

sPHENIX MAPS Inner Tracker Cost Estimate

3 MAPS layers
FY16 dollars

	Funding Profile										
	R&D LANL (k\$)	R&D BNL (k\$)	Construction (k\$)	Comments	Total Contingency	Cost with Contingency (k\$)	FY17	FY18	FY19	FY20	FY21
MAPS Staves	128		1064	Alice production		0.1	1170.4				
							0				
RDO boards	7.4		354	Alice production		0.1	389.4				
CRU boards	11		183.3	Alice production		0.1	201.63				
sPHENIX readout R&D	178										
DAQ integration	82.2										
							0				
ALICE Readout Teststand	40			Alice production			0				
SamTec cables	2.4		28	Alice production		0.1	30.8				
Optical links	0.6		43.2	Alice production		0.1	47.52				
							0				
LVPS etc	27.4		61.6	Alice production		0.1	67.76				
Racks	7.4						0				
Chiller & Cooling Plant	52	51	118.6	Alice production; may need to modify them to fit sPHENIX		0.3	154.18				
Safety system Mechanical integration	29.2	56									
	182	158.6				0	0				
				Alice production; may need to modify							
Assembly Jigs	34.4	41.4	101	them to fit sPHENIX		0.3	131.3				
Test beam											
							0				
End wheels			35.6	Alice production		0.1	39.16				
Cylindrical Structure											
Shells			12.6	Alice production		0.1	13.86				
Detector half barrels			14.6	Alice production		0.1	16.06				
Service half barrels			121.6	Alice production		0.1	133.76				
Detector and Service Half Barrels			22.6	Alice production		0.1	24.86				
Two Half Support Structures			51.6	Alice production; may need to modify them to fit sPHENIX		0.3	67.08				
Total	782	307	2212.3				2487.77				