

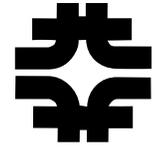
Project X Collaboration Plan

Steve Holmes

Accelerator Advisory Committee Meeting

May 6-8, 2008

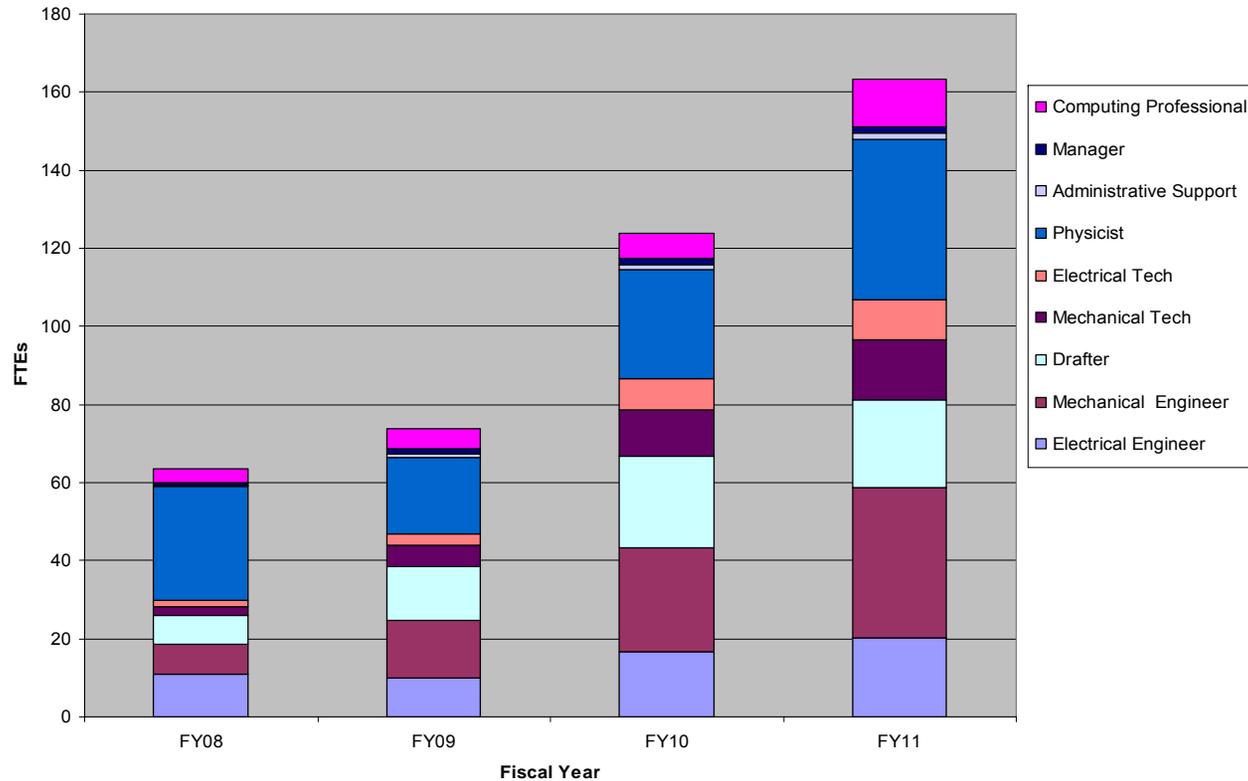
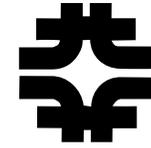
Project X Management/ Organization Goals



- Formation of a multi-institutional collaboration to carry out the Project X RD&D program and to prepare a plan for construction.
- Development all project documentation and organizational structures required by DOE 413.3.
- Timeline:
 - 2008:
 - Form Project X RD&D Collaboration
 - 2009: CD-0
 - Start project documentation (including CDR), and accompanying R&D program
 - 2010: CD-1
 - Finish CDR, form collaboration to undertake construction project
 - 2011: CD-2/3a
 - Establish project baseline (scope, cost, schedule)

Project X RD&D Plan

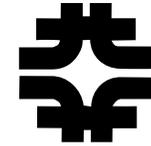
Resource Requirements and Profile



Personnel profile by skills types

Note: This includes total resources, not just Fermilab.
Incremental to ILC, SRF, and HINS programs

Project X RD&D Plan Budget Profile



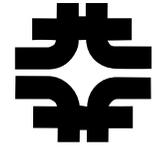
Project X R&D Plan Budget Profile							
(Dollar amounts in millions, fully burdened)							
	FY08	FY09	FY10	FY11	FY12	TOTAL	
SWF	\$6.7	\$10.5	\$19.1	\$26.3			\$62.6
M&S	\$1.5	\$4.9	\$6.2	\$13.7			\$26.3
TOTAL	\$8.1	\$15.5	\$25.4	\$40.0			\$88.9
		↑	↑	PED	↑		
		CD-0	CD-1	CD-2/3a			

Project X RD&D budget profile

- Incremental to ILC, SRF, and HINS programs

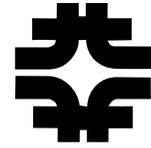
Project X R&D Plan

Institutional Expressions of Interest



- Goal of the November 2007 Project X Accelerator Workshop was to discuss accelerator physics and technology issues of Project X, and to explore possible areas of overlap and interest between potentially interested institutions.
 - Participation in the workshop included 175 individuals from 28 institutions in the U.S., Europe, and Asia.
- The Workshop report contains a record of discussions and a complete compilation of “expressions of interest” from the participating institutions.
 - Purpose of these EOIs is to provide an initial step in understanding how capabilities at interested institutions could be brought to bear in the R&D phase of Project X.
 - (For compilation see Project X Workshop Report on the AAC website)

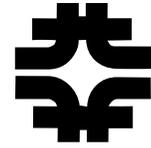
Project X RD&D Plan Collaboration Plan



Disclaimer: This is not formally agreed to, although institutions have been invited to comment as this has been developed.

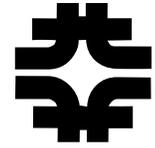
- Intention is to organize and execute the RD&D Program via a multi-institutional collaboration.
 - Goal is to assign collaborators complete and contained sub-projects, meaning they hold responsibility for design, engineering, estimating, and potentially construction if/when Project X proceeds.
 - Project X R&D Collaboration to be established via a Collaboration Memorandum of Understanding (MOU) outlining basic goals of the collaboration, and the means of organizing and executing the work.
 - Goal: Establish RD&D Collaboration by end of FY08
 - It is anticipated that the Project X RD&D Program will be undertaken as a “national project with international participation”. Expectation is that the same structure of MOUs described above would establish the participation of international laboratories.

Project X R&D Plan Management Plan



- Fermilab responsible for management of the Project X RD&D program.
 - Program managed by a Project X RD&D Program Leader, assisted by a Program Team. Deliverables:
 - reviewable/defensible accelerator physics and engineering design, cost estimate, and schedule to achieve CD-2/3a;
 - including identification of possible upgrade paths;
 - organization of a supporting R&D program.
- Collaboration Council established for the primary purpose of advising/assisting the Project Leader in inter-laboratory coordination.
- Project X Technical Advisory Committee.
 - Subcommittee to AAC?
- Fermilab 1.3 GHz program managed and coordinated jointly via the Assoc. Director for Accelerators and the ILC Program Director.

Summary



-
- An RD&D plan developed covering the period through CD2/3a (2011)
 - Integrates effort on Project X, ILC, and HINS
 - Resource plan exists
 - Executing this plan will require participation from institutions outside of Fermilab
 - Working towards organizing as a national project with international participation.
 - Draft Collaboration MOU prepared for circulation among potential collaborators
 - Covering the period through CD-2
 - Goal is to establish collaboration by end of FY08