Facial Recognition & License Plate Readers

Presented to the Detroit Board of Police Commissioners, April 24th, 2025



DETROIT POLICE DEPARTMENT Chief Todd A. Bettison



Facial Recognition Technology

- Biometric Software
- Deep learning algorithms (AI) compare an input "probe" image to a database of photos
- Compares geometry of the face
 - Distance between the eyes
 - Thickness of the lips
 - O Distance between the chin and forehead
 - And other measurements

Morphological Comparisons

- Human Centric Process
- Comparing the shapes and arrangements of facial features
 - Proportions
 - Angles
 - Characteristics
- Examiners receive training from the FBI



Facial Recognition Policy (307.5)

- DPD worked with the ACLU to develop the current version of the Facial Recognition Policy.
- The policy is considered the strongest in the country for preserving civil liberties.
- DPD continues to implement processes to ensure policy compliance

- Facial Recognition shall only be used when there is reasonable suspicion that such use will provide information relevant to an active or ongoing investigation of a Part 1 Violent Crime or 1st Degree Home Invasion.
- Members shall not use facial recognition to surveil the public through any camera or video device.
- Members shall not use facial recognition on live stream or on recorded videos.
- Members shall not use facial recognition for predictive analysis.
- Members shall not use facial recognition to violate First, Fourth or Fourteenth amendments.
- The result of a facial recognition search is provided by the Detroit Police Department as an investigative lead and **IS NOT TO BE CONSIDERED A POSITIVE IDENTIFICATION OF A SUBJECT.**



Measuring the Usage of Facial Recognition in Detroit

Facial Recognition Metrics	2024	2023
Total searches	27	102
Possible matches	15	40

Probe Photo Demographics	2024		2023	
	Female	Male	Female	Male
Black	0	25	5	92
Other	0	0	0	4
White	1	1	1	0





What is a License Plate Reader?

A License Plate Reader (LPR) combines camera hardware with specialized software to identify and capture images of license plates. This information can be matched against Law Enforcement databases for realtime alerts or made available for investigative follow-up.



The Two Uses of License Plate Reader Technology

Real-Time Alerts for Wanted Vehicles

- Captured plates are compared to NCIC/LEIN
- When plates match, jurisdiction is notified
- Member researches hit to confirm information before notifying nearby units

Investigative Follow-Up

- LPR data can be searched by plate, vehicle information, or location and time
- Can be used to determine a variety of information
 - Identify a vehicle based on a general description, location, and time
 - Determine the movements of a vehicle before and after an incident has occurred
 - Determine if other vehicles are convoying with a wanted vehicle



License Plate Reader Policy

- Data Sharing, Retention and Dissemination (101.12-8)
- Record Retention Schedule (101.11)
- Real Time Crime Center (203.14)
- Use of Traffic Light-Mounted Cameras (307.6)

- LPR information may be used for purposes such as crime analysis, to alert law enforcement about the location of a wanted vehicle, and to identify the movements of a vehicle connected to a criminal investigation
- Members are required to confirm information derived from LPR systems prior to engaging with the suspected vehicle:
 - Ensure the plate was read properly
 - Confirm the vehicle status in LEIN
- Members may not create watchlists to receive ongoing notifications for cars that are not in NCIC/LEIN.



Current License Plate Reader Deployments

Types of LPRs	Genetec	Motorola	Flock	TOTAL
City Street Intersections (Devices)	82	219	27	328
Freeway Camera Project (Devices)	-	-	235	235
Portable Trailers (Devices)	3	-	-	3
TOTAL (Devices)	85	219	262	566
Mobile (Vehicles)	55	-	-	55



Questions?



DETROIT POLICE DEPARTMENT

Chief Todd A. Bettison

