



Society of American Military Engineers



377th Civil Engineer Division
2010

Surety, Readiness, Support



AGENDA



- **GROWTH AT KIRTLAND**
- **MILCON Updates**
- **SRMC FY09 SUMMARY/UPDATE**
- **ARRA SUMMARY UPDATE**
- **ASSET MANAGEMENT & CE TRANSFORMATION**
- **BULK FUELS FACILITY UPDATE**
- **FUELS MILCON**
- **ENERGY**
- **WHERE THE WILD THINGS ROAM!**
- **QUESTIONS/ANSWERS**



Growth at Kirtland



**Security Forces Sqdn
Growth**
●+ Approx 140
●FY10



**AF Inspection Agency
Growth**
●+ 36
●FY09-10



**AF Nuclear Weapons
Center Growth**
●+ Approx 380 (multiple
locations)
●+ Approx 280 (KAFB)
●FY09-10



**Armed Forces Reserve Center
(Coming from Albuquerque)**
●\$25M - 107,000 SF
●800+ members
●Estimate complete Dec 09



**Space Vehicles Battlespace Environment
Division
(Coming from Hanscom AFB, Mass.)**
●\$56M - 145,000 SF State-of-the-Art Facility
●188-position division
●Potentially 100+ Jobs
●Broke ground Apr 09



KAFB BRAC Update



Armed Forces Reserve Center (BRAC/AFRC) - \$26.9M:

- **Constructed 107,000 square foot, 600 member Center at KAFB.**
 - 100% Complete



Surety, Readiness, Support



KAFB BRAC Update



Space Vehicles Battlespace Environment Lab (BRAC/AFRL) - \$53.5M:

- **Constructs 145,000 square foot lab/admin building for AFRL, relocated from Hanscom AFB.**
 - 40% Complete
 - FY09 AFMC Design Concept Merit Award



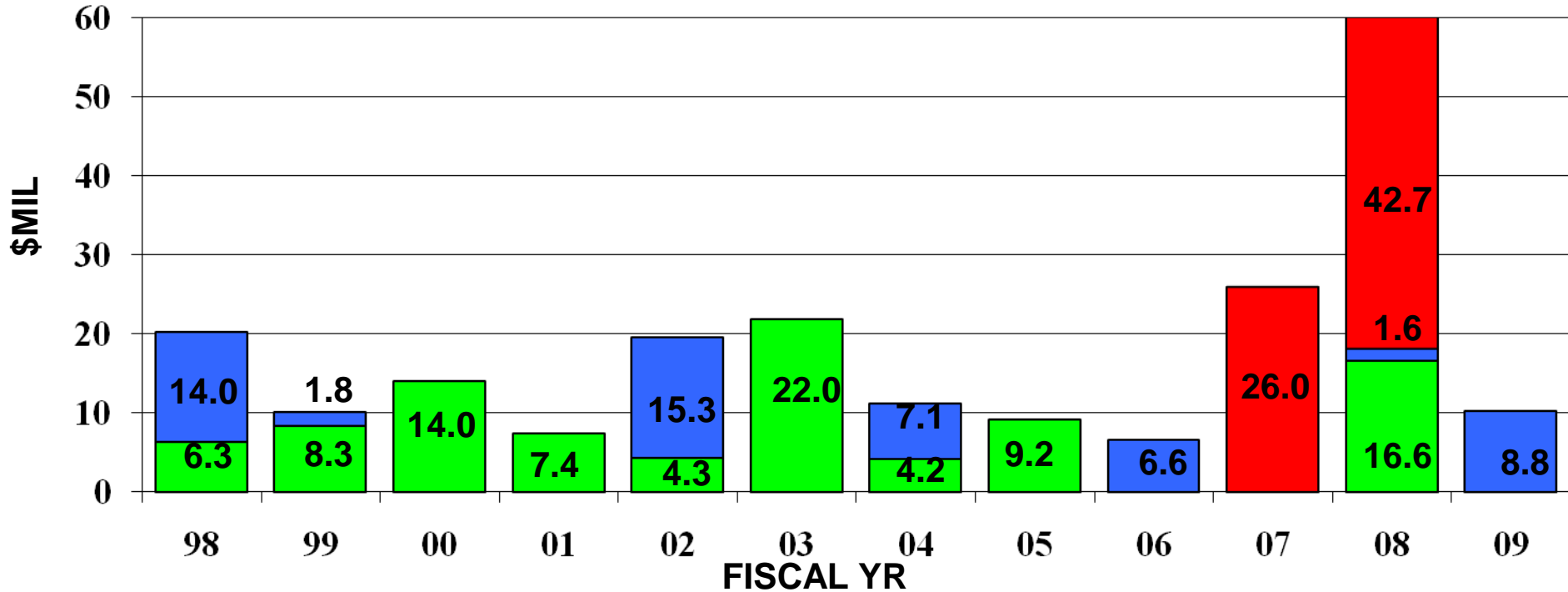
Surety, Readiness, Support



Integrated Military Construction Program



■ BRAC ■ Projects ■ Inserts



# Projects	(1)	(1)	(-)	(-)	(1)	(-)	(1)	(-)	(1)	(1)	(2)	(1)
# Inserts	(1)	(2)	(1)	(1)	(1)	(3)	(1)	(1)	(-)	(-)	(1)	(0)

Surety, Readiness, Support



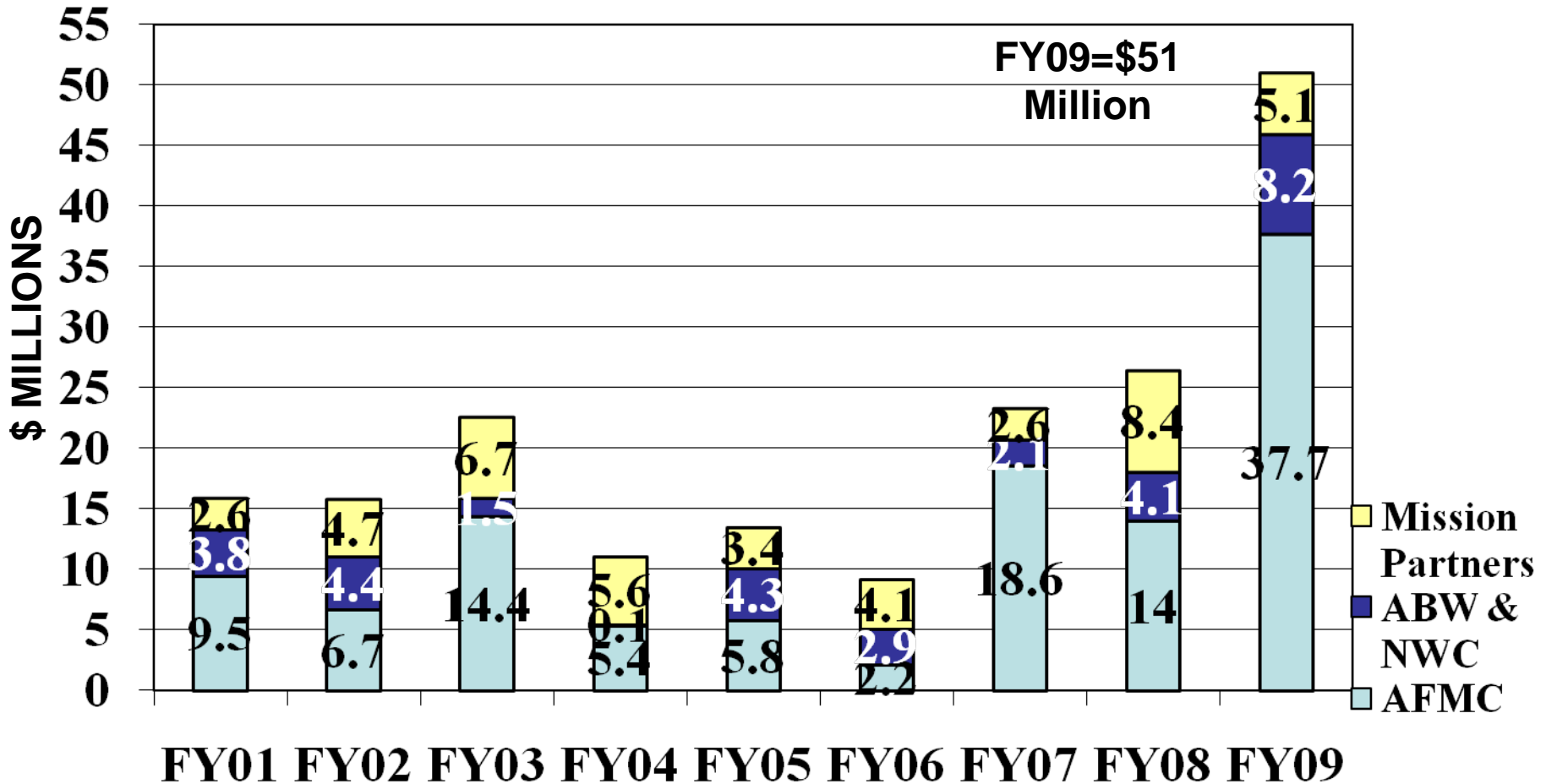
MILCON PROJECTS



<u>PRI</u>	<u>YEAR</u>	<u>TITLE</u>	<u>\$M</u>
1		Nuclear Systems Wing and Sustainment Center (AFNWC)	\$49.0
2		550th Operations Facility (AETC)	\$17.0
3		Space Vehicles Component Development Lab (AFRL)	\$18.0
4		Security Forces Center	\$19.0
5		Replace Fire Station #3 (Relocate from Manzano to Penn Ave)	\$6.8
6		Military Working Dog Facility	\$4.4
7		Advanced High Power Microwave Research Lab Ph I (AFRL)	\$21.0
8		PJ/CRO Aquatic Rescue Recovery Trainer (AETC)	\$15.0
9		Add to Space RDT&E Ops Center, SD&TW (AFSPC)	\$5.8
10		Hot Cargo Pad	\$14.6
11		Visiting Officers Quarters (Replaces VOQ 22010)	\$9.5
12		Physical Fitness Center	\$36.0
13		Lighting for Aircraft Parking	\$2.9
14	FY11	Armament Shop (AETC)	\$6.8
15		Reconstruct/Widen Wyoming Blvd Ph 1 & Upgrade Gate	\$22.0



KAFB SRMC History





FY09 PROJECT SUMMARY



No. of Projects	Project Title	Project Amount	Running Total
1	Repair Roof, Film Laboratory/Processing B20140	\$410,638	\$410,638
2	Design/Build Fire Material Removal AFIA B24499	\$1,333,591	\$1,744,229
3	Study Low Pressure Problem-Water Distribution	\$184,658	\$1,928,887
4	Design for Repair Power Lines-SOR	\$16,289	\$1,945,175
5	Survey Base Sanitary Sewer System-East	\$340,966	\$2,286,141
6	Design for Install Switch & Feeder-Substation 24A	\$4,254	\$2,290,396
7	Line Survey & Capacity Study, West & East KAFB, Natural Gas	\$199,925	\$2,490,321
8	Design for Repair Landscape, Dormitory B425	\$8,482	\$2,498,803
9	Design for Repair Bathrooms, Dormitory B20221	\$5,575	\$2,504,378
10	Design for Repair Dorm Doors, B20221	\$6,726	\$2,511,104
11	Design for Repair Dorm Stairs, B20221	\$2,257	\$2,513,361
12	Design Sustainment HVAC Dorm Systems, B20221	\$8,587	\$2,521,949
13	Design for Repair Dayroom, Dormitory B425	\$3,333	\$2,525,282
14	ARRA #1021: Repair Parking Lot, Dormitory B425	\$320,126	\$2,845,407
15	ARRA #1025: Sustain Parking Lot Pavement, Dorm B20221	\$187,959	\$3,033,367
16	Construct ECIP Utility Upgrade-AFSO	\$405,533	\$3,438,899
17	Design/Renovate B20604	\$803,173	\$4,242,072
18	Design for Repair Apron E Lighting, 58th SOW	\$74,740	\$4,316,812
19	Design Renovation Wheel & Tire Section, H1002	\$70,717	\$4,387,529
20	Design Cooling Rm. 27, B996	\$7,885	\$4,395,413
21	Design Repaint Hangar Floor, H1001	\$42,393	\$4,437,806
22	ARRA #1038: Repair Wyoming Phase II	\$636,074	\$5,073,880
23	Repair Carlisle Blvd. - Aberdeen to Randolph	\$481,614	\$5,555,494
24	Repair Truman - Aberdeen to Randolph	\$30,144	\$5,585,637
25	Airfield Striping - "D" and "E" Ramps; Taxiway "H"	\$146,454	\$5,732,091

Surety, Readiness, Support



FY09 PROJECT SUMMARY



No. of Projects	Project Title	Project Amount	Running Total
26	Repair B20245, Housing Relocation, NWC/708th	\$240,482	\$5,972,573
27	Repair HVAC B20130 AFOTEC-Phase II	\$1,204,186	\$7,176,758
28	AFOTEC Command Section & Facility Repair, B20130	\$870,238	\$8,046,997
29	Design Fall Restraint H1000, H1001 and H1002	\$11,401	\$8,058,398
30	Design for Repair Water Distribution, (FSD2)-Phase I	\$2,346	\$8,060,744
31	Study/Design for Critical Comm. Facilities, B412, B498, B20449, B20604 & B20202	\$413,685	\$8,474,429
32	Survey/Evaluation of Wood Utility Poles	\$244,610	\$8,719,039
33	Design to Replace Gas Lines Phase III-A	\$21,921	\$8,740,960
34	Design Corrosion Control for Climbing Training Structure, B19092	\$13,308	\$8,754,268
35	Design for Repair Stucco, B20356	\$1,346	\$8,755,614
36	Study of KAFB Wastewater System	\$156,320	\$8,911,934
37	Design for Repair Youth Center Carpet, B20234	\$1,565	\$8,913,499
38	Design Corrosion Control for Hanging Harness Training Structure	\$13,308	\$8,926,806
39	Design for Repair Sanitary Sewer - East	\$20,279	\$8,947,085
40	Survey Monumentation KAFB Railroad Spur	\$72,571	\$9,019,656
41	Design Standoff/ATFP to B20449	\$20,509	\$9,040,165
42	Design for Repair Electrical Power System, B22000 (Mt. View	\$8,829	\$9,048,994
43	Design for Install CV22 Mattress tiedowns, Heli Pad 5	\$2,788	\$9,051,782
44	Design for Repair Security Forces Facility, Phase I, B20220	\$35,160	\$9,086,942
45	Design for Repair S. Wing, B20604	\$96,403	\$9,183,345
46	Design for Renovation Restroom, Water Lines & Drains, B20356	\$8,565	\$9,191,910
47	Repair Subs 1, 3, 11, & 22 - Phase I	\$157,029	\$9,348,940
48	Repair Sub 20, High Voltage Isolation Switch	\$264,359	\$9,613,298
49	Repair Mechanical Systems, Hangar Doors, H1001	\$533,452	\$10,146,751
50	Resurface Interior Above Ground Water System Reservoirs	\$1,521,908	\$11,668,659

Surety, Readiness, Support



FY09 PROJECT SUMMARY



No. of Projects	Project Title	Project Amount	Running Total
52	ARRA#1037: Construct Addition, MUNS Vehicle Barn	\$292,858	\$13,011,830
53	ARRA#1048: Repair Built-Up Roof, Hangar 1002	\$1,722,773	\$14,734,603
54	ARRA#1049: Repair Roof, Warehouse, B20170	\$1,376,620	\$16,111,223
55	ARRA#1046: Repair Roof, B20602 Tech/Lab Shop	\$1,094,910	\$17,206,133
56	ARRA #1032: Repair Base Operations Roof, B333	\$667,538	\$17,873,671
57	ARRA#1028: Repair Roof B20338 Vehicle Maintenance Shop	\$511,429	\$18,385,100
58	ARRA#1023: Repair Roof, Supply Storage, B20410	\$329,333	\$18,714,433
59	ARRA #1019: Repair Roof, B20414 Research Equipment Storage	\$319,318	\$19,033,751
60	ARRA #1020: Repair Roof, B20415 Hsg Sup & Storage Facility	\$318,357	\$19,352,109
61	ARRA #1026: Repair Roof, Administrative Office Building 926	\$260,756	\$19,612,865
62	ARRA #1018: Repair Roof, B613, SC Physics Lab	\$225,313	\$19,838,178
63	ARRA #1014: Repair Roof, B20344 Vehicle Maint. Bldg.	\$244,359	\$20,082,537
64	ARRA #1030: Repair Admin Office Roof, B20320	\$125,091	\$20,207,628
65	ARRA #1007: Repair Roof B956 Flight Training Classroom	\$186,374	\$20,394,002
66	ARRA #1003: Repair Roof, Vehicle Maintenance Shop, B20348	\$136,074	\$20,530,075
67	ARRA #1002: Repair Roof, B66008, BE Maintenance Shop	\$71,690	\$20,601,765
68	ARRA #1000: Repair Readiness Classroom Roof, B20682	\$87,970	\$20,689,735
69	ARRA #994: Repair Roof, Htg. Facility B910	\$43,087	\$20,732,822
70	ARRA #993: Repair Roof, B20168, Vet Clinic	\$56,803	\$20,789,625
71	ARRA #992: Repair Roof, B20345-Transportation	\$8,872	\$20,798,497
72	ARRA #1047: Repair Isleta Rd.	\$645,070	\$21,443,566
73	ARRA #1045: Repair Parking Lot, HQ ABW B20604, Phase I	\$1,480,947	\$22,924,514
74	ARRA #1039, Repair Parking Lot, HQ B20604, Phase II	\$935,538	\$23,860,052
75	ARRA #1044: Repair Aberdeen-San Mateo Rd.	\$601,211	\$24,461,263

Surety, Readiness, Support



FY09 PROJECT SUMMARY



No. of Projects	Project Title	Project Amount	Running Total
76	ARRA #1043: Repair Randolph Phase III	\$1,435,261	\$25,896,524
77	ARRA #1040: Repair Randolph-Flightline to Kirtland	\$622,018	\$26,518,543
78	ARRA #1035: Repair Visitor Quarters Access, NE Corner of KAFB	\$1,556,769	\$28,075,311
79	ARRA #1034: Repair Southgate Rd.	\$1,566,885	\$29,642,196
80	ARRA #1024: Pennsylvania-Ridgecrest to "G" (Resurface)	\$767,043	\$30,409,240
81	ARRA #1022: Repair Quad Parking Lot, Dorm B20351	\$215,914	\$30,625,154
82	ARRA #1017: Repair CE Parking Lot - Phase II	\$801,904	\$31,427,058
83	ARRA #1016: Repair POL Parking Lot, B255	\$80,325	\$31,507,383
84	ARRA #1013: Repair SOR Rd.	\$343,604	\$31,850,987
85	ARRA #1011: EOD Parking Lot Expansion, B20413	\$410,540	\$32,261,527
86	ARRA #1010: Repair Eastside Fitness Center Parking Lot, B20228	\$219,966	\$32,481,493
87	ARRA #1008: Repair Parking Lot, B20170	\$213,905	\$32,695,398
88	ARRA #1006: Repair Westside Fitness Center Parking Lot	\$224,023	\$32,919,421
89	ARRA #1005: Repair Eastside Fitness Center Parking Lot	\$538,134	\$33,457,555
90	ARRA #1001: Repair LRS Parking Lot, B20341	\$142,774	\$33,600,329
91	ARRA #999: Repair Maxwell to Gibson	\$390,284	\$33,990,613
92	ARRA #996: Repair Research Lab Parking Lots, B412 and B413	\$27,040	\$34,017,653
93	ARRA #995: Repair Parking Lot Paving, 4th and F Ave.	\$78,755	\$34,096,408
94	ARRA#1042: Repair Randolph/San Mateo Drainage	\$561,296	\$34,657,704
95	ARRA #1033: Pennsylvania to "G" St. to Gibson	\$505,182	\$35,162,886
96	Repair Chiller B996, 58th SOW	\$5,072	\$35,167,957
97	Electrical and Comm Support for AFIA Furniture Installation	\$5,977	\$35,173,934
98	Electrical Design for B1029	\$1,854	\$35,175,788
99	Repair Collapsed Communications Duct-Wyoming and TX St.	\$1,396,478	\$36,572,266
100	Repair Bathrooms 58th MXS, B336	\$173,541	\$36,745,808

Surety, Readiness, Support



FY09 PROJECT SUMMARY



No. of Projects	Project Title	Project Amount	Running Total
101	Construct Parking Lot 58th SOW-Phase II	\$282,744	\$37,028,551
102	ARRA #1041: Repair Heating, Ventilation & Air Condition in 51	\$768,891	\$37,797,443
103	ARRA #1031: Install Solar Reflective Roofing, 3 Training &	\$620,115	\$38,417,558
104	ARRA #1029: Replace Chillers, Water Softner & Window Film, 5	\$399,536	\$38,817,094
105	ARRA #1004: Install Solar Water Heater, Aquatic Trg. Facility	\$350,202	\$39,167,295
106	ARRA #997: Repair Compressed Air System, Research Hangar,	\$71,665	\$39,238,960
107	ARRA#1012: Repair Fire Sprinkler System, Hgr. 277, High Bay	\$109,025	\$39,347,985
108	ARRA #1015: Repair Pad 5 Taxiway	\$293,858	\$39,641,843
109	ARRA #1027: Crack Seal & Seal Coat MUNS Haul Rt.	\$256,450	\$39,898,293
110	Repair LPS Manzano Area Igloos & WCTT Area (DOE)	\$6,082	\$39,904,375
111	Golf Course Bathrooms, B28054	\$172,567	\$40,076,942
112	LPS "As Built" Drawings	\$80,025	\$40,156,967
113	Demo Two Guard Towers, 26000 Area	\$62,679	\$40,219,646
114	Temporary Sustainment Integration Centers-TSTIC	\$512,154	\$40,731,800
115	Design for Repair B20201, JNWC OPS	\$60,888	\$40,792,688
116	Repair UPS Breakers, B27496	\$87,225	\$40,879,913
117	Design Brims Hall, B953	\$161,860	\$41,041,773
118	Construct Orderly Room, Bldg. 24499, AFSC	\$3,321	\$41,045,094
119	Design AFIA Server Room & SIPR Area, AFIA, B24499	\$9,322	\$41,054,417
120	Design to Repair Restrooms, Squad Ops, KUMMSC, B27494	\$16,225	\$41,070,642
121	Design to Renovate Conference Room, KUMMSC, B27494	\$10,845	\$41,081,487
122	Repair Water Distribution, (FSD2)-Ph. I	\$73,124	\$41,154,611
123	Replace Gas Lines Phase IIIa	\$503,368	\$41,657,978
124	Corrosion Control for Climbing Training Structure, B19092	\$410,928	\$42,068,906
125	Repair Manzano Bridge Approaches	\$1,851,001	\$43,919,907

Surety, Readiness, Support



FY09 PROJECT SUMMARY

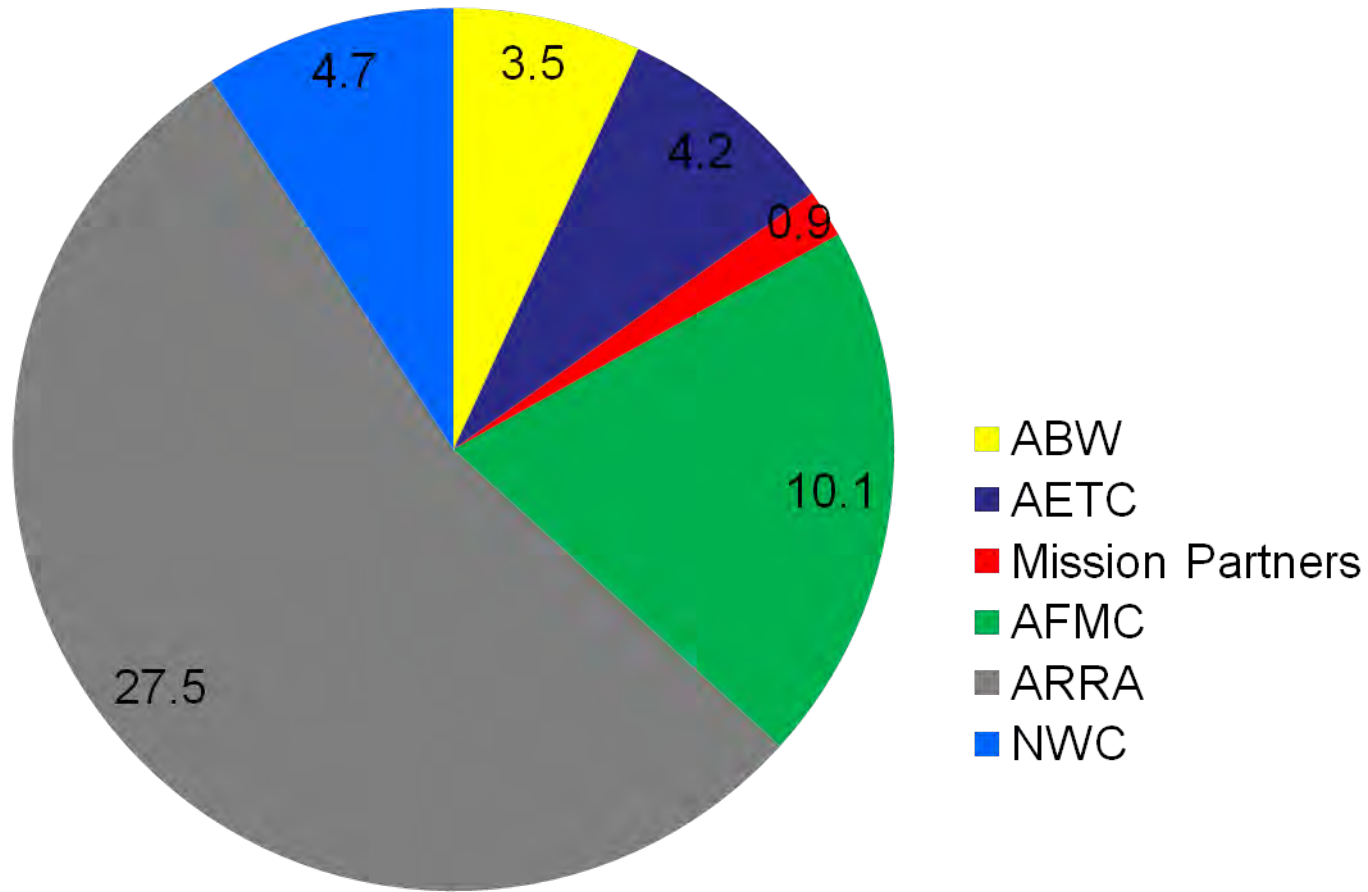


No. of Projects	Project Title	Project Amount	Running Total
126	Demo Shade Structure, B57037	\$11,246	\$43,931,152
127	Demolish Guard Shack, Bldg. 20612	\$5,362	\$43,936,514
128	Demo Training Aid Shop, Bldg. 29071	\$11,655	\$43,948,169
129	Demo Equipment Research Test Building 37505	\$24,158	\$43,972,328
130	Demo Storage Building 57006	\$2,631	\$43,974,958
131	Demo Tech Training Classroom, B30143	\$685,307	\$44,660,265
132	Design/Sustain Basketball Court Floors-East Gym	\$17,906	\$44,678,171
133	Design/Sustain Basketball Court Floors - West Gym	\$9,325	\$44,687,496
134	Pave Parking Lot North of B413	\$330,758	\$45,018,254
135	Repaint Hangar Floor, H1001	\$1,098,886	\$46,117,140
136	Renovate Wheel and Tire Section, H1002	\$304,259	\$46,421,400
137	Repair Chiller, B996	\$173,759	\$46,595,159
138	Repair Apron E Lighting, 58th SOW	\$1,841,935	\$48,437,094
139	Electrical and Communications Upgrades, NWC, B20235	\$876,217	\$49,313,311
140	Remodel Elevator, B413	\$299,611	\$49,612,922
141	Repair B20201 JNWC-Phase I	\$171,546	\$49,784,467
142	Construct Orderly Room B24499 AFSC	\$111,986	\$49,896,453
143	Design Solar Lighting Repairs, 750 Area	\$7,808	\$49,904,260
144	Design for Repair Electrical Power Systems, 750 Area	\$16,772	\$49,921,033
145	Design Landscaping AFOTEC, B20129,20130, and 20202	\$4,960	\$49,925,993
146	Repair Electrical and Comm for AFIA Furniture Installation	\$75,755	\$50,001,748
147	Repair AFIA Server Room & SIPR Area, B24499	\$125,355	\$50,127,103
148	Repair "M" Street-Phase I	\$793,661	\$50,920,763
149	Repair Asphalt, SE of B1060	\$2,516	\$50,923,279
150	898 MUNS Equipment Garage	\$55,999	\$50,979,279

Surety, Readiness, Support



FY09 SRMC/ARRA SUMMARY



Surety, Readiness, Support





ARRA Current Summary

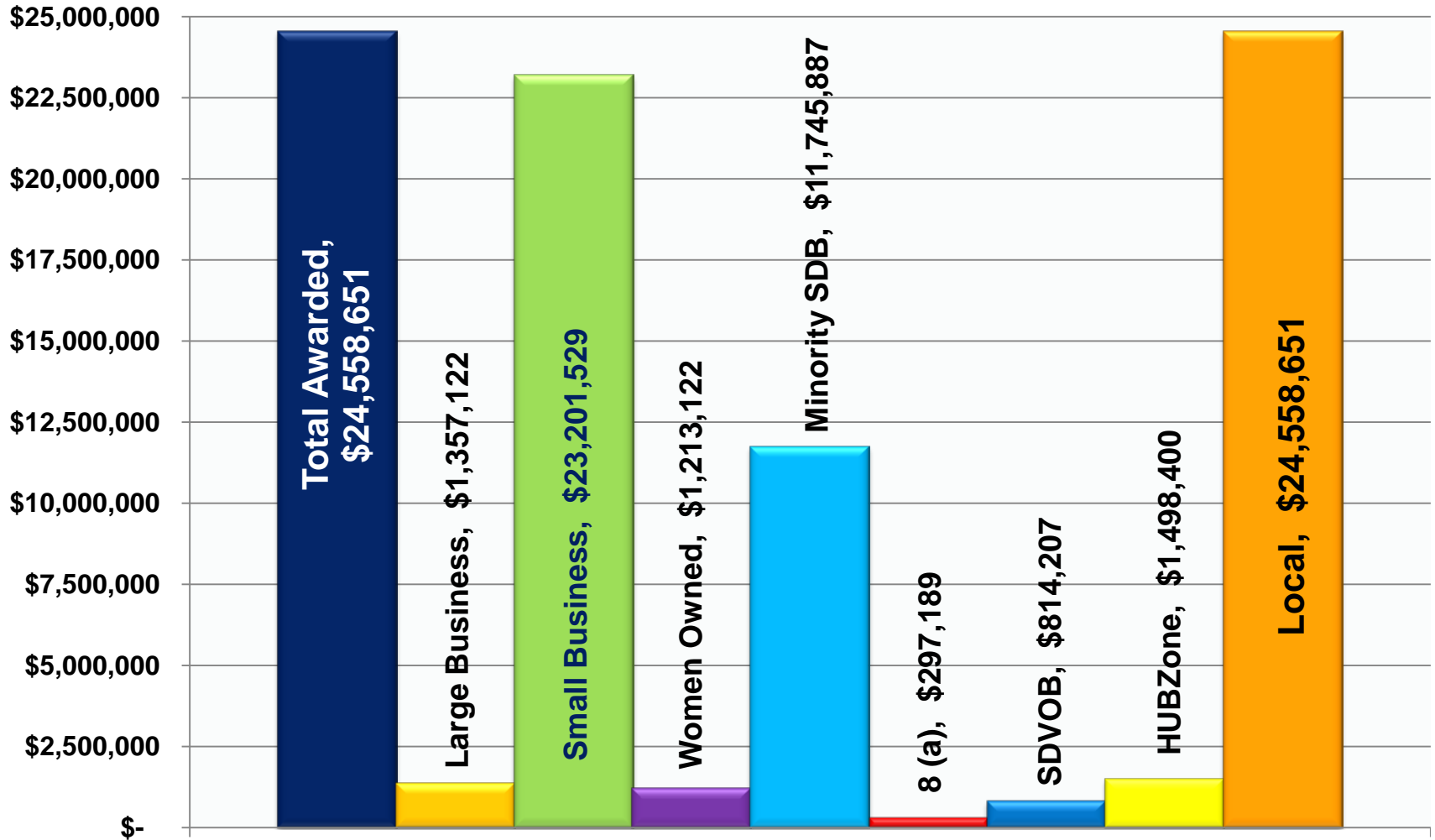


ARRA Status as of December 31, 2009:

- 53 Total Projects Awarded
- 3 ARRA Projects Pending Award
- 30 Construction Complete
- 13 Currently in Construction
- 10 Awaiting Construction Start



CMSJV ARRA Program Subcontracted Dollars – Small Business As of December 2009



CMSJV ARRA Subcontracting Small Business Awards FY09

Surety, Readiness, Support



CMSJV ARRA Program Subcontract Awards



FIRST TIER SUBCONTRACTOR	SUBCONTRACT AMOUNT AWARDED
310 Solar	\$ 277,427.04
Alliance Fire Protection	\$ 86,374.00
Corbins Electric	\$ 831,673.00
Jacks Mechanical	\$ 297,189.00
Kelco	\$ 615,475.00
National Roofing	\$ 525,449.00
Queston Construction	\$ 981,382.00
Robert Rivera	\$ 4,040,545.30
Ruperts P&H Company	\$ 57,369.00
TEF	\$ 231,740.00
TLC Plumbing	\$ 444,750.00
Universal Constructors Inc.,	\$ 9,445,318.36
Viking Roofing	\$ 6,723,959.67
TOTAL	\$ 24,558,651.37



ARRA IN PROGRESS



Surety, Readiness, Support



ARRA IN PROGRESS



Surety, Readiness, Support



ASSET MANAGEMENT PLAN (AMP)



- **AF CE undergoing significant transformation**
- **Activity Management is foundation for CE transformation**
- **Initiative will change how CE manages core mission support activities, advocates for & allocates funds**



Air Force Strategy



- **We are at war but must continue to transform**
 - Reinvigorate the AF Nuclear Enterprise
 - Win Today's Fight
 - Develop and Care for Airmen and Their Families
 - Prepare for Tomorrow's Challenges by Modernizing
 - Acquisition Excellence
- **USAF Strategy to fund modernization:**
 1. Reduce Active Duty manpower by 40K (~11%)
 - Civil Engineering losing ~1,700 personnel (~10%)
 2. Gain efficiencies in org structure and business processes
 3. Take risk in facilities / infrastructure
 - 20% decrease in buying power over last 2 years

Risk in Infrastructure & Personnel Drives CE Transformation



HAF/A7C's Response: "20/20 by 2020" Vision



Reduce the portion of the Air Force obligation authority required to support installation support activities by twenty-percent by...

Improving efficiency through business process transformation to mitigate the risk of negative mission impact caused by budget reductions leading to deteriorating infrastructure

Reduce the Air Force physical plant by twenty-percent, by the year 2020 by...

Focusing our limited time and funding on the infrastructure we need to perform the mission, diverting resources away from excess, obsolete, and under-utilized infrastructure

Surety, Readiness, Support



The Asset Mgt Approach



- ***A structured, standardized approach to maximize value and utility of built & natural assets***
- **Manage assets from a holistic portfolio perspective**
- **Standardized processes, levels of service across the AF**
- **Use of IT to analyze data, drive Key Performance Indicators**
- **Making informed asset decisions based on business case principles (risk, cost & benefits)**
- **Spending scarce dollars at the right place and right time for maximum effect**
- **Proven internationally and becoming commonplace in the US**

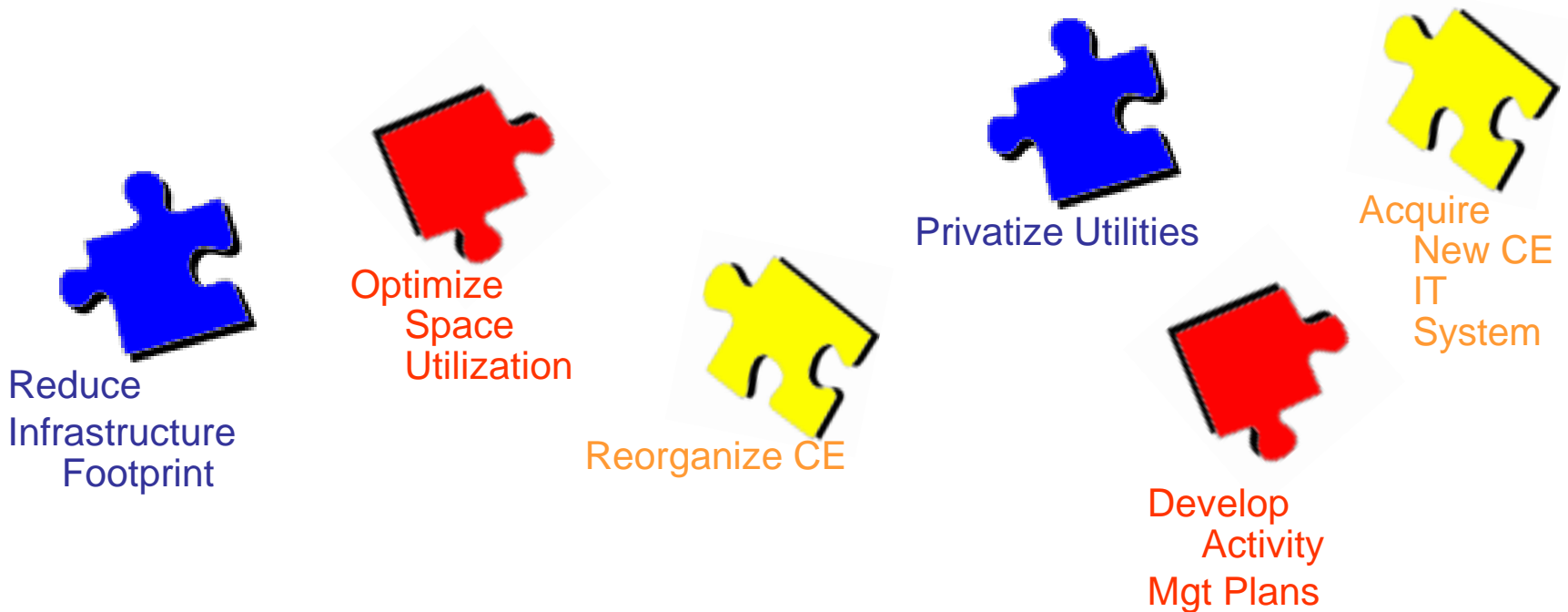
Already proven successfully with MFH Master Plan



Sample CE Initiatives Using Asset Mgt Approach



- Scope & pace of CE Transformation is very aggressive
- Numerous initiatives underway – samples include:



- Asset Management approach will be implemented by focusing first on Activity Management of Air Force Civil Engineering core activities

Surety, Readiness, Support

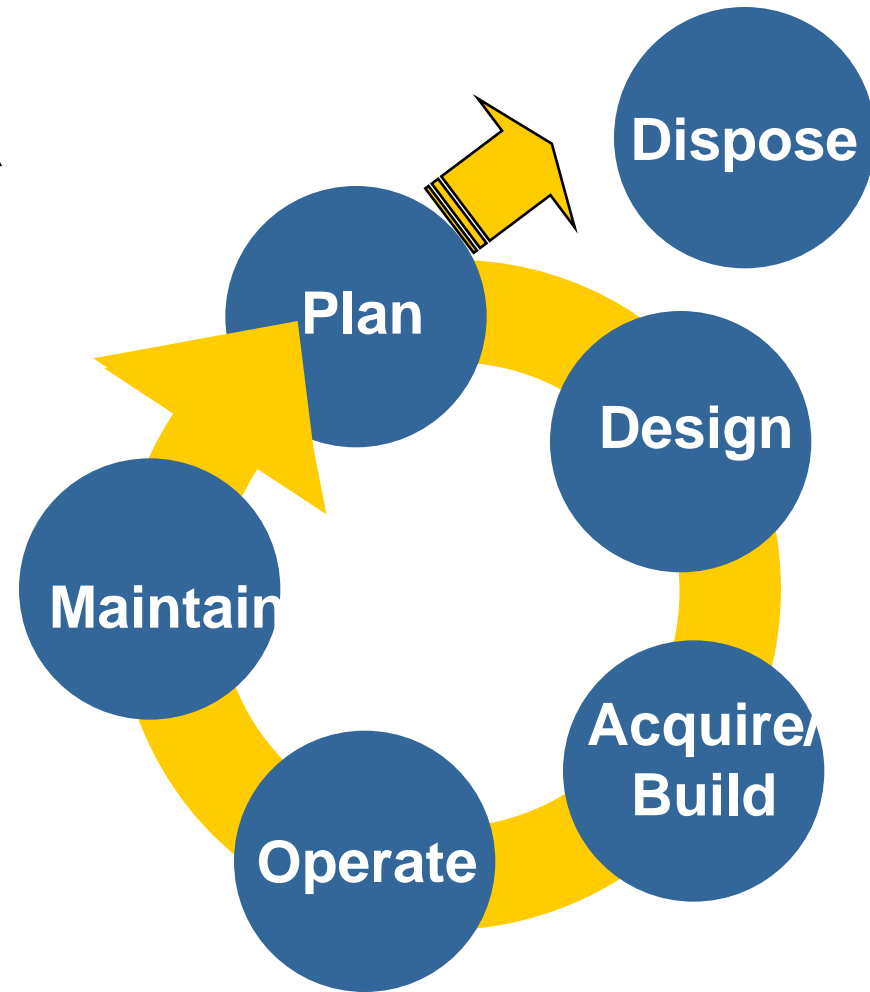


Activity Management – What is it?

- A structured approach for managing services
- Enables decisions about how best, and when, to:
 - Acquire,
 - Maintain,
 - Operate,
 - Rehabilitate, and
 - Dispose of or replace assetsin order to provide services

A process, a discipline, and a culture for managing assets from the **cradle to the grave**

Asset Management



Surety, Readiness, Support

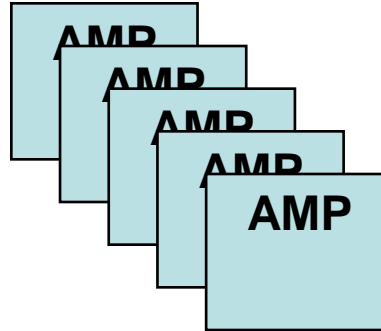


AMP Framework: Efficiencies gained via Integration

Existing CE plans & processes...

- Comprehensive Plan
- Housing / Dorm Plans
- Base-To-Command
- Infrstr. 5 Yr. Plans
- SRM Rack & Stack
- FUB
- NIA
- Etc...

...replaced by AMPs & AMP processes...



...resulting in an integrated BCAMP

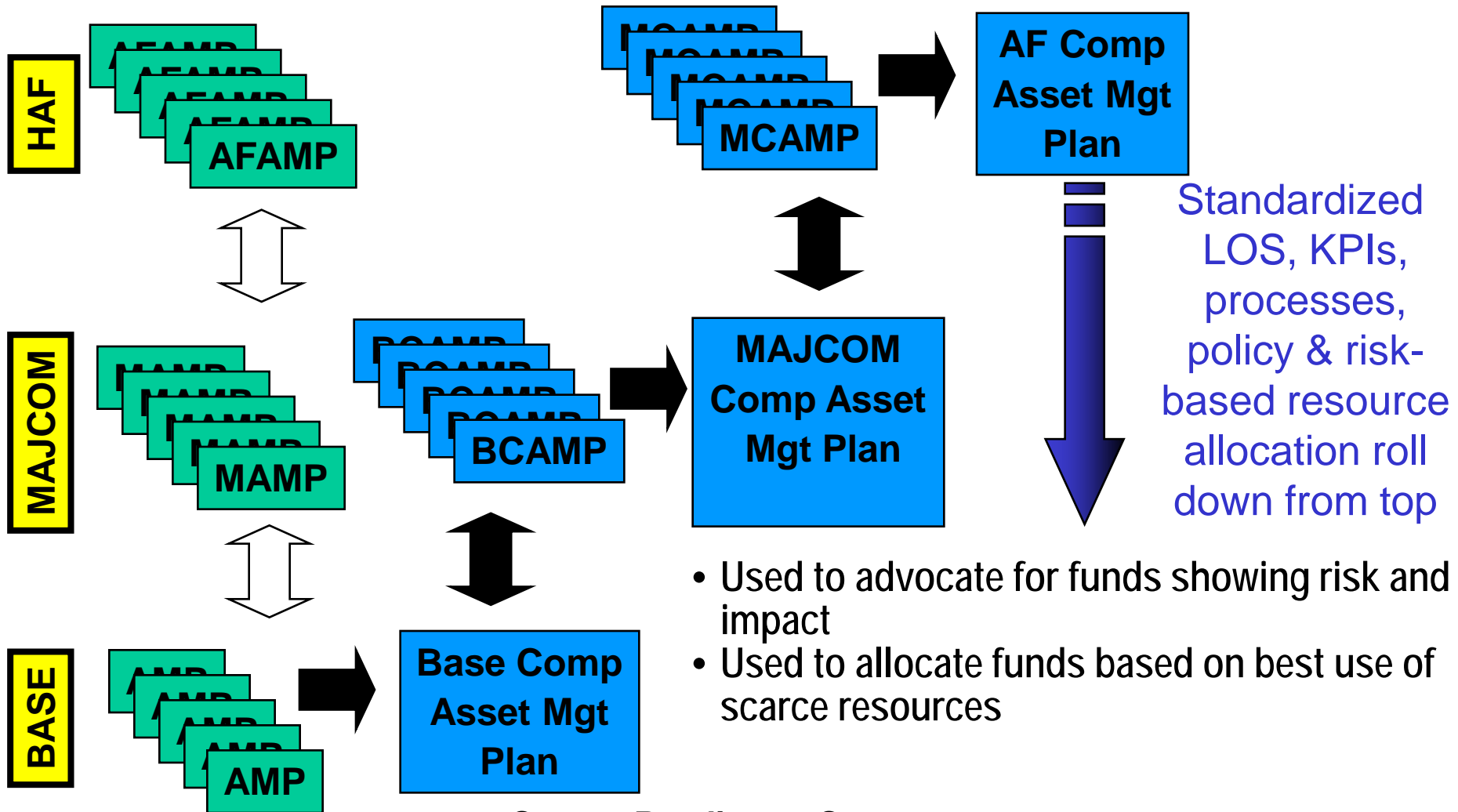


Integrated, holistic portfolio approach
Risk & cost business case analysis
Common Level of Service

Surety, Readiness, Support



AMP Framework: The Corporate 'Rollup'



Surety, Readiness, Support



AMP Value Proposition



A7C Commander's Intent

Integrate functional stovepipes using a holistic portfolio approach



What AMP Process Delivers

- Breaks down traditional CE stovepipes
- Encourages interdependent relationships, dialogue
- Puts emphasis on portfolio, not facility planning

Strengthen resource advocacy by analyzing & articulating best business case based on risk & cost/benefits



- Captures risk associated with level of resources
- Builds defensible, informed business case
- Better articulates impact if \$ not provided

Optimize resource allocation through standardized, transparent mgt processes & LOS



- Concretely links Levels of Service to cost
- Ensures scarce resources applied to most urgent needs
- Maximizes activity / asset value to support AF mission

Surety, Readiness, Support



What Is Achieved By AMP?



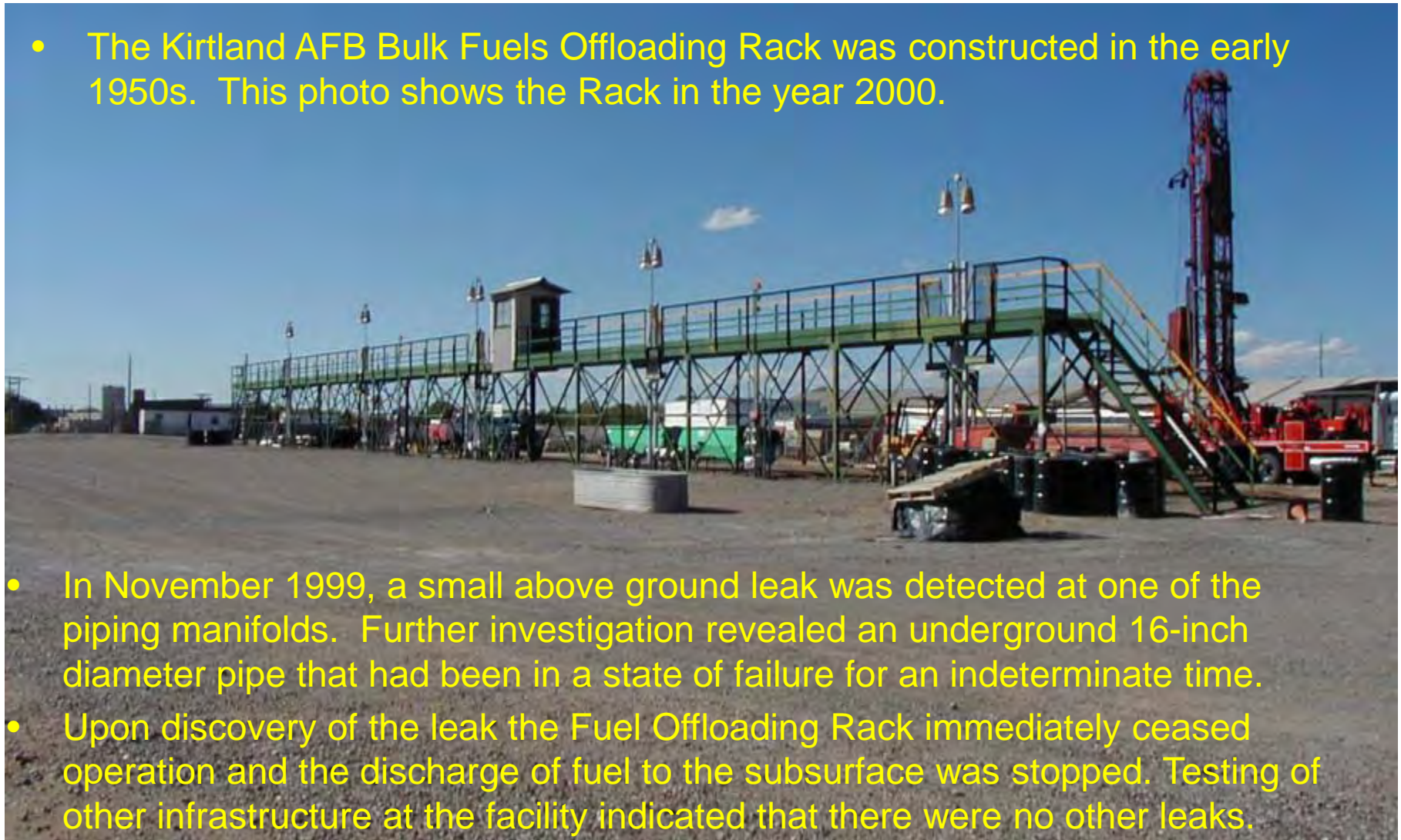
- **Balances expectations vs affordable levels of service**
- **Forced to address the true cost of providing the activity**
- **Better armed to defend fiscal need**
- **Provide objective decision making capability**



Bulk Fuels Facility (Site SS-111)



- The Kirtland AFB Bulk Fuels Offloading Rack was constructed in the early 1950s. This photo shows the Rack in the year 2000.



- In November 1999, a small above ground leak was detected at one of the piping manifolds. Further investigation revealed an underground 16-inch diameter pipe that had been in a state of failure for an indeterminate time.
- Upon discovery of the leak the Fuel Offloading Rack immediately ceased operation and the discharge of fuel to the subsurface was stopped. Testing of other infrastructure at the facility indicated that there were no other leaks.



Bulk Fuels Facility (Site SS-111)



SS-111 Ongoing Interim Remediation

- The original SVE remediation system at the former fuel offloading rack has been operating since 2003.
- A second SVE system specifically focused on remediating fuel directly on the groundwater began operating in August 2008.
- A third SVE remediation system began operating in early March 2009 at a second well where fuel is present on the groundwater.
- A fourth SVE system began operating in late March 2009 at another well location with fuel on the groundwater.





Bulk Fuels Facility (Site SS-111)



Plume Delineation

- Ten new groundwater monitoring wells were installed in late 2008 at both on and off base locations
- Those new wells largely delineated the free product fuel body on the groundwater table
- The most northern downgradient well (KAFB-10618) had a sheen of fuel present in the well
- Based on KAFB-10618 results three additional further downgradient wells we installed on San Pedro and the Siesta Hills neighborhood streets in June 2009
- All new wells have been added to the comprehensive quarterly groundwater sampling events.
- Data from the third quarter groundwater sampling in July/August 2009 indicate ethylene dibromide (EDB) exceeds EPA Maximum Contaminant Levels (MCLs) in 2 of 3 downgradient wells

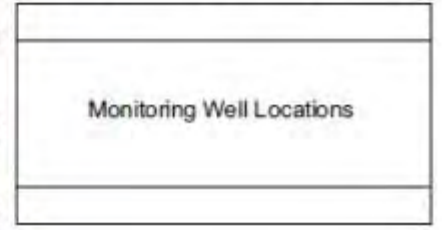


Bulk Fuels Facility (Site SS-111)



LEGEND

- Groundwater Production Well
- Groundwater Monitoring Well
- Currently Estimated Extent of Fuel
- Estimated Area of Dissolved Phase Plume Exceeding MCLs
- NM Central State Plane Feet, NAD 83



Surety, Readiness, Support



REPLACE FUEL UPLOAD FACILITY/TANKS PAST

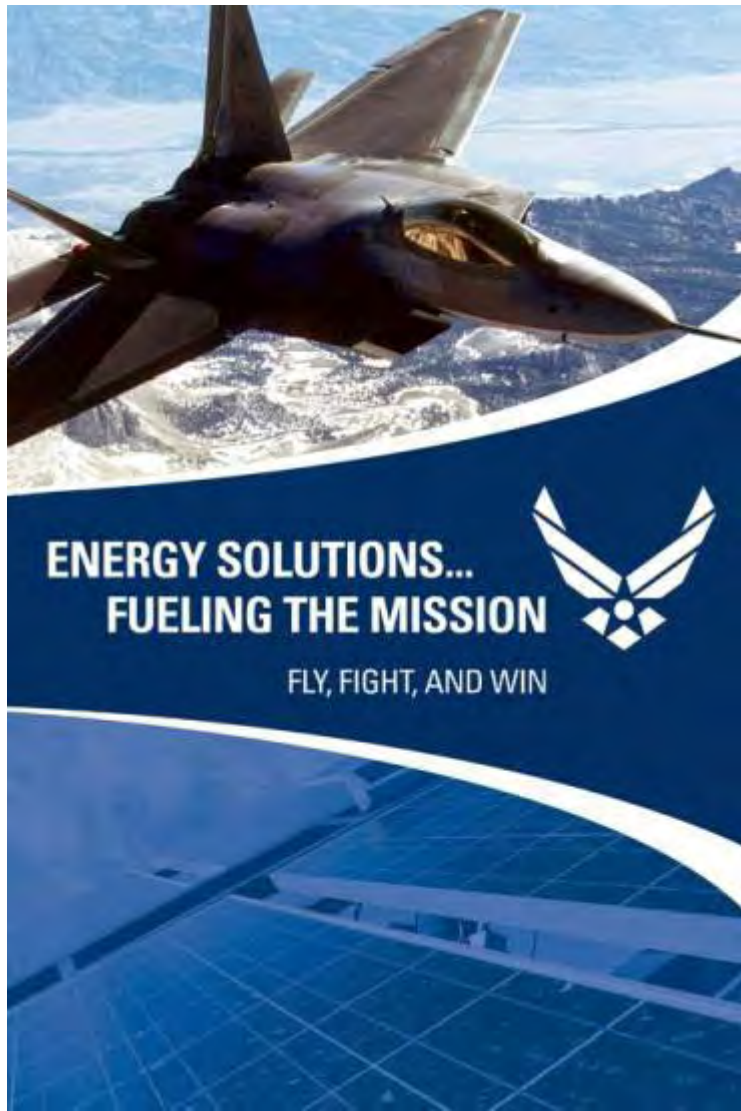


Original Design:	1940's
Original Construction:	1950's

Surety, Readiness, Support



ENERGY – FY09



ENERGY HOG COMPETITION DOE vs DOD



Photo by Todd Hendershot
Gen. Donald Hoffman, Air Force Materiel Command commander, listens intently to first place winner of the Sandia Elementary School Energy Conservation Poster Contest Skyler Dalano.



ENERGY – ARRA FUNDED PROJECTS



<u>Description</u>	<u>Amount</u> <u>(\$K)</u>	<u>Savings</u> <u>(MBTU)</u>
• Solar Roofs	\$620	4385
• Upgrade Facilities	\$400	1022
• Repair Compressed Air	\$72	1496
• Solar Heat Olympic Pool	\$350	19701
• Re-Commission 51 Bldgs	<u>\$769</u>	<u>8065</u>
	\$2,618K	37,434

❖ 21,000 MBTU equals 3% annual savings

❖ 1 MFH typically uses on average 75 MBTU/Month



KAFB's WILDLIFE



11/08/09 3:21 PM gregg



Surety, Readiness, Support



KAFB's WILDLIFE



Surety, Readiness, Support



KAFB's WILDLIFE



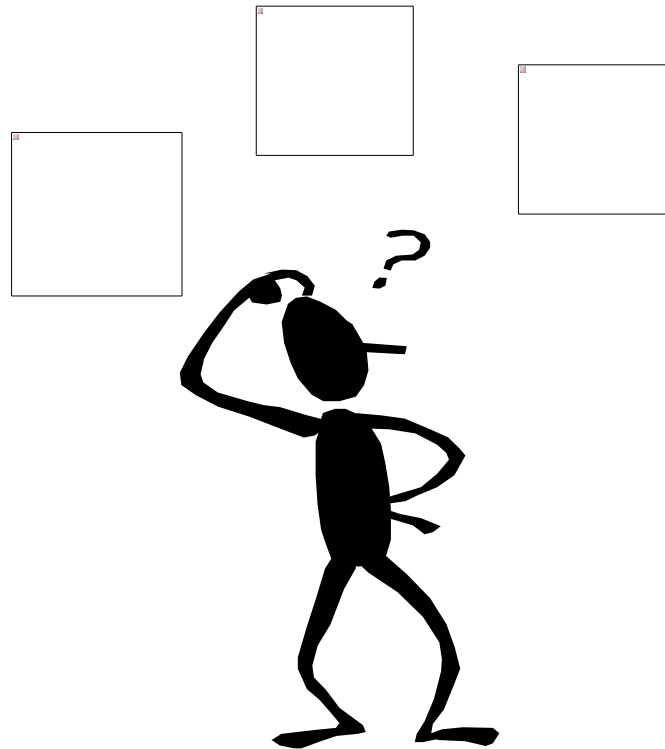
11/09/09 8:24 AM

Cuddeback

Surety, Readiness, Support



QUESTIONS



Surety, Readiness, Support