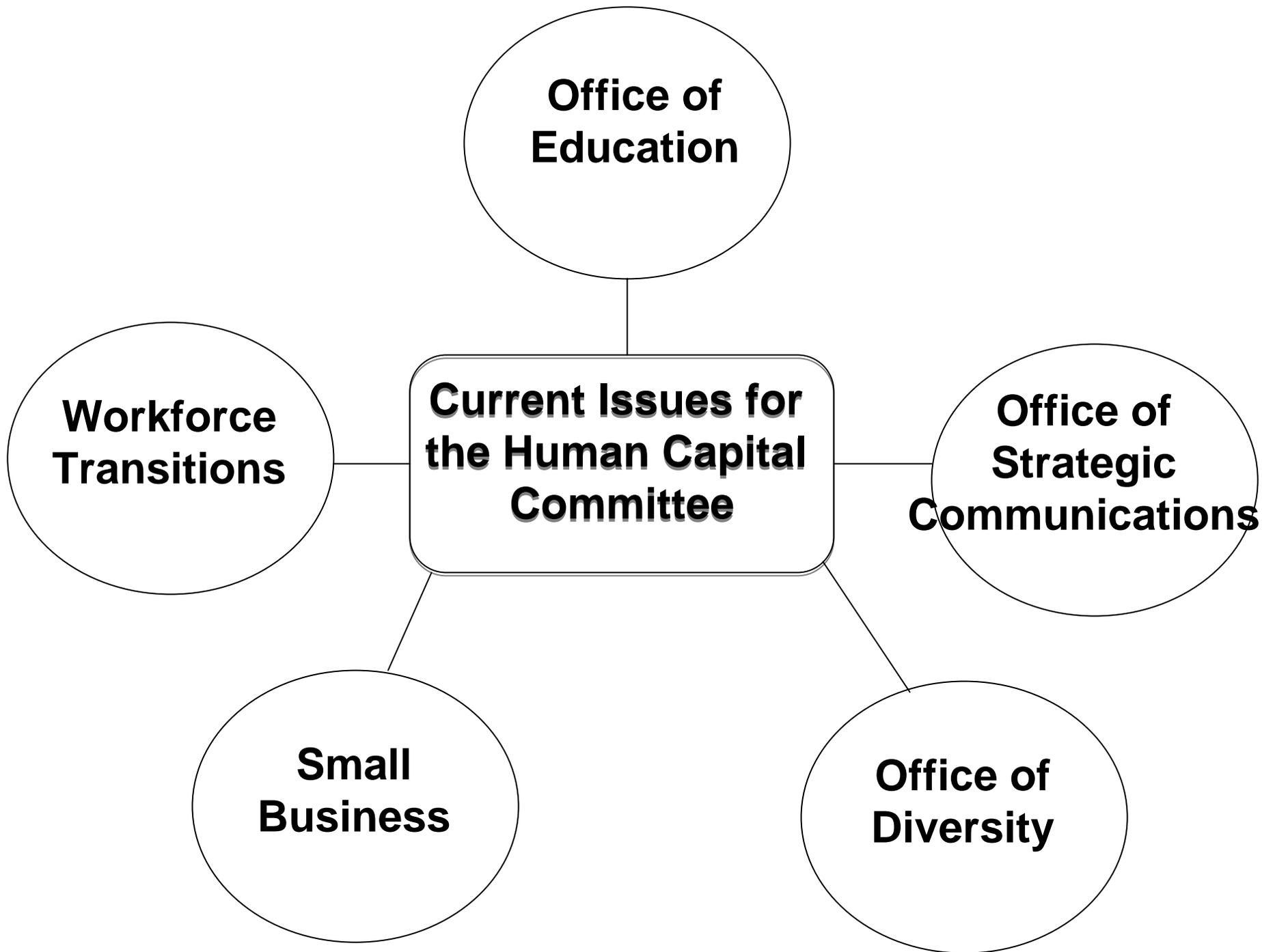


NAC-Human Capital Summary

Lucy Fortson, Gerald Kulcinski (chm),
Ioannis Miaoulis, and Jim Milgram

April 16, 2008

Stennis Space Center



Fact Finding Presentations to Human Capital Committee

- Mr. Robert Hopkins- *"NASA Strategic Communications"*
- Ms Sue Leibert- *"Update on Shuttle Human Capital"*
- Generation Y Representatives- *"Next Gen Presentation"*
- Dr. Helen Quinn- *"NASA's Elementary and Secondary Education Program Review and Critique"*

Office of Strategic Communication Topics

- Update on 50th Anniversary Events
- Current NASA Strategic Initiatives
- NASA Presentation Tool

50th Anniversary

- Overarching goal “*Reintroduce NASA and its Relevance*”.
- After review of the current plans the HC committee was pleased that there are many cross country, high profile events for particular audiences. (see next slide).
- OSC should consider more avenues for general public to participate in the celebration.

50th Anniversary High Profile Events

- NASA lecture series-Policymakers.
- Future Forums-Influential Public Leaders.
- Folklife Festival (6/25 to 7/6, DC Mall)-million plus visitors.
- Business Week has proposed 2 advertorial sections (4.8 Million readers).
- 50th Anniversary Celebration Gala-National Air Space Museum (9/24/08)-aerospace community, opinion leaders, White House/Cabinet/Congressional members
- Discovery Communications-6 part documentary series-When We Left the Earth-start 6/8/08

Current NASA Strategic Initiatives

- NASA.gov upgrade
- Several National Air & Space Museum Exhibits (*i. e., Space: A journey to Our Future, Moving Beyond Earth Gallery, etc.*)
- NASA Educational TV-online infrastructure to enable NASA Educational TV programming to be made available to every school in the country.
- Aspen Institute-Conference to explore “Space Economy (6/12/08) Truly, Crippen, & Ride

USE THE SCROLLBAR AT RIGHT TO VIEW ALL AVAILABLE PRESENTATIONS



Why Explore Space?

Reaching for the unknown, making our lives bigger and our horizons broader, achieving things never before possible are the heart and soul of what we do at NASA.

Start

Preview

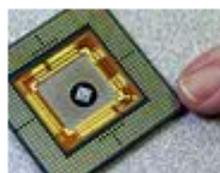
Length: 30 mins. (approximate)



SPEECH



REFERENCE



Technical Benefits from Space Exploration

Space exploration has led to great advances in science and engineering, many of which have produced items that have revolutionized and improved our daily lives.

Start

Preview

Length: 10 mins 20 mins 30 mins



SPEECH



REFERENCE



Health & Safety Benefits from Space Exploration

Space exploration has led to great advances in science and engineering, many of which have produced items that have improved health and made our lives safer.

Start

Preview

Length: 10 mins 20 mins 30 mins



SPEECH



REFERENCE



Future Benefits from Space Exploration

Activities required to implement space exploration may yield possible benefits in the future for all of us here on earth.

Start

Preview

Length: 10 mins 20 mins 30 mins



SPEECH



REFERENCE

Help

Quit

Program Use: Review the presentations listed above and either a) select "Start" to begin a presentation, b) select "Preview" to run through previews with additional notes or c) select "Reference" to view a PDF version of the presentation content.

Presentation Options: The presentations above provide the user with options for **Length** (time), **Audio**, and **Auto-Advance**. Options available may vary between presentations. For a selected presentation, simply click and enable the options you wish to use. Please note that presentation lengths are approximate.

NOTE! To exit an active presentation and return to this program, use the **ESC** key on your keyboard.



NASA TV

- Currently costs \$14 M/y (90% outsourced)
- Because of the retirement of the shuttle (one of the initiating events for NASA-TV) and emergence of internet based delivery, the reason to continue NASA-TV needs to be reexamined.
- Recommendation-An outside organization should be contracted to do an evaluation of the current effectiveness and viewership of NASA TV.

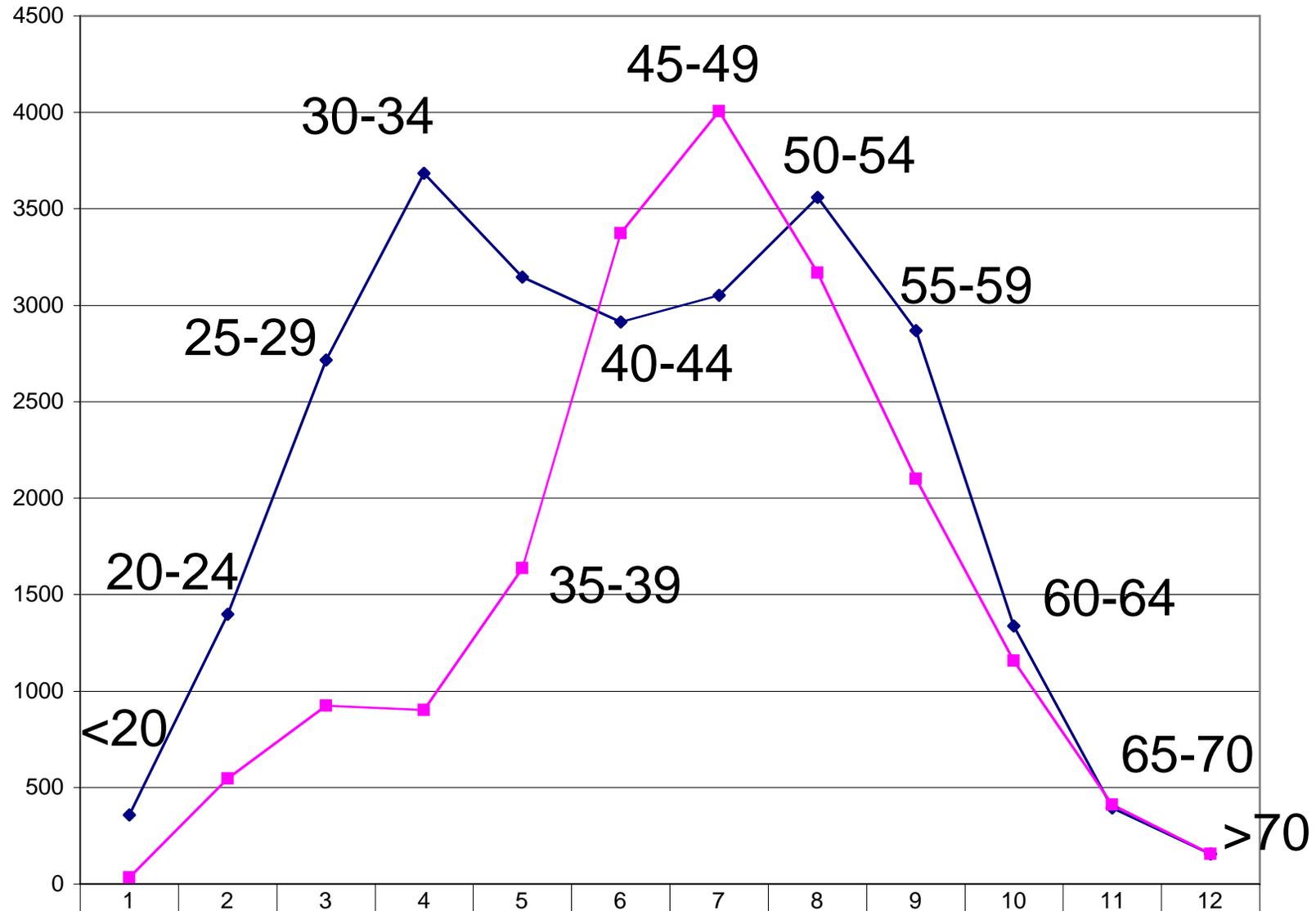
Budget Cuts in the OSC

- The overall budget (85% FTE's) for the Office of Strategic Communications is insufficient to carry out its goals and it looks as future budget cuts are in store for the next 5 years (\$18M).
- The situation is compounded by the incorporation of the Office of Education and reduction of staff (i. e., down to one person for public inquiries which were $\approx 14,000$ last year).
- Observation: There should be a much closer relationship between Office of Education and Strategic Communications to achieve joint goals of outreach and STEM pipeline support.
 - e. g., embed outreach messaging in OHC recruitment strategies

Organization Strategic Communication

- The integration of OE into the OSC framework requires further refinement
- The Office of Strategic Communications should work with OE to better align the OE portfolio of programs with NASA's mission.

The NASA Civilian Workforce Average Age has Increased from 43 to 47 from 1994 to 2007 While the Total Number has Dropped from 25,600 to 18,400



Start of FY1994	357	1399	2715	3684	3146	2914	3053	3560	2870	1338	394	154
Current (2007-07-07)	34	546	925	902	1638	3373	4007	3169	2099	1156	410	154

HQ / Garth Henning, program analyst

LaRC / Jennifer Keyes, systems analyst

HQ / Rich Leshner, policy and program analyst

KSC / Kelli McCoy, budget integrator

JSC / Kristen Painting, instructor

GSFC / Stephen Rinehart, astrophysicist

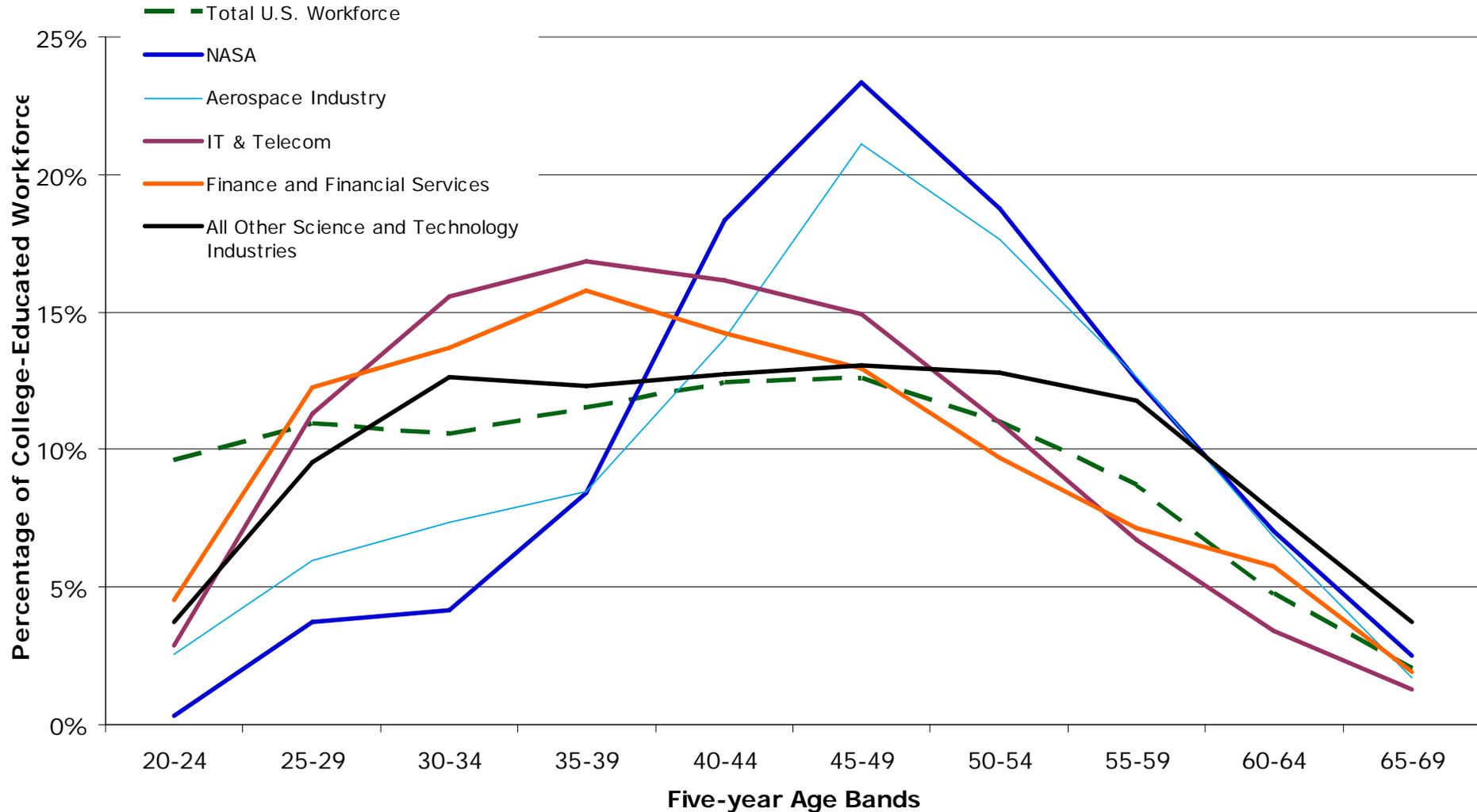
ARC / Robbie Schingler, project manager

JSC / Nick Skytland, project manager

And NASA is Notably Different...

- The data is hard to break down by specific “hi-tech” industries, but available data does show that NASA is old by comparison

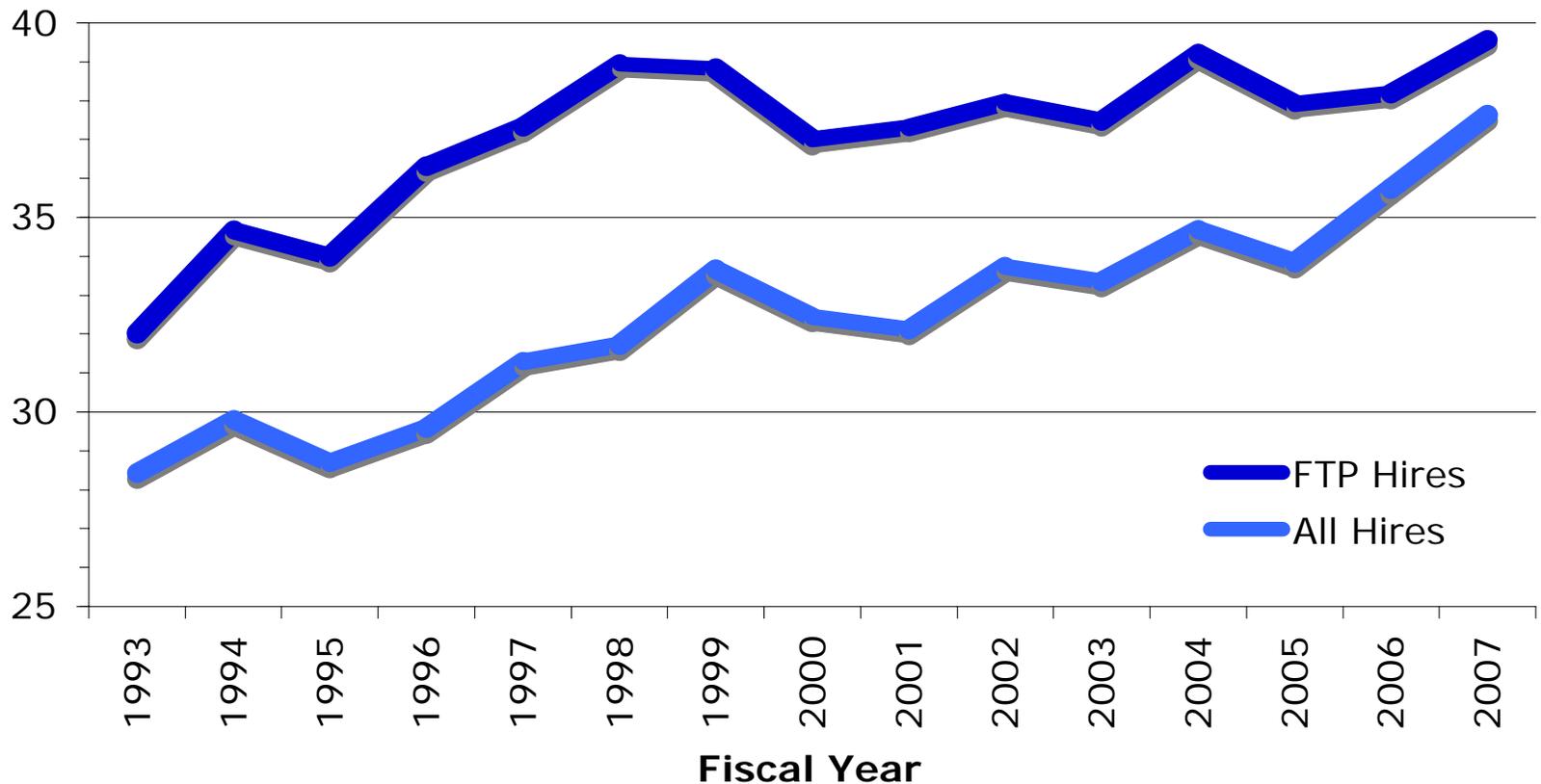
Industry Age Profiles



NASA is Hiring Older Employees

- Despite best efforts, is next-generation hiring actually a priority?

Average Age of NASA Hiring



Workforce-Age Distribution

- NASA's workforce is definitely aging (current average age is close to 50).
- There is a lower % employees younger than 35 in NASA than in all U. S. S&T industries.
- Continuing the trend of hiring midlevel scientists and engineers could result in a critical dearth of qualified S&E employees in 10-15 years.
- The current accounting system is contributing to this problem by not differentiating costs between grade levels.
- To insure an adequate amount of innovation and vitality so that NASA can remain globally competitive, the hiring of entry level S&E needs to be emphasized.

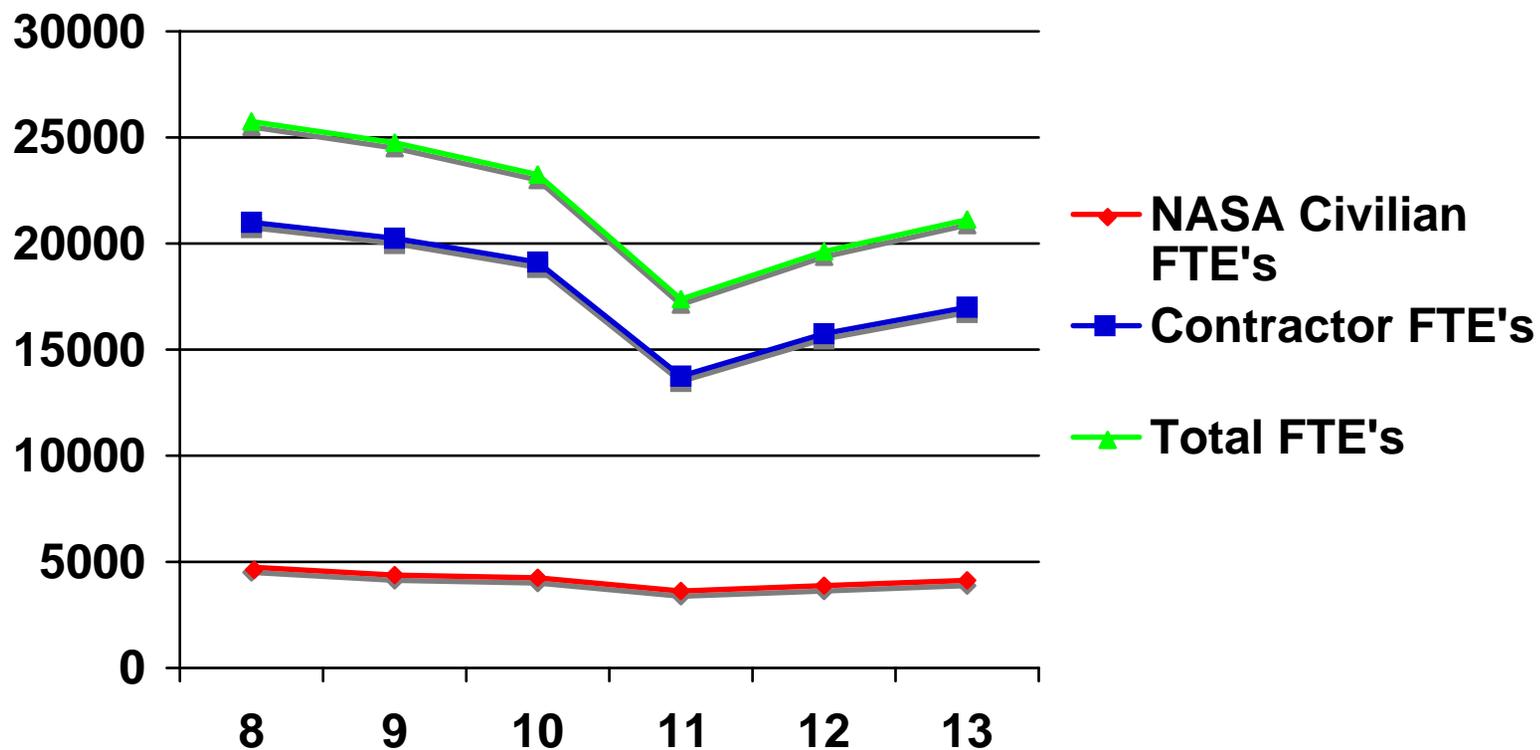
Public Concern About Workforce Transition

- SPACE News-March 3, 2008

Senators Question Griffin on NASA Plan to Cut Jobs

- Focus appears to be on Florida and Louisiana.

The Total Identified Number of FTE's on the Shuttle/Constellation Workforce Drops by 8,300 from FY08 to FY11

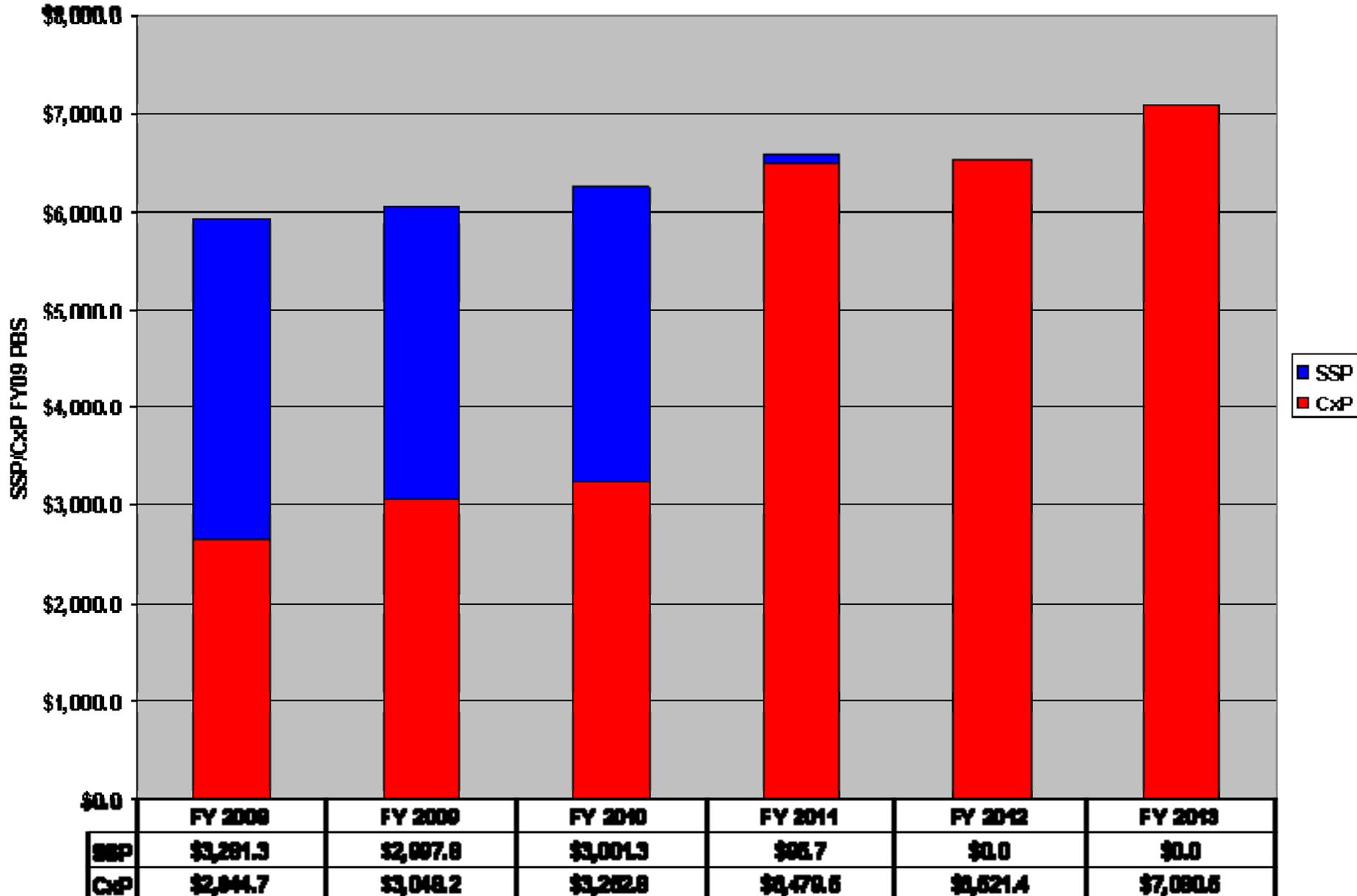


Source: Suzanne Leibert-JSC

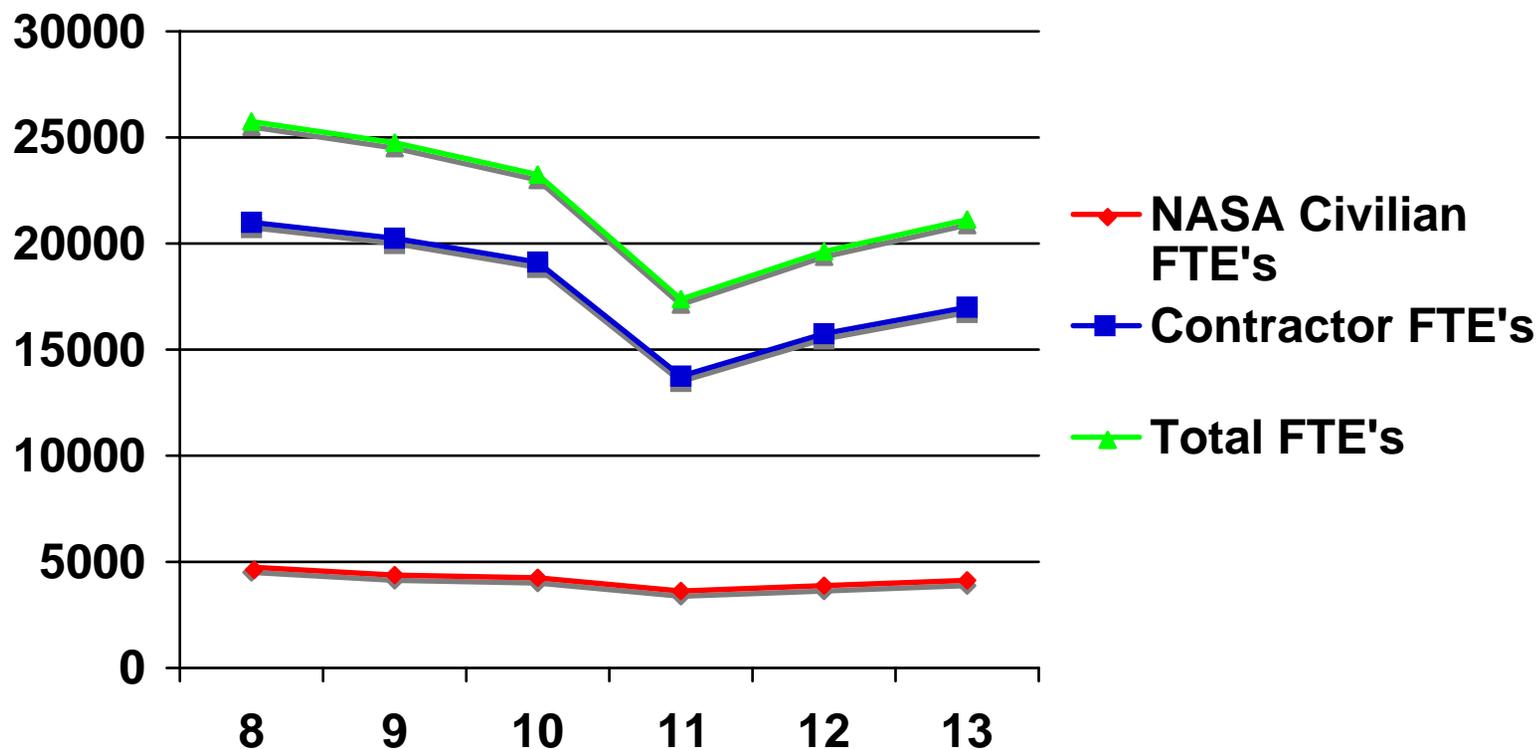
Workforce-Shuttle Issue

- Not as bad as we originally thought due to the fact that the uncertainty in the reserve for Constellation was NOT included in NASA data.
- We still do not have a good fix on the total skill set needed for Constellation.

The Total Resources Available for Shuttle/Constellation Are Roughly Constant at \approx \$6 B for FY 08 to 13 When Adjusted for Inflation

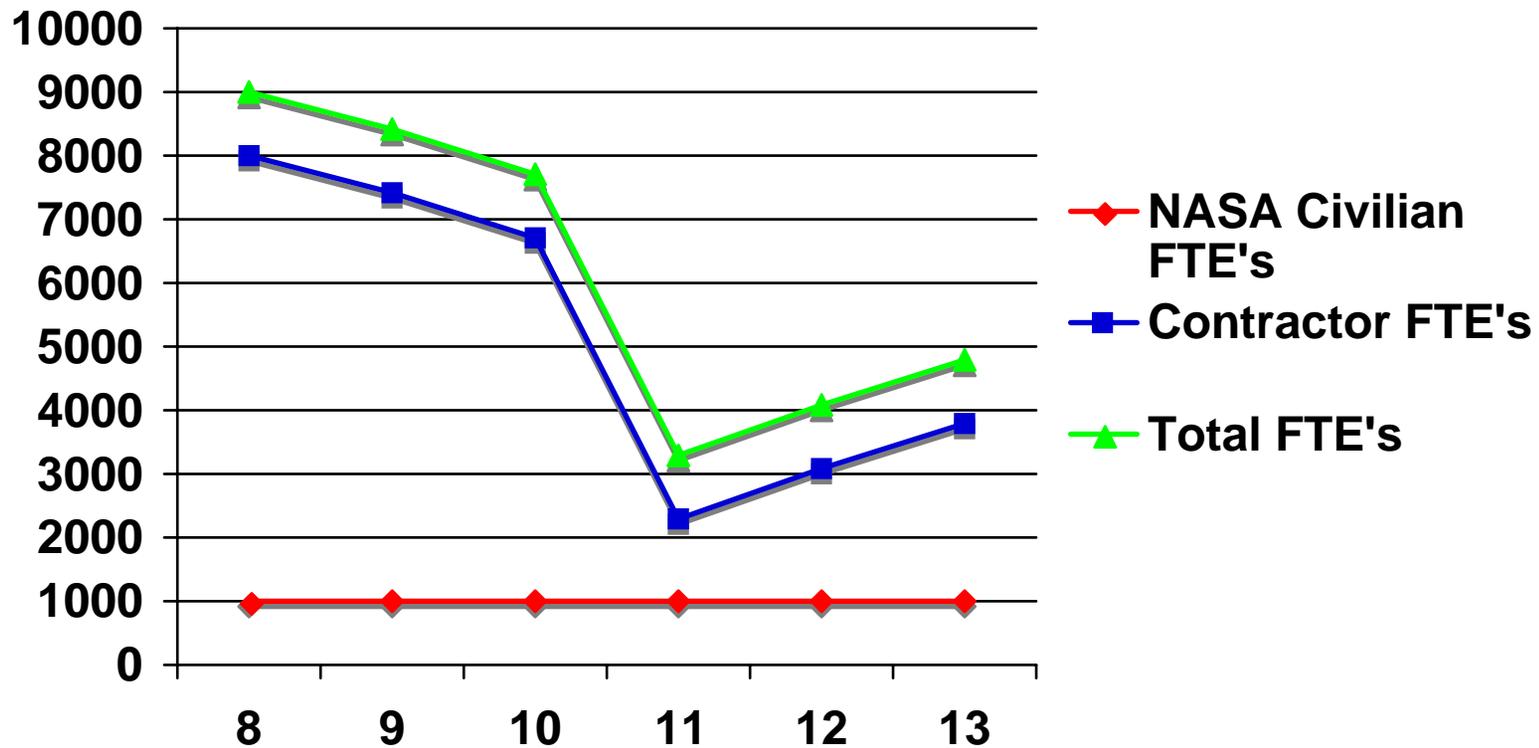


The Total Identified Number of FTE's on the Shuttle/Constellation Workforce Drops by 8,300 from FY08 to FY11



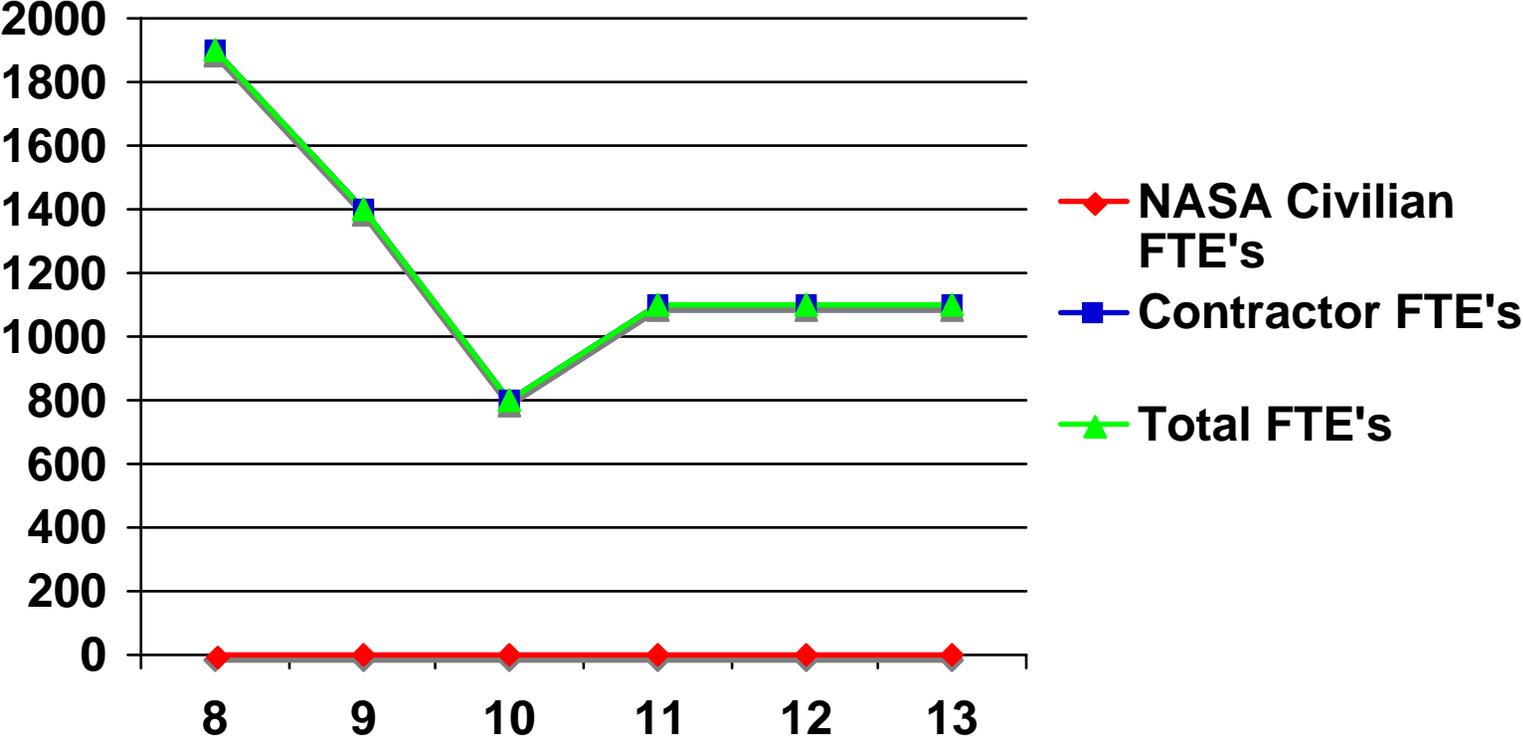
Source: Suzanne Leibert-JSC

The Total Number of FTE's on the Shuttle/Constellation Workforce at KSC Drops by 5,700 from FY08 to FY11



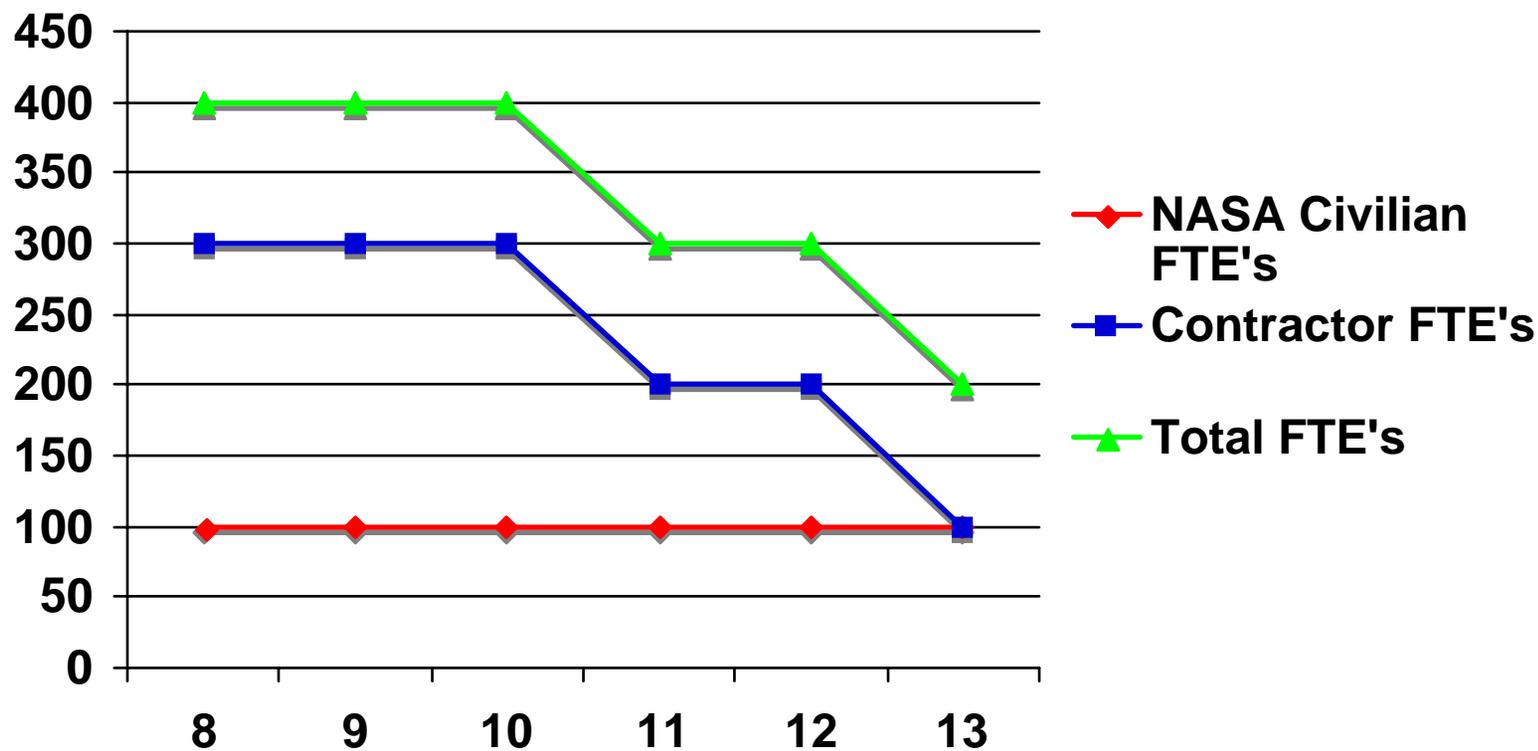
Source: Suzanne Leibert-JSC

The Total Number of FTE's on the Shuttle/Constellation Workforce at Michoud Drops by a Factor of 2 From FY08 to FY10 and Levels out at 1,100



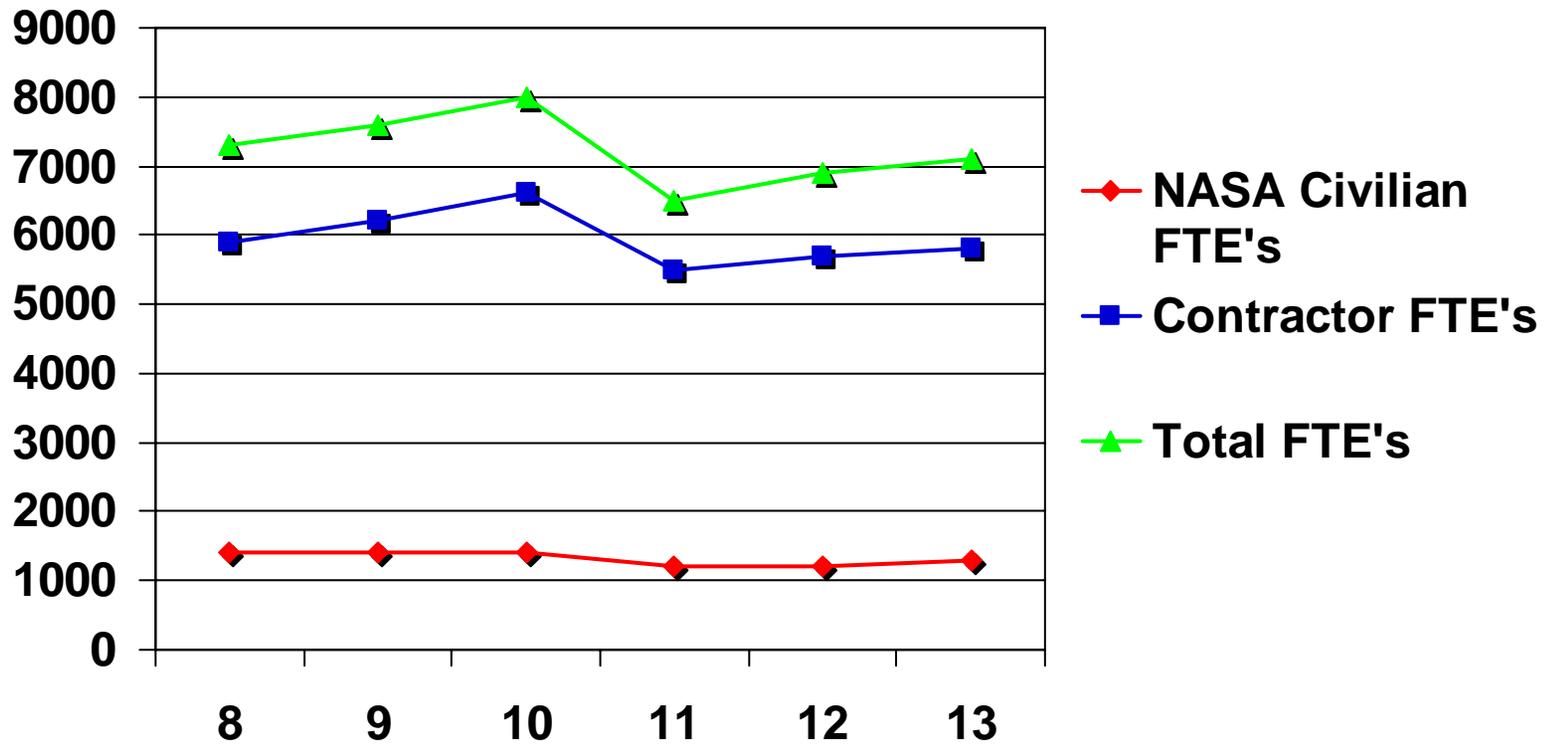
Source: Suzanne Leibert-JSC

The Total Number of FTE's on the Shuttle/Constellation Workforce at Stennis Drops by a Factor of 2 From FY08 to FY13 Mostly from the Contractors



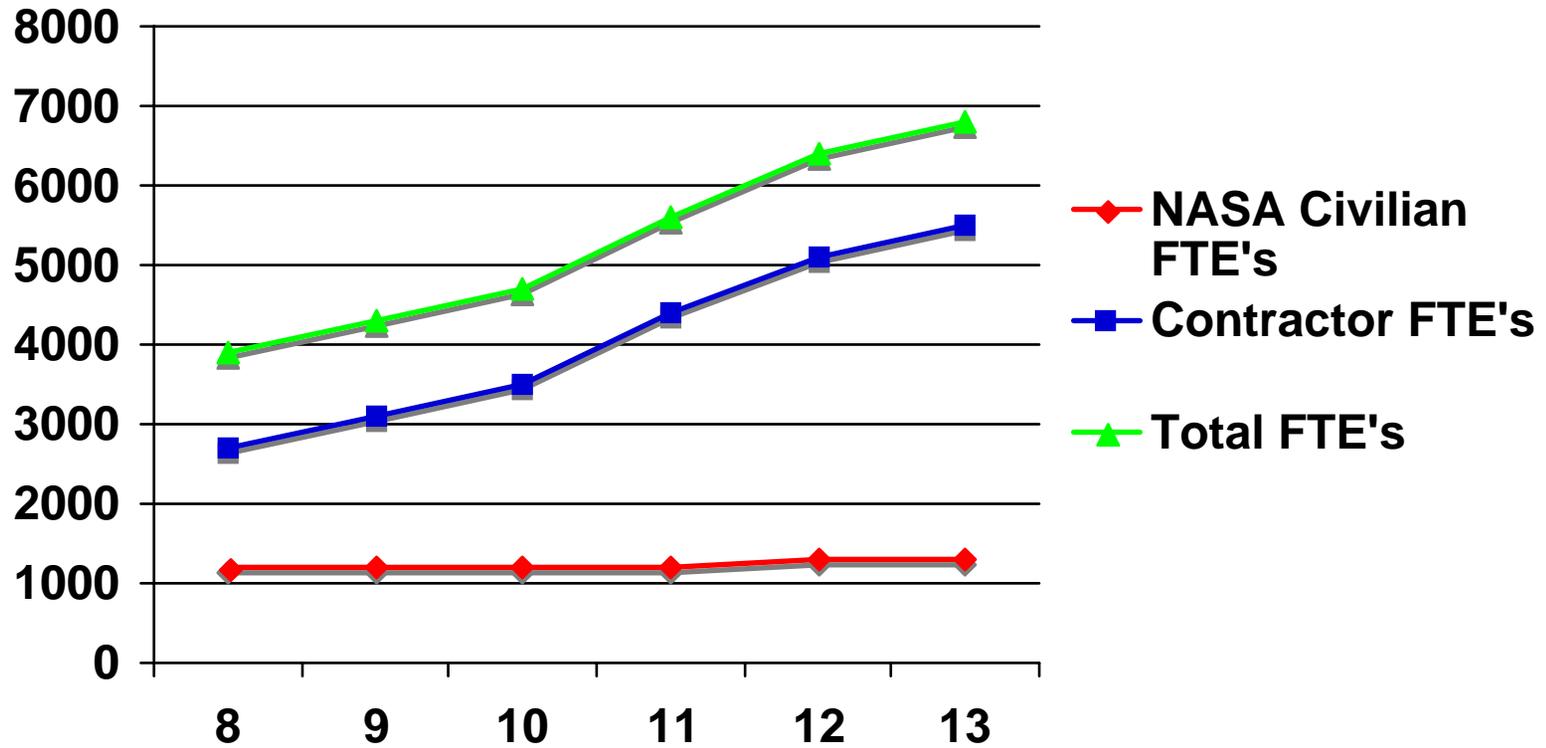
Source: Suzanne Leibert-JSC

The Total Number of FTE's on the Shuttle/Constellation Workforce at JSC is Relatively Constant from FY08 to FY11



Source: Suzanne Leibert-JSC

The Total Number of FTE's on the Shuttle/Constellation Workforce at MSFC Actually Increases from FY08 to FY11



Source: Suzanne Leibert-JSC

The Employee Survey

- Served as both a communication and data gathering tool.
- Sent to over 2800 civil service employees at KSC, JSC, MSFC, and SSC
- Included employees who had charged any time to Shuttle from October 2006 to May 2007
- Web-based survey which opened June 25 and closed July 13
- Consisted of up to 18 questions—mix of opinion, demographic, and open ended

Intent and Influences to Stay with the Program

“I am likely to stay with SSP through program retirement.”

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
2006	7.5%	10.7%	16.1%	34.5%	31.2%
2007	7.2%	7.1%	18.3%	37%	29.5%

MSFC—62.4%	JSC—65.4%	KSC—71.6%	SSC—75%
SSP Average—66.5%			

Three Centers stayed the same or increased. MSFC decreased from 72.1 to 62.4%--nearly 10% drop

“The following items are likely to influence me to remain with the Space Shuttle Program through Program retirement:”

- Having meaningful work in the Shuttle Program
- My commitment to the Shuttle Program and/or NASA
- My ability to make a difference in the Shuttle Program
- Assurances by NASA that I will have interesting future work

NRC Report *“NASA’s Elementary and Secondary Education Program Review and Critique”*

- Carefully thought out (22 recommendations/ observations).
- One concern was that insufficient metrics were used to judge the effectiveness of the OE programs. OE is addressing the development of metrics to assess effectiveness of the OE programs.
- Another concern was for the overall organization of the OE portfolio.
- OE delayed solicitation of new Explorer Schools until:
 - 1) they secure better ways to evaluate effectiveness of these schools.
 - 2) budgetary conditions improve

Questions?