
# Reflections on CIRA's Re-compete Experience

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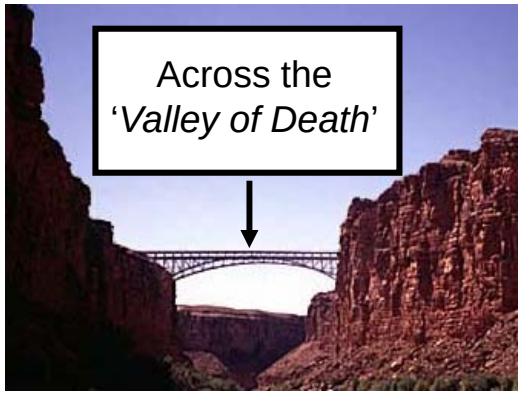
NESDIS CI Meeting

16 June 2009

# CIRA At Present

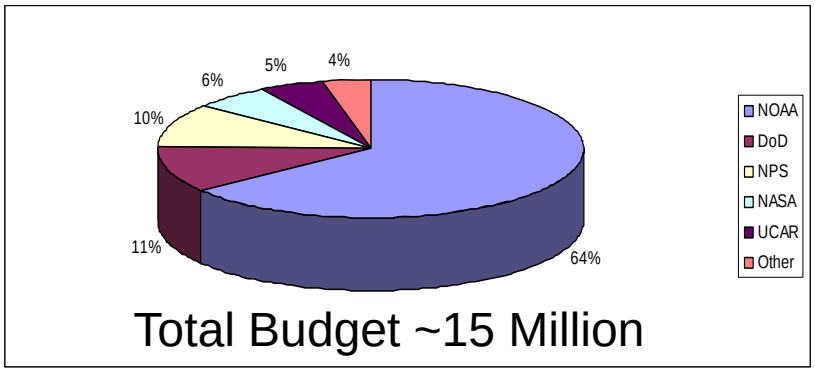


*Between the 'Ivory Towers' of Research…*




*…and Practical Knowledge and Applications*

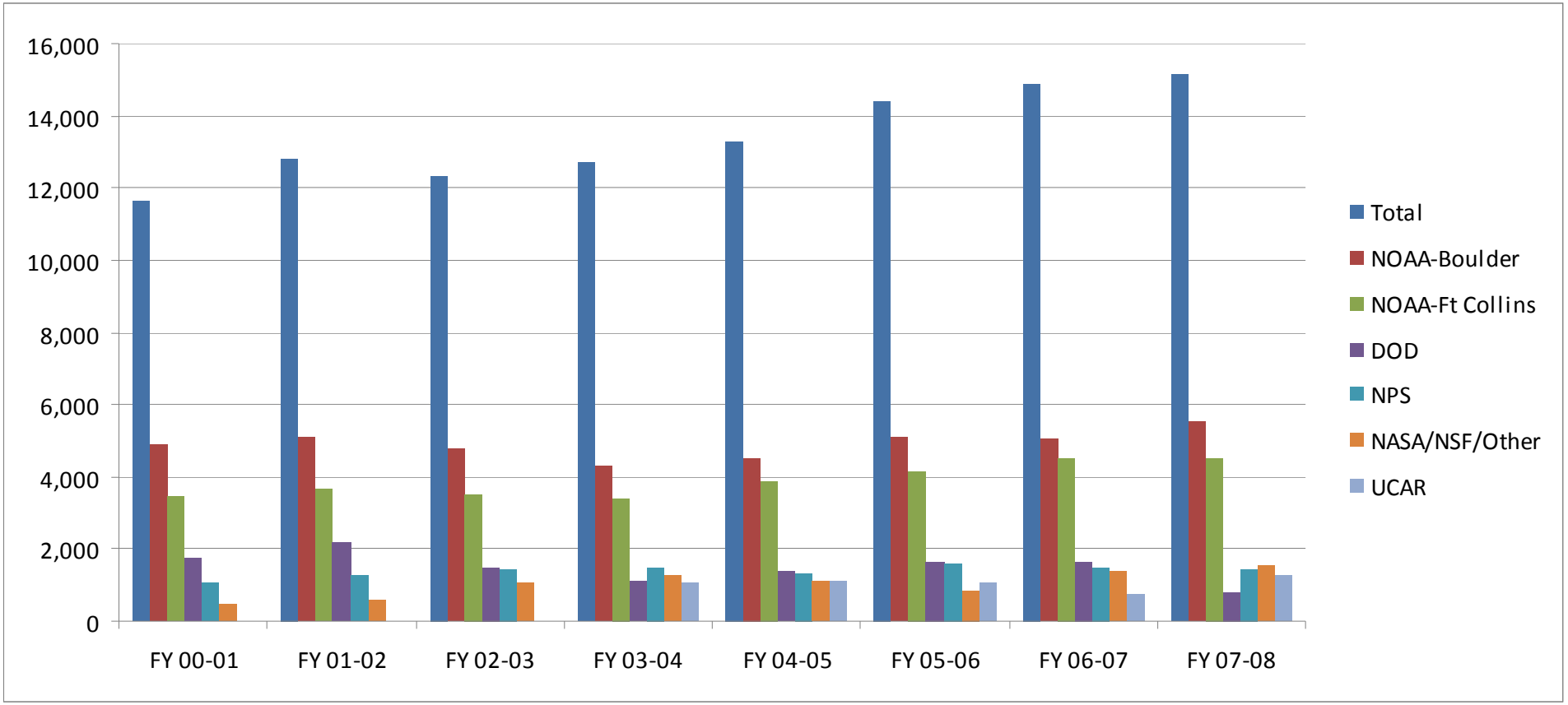
~145 scientists and support staff, distributed between Ft. Collins (CSU) and Boulder (NOAA/ESRL) offices.




Roughly 2/3 of active CIRA projects (and 2/3 funding) tied to NOAA, with DoD and NPS support comprising ~20% of total activity.
$15M total volume in FY2008-2009

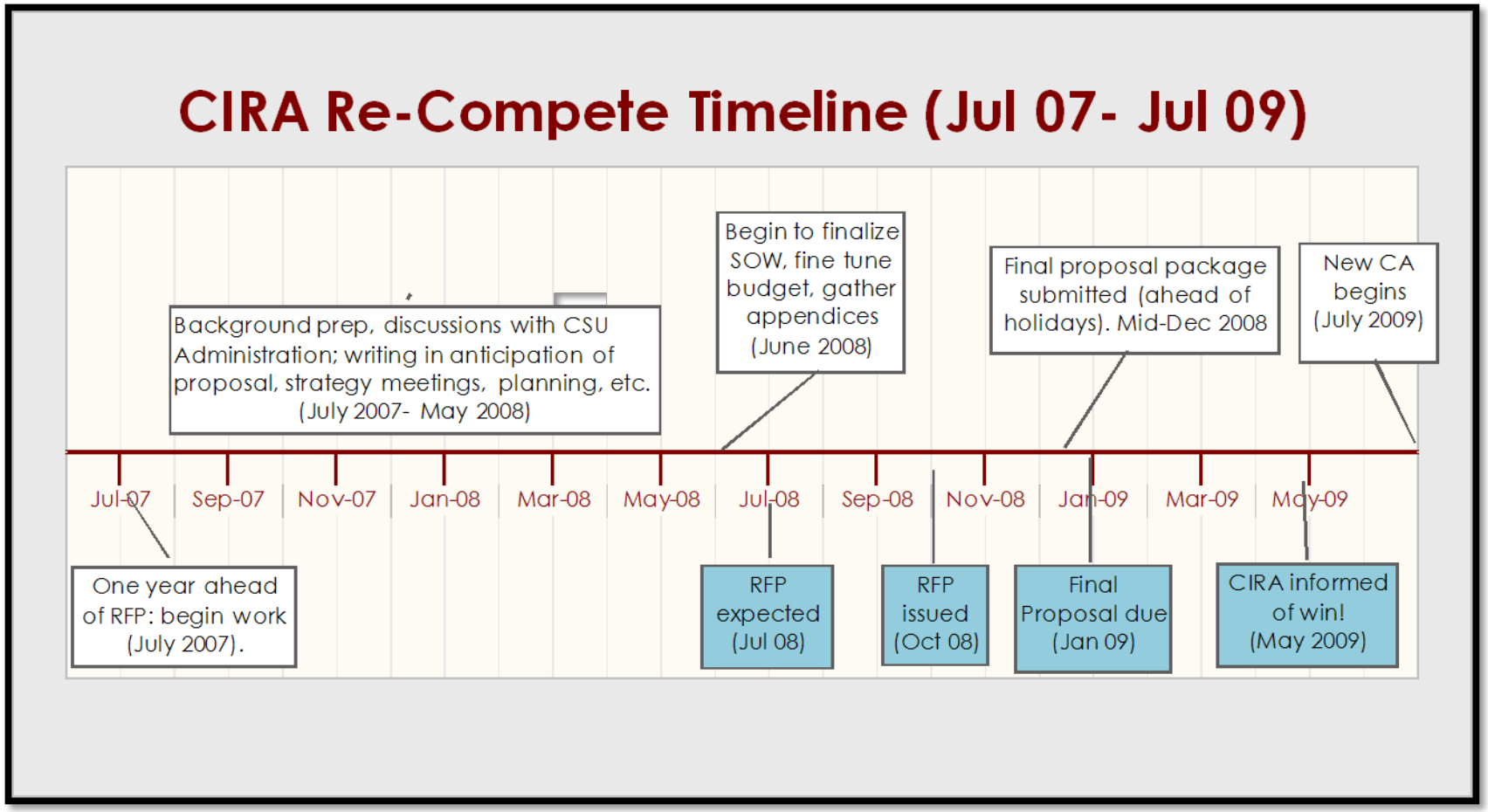
# CIRA Research Activity 2000-2008





# Re-Competition Schedule





# Schedule



- End of current Cooperative Agreement: June 30, 2008
- RFP for new CI expected July 2009- work began one year ahead (July 2007)
- RFP actually appeared October 2009
- Proposal package due to NOAA January 3, 2009
  - Due to holiday schedule, CIRA submitted its proposal by mid-December
- Announcement made by NOAA May 2009
- New Cooperative Agreement dates: July 1, 2009- June 30, 2014

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

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**FOR IMMEDIATE RELEASE**
May 20, 2009

## NOAA Selects Colorado State University Institute to Study Satellite Applications for Improved Regional and Global Weather Forecasts

NOAA announced today its renewed affiliation with the Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University in Fort Collins, Colo. Chosen through a competitive process, the cooperative institute will continue to investigate satellite applications for improving regional and global-scale weather forecasts, water resource forecasts, and provide integrated weather information to meet future aviation and surface transportation needs.

"Our partnership with CIRA provides professors and students of CSU an exciting and challenging opportunity to collaborate with NOAA scientists on cutting-edge research," said Richard Spinrad, NOAA assistant administrator for oceanic and atmospheric research. "Improving the accuracy of weather forecast warnings and looking at short-term climate forecasts are important efforts toward NOAA's overall mission to monitor and enhance weather and water information, improve decision making, and promote environmental stewardship."

Working closely with NOAA research scientists in Boulder and Fort Collins, Colo., CIRA will focus on ways to:

- Improve development of satellite-based algorithms for weather forecasting;
- Improve weather and climate models;
- Develop techniques to integrate satellite, terrestrial, oceanic, and biological observations;
- Increase understanding of environmental changes on weather and climate, and;
- Develop effective and efficient methods to quickly distribute and display large sets of environmental and model data using various data networks.

NOAA supports 22 cooperative institutes across the U.S. to promote research, education, training, and outreach aligned with NOAA's mission. Cooperative institutes collaborate with NOAA scientists, coordinate resources among all non-government partners and promote the involvement of students and post-doctoral scientists in NOAA-funded research.

NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources. Visit http://www.noaa.gov

On the Web:
Cooperative Institutes: http://www.research.noaa.gov/programs/joints.html

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# Plenary Efforts



- First steps:
  - Recruited, hired new leadership (Deputy Director, Director-Select)
  - Began weekly meetings to discuss strategy, strengths, outline of approach
  - Established a dedicated 'war room' and shared website (hostpilot)
  - Developed a shared contacts list to capture key conversations, information exchanges, meetings, etc
  - Sat down with University administration early (summer, fall 07)
    - On budget matters, funds for re-competition
    - On overhead and other cost-share issues
    - On vision/goals for next 5-10 year horizon
- Key inputs:
  - NOAA planning documents; NOAA "needs survey"
  - Evaluation criteria in RFP- leaving nothing to chance
  - Cataloging University's strength areas, CIRA's track record
  - CIRA transitions

# Challenges



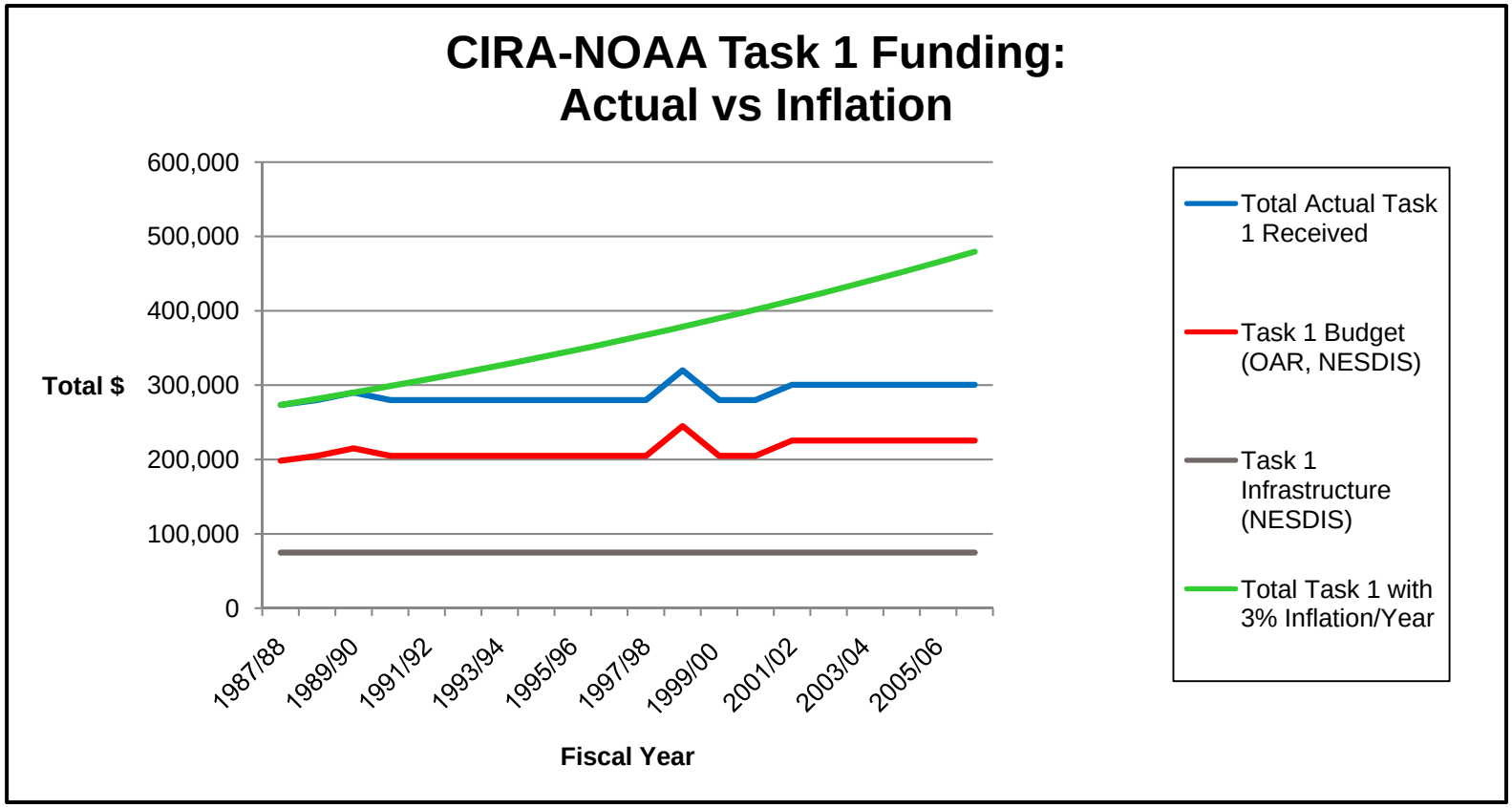
- Unique challenges as an established CI (25+ year history)
  - Need to balance legacy work with new opportunities
  - RFP elements
    - Five research theme areas
    - Budget terms for Task One (do not exceed amount)
  - Operating with as little interruption to normal business as possible
    - Restricted communication with NOAA technical advisors, budget points of contact, leadership, partners, etc. Difficult environment for strategic planning (represents a particular challenge for a brand new CI).
    - Unknown future beyond 6/30/09- how to propose new work, sustain employment, spin-up/spin-down a large and multivariate program

# Approach to Challenges

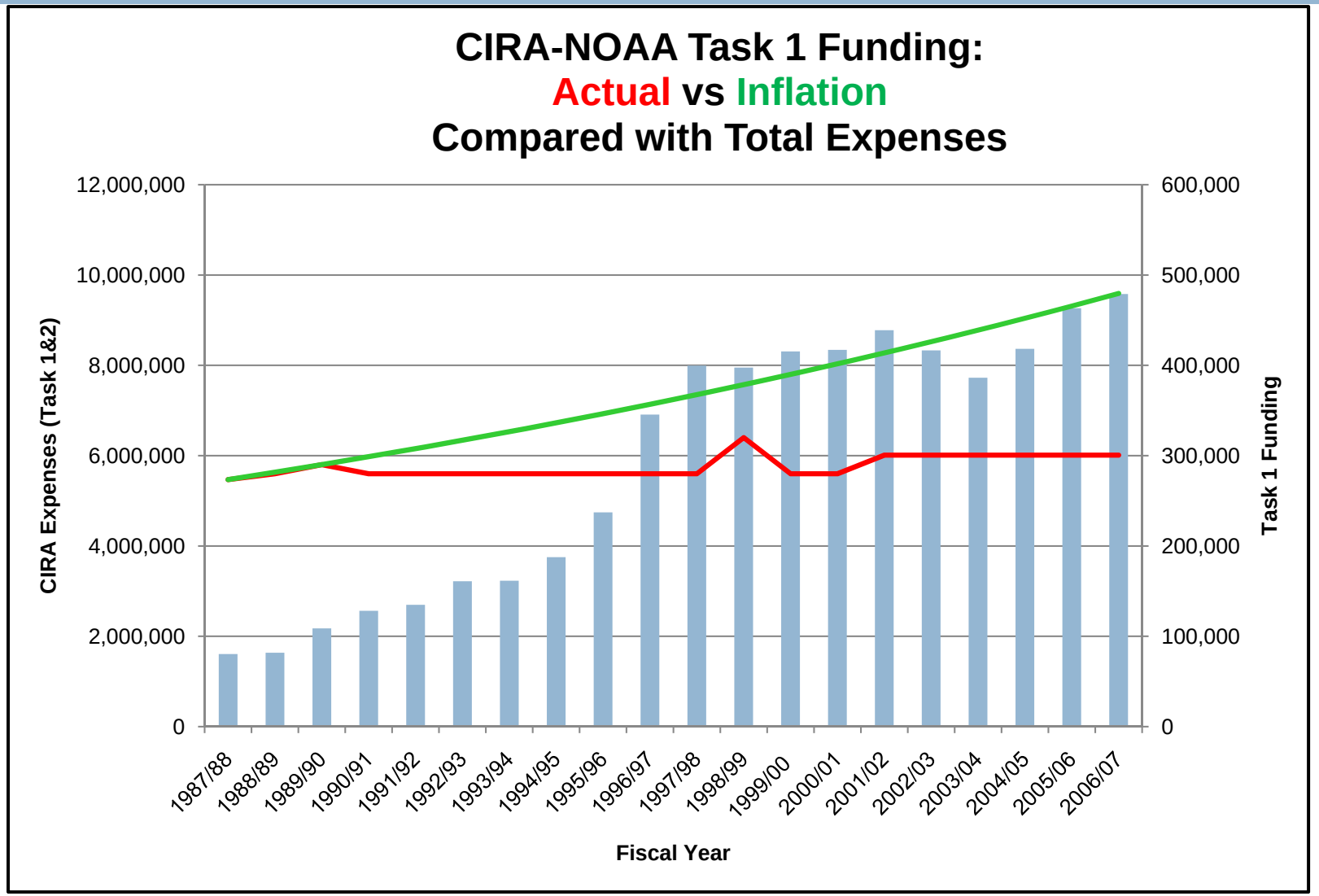


- CIRA's approach included
  - Input via strategy sessions with PIs, Project Leaders, Fellows, Board/Council, Faculty, contributions and technical review managed by technical editor
  - Kept the core writing team very small
  - Used appendices extensively to counter page limitations
  - Proposal included new:
    - Mission
    - Vision
    - Strategic Plan
    - Tweaks to the CIRA Administrative Structure; Board/Council
    - Significant Cost-sharing from the University: new CIRA Faculty Line; CIRA Building Addition; lower overhead rates
    - 2 new Cross-Cutting Themes
  - Shadow Award mechanism mitigated effects of looming end date *somewhat*
  - No opportunity to address long-standing budget issues in Task One

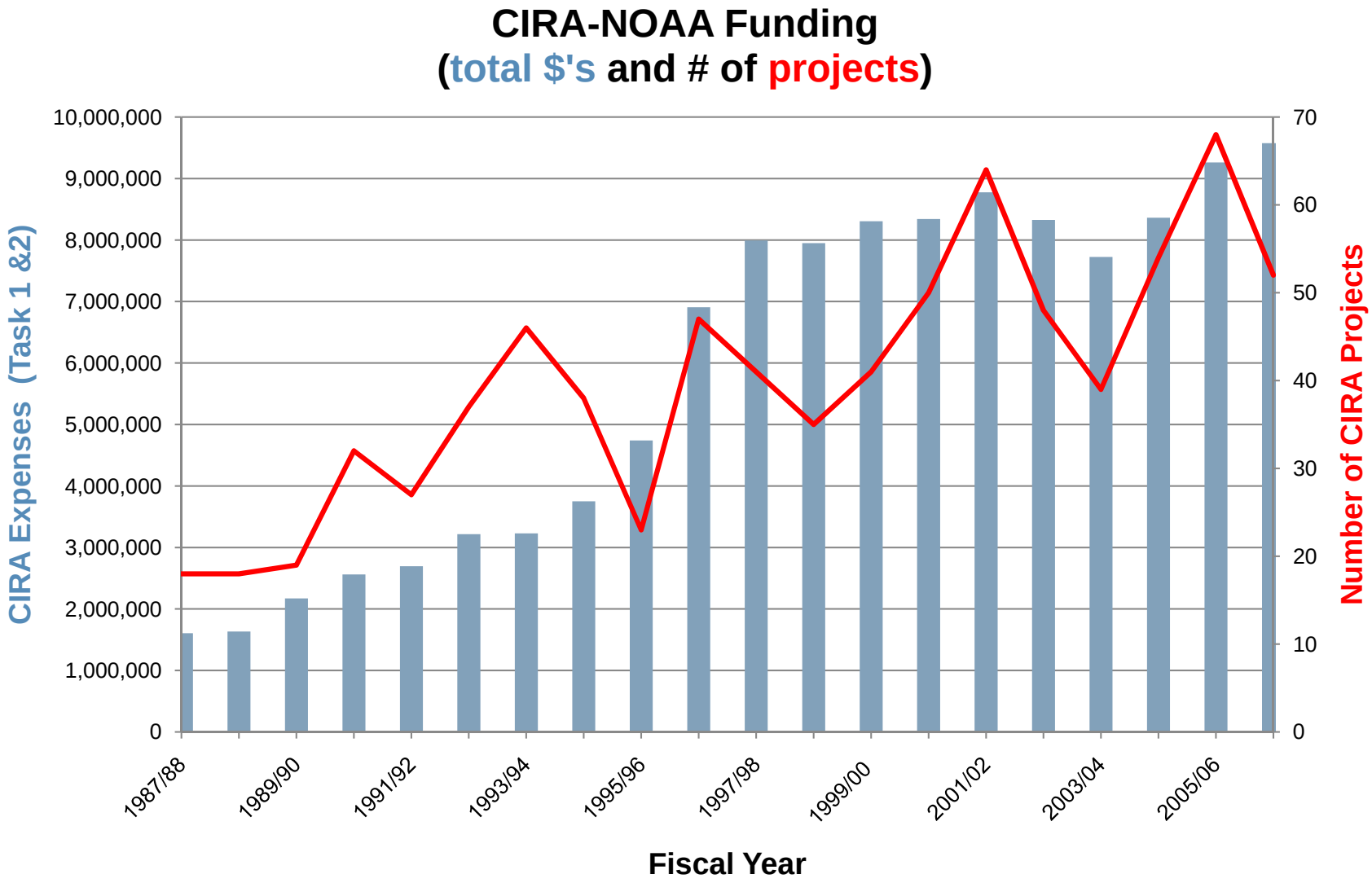
# Task 1 Vs. Inflation @ CIRA



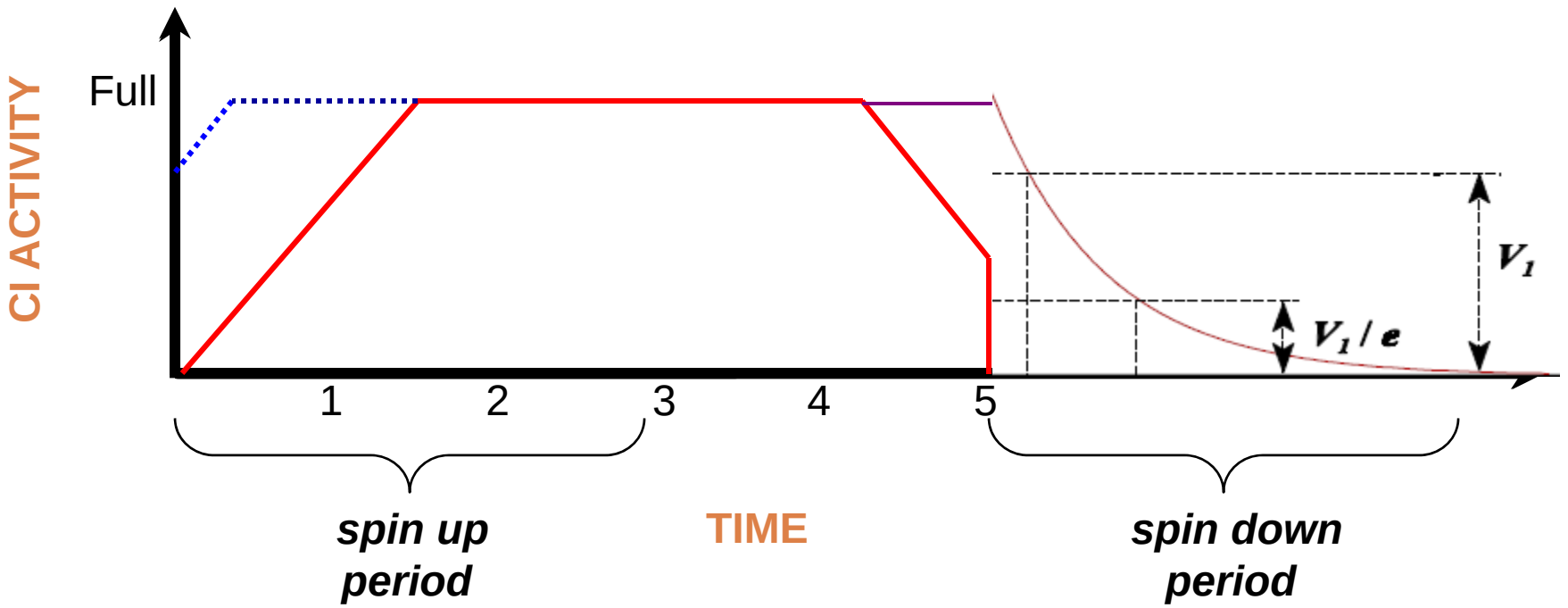
# Research Volume Evolution



# Projects Tied to Volume



# Our Operational "Capacity": Task II




1. Spin up period faster for established CI, much slower for new CI
2. Spin down period faster for new CI, much slower for established CI
3. "Reviews scheduled at beginning of 4th year of agreement to give NOAA time on decision on extension" → potential for early spin down

# Formation of Consortia—Perspectives from the new ‘CICS’

- One cooperative agreement for multiple institutions unwieldy, tremendous admin task
- Spin up in understanding and educating partners on how to best use the CI apparatus
- How to coordinate rapidly when there are multiple sources of NOAA funding involved
- Understanding shadow awards, where the apply and where they do not
- The need to use subcontracts as a mechanism to move funds between the participating members of the consortia

# CIRA Proposal Reviewer Scoring



- 7 Reviewers
- Overall weighted score 89.2 out of possible 100
- Scoring ranged from 79.25 to 97.0
- Reviewers provided detailed comments on all components of proposal
- Constructive critique
- Several conflicts of opinion among reviewers on the perceived value of work proposed…

# Selected Reviewer Comments



- Strengthen the linkage between themes (e.g., between the Satellite Applications and Regional to Global Scale Modeling Systems themes)
- Encouraged by social science "cross cutting" theme
- Strong CSU/CoE support & solid business plan
- Strengthen the link to operational modeling centers and their priorities
- Suggest showing milestones/deliverables (difficult in a "TBD Task II" operating environment vs. a grant

# Selected Reviewer Comments



- More emphasis on individual scientist capabilities
- Cost sharing significant, shows CSU generous commitment; "NOAA is getting a good deal!"
- Why does NOAA want two CIs in central CO, both working with ESRL?
- Careful not to dilute CIRA's traditional expertise