



## Chapter 6

# Special Exhibits



## Summary by Appropriation

(Dollars in thousands)

<u>Appropriation</u>	2006 <u>Actual</u>	2007 <u>Estimate</u>	2008 <u>Estimate</u>	Increase <u>(Decrease)</u>
Operations, Research & Facilities (ORF)	\$2,862,236	\$2,365,164	\$2,763,866	\$381,794
Procurement, Acquisition & Construction (PAC)	1,179,319	996,703	979,893	(16,810)
Coastal Zone Management Fund	3,000	3,000	3,000	0
Fisheries Finance Program Account	283	283	0	(283)
Pacific Coastal Salmon Recovery	66,638	20,000	66,825	46,825
Medicare-Eligible Retiree Healthcare Fund	1,645	1,820	1,820	0
<b>TOTAL APPROPRIATION</b>	<b>4,113,121</b>	<b>3,386,970</b>	<b>3,815,404</b>	<b>428,434</b>
<b>Transfers:</b>				
<u>Operations, Research &amp; Facilities</u>				
FROM: Promote & Develop Fishery Products	67,000	77,000	77,000	0
Coastal Zone Management Fund	3,000	3,000	3,000	0
Pacific Coastal Salmon Recovery	67	0	0	0
Procurement, Acquisition and Construction	5,979	0	0	0
Department of Defense - Navy	0	0	0	0
Department of Agriculture	38,000	0	0	0
TO: Procurement, Acquisition and Construction	0	0	0	0
Fisheries Finance Program Account	(1,972)	0	0	0
Subtotal, ORF	112,074	80,000	80,000	0
<u>Coastal Zone Management Fund</u>				
TO: ORF	(3,000)	(3,000)	(3,000)	0
<u>Pacific Coastal Salmon Recovery</u>				
TO: Fisheries Finance Program Account	(67)	0	0	0
Subtotal, PCSR	(67)	0	0	0
<u>Procurement, Acquisition &amp; Construction (PAC)</u>				
TO: ORF	(5,979)	0	0	0
TO: NASA	(26,629)	0	0	0
<u>Fisheries Finance Program Account (FFPA)</u>				
FROM: ORF	1,972	0	0	0
Subtotal, FFPA	1,972	0	0	0



<b>Appropriation</b>	2006 <u>Actual</u>	2007 <u>Estimate</u>	2008 <u>Estimate</u>	Increase <u>(Decrease)</u>
<b>Promote &amp; Develop American Fishery Products (P&amp;D)</b>				
TO: ORF	(\$67,000)	(\$77,000)	(\$77,000)	\$0
FROM: Department of Agriculture	79,284	82,816	82,816	0
Subtotal, P&D	12,284	5,816	5,816	0
<b>TOTAL TRANSFERS</b>	90,655	82,816	82,816	0
<b>Unobligated balances, rescission</b>				
Operations, Research & Facilities (ORF)	(11,629)	0	0	0
Procurement, Acquisition & Construction (PAC)	(13,371)	0	0	0
<b>TOTAL UNOBLIGATED BALANCES, RESCISSION</b>	(25,000)	0	0	0
<b>Mandatory Accounts</b>				
Damage Assessment & Restoration Revolving Fund	1,910	1,000	1,000	0
Fisheries Finance Program Account	6,316	4,656	0	(4,656)
Environmental Improvement and Restoration Fund	7,839	10,253	10,290	37
CZMF mandatory offsetting collections	(1,350)	(1,500)	(1,500)	0
Federal Ship Financing Fund	(1,781)	(1,000)	(1,000)	0
NOAA Corps Retirement Pay	19,670	19,322	23,119	3,797
Limited Access System Administration Fund	7,935	7,444	7,444	0
<b>TOTAL BUDGET AUTHORITY</b>	4,219,315	3,509,961	3,937,573	427,612
Mandatory Funds	119,823	122,991	122,169	(822)
<b>Discretionary Budget Authority</b>				
Operations, Research & Facilities (ORF)	2,962,681	2,445,164	2,843,866	398,702
P&D Transfer	(67,000)	(77,000)	(77,000)	0
Procurement, Acquisition & Construction (PAC)	1,133,340	996,703	979,893	(16,810)
Coastal Zone Management Fund	0	0	0	0
Fishermen's Contingency Fund	0	0	0	0
Marine Mammal Unusual Mortality Event Fund	0	0	0	0
Medicare-Eligible Retiree Healthcare Fund	1,645	1,820	1,820	0
Fisheries Finance Program Account	2,255	283	0	(283)
Pacific Coastal Salmon Recovery	66,571	20,000	66,825	46,825
<b>TOTAL DISCRETIONARY</b>	4,099,492	3,386,970	3,815,404	428,434
<b>BUDGET AUTHORITY</b>				

**Adjustments to Current Programs (Adjustments to Base) – requested \$55,325,000:**

Adjustments to Base (ATBs) are defined as increases or decreases to *specific object classes* that:

1. Represent the *same level of effort* as the current budget year,
2. Are *outside of the agency management's control*,
3. Are supported by *specific documentation*, and
4. Are a *known cost* (or fixed cost of doing business).

NOAA has requested the following increases for labor-related and non-labor ATBs:

ORF & PAC	(Salary & Benefits)	(Other Object Classes)	Total
NOS	4.4	0.0	4.4
NMFS	10.2	0.0	10.2
OAR	3.0	0.0	3.0
NWS	18.3	1.0	19.3
NESDIS	2.6	0.0	2.6
Program Support	3.9	0.0	3.9
OMAO	2.5	5.6	8.1
Total Discretionary - ATBs (Budget Authority)	44.9	6.6	51.5
Other Accounts - Mandatory Accts NOAA Corp Retirement	3.8		3.8
Total Appropriated - ATBs (Budget Authority)	48.7	6.6	55.3

These increases for ATBs will help fund the agency's overall anticipated adjustments to the current programs. Program totals will fund the FY 2008 Federal pay raise of 3.0 percent and annualize the FY 2007 pay raise of 2.2 percent. In addition, program totals will also fund inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.



## FY07 Unrequested Projects

NOAA (\$ in Thousands)	FY 2007 Unrequested Projects
<b>NATIONAL OCEAN SERVICE</b>	
Geodesy Base	271
Coral Reef	298
Nonpoint Pollution Implementation Grants	1,500
<b>Total, NOS - ORF</b>	<b>2,069</b>
<b>Total, NOS - PAC</b>	<b>0</b>
<b>Grand Total, NOS</b>	<b>2,069</b>
<b>NATIONAL MARINE FISHERIES SERVICE</b>	
Salmon Management Activities	1,786
Other fisheries-related projects	3,007
Fisheries Habitat Restoration	864
Antarctic Research	33
Chesapeake Bay Studies	1,094
<b>Total, NMFS - ORF</b>	<b>6,784</b>
<b>Total, NMFS - PAC</b>	<b>0</b>
Fisheries Finance Program Account (Discretionary)	283
<b>Total, NMFS - Other Discretionary</b>	<b>283</b>
<b>Grand Total, NMFS</b>	<b>7,067</b>
<b>OFFICE OF ATMOSPHERIC RESEARCH</b>	
Competitive Research Program	4,288
Tornado Severe Storm Research / Phased Array Radar	28
Invasive Species and Ocean Partnership Programs	5,586
<b>Total, OAR - ORF</b>	<b>9,902</b>
<b>Total, OAR - PAC</b>	<b>0</b>
<b>Grand Total, OAR</b>	<b>9,902</b>
<b>NATIONAL WEATHER SERVICE</b>	
Local Warnings and Forecasts Base	1,514
Tsunami Warning and Env. Obs for AK (TWEAK)	2,000
<b>Total, NWS - ORF</b>	<b>3,514</b>
Radiosonde Network Replacement	2,000
<b>Total, NWS - PAC</b>	<b>2,000</b>
<b>Grand Total, NWS</b>	<b>5,514</b>



<b>NATIONAL ENVIRONMENTAL SATELLITE, DATA, &amp; INFO SERVICE</b>	
<b>Total, NESDIS - ORF</b>	<b>0</b>
<b>Total, NESDIS - PAC</b>	<b>0</b>
<b>Grand Total, NESDIS</b>	<b>0</b>
<b>PROGRAM SUPPORT / OFFICE OF MARINE AVIATION AND OPERATIONS</b>	
NOAA Education Program / Education Initiative	<b>6,073</b>
<b>Total, PS / OMAO - ORF</b>	<b>6,073</b>
<b>Total, PS / OMAO - PAC</b>	<b>0</b>
<b>Grand Total, PS / OMAO</b>	<b>6,073</b>
<b>GRAND TOTAL, NOAA</b>	<b>30,625</b>
<b>NOAA Summary by Account</b>	
Total, ORF	28,342
Total, PAC	2,000
Total, Other Discretionary - NMFS / Fisheries Finance Program Account	283
<b>Grand Total, NOAA</b>	<b>30,625</b>

**NOAA MARINE AND AVIATION OPERATIONS****Planned Fiscal Year 2008 Operating Days of Ship Support for NOAA Programs**

Operating days are days that a ship is away from home port and engaged in a project including days in any port other than home port or days transiting to or from a project. Days at sea are days that a ship is at sea engaged in a project or days transiting to or from a project.

The private sector and University National Oceanographic Laboratory System (UNOLS) ships generally track operating days rather than days at sea, so all days in the table below, including in-house ships days, are operating days. Operating days are typically 10 to 15 percent higher than days at sea.

	<u>Operating Days</u>	<u>Dollars in Millions</u>
<b><u>In-House</u></b>	4,401	\$ 129.8 Operations & Maint.
	-----	-----
<b><i>In-House subtotal</i></b>	4,401	\$ 129.8
 <b><u>Outsourced (OMAO &amp; NOAA Programs)</u></b>		
Private Sector	2,460	\$19.1
UNOLS	650	\$ 9.6
Contracts for hydro- graphic data *	-----	\$31.2
	-----	-----
<b><i>Outsourced subtotal</i></b>	3,110	\$59.9
	=====	=====
<b>Grand Total</b>	<b>7,510</b>	<b>\$189.7</b>

\*All hydrographic charters have been combined under contracts for hydrographic services. These contracts deal with area (square nautical miles), not operating days.



## **NOAA Research and Development**

The National Oceanic and Atmospheric Administration's (NOAA) research helps meet the evolving economic, social, and environmental needs of the Nation. NOAA provides research leadership by conducting environmental research and transitioning mature research into products and services. NOAA is committed to maximizing the value of its research and ensuring successful transition of research to application. This commitment is demonstrated by NOAA's adoption of a Transition of Research to Application policy and implementation procedures. Under these procedures, NOAA research is annually reviewed to assess readiness for transition. Within the last few years, NOAA has successfully transitioned mature research, which has resulted in the following products and services for the Nation.

### **Air Quality Management**

In FY 2004, NOAA began operational production of air quality forecasts as a result of NOAA's earlier Air Quality Forecast research. The initial operating capability provides next-day ground-level ozone predictions for the northeastern United States (U.S.). NOAA's Office of Oceanic and Atmospheric (OAR) is working with the National Weather Service (NWS) to extend these forecasts nationwide in the continental U.S.

### **Improved Quantity and Quality of Climate Information**

NOAA has played a leading role in the international ozone assessment throughout the history of the 1987 U.N. Montreal Protocol. NOAA scientists have served as leading authors, coauthors, and reviewers in each of the assessments (1988, 1991, 1994, 1998, 2002, and 2006). In the current assessment, NOAA scientists are serving on the Scientific Steering Committee, as Chapter Lead Author, as coauthors and reviewers, and one NOAA scientist is serving as Coordinating Editor. The document is a major contribution to NOAA's portfolio of climate science products that meet the needs of NOAA's information customers in government, the private sector, and the public.

### **Tsunami Early Detection and Real-Time Reporting**

Significant improvements have been made in the detection of tsunamis because of NOAA's Deep Ocean Assessment and Reporting of Tsunami (DART) buoys that sense deep-ocean waves that could generate tsunamis in the Pacific basin. These buoys were developed by OAR/PMEL and were transitioned in FY 2003 to the NWS/NDBC where they have been maintained in an operational status.

### **Improved Detection, Understanding and Prediction of El Niño and La Niña**

In FY 2005, NOAA's Tropical Atmosphere Ocean (TAO) buoys began transitioning from OAR/PMEL to operations at the NWS/NDBC. The TAO array, which consists of approximately 70 moorings in the tropical Pacific Ocean, was designed to transmit ocean and meteorological data in real time via the Argos satellite Monitoring. The TAO array



reflects the successful development of an ocean observing system that is a major component of the El Niño/Southern Oscillation Observing System, the Global Climate Observing System, and the Global Ocean Observing System.

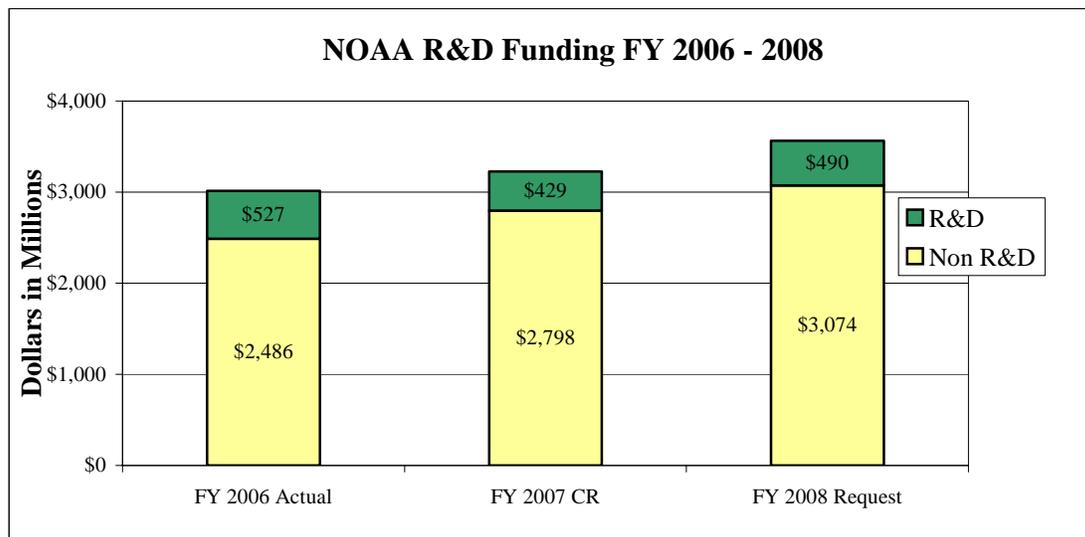
### Forecasting Harmful Algal Blooms

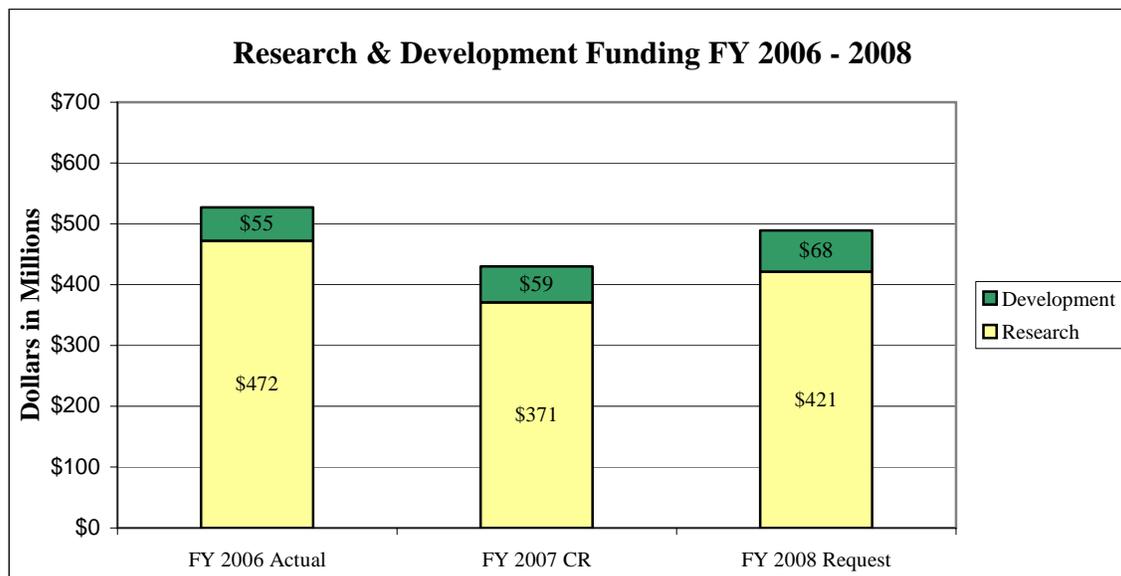
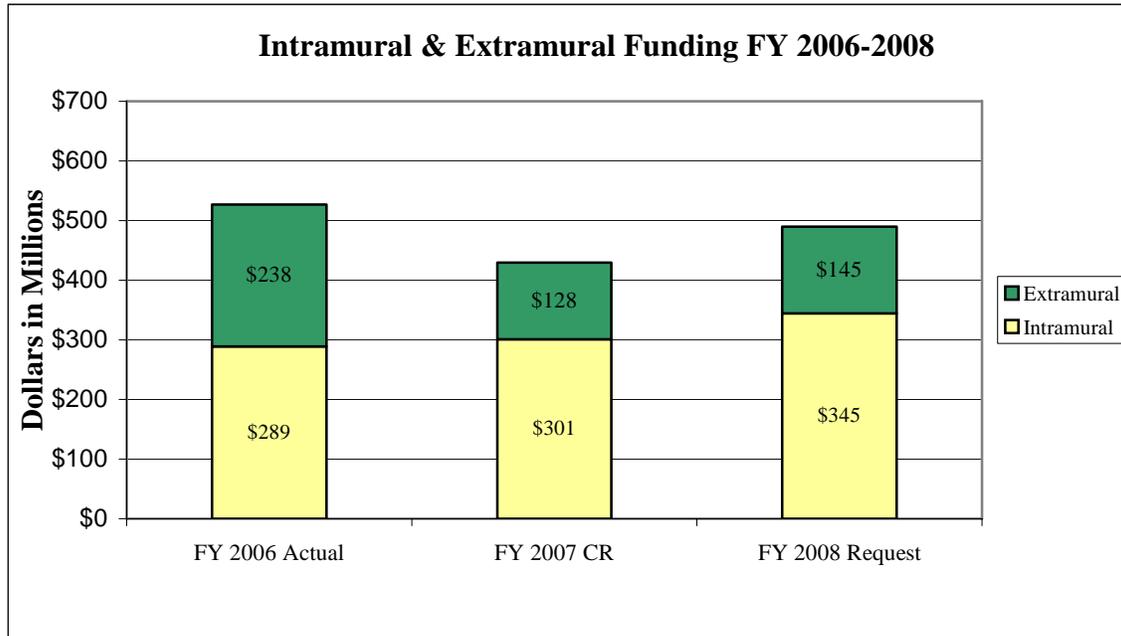
The rapid proliferation of toxic or nuisance algae is called a harmful algal bloom (HAB) which can be devastating to coastal resources and economies. Over the past 10 years, NOAA has invested significant resources on HAB research in order to understand the processes regulating HAB dynamics and to provide products to help managers mitigate bloom events and reduce the impacts of HABs. These research investments have begun to transition to applications. Currently, NOAA’s HAB Forecasting System supplies information on the location, extent, and potential for development or movement of harmful algal blooms in the Gulf of Mexico.

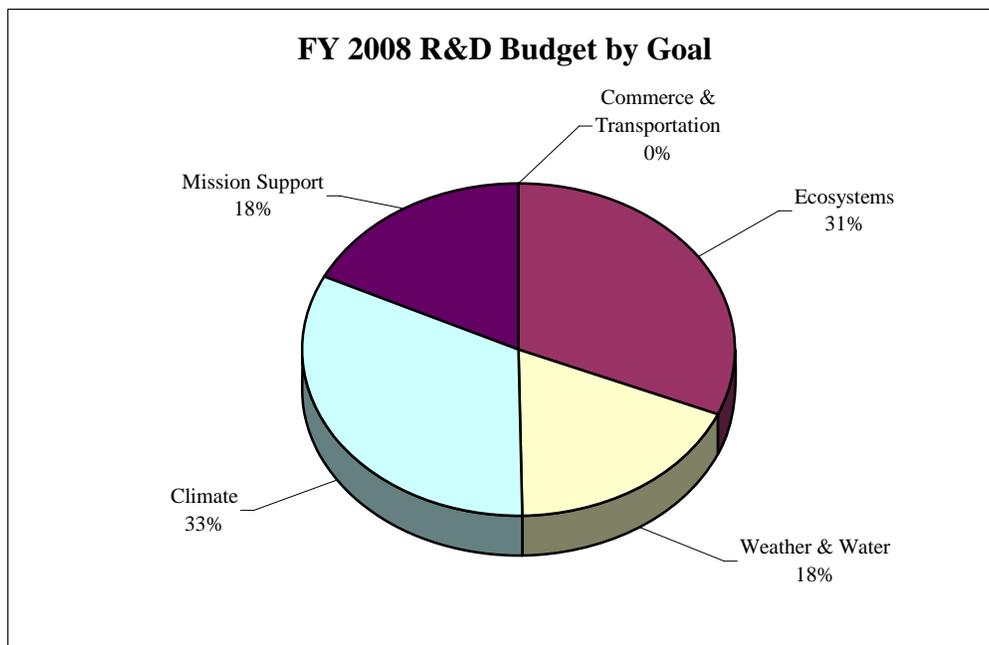
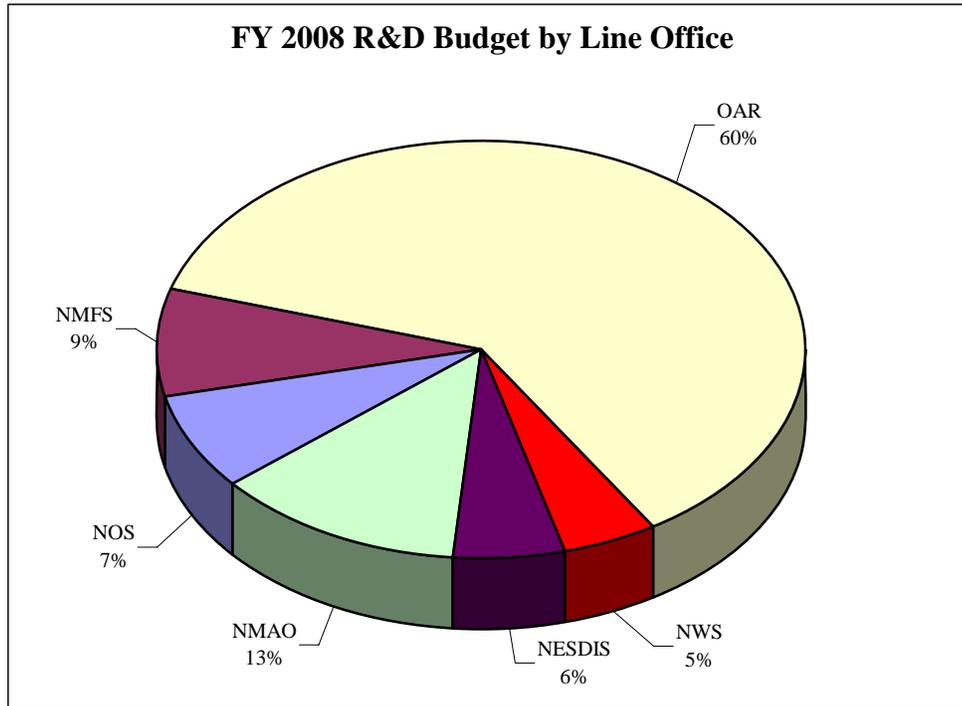
The following charts display the scope and nature of R&D at NOAA. Key elements include the following for FY 2008:

- R&D represents 16 percent of total NOAA funding in FY 2008.
- Seventy percent of NOAA’s R&D is intramural and 30 percent extramural.
- NOAA’s R&D budget is 86 percent research and 14 percent development.
- NOAA’s Office of Oceanic and Atmospheric Research (OAR, also known as “NOAA Research”) manages 60 percent of NOAA’s R&D. The remainder is distributed among NOAA’s operational units.
- Major R&D efforts are supported by three of NOAA’s mission goals: Ecosystems (31 percent), Climate (33 percent), and Weather and Water (18 percent). Zero percent is focused on Commerce and Transportation. The 18 percent conducted for “Mission Support” primarily provides research vessels for research.

### NOAA Research and Development









### **A NOTE ON TERMINOLOGY:**

The reader should be aware of the specific meaning of several terms as they are used throughout this budget summary:

**“FY 2006 Enacted”** is:  
Fiscal Year (FY) 2006 Appropriations,  
less rescissions,  
plus initial Hurricane Supplemental funds

**“FY 2007 Request”** is:  
FY 2007 President’s Budget Request.

**“FY 2008 Request”** is:  
FY 2007 President’s Budget,  
plus Adjustments to Base, and Program Changes.

**“Adjustments to Base”** include:  
the estimated FY 2008 Federal Pay raise of 3.0% and the annualized FY 2007 pay raise of 2.2%. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from GSA. In addition, ATBs include unique/technical adjustments to base program