

DUNE Project Status

Eric James
DUNE PMG Meeting
January 19, 2016

Management Update – News

- DUNE Collaboration and LBNC meetings took place last week in Arlington Texas
- Lots of good discussions with an emerging general consensus that taking beam data with ProtoDUNE detectors at CERN in 2018 should be among highest collaboration priorities
- Formal request was made for Expressions of Interests from collaborating institutes for becoming involved in ProtoDUNE efforts

Management Update - News

- New Single and Dual-Phase ProtoDUNE management teams becoming actively engaged in their new roles
- A high-level schedule has been created to project the effort needed to construct, install, commission, and operate the Single-Phase ProtoDUNE detector on the timescale of 2018
- Work now underway to build a fully resource-loaded schedule matched to the draft high-level schedule (goal is to have this in place by the end of January)
- Next Step will be to integrate the Single-Phase ProtoDUNE schedule with the EHN1 (CERN neutrino platform) and Dual-Phase schedules
 - The management teams are planning to spend the week of February 22nd at CERN to work on synchronizing schedules

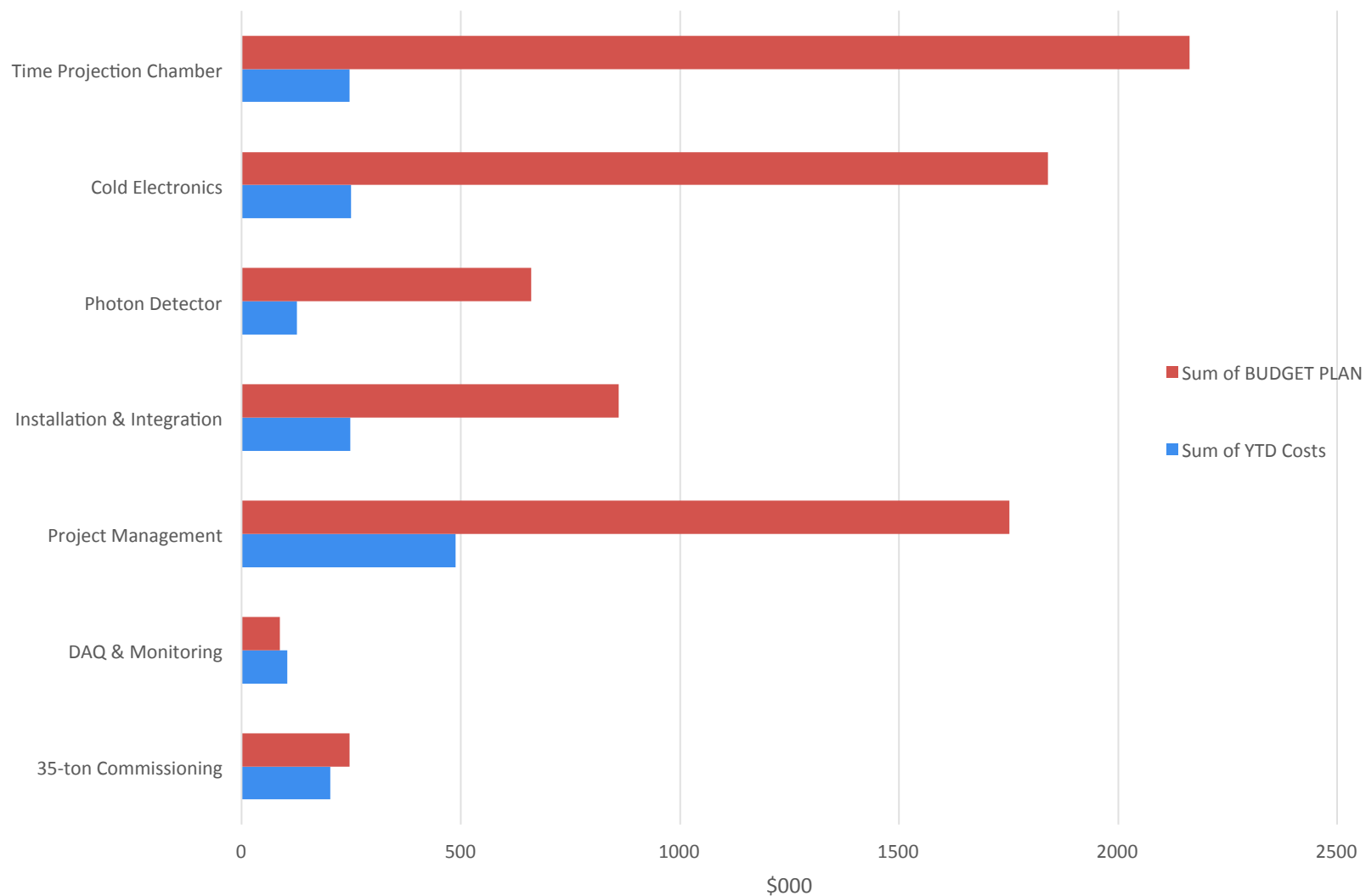
Management Update - News

- Attempting to use better than expected FY16 budget to speed up critical-path activities for ProtoDUNE
 - Add resources for APA construction activities
 - Additional engineering support for CPA and Field Cage design activities
 - Additional engineering support for Electronics Integration Issues (define needed QA/QC activities)
 - University support for critical Photon Detector engineering studies
 - University support for TPC integration facility at Ash River
 - Accelerating development of COLDATA ASIC chips (DUNE)

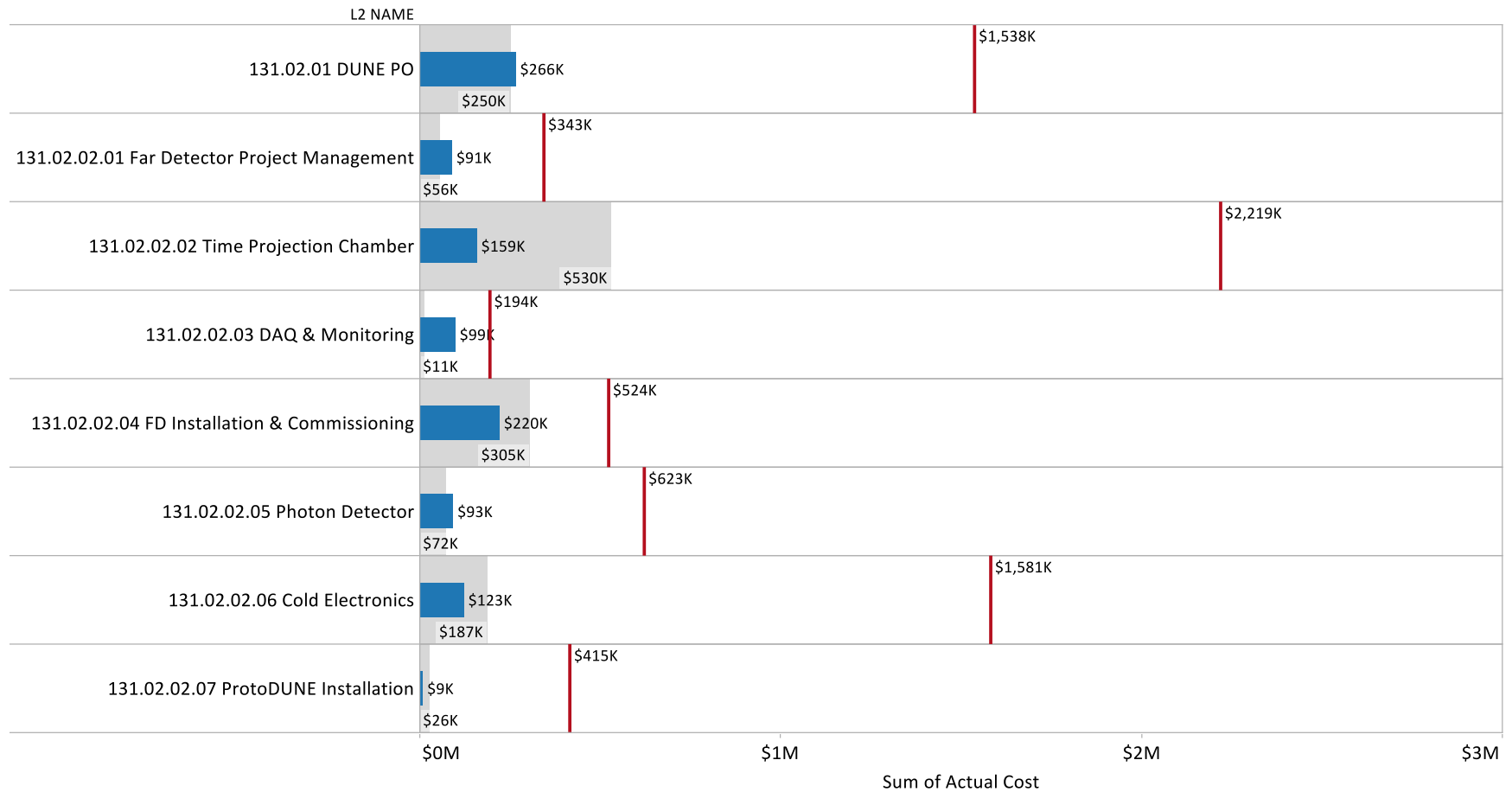
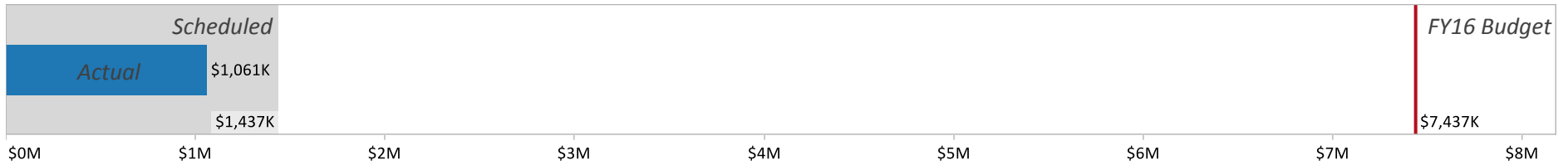
Management Update – News

- ProtoDUNE cryostat review took place on December 17-18
- Review of front-end and ADC ASIC designs will take place at BNL on January 21
- DAQ Workshop at CERN on February 25-26
- New L3 Manager for Photon Detection system identified (Leon Mualem – Cal Tech) with transition plan for FY16 in place
- Working to obtain waiver that will allow for the duty-free entry of detector components produced outside of the U.S.
 - Met with FESS/Property to identify requirements for shipping ProtoDUNE components to CERN

Management Update – Budget (re-plan) Status; by L3 WBS



Management Update – Budget Status, FY16 Costs vs. schedule



Interfaces with LBNF – FSCF Interface Issues

Continue to refine requirements through the start of CF final design work in spring 2016

- Detector interface issues requiring additional input prior to the start of the final design work are documented in LBNF change log
 - Review of Computational Fluid Dynamics Calculations during last week's DUNE Technical Board Meeting (have not identified a need for pumps on both sides of the far detector cryostats)
 - Control Room workshop was held on December 16 and preliminary report is now available for comments (due today)

Collaboration News

- Collaboration meeting last week in Arlington, TX
 - Mini-workshop on QC/QA planning for ProtoDUNE production including discussion of 35-ton lessons learned
 - QA/QC process important as ProtoDUNE construction is intended to serve as the development platform for defining these processes for the far detectors
 - ProtoDUNE = 6 APAs; 1 FD detector = 150 APAs
 - Initial organizational discussions among members of Single-Phase Management team and upper-level DUNE management
 - Dedicated parallel sessions on detector integration and installation activities that will need to take place at CERN
 - “Expressions of Interest” for participation in ProtoDUNE activities from collaboration institutes

35-ton

- 3rd and 4th truckloads of LAr to be received Thursday and Friday of this week
- Cool-down and filling currently scheduled to commence next Monday (January 25th)
- More details in Michelle Stancari presentation