



CREST HILL
POLICE DEPARTMENT
 20590 City Center Blvd
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 815-741-5115
 cityofcresthill.com

To: Mayor and City Council
 From: Deputy Chief Jason Opiola
 CC:
 Date: Tuesday, August 20, 2024
 Re: Glock Model 45 MOS 9mm Purchase

Introduction

In light of recent evaluations of our department's firearm capabilities and industry trends, I recommend transitioning from our current Glock 22 .40 caliber handguns to Glock MOS 45 9mm handguns with the red dot Holosun 508T sight. This recommendation is based on a comprehensive review of performance, cost, and operational considerations. Glock recommends replacement of firearms after 8 years and our current firearms were purchased in 2014. The cost for the new Glock Firearms after Trade-In of our current inventory is \$24,702.28. (See Annex A for photos)

New Glock Purchase Spreadsheet

New Equipment			
Item	Cost	Quantity	Total
Glock 45 (MOS w/ Red Dot)	\$ 757.56	38	\$ 28,787.28
New Duty Holster (Safariland 6360RDS)	\$ 158.00	38	\$ 6,004.00
Trade-In / Sold Back Equipment			
Glock 22 Gen 4 (.40 Cal)	\$ 235.00	33	\$ 7,755.00
Glock 23 Gen 4 (.40 Cal)	\$ 235.00	3	\$ 705.00
Glock 17 Gen 3 (9mm)	\$ 235.00	1	\$ 235.00
Shotgun Trade-In and Ammo			\$ 1,394.00
Trade-In/Sold Back Deductions			\$ 10,089.00
Total Cost of New Equipment			\$ 34,791.28
Total Cost After Deductions			\$ 24,702.28

Key Reasons for Transition from .40 Caliber to 9mm

1. Performance and Accuracy

- **Recoil Management:** The 9mm cartridge typically produces less recoil compared to the .40 caliber. This reduction enhances accuracy and control, allowing officers to make more precise follow-up shots.
- **Training Efficiency:** With less recoil, training sessions become more effective and less physically taxing, potentially improving overall marksmanship and confidence in high-stress situations.

2. Operational Effectiveness

- **Magazine Capacity:** Glock 45 MOS 9mm handguns magazine capacity is 17 compared to the 15 round capacity of the Glock 22 .40 caliber we currently carry. This could be crucial during high-intensity encounters.
- **Ballistics:** Modern 9mm ammunition has improved significantly in terms of stopping power, matching or even surpassing the .40 caliber in certain defensive scenarios according to the FBI. Advances in ammunition technology ensure that the 9mm remains effective in both penetration and expansion. (Annex B)

3. Cost Considerations

- **Ammunition Costs:** 9mm ammunition is typically less expensive than .40 caliber, leading to significant cost savings in training and operational use.



New Ammo Purchase (See Annex C)

Ammunition Type 9mm	Price Per Box	Quantity	Total Rounds	Total
Duty Ammo (Hornady 135gr Critical Duty Flexlock +P)	\$ 28.18	80	4,000	\$ 2,254.40
Range Ammo (Fiocchi 124gr FMJ)	\$ 13.40	200	10,000	\$ 2,680.00
9mm Total Purchase Price				\$ 4,934.40

Ammunition Type .40	Price Per Box	Quantity	Total Rounds	Total
Duty Ammo (Hornady 175gr Critical Duty Flexlock +P)	\$ 29.70	80	4,000	\$ 2,376.00
Range Ammo (Fiocchi 180gr FMJ)	\$ 20.18	200	10,000	\$ 4,036.00
.40 Caliber Total Purchase Price				\$ 6,412.00

Ammo Cost Savings (Cumulative)	Year 1	Year 2	Year 3	Year 4	Year 5
	\$1477.60	\$2955.20	\$4432.80	\$7388.00	\$8865.60

- **Maintenance and Parts:** The 9mm handguns often have lower maintenance costs and greater availability of parts and accessories, which can enhance overall reliability and reduce downtime.

4. Industry Trends and Feedback

- **Law Enforcement Adoption:** Many law enforcement agencies across the country including the FBI have successfully transitioned to 9mm handguns. Their feedback and positive results support the decision to adopt 9mm as the standard issue. (See attached PDF “FBI 9mm Justification)
- **Expert Recommendations:** Numerous firearm experts and industry studies endorse the 9mm for its balance of

performance and manageability, reinforcing the practicality of this transition. Additionally, the use of red dot optics enables an officer to better be able to detect any change in the threats actions or inactions that may be missed with traditional iron sight use. (See attached PDF “Miniaturized Red Dot Systems for Duty Handgun Use”)

Implementation Plan

1. **Training:** We have developed a comprehensive training program to ensure a smooth transition for all officers, including familiarization with the new weapon systems and updated ammunition types.
2. **Phased Transition:** Implement the changeover in phases to minimize operational disruptions. Prioritize issuing new handguns to frontline officers and provide ample time for all personnel to transition.

Conclusion

Transitioning to the Glock 45 MOS 9mm handguns represents a strategic enhancement of our department's firearm capabilities, improving performance, operational effectiveness, and cost efficiency. I recommend approving this transition to align with modern standards ensuring our officers are equipped with the best tools for their critical duties.

Please feel free to reach out with any questions or to discuss this recommendation further.

Respectfully Submitted:



Deputy Chief Jason Opiola



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ANNEX LIST

Annex A – Photos of Glock 45 MOS 9mm and Holosun 508T

Annex B – FBI Ammunition Test Summary

Annex C – Ammo Cost Savings Graphs

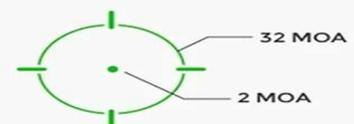
ANNEX A



G45_{MOS}
Compact | 9x19mm

HE508T-GR X2 Reflex Sight

The HS507K is an open reflex optical sight designed for concealed carry pistol applications. Features include Holosun's Super LED with up to 50k hours battery life, Multi-Reticle System, Shake Awake, and Lock Mode.



Reticle Color

RED

In the Box

- CR1632 Battery
- User Manual
- Lens Cloth
- T10 L Key

HOLOSUN

Annex B

FBI Ammunition Test Summary
**9mm - 147 grain - Winchester -
Bonded JHP**



**Defensive Systems
Unit**

Performance by individual test

Measurements for Avg. Penetration and Avg. Expansion are in inches, Avg. Weight is in grains. Unless noted, gelatin tests conducted at 10'.

<u>Test Description</u>	<u>Avg. Pen</u>	<u>Avg. Expan</u>	<u>Avg. Weight</u>
Bare Gelatine	15.10	0.57	147.6
Standard Deviation	0.38	0.002	0.22
Heavy Clothing	15.85	0.56	147.3
Standard Deviation	0.45	0.007	0.24
Steel	18.90	0.42	146.6
Standard Deviation	0.58	0.002	0.38
Wallboard	16.45	0.53	147.4
Standard Deviation	0.99	0.015	0.20
Plywood	17.60	0.44	147.5
Standard Deviation	2.28	0.089	0.47
Auto Glass	13.15	0.55	133.3
Standard Deviation	0.68	0.031	2.83
Heavy Clothing at 20 yards	16.15	0.55	147.4
Standard Deviation	0.45	0.004	0.27
Auto Glass at 20 yards	12.75	0.56	129.5
Standard Deviation	0.68	0.067	4.73

Ballistic Research Facility
FBI Academy
Quantico, VA 22135
703-632-1752 Voice
703-632-1785 Fax

Date Tested: 9/17/2007
Bullet Diameter (inches): 0.355
Bullet Type: Bonded JHP
Bullet Weight (grains): 147
Lot #: WCC07-01, 02 & 03
Product Order Number: Q4364
Weapon Type: SAAMI Test Barrel
Barrel Length (inches): 4.25
Cartridge ID: 263
Notes: FBI Service Ammo contract awarded 01/2008. Accuracy comprised of 6 groups of 10 for test barrel, 3 for Glock. Avg. Glock accuracy if first shot of each group was omitted is 1.94"

Penetration Performance

Range of penetration (inches): 12 - 20.75
Shots less than 12":
(*0" if no value shown)

<u>40 round Averages</u>	<u>Penetration (inches)</u>	<u>Expansion (inches)</u>	<u>Retained Weight . . . As %</u>
	15.74	0.52	143.3
Std. Deviation:	2.17	0.066	7.26
			97.5
			4.94

Success rate and above averages are calculated over the entire 40-round test series and include all shots fired.

Average Group Size @ 25 yards

Glock 17 5.14 Inches
SAAMI Test Barrel 1.09 Inches

Average Velocity

Glock 17 1,005 fps
SAAMI Test Barrel 1,007 fps

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Annex B (pp2)



Annex C

