internet
- Travel was dangerous
- New leadership at all levels
- Lack of trust between players
- Utilities unreliable
- Cash only society
- General lack of stability





Objectives: Planning without information

- We knew very little about
 - Workload
 - Inventory
 - Condition
 - Capacity
 - Capabilities
- And we had no means or time to find out.

Objectives: Our Rules of Engagement

- Establish credibility
- Think systematically, not address individual problems in isolation
- Build a requirements-based program
- Develop program to solve the problems
- Make assumptions when we did not have facts
- Make "No arbitrary decisions"
- Use Iraqi MOH Engineers to Verify assumptions
- Develop projects to execute the program Build an Iraqi healthcare system, not an American healthcare system

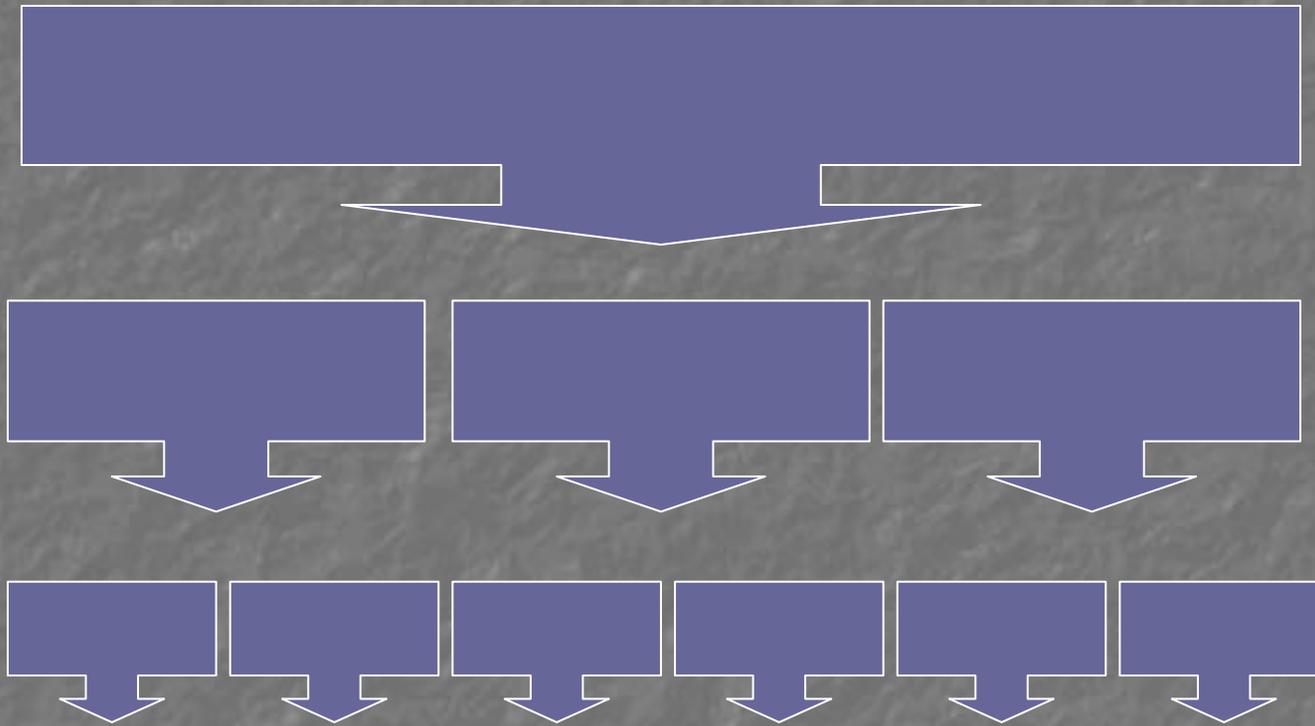




Primary Assumptions

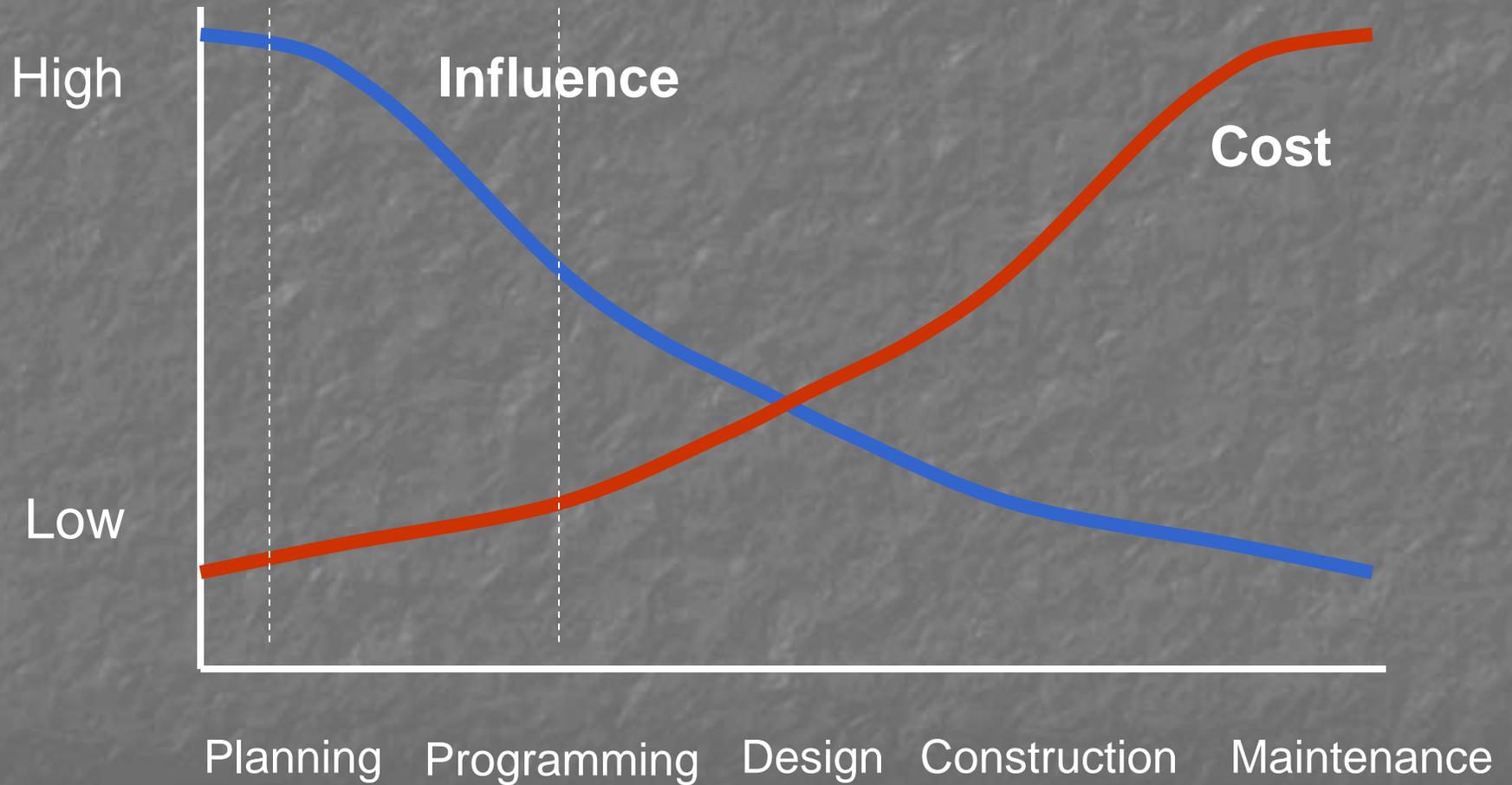
- Inventory
 - 240 Hospitals
 - 1,200 Clinics
- Condition
 - Power: Source and Distribution
 - Sanitation
 - HVAC
- Capacity
 - Inadequate but facilities not primary problem
- Capability
 - Inadequate but facilities not primary problem

Planning



Start with the concepts and develop to details

Cost and Influence









Problem ID & Programming: Criteria Used

- Impact that problem has on health of beneficiary population
- Impact that problem has on health care system's effectiveness
- Impact that problem has on health care system's efficiency



Identifying Magnitude of Requirements

- Impossible to produce meaningful project lists
- We decided to identify system-wide problems
 - Estimate magnitude of problems
 - Take sample to verify
 - Extrapolate sample group across the inventory
 - Provide requirements in aggregate
- Develop Strategy to correct major problems
- Present to International Donor's Conference

Aggregate Estimating: Applying Across the Inventory

Project		Sanitation	Electrical	Mechanical	Structure	Condition	Required	Exist	Services	Capacity	Capacity	Original	Growth	Number	Layout	Total	HC support	Primary Care	New Constructor	Total	Beds	Project Cost	Cumulative
Saddam Teaching General Hospital	Al-Ramadi	2	2	3	1	24	2	1	27	2	20	0	1	0	2	73				73	428	\$10,824,802	\$10,824,802
Gynaecology, Obstetrics & Children Hospital	Al-Ramadi	3	2	2	2	27	2	1	27	2	20	0	1	0	2	76				76	260	\$7,574,002	\$18,398,803
Heet General Hospital	Heet	2	2	2	1	21	2	2	36	2	20	0	1	0	2	79				79	50	\$10,330,002	\$28,728,805
Al Faluja General Hospital	Al-Falluja	2	2	2	1	21	2	1	27	2	20	0	1	0	2	70				70	50	\$10,330,002	\$39,058,806
Al-Faris Al-Arabi Hospital	Al-Falluja	2	2	2	1	21	2	2	36	2	20	2	1	0	6	83				83	100	\$10,660,002	\$49,718,808
Ana General Hospital	Ana	2	2	2	1	21	1	1	18	1	10	0	1	0	2	51				51	100	\$660,002	\$50,378,810
Rawah General Hospital	Ana	2	2	2	1	21	2	2	36	2	20	2	2	0	8	85				85	50	\$10,330,002	\$60,708,811
Haditha General Hospital	Haditha	2	2	2	1	21	2	1	27	2	20	0	1	0	2	70				70	50	\$10,330,002	\$71,038,813
Al Rutba General Hospital	Al-Rutba	4	4	4	4	48	2	2	36	2	20	2	2	2	12	116				116	20	\$10,264,003	\$81,302,816
Al-Qa'im General Hospital	Al-Qa'im	3	2	3	2	30	2	2	36	2	20	0	2	0	4	90				90	50	\$10,495,002	\$91,797,818
Al Ubaidi General Hospital	Al-Qa'im	3	2	4	3	36	2	1	27	2	20	0	2	0	4	87				87	50	\$10,495,002	\$102,292,820
Babel Maternity & Children Hospital	Al-Hilla	3	2	2	1	24	1	0	9	2	20	0	1	0	2	55				55	313	\$3,098,702	\$105,391,521

Per bed estimates: Critical System Fix

per bed estimates	Sanitation			
Elec/Mech	none	minimal	significant	major
none/none	\$0	\$1,700	\$4,250	\$8,500
singificant/none	\$8,500	\$10,200	\$12,750	\$17,000
major/ none	\$17,000	\$18,700	\$21,250	\$25,500
none/ significant	\$6,375	\$8,075	\$10,625	\$14,875
significant/significant	\$14,875	\$16,575	\$19,125	\$23,375
major/significant	\$23,375	\$25,075	\$27,625	\$31,875
none/ major	\$12,750	\$14,450	\$17,000	\$21,250
significant/major	\$21,250	\$22,950	\$25,500	\$29,750
major/major	\$29,750	\$31,450	\$34,000	\$38,250

Per bed estimates: Renovation

per bed estimates	Sanitation			
Elec/Mech	none	minimal	significant	major
none/none	\$0	\$3,400	\$8,500	\$17,000
singificant/none	\$17,000	\$20,400	\$25,500	\$34,000
major/ none	\$34,000	\$37,400	\$42,500	\$51,000
none/ significant	\$12,750	\$16,150	\$21,250	\$29,750
significant/significant	\$29,750	\$33,150	\$38,250	\$46,750
major/significant	\$46,750	\$50,150	\$55,250	\$63,750
none/ major	\$25,500	\$28,900	\$34,000	\$42,500
significant/major	\$42,500	\$45,900	\$51,000	\$59,500
major/major	\$59,500	\$62,900	\$68,000	\$76,500

Aggregate Estimating: Estimating Cost Requirements

Problem	Initiative	11 year Total	FY 03	FY 04	FY05	FY06	FY07
Unreliable Electricity	Generators, hospitals	\$40,000,000	\$40,000,000	\$0	\$0	\$0	\$0
Unreliable Electricity	Generators, hospitals	\$90,000,000	\$0	\$90,000,000	\$0	\$0	\$0
Unreliable Electricity	Electrical Internal distribution	194,559,750	\$2,222,222	\$42,741,673	\$37,398,964	\$86,305,301	\$25,891,590
Unsanitary conditions	Sanitary JOC	\$134,894,760	\$1,111,111	\$29,729,700	\$26,013,487	\$60,031,125	\$18,009,337

- Requirements based on problems to be solved
- Estimates based on percentages of aggregate construction costs
- Estimates verified by available assessments and MOH Engineer experience

Aggregate Estimating: 4- year Rebuild Plan

Annual Total:	\$5,177,869,627	\$55,120,000	\$734,039,152	\$595,471,118	\$643,753,482	\$476,832,432
4 year rebuild fy04-07	\$915,361,910	\$55,120,000	\$354,420,202	\$214,029,677	\$230,453,101	\$61,635,930
10 year expansion fy04-13	\$1,884,795,000	\$0	\$188,610,000	\$188,610,000	\$188,610,000	\$188,610,000
Annual sustainment	\$2,377,712,717	\$0	\$191,008,950	\$192,831,441	\$224,690,382	\$226,586,501
Capital Costs	\$2,800,156,910	\$55,120,000	\$543,030,202	\$402,639,677	\$419,063,101	\$250,245,930
w/out expansion	\$3,293,074,627	\$55,120,000	\$545,429,152	\$406,861,118	\$455,143,482	\$288,222,432
Total 4 year capital	\$1,614,978,910					
Total Rebuild 4 year	\$860,538,910	<i>Not requesting:</i>	\$191,008,950	\$192,831,441	\$224,690,382	\$226,586,501
Total 4 year w/out expansion	\$1,695,656,184					

4 year rebuild
10 year expansion/ realignment
Establish Sustainment program

Congratulations Tasek Team
2.23 Hours Required
1,820 Required Service Items
80% Through



Problem ID & Programming: Requirements Packages

Priority	Sequence	Package	Project	Location	Package	Cumulative	Technology level	Level of investment	Potential funding Source
1	Foundation	1 Primary Care Establishment	Construct, equip and train New Health Centers	Country-wide	\$300,000,000	\$300,000,000	Low	Medium	USA Supplemental
2	Foundation	1 Mother and Child	Ronovate/ equip and train Hospitals that specialize in Maternity and Children healthcare	Country-wide	\$370,000,000	\$670,000,000	Medium	Medium	USA Supplemental
4	Foundation	1 Supply and Distribution System	Establish Supply and equipment distribution System. Facilities, Equipment, training.	Country-wide	\$100,000,000	\$770,000,000	Medium	High	Japanese Donation
3	Early Development	2 Critical Systems	Renovate and upgrade critical systems in hospitals to continue operations.	Country-wide	\$300,000,000	\$1,070,000,000	Medium	High	Individual Donors/ NGOs
5	Early Development	2 Blood Program	Establish National blood collection/ distribution System. Facilities, equipment, supplies, training.	Country-wide	\$364,698,700	\$1,434,698,700	High	High	Japanese Donation
6	Early Development	2 Public Health Lab	Renovate/ equip Public Health and TB Labs. Training.	Country-wide	\$18,995,000	\$1,453,693,700	High	Medium	Unidentified Single Donor
12	Early Development	2 Tertiary Care Specialty	Renovate/ equip Tertiary Care Specialty Centers. Training.	Country-wide	\$250,000,000	\$1,703,693,700	High	High	Individual Donors/ NGOs
13	Early Development	2 Communications Network	Establish a Communication network for organizations within the healthcare system to communicate. Facility modifications, Backbone, hardware, software, training.	Country-wide	\$250,000,000	\$1,953,693,700	High	High	Unidentified Single Donor
14	Early Development	2 Housekeeping Program	Develop solution, Establish, equip, implement a certified housekeeping program. Cleaning equipment, initial supplies, hardware, software, training.	Country-wide	\$10,000,000	\$1,963,693,700	Low	Low	Unidentified Single Donor
7	Middle Development	3 Preventive Maintenance	Establish a preventive Maintenance Program for buildings/ equipment. Hardware, software, training.	Country-wide	\$10,000,000	\$1,973,693,700	Medium	Low	Unidentified Single Donor

Problem ID & Programming: Requirements Packages

Priority	Sequence	Package	Project	Location	Package	Cumulative	Technology level	Level of investment	Potential funding Source
8	Middle Development	3 Medical and Hazardous Waste	Establish a Medical Waste and Hazardous Waste Disposal program. Incinerators, storage facilities, transportation, hardware, software, training.	Country-wide	\$150,000,000	\$2,123,693,700	Medium	High	Unidentified Single Donor
9	Middle Development	3 Quality Assurance	Establish a System-wide Quality Assurance Program. Hardware, software, training.	Country-wide	\$10,000,000	\$2,133,693,700	Low	Low	Unidentified Single Donor
16	Middle Development	3 Patient Transport System	Equip, Patient Transport system to allow it to communicate, manage and travel. Training.	Country-wide	\$40,000,000	\$2,173,693,700	Low	Medium	Unidentified Single Donor
10	Late Development	4 Media Access for Hospital staff and Public education	Establish and provide media access to educate public and healthcare workers.	Country-wide	\$4,000,000	\$2,177,693,700	Medium	Low	Individual Donors/ NGOs
15	Late Development	4 Vehicles/ Tools for Governorate MOH	Equip, Governorates with tools and vehicles necessary to allow them to manage governorates. Hardware, software, training.	Country-wide	\$5,000,000	\$2,182,693,700	Low	Medium	Individual Donors/ NGOs
11	As available	5 Japanese Hospitals	Renovate/ re-equip 13 Japanese Hospitals. Training.	Country-wide	\$248,698,700	\$248,698,700	High	High	Japanese Donation
17	As available	5 Individual Renovations/ Repairs/ etc.	Sponsor individual facilities to renovate, rehabilitate, re-equip as necessary. Training.	Country-wide	\$700,000,000	\$948,698,700	Various	Low	Individual Donors/ NGOs

Program Development Objectives

- Provide Catalyst to establish Primary Care-Based Healthcare system
 - Construct 200 Primary Health Centers
- Improve health of Vulnerable population Groups
 - Renovate 17 Women & Children Hospitals
 - Construct 1 Maternity and Children's Hospital
- Provide equipment
 - Blood Program
 - TB Program
 - Life Saving
 - Life Sustaining
 - Women and Children focused

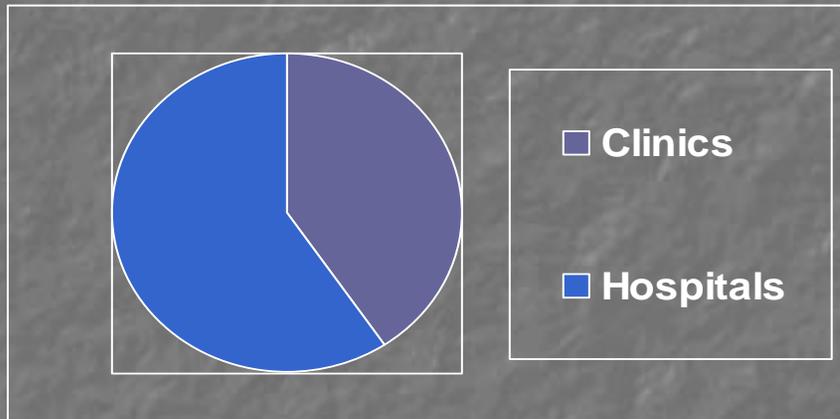


Program Development MOH Supplemental Breakdown

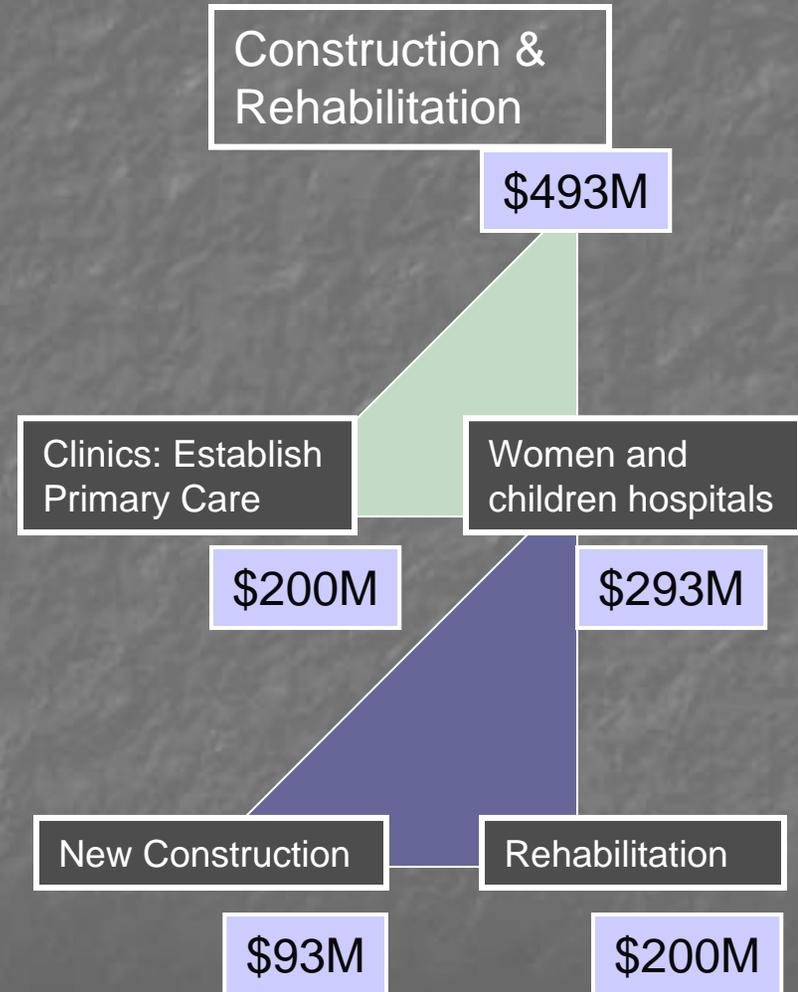


- The Ministry of Health Supplemental is part of a larger requirements-driven program designed to
- convert the condition and layout of the existing facilities infrastructure in facilities that support most beneficial vulnerable population group.
 - Boldly establish a strong primary care base

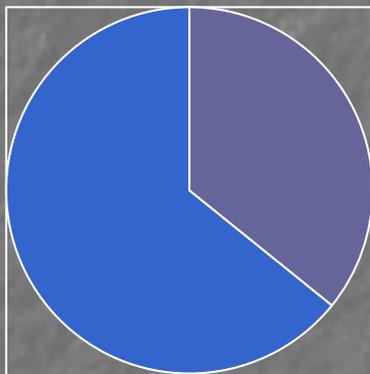
Program Development MOH Supplemental Breakdown



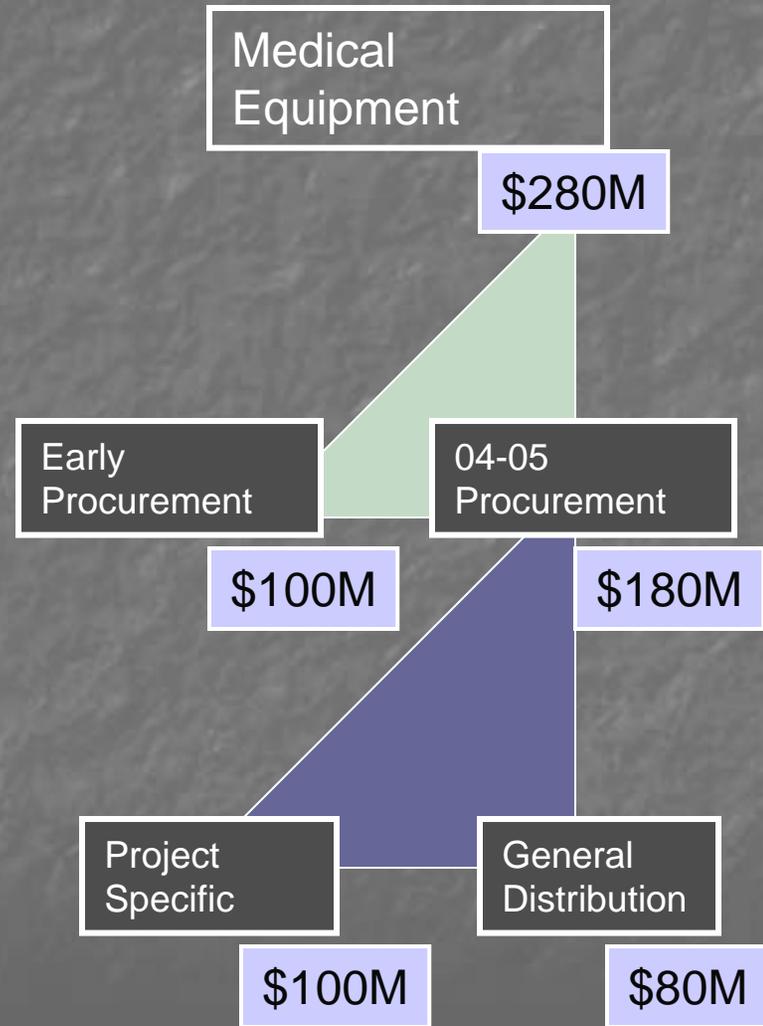
Construction & Rehabilitation
Distribution



Program Development MOH Supplemental Breakdown



Equipment Distribution



Program Development MOH Supplemental Breakdown

Medical Related
Training

\$17M

- Primary Care Training will target the development of staff skills and attitudes to assist them in most effectively and efficiently implementing comprehensive Community Oriented Primary Care in the model clinics and renovated Primary Care facilities

\$12M
- There are more physicians than nurses in Iraq so the development of improved nursing practices in the renovated maternal and pediatric facilities as true “Centers of Excellence” and initiate a longer term development program for professional nurses.

\$5M

Project Development

- Project Management Office
 - Established to manage the US Supplemental
 - Stationed in Baghdad
 - Set up in November 2003

Outcomes: Update

- This briefing covered the time period 1 Aug 03- 1 Feb 04.
- The Ministry of Health was the first of the Ministries to be declared independent of CPA Spring 2004.
- The CPA disbanded June 2004.
- As of June 2005 construction has begun on over 150 health clinics and about 20 hospitals including a new Children's Healthcare Center.
- As of June 2006, most construction has stopped, as the effort ran out of money. Most the clinics have not been completed.

Outcomes: Lessons Learned?

- Degree of Success dependent upon balance of Political and Technical influence
- Looking for Projects before building a program is disappointing at best
- Not recognizing the overhead costs early destroys your estimates
- Underestimating costs and time required for short-term Political images creates a "No Win" situation
- Awarding HUGE Contracts overseas (US & UK) minimizes buying power
- Utilizing foreign and ill defined standards minimizes buying power and distances locals
- Disengaging the local professionals from the process leads to ineffectiveness, inefficiencies and distrust
- Not all problems are Facilities problems... therefore fixing facilities may not fix the problems.





Planning and executing the US/ Coalition Military healthcare system

Photo:
31st Combat
Support
Hospital
LSA Anaconda
Balad, Iraq





Ibn Sina Hospital - Baghdad



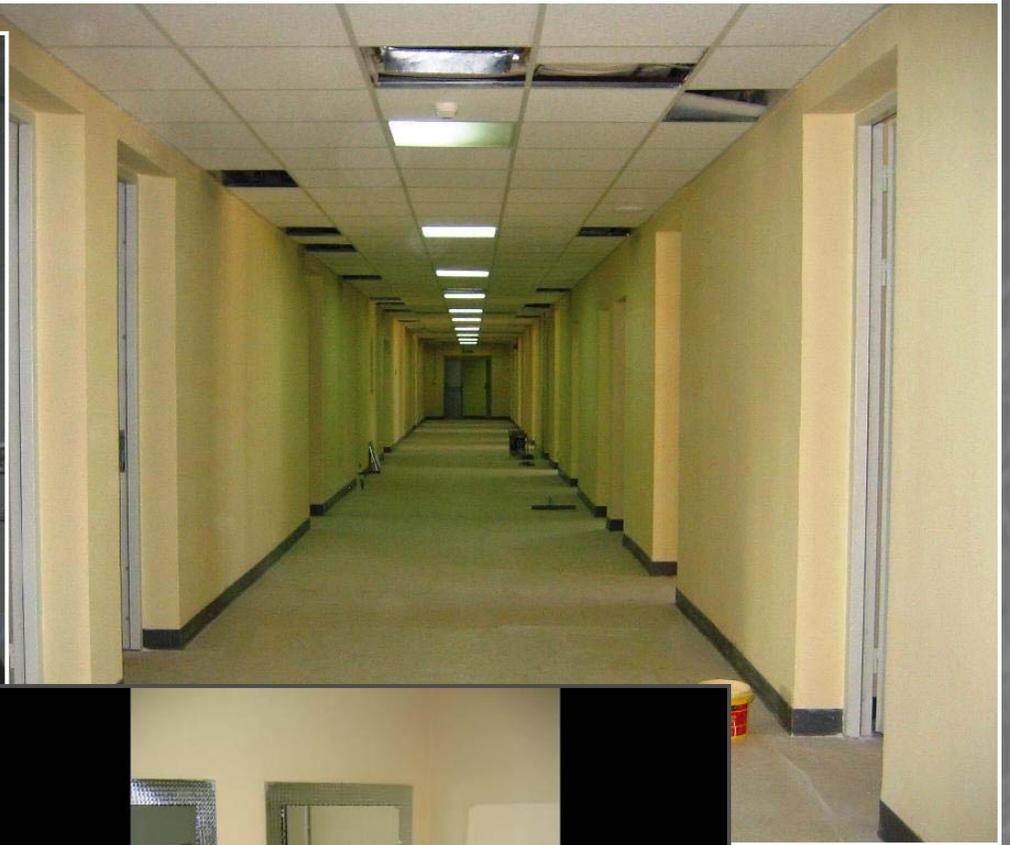
Air Force Theater Hospital – LSA Anaconda (Balad Air Base)



Kosovo Model - Medical Modular and CMU Construction



AFTH – A Wing Renovation (Admin Bldg)



AFTH – A Wing Renovation (Admin Bldg)



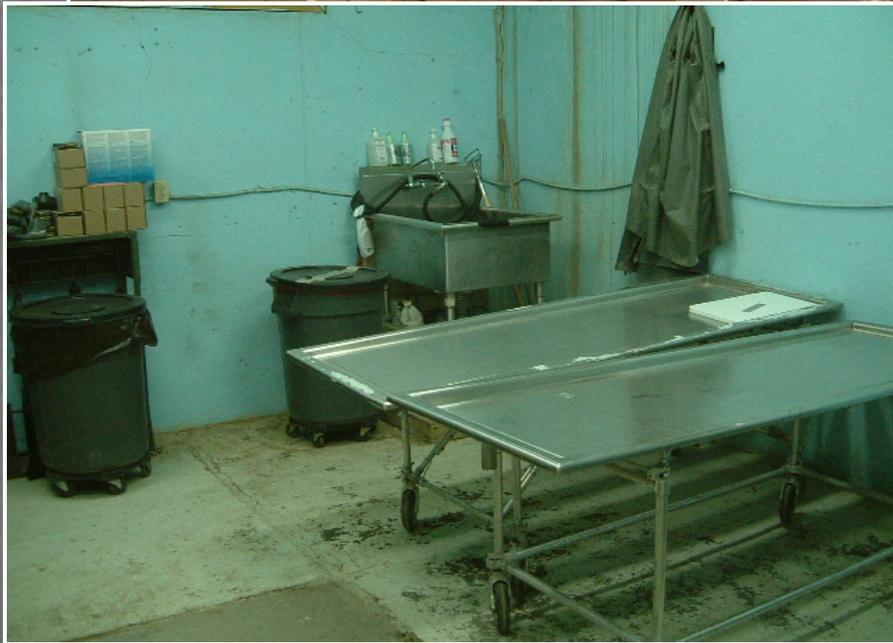
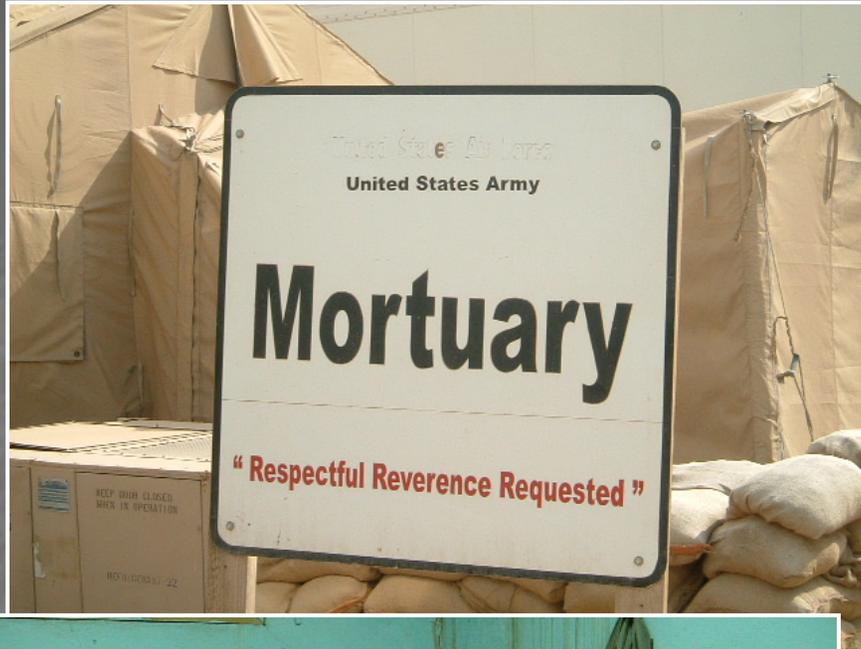
8-4-05

JL02

Class VIII Storage and Distribution – LSA Anaconda

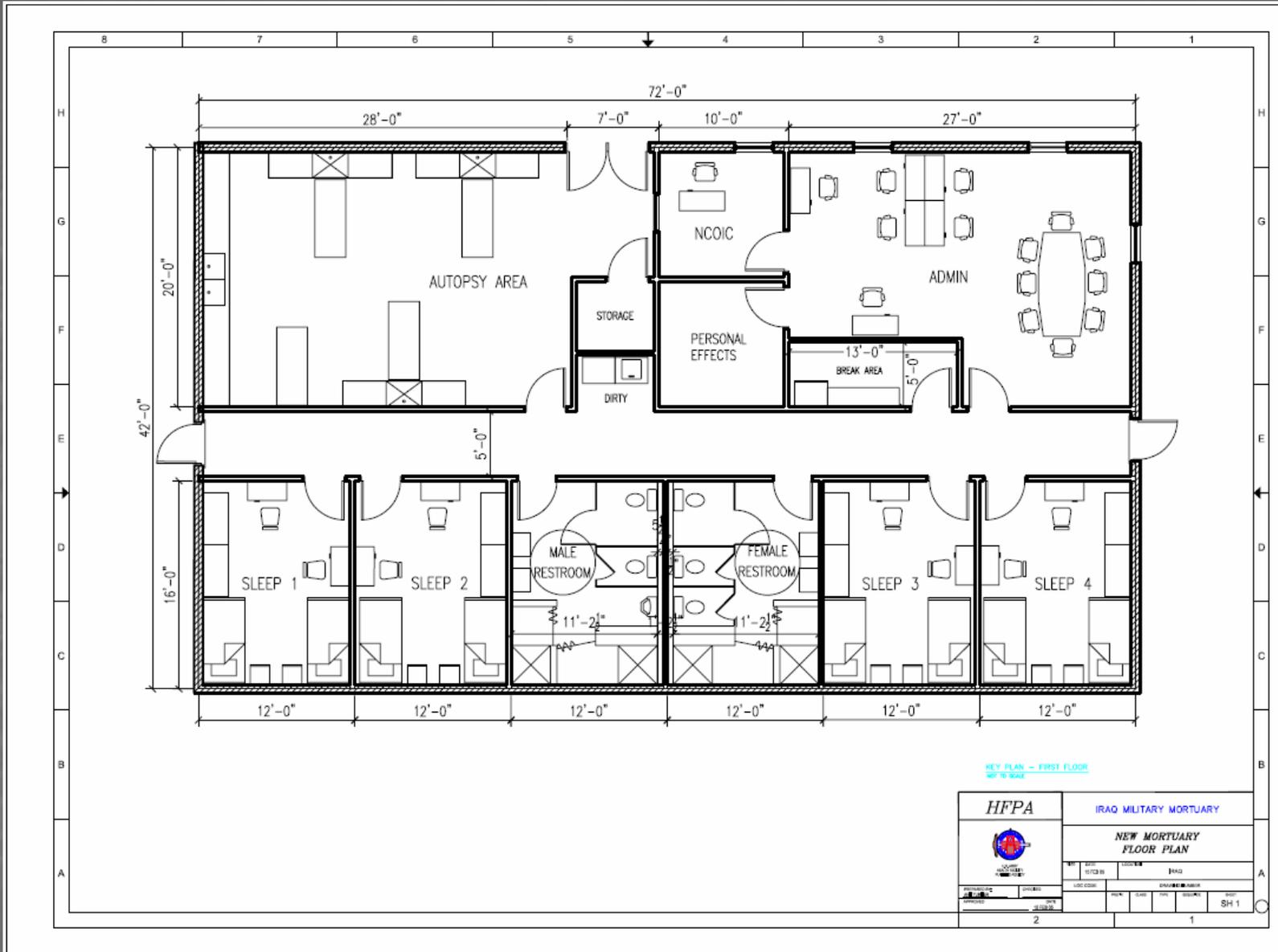


Class VIII Storage and Distribution – LSA Anaconda



BIAP Mortuary Affairs Facility





BIAP Mortuary Affairs Facility



Abu Ghraib Hospital



Abu Ghraib Hospital





Camp Bucca Detainee Facilities



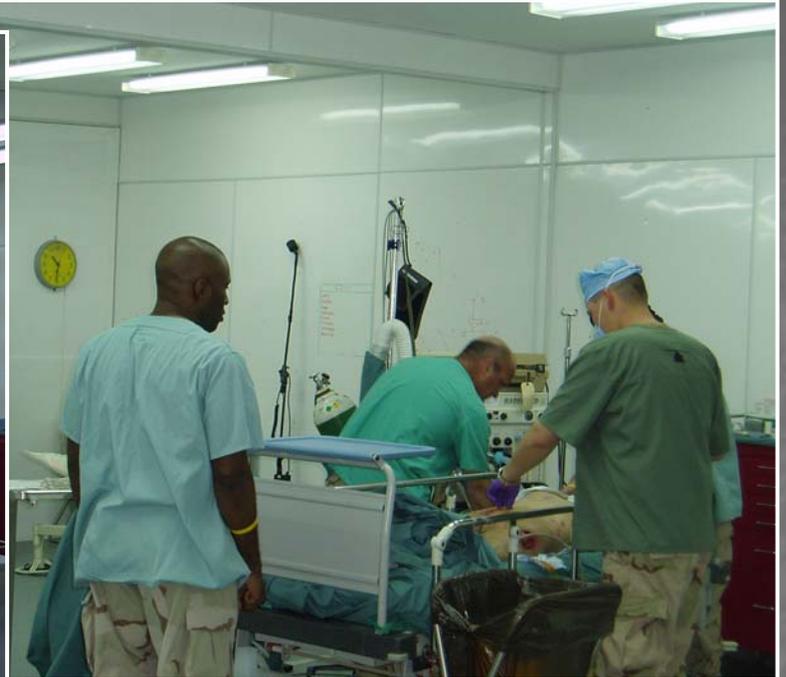
Camp Bucca Facility Alternatives



Tallil Air Base Hospital



Camp Bucca Detainee Hospital





Planning and executing the Iraqi Military and Police Forces Healthcare System

Photo: The first graduating class of the New Iraqi Army Kirkush, Iraq Aug/Sep 2003

