

NOAA's Ship and Aircraft Support Office of Marine and Aviation Operations (OMAO)



**University-National Oceanographic Laboratory System (UNOLS)
Research Vessel Operators Committee (RVOC)**

University of Rhode Island

April 20, 2010



Overview

- ✓ Fleet Overview
- ✓ Budget - FY2010 and FY2011 (requested)
- ✓ New Ships and Aircraft
- ✓ Greening Efforts
- ✓ Crew Recruiting & Retention
- ✓ Fleet Maintenance
- ✓ Pacific Vessel Homeporting: Newport, Oregon



NOAA Ships and Homeports in FY2010

20 Ships

11 Homeports

FERDINAND R. HASSLER



DELAWARE II



HENRY B. BIGELOW



OKEANOS EXPLORER



THOMAS JEFFERSON



RONALD H. BROWN



NANCY FOSTER

NEW CASTLE, NH (1)

WOODS HOLE (2)

DAVISVILLE, RI (1)

**MOC-ATLANTIC
NORFOLK, VA
(1)**

CHARLESTON (2)

PASCAGOULA
(3)



GORDON GUNTER



OREGON II



PISCES

**MOC-PACIFIC
SEATTLE, WA
(4)**

MISSIONS
Nautical Charting
Fisheries Research
Oceanographic Research
Coastal Monitoring
Ocean Exploration



RAINIER



McARTHUR II

SAN DIEGO
(1)



MILLER FREEMAN



BELL M. SHIMADA



HI'IALAKAI



OSCAR ELTON SETTE



KA'IMIMOANA

PEARL
HARBOR (3)



• KODIAK , AK (1)



OSCAR DYSON



DAVID STARR JORDAN

• KETCHIKAN , AK (1)



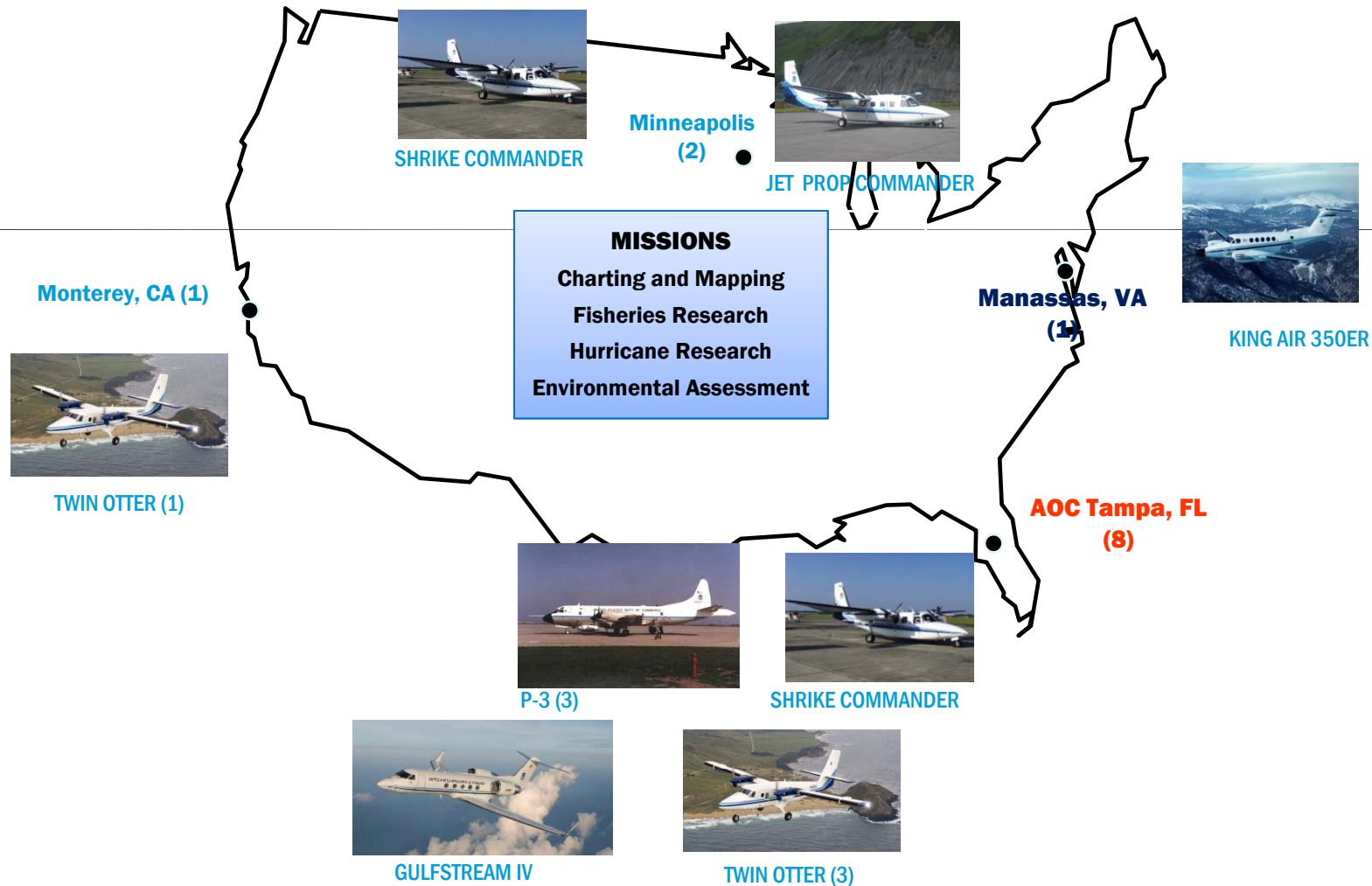
FAIRWEATHER





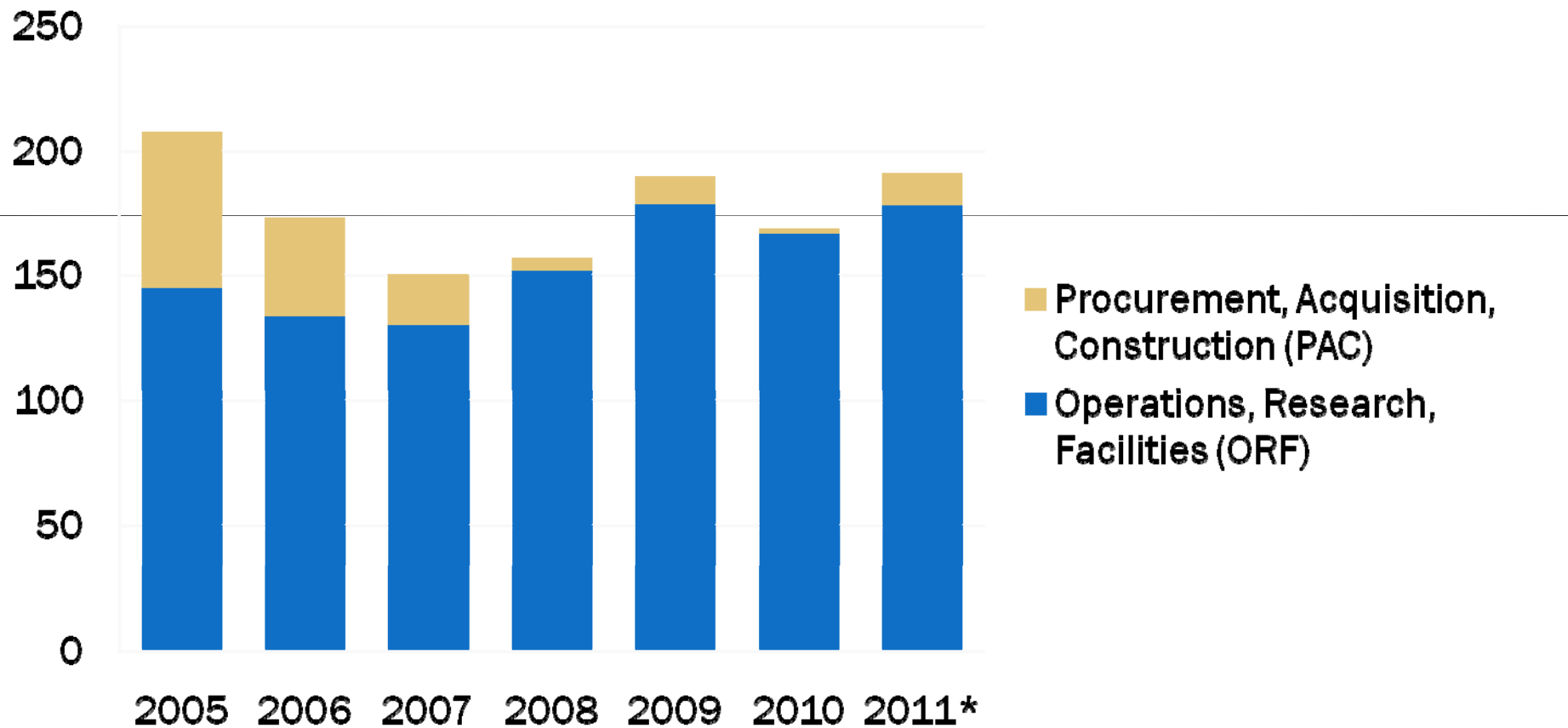
NOAA Aircraft and Bases in FY2010

12 Aircraft





NOAA OMAO Budget



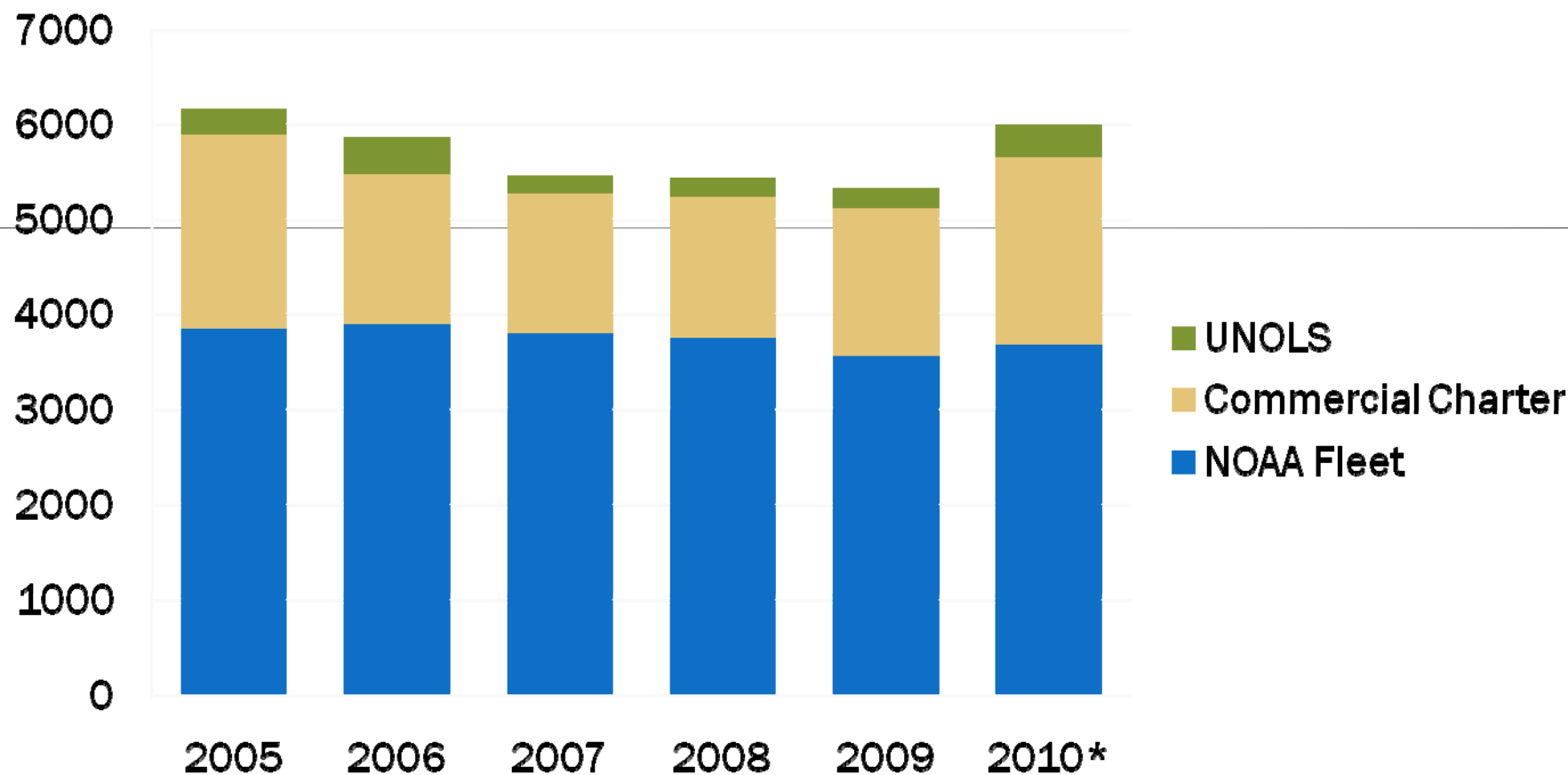
(\$ in Millions)

*President's Budget Request





Operating Days

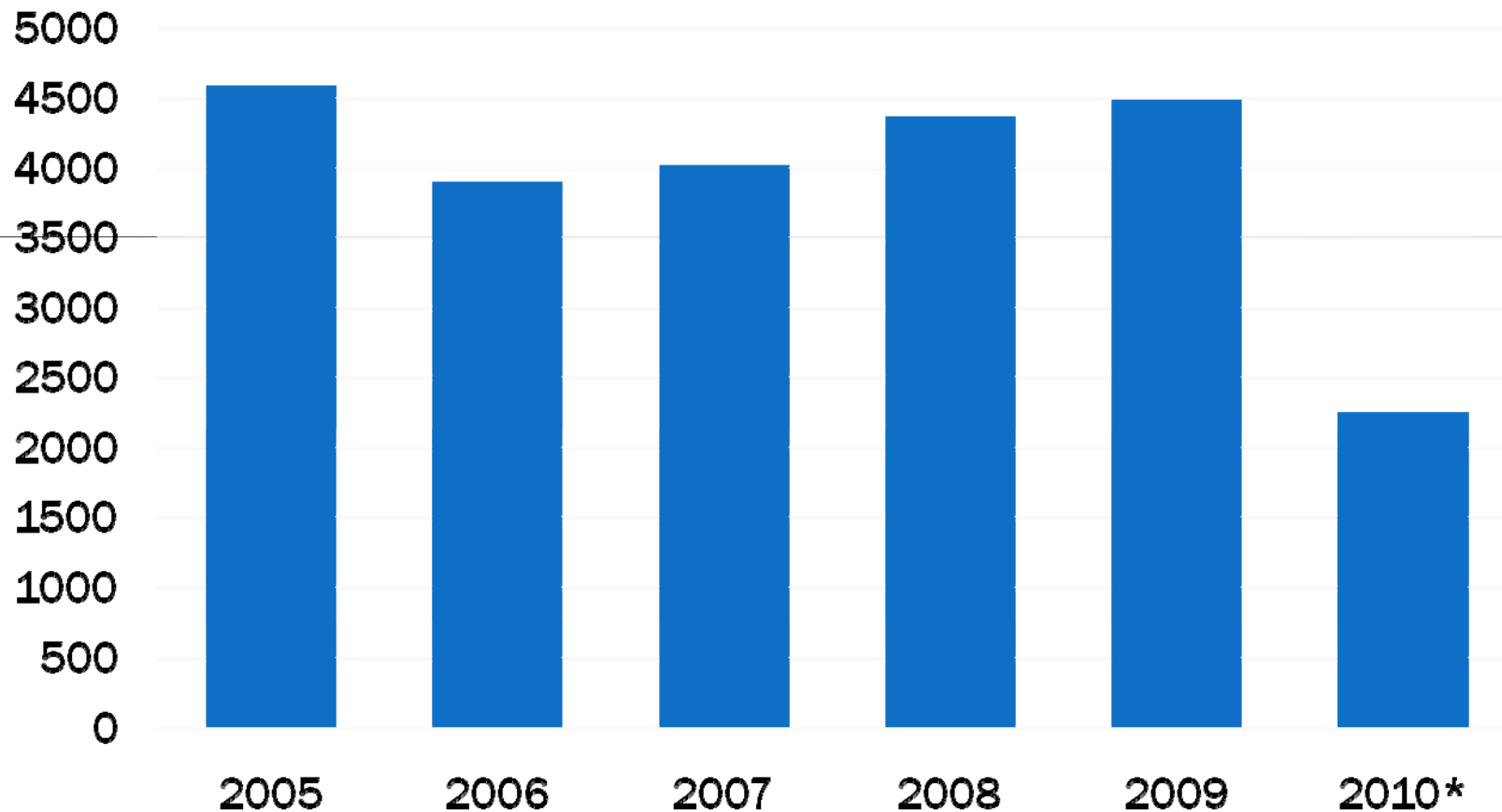


*Projected





Flight Hours



*As of April 15, 2010





New Ships

Bell M. Shimada



Pisces



Ferdinand R. Hassler





New Aircraft



King Air



WP-3D Aircraft N44RF





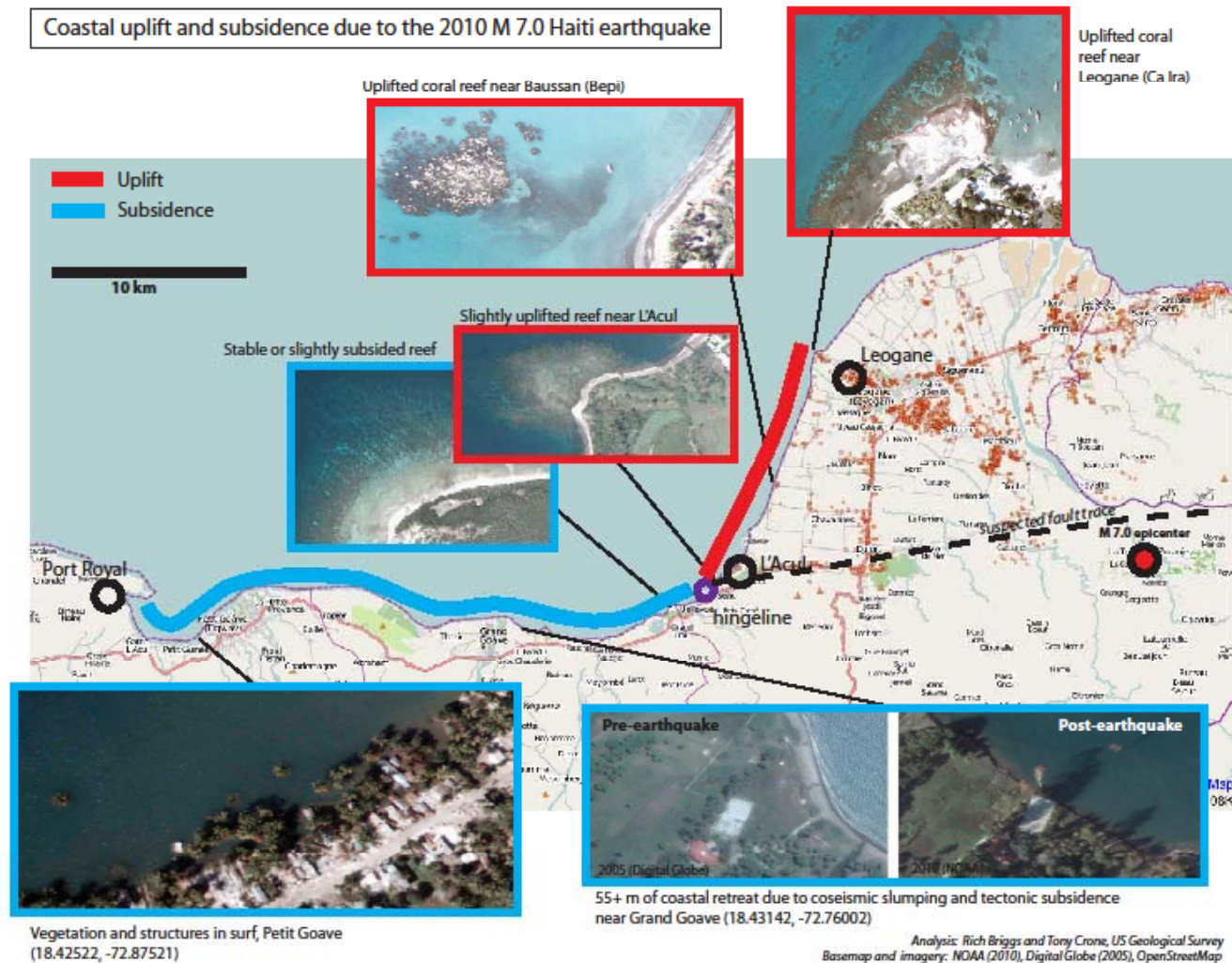
Canadian Car Wash





Haiti Damage Assessment

Coastal uplift and subsidence due to the 2010 M 7.0 Haiti earthquake





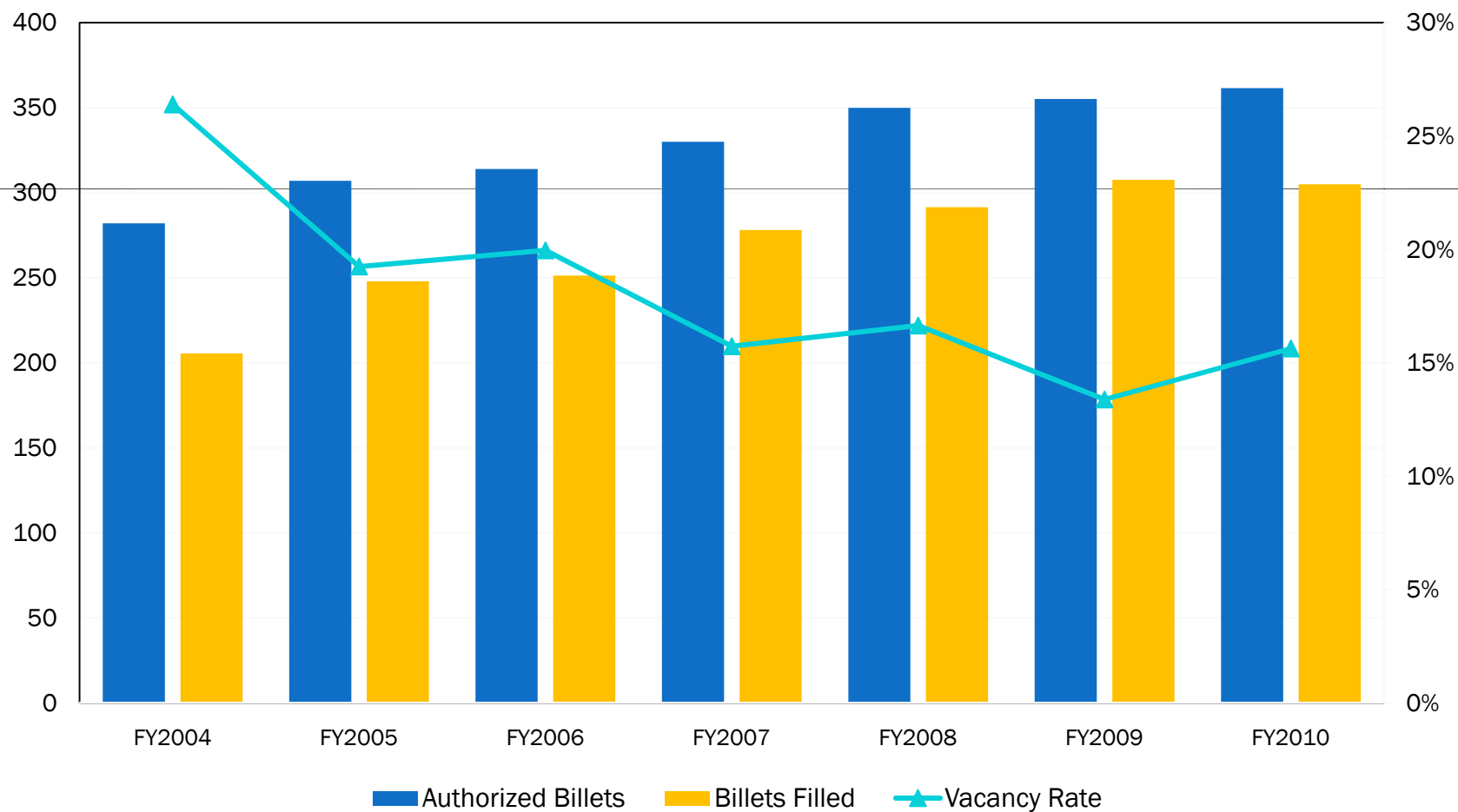
“Greening” Efforts

- ✔ Green Fleet Planning Team – coordinating program
- ✔ Greening of the Fleet Cost/Benefit Study conducted (due May 2010)
 - ✔ Applying/adopting existing proven technologies
- ✔ Engine upgrade kits on Rainer and Miller Freeman (January 2010)
 - ✔ 25% reduction in particulate matter emissions (~2000 kg/year)
- ✔ Energy use audit on Thomas Jefferson (April 2010)
 - ✔ Minor changes identified by audit expected to pay for audit within 2 years
- ✔ 5 ships (30% of fleet) converted to biodegradable hydraulic oil/lubes



Crew Recruiting & Retention

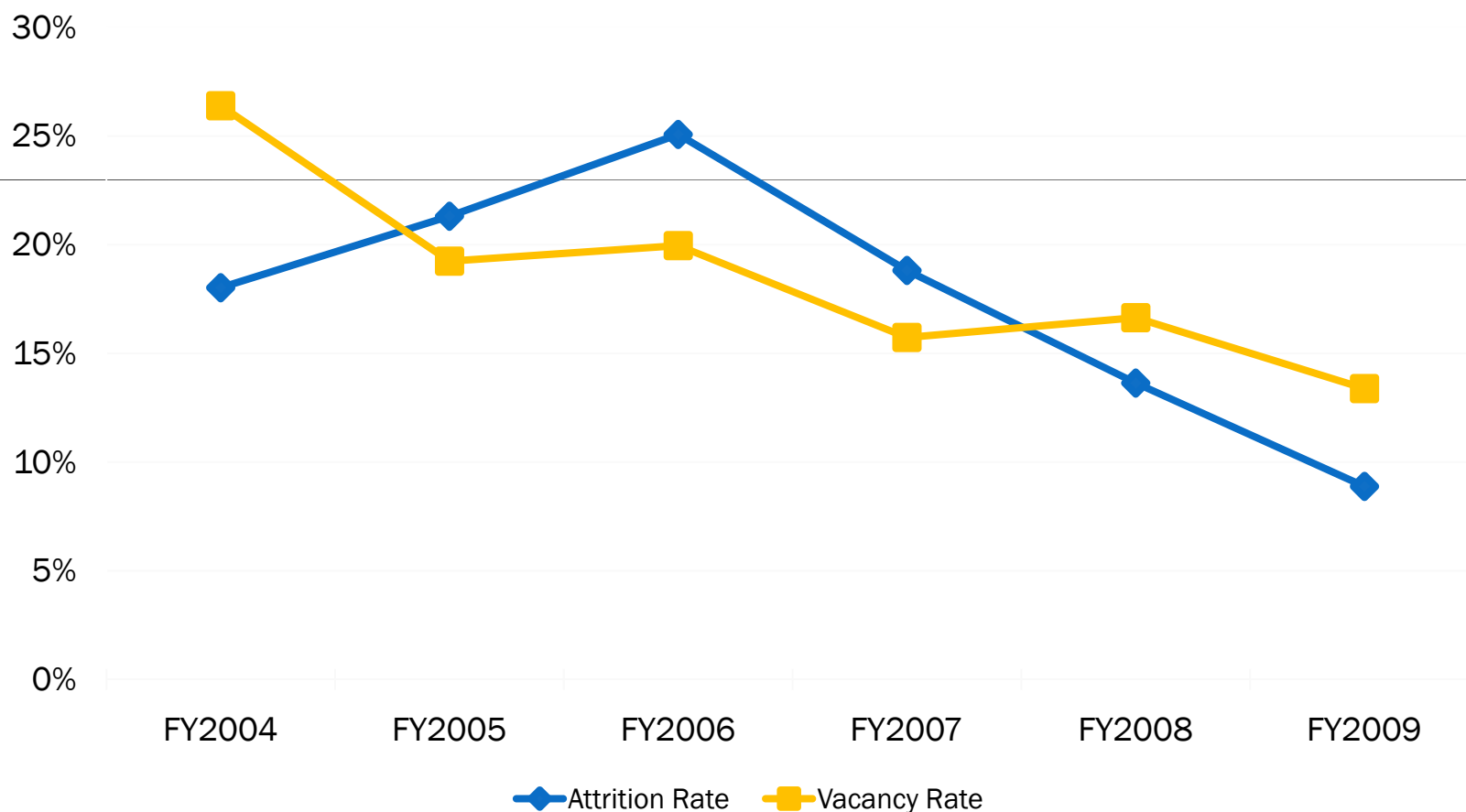
Vacancy Rate of Permanent Ship Billets





Crew Recruiting & Retention

Fleet Attrition Rate





Fleet Maintenance

- ✔ Implementing a fleet maintenance management system
 - ✔ Maximize ship availability for mission use
 - ✔ Provide tech/tools/training/documentation to analyze existing conditions and enhance maintenance planning/execution
- ✔ Preventive Maintenance baseline review and class standardization (T-AGOS, FSV, NSV)
- ✔ Personnel management (MOC Crew Relief Pool) integral in full lifecycle management plan
- ✔ Full SAMM implementation/interconnectivity



NOAA Vessel Homeporting: Newport, Oregon



Architectural rendering of the proposed NOAA site
provided by gLAS Architects, LLC, of Eugene, OR
Used by permission





Takoradi Ghana

“Basically 2 armed Port Security police or Army personnel (we think—they had removed any insignia or names), holding M-16 rifles, boarded the ship at dockside and were aggressive and threatening to arrest people because the Ghana flag was (accidentally) left up after sunset. Port Security people don't appear to normally carry M-16's.

While I'm told this leaving the flag up is a serious issue in Ghana, their behavior and authority here on the ship was not acceptable, nor I'm sure condoned by the Port Authority. It was clearly a ruse and an attempt at extortion by armed men— a "give us something and we'll not arrest you", type of thing. I think they said the "fine" was \$1500 or something like that. No one paid, no one was hurt, and they left. We've also had people coming to the ship asking for ice cream, sandwiches, etc. Port Security and ISPS codes and Port Authority inspections

U.S. Embassy and ship's agent are investigating further with Port Security officials so this "freelancing" (my impression) does not happen again”.





Backup Slides





Fleet Recapitalization 1: Fishery Survey Vessels

- Two (i.e., *Oscar Dyson* and *Henry B. Bigelow*) of seven planned acoustically-quiet Fisheries Survey Vessels (FSVs) are currently conducting operations.
- Two more FSVs (i.e., *Pisces* and *Bell M. Shimada*) expected to be fully operational in FY2010.
- \$3M included in FY2011 President's Budget to continue design work for FSV 5.
- FSV 6 contract award is scheduled for April 2010.



Ship	Homeport	Commissioning Date
<i>Oscar Dyson</i> (FSV 1)	Kodiak, AK	2005
<i>Henry Bigelow</i> (FSV 2)	Newport, RI	2007
<i>Pisces</i> (FSV 3)	Pascagoula, MS	2009
<i>Bell M. Shimada</i> (FSV 4)	Seattle, WA Newport, OR	2010
FSV 5 (shallow draft)	Pascagoula, MS	2015
FSV 6	San Diego, CA	2013
FSV 7	Newport, OR	2018



Fleet Recapitalization 2: NOAA Survey Vessels (NSVs)

- 🌐 **Six additional multi-mission NOAA Survey Vessels (NSVs) are planned to be placed in service between 2018 and 2024:**

- NSVs will replace:

- Two hydrographic survey vessels
- Four fisheries/ecosystem research vessels

- NSV mission requirements are currently being analyzed. They are projected to have a common baseline configuration, with minor variations to support specific missions (e.g. hydrographic survey or fisheries/ecosystem research).

- 🌐 **One currently active ship (*Ka'imimoana*) will undergo a service-life extension (approx. 2020). Ship maintains buoy arrays used to understand climate change and El Nino-Southern Oscillation events.**

- 🌐 **Phase II Recapitalization Plan being drafted to:**

- 🌐 look at innovative, cost effective ways to collect in situ data
- 🌐 consider new concepts of operations which incorporate new technology, i.e., autonomous platforms (airborne, surface, underwater, etc.)



Status of ARRA Funding

☑ Stimulus Package – American Recovery and Reinvestment Act (ARRA)

- Vessel Maintenance and Repair (\$20M)
 - Major Repair Period (MRP) for Rainier (\$5.78M, \$6.1M PAC)
 - Major Repair Period (MRP) for Oregon II (\$4M)
 - Drydock repair for five other vessels
- Vessel Construction (\$78M)
 - Construction of FSV 6, fifth vessel in the Dyson Class