

Table 3.4.1 F: Ammunition for Shooting Ranges – Iron

	Financial Parameter	Measure/Metric	Source of Information
<i>Required Data</i>			
	Initial purchase price for chemical/alternative	Iron and iron powder are not traded on an exchange such as the London Metal Exchange and therefore pricing was not readily available.	
	Initial purchase cost for end-product/component	Remington’s Disintegrator Lead-Free Frangible ammunition is available at several online ammunition retailers. Prices for 9mm, 100 grain ammunition ranged from \$0.35 to \$0.53 per round.	
	Availability of chemical/alternative	In 2004, worldwide trade in iron ore was approximately 670 million metric tons.	ISSB, 2006
	Availability of component/end-product	At least one ammunition manufacturer produces lead-free frangible handgun ammunition produced with iron powder. The projectile in Remington’s Disintegrator Lead-Free Frangible ammunition is composed of powdered iron with an electroplated copper jacket. Remington markets its Disintegrator product line to law enforcement agencies. Disintegrator ammunition is available in 9 mm, .40 S&W, and .45 ACP calibers.	Remington, 2005
	Capital costs	Frangible bullets made from powdered iron require a significantly different production process due to the fact that they are made from powdered metals. Therefore, it is likely that switching a lead bullet manufacturing process to an iron bullet manufacturing process would require significant capital investment.	
<i>Additional Data if Available</i>			
	<u>Key</u> end-of-product life costs	Frangible iron bullets reduce wear and damage to bullet traps and backstops at firing ranges.	Remington, 2005