#### **APS Upgrade Update:** Start of the Shutdown

**Jim Kerby Director, APS Upgrade Project** 



Vacuum chamber insertion in a DLM-A module





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### **USER OPERATIONS END MONDAY APRIL 17**



After one week of accelerator testing, the beam will turn off on April 24 and we will begin the one-year shutdown.

The PSC organization as a whole is working in a concerted manner to plan and execute work during the downtime.





### **CURRENT STATUS: BY THE NUMBERS**

\$294M: 82% Costed 89% Obligated	\$78M: 87% Costed 93% Obligated		\$200M: 58% Costed 83% Obligated
Storage Ring	Insertion Devices	Front Ends	Beamlines
1,321 Magnets	11 Phase Shifters/Supports	470 Tables/Supports	36 Enclosures
4,640 Vacuum Components	48 Canted Magnets/Supports	162 Shutters	55 Mirrors
2,245 Power Supplies	33 Corrector Magnets	108 BPMs	20 Instruments
400 Power Supply Controllers	800 Vacuum Components	162 Masks	19 Monochromators
560 RF BPM Electronics	68 Power Supplies	116 Collimators	9 Transports
200 Module Assemblies	57 Insertion Devices	35 High Heat Load and Canted Front Ends	21 Compound Refractive Lens





# **MAKING GREAT PROGRESS**





We have an incredible team working to meet our pre-shutdown goals.





#### **MAKING GREAT PROGRESS**





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#### **READY FOR THE CHALLENGE**





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# SAFETY IS UP TO ALL OF US



The facility is entering a downtime unlike any over the past 25+ years, and the safety of all personnel during that phase is our highest priority.

Large portions of the experiment hall will be construction areas, and locations and markings will change. Be alert, and assure, do not assume. Pause work if unsure.

If you are working on the experiment floor, connect with floor coordinators as soon as possible to schedule that work.



