

Pilot
PROGRAM

AUTOMATED LICENSE PLATE READERS

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Metropolitan Nashville Police Department
Deputy Chief Greg Blair



PROGRAM GOALS

- 1** Does the technology work?
- 2** Does the ordinance meet community needs?
- 3** Does the MNPD policy provide effective controls?
- 4** What is the best way to deploy ALPRs?
- 5** How can the MNPD adequately manage the program?
- 6** Which vendor(s) should be used?

VICTIM IMPACT

A 16-year-old alleged car thief was arrested as the result of a lead generated by an ALPR remains under investigation for other criminal activity after numerous keys and key fobs and identity documents/credit cards for at least six different people were found in his bedroom.



VICTIM IMPACT

Three men were arrested and a stolen SUV, two guns (one stolen), and additional vehicle keys were recovered as the result of a lead generated by an ALPR. The hit was detected and with the assistance of a MNPD helicopter crew, detectives took the suspects into custody.



VICTIM IMPACT

- Coordinated effort by Special Victims detectives, Entertainment District Unit officers and automated license plate reader technology led to the arrest of a Chattanooga man following the May 4 aggravated rape of an 18-year-old college student.
- A vehicle was taken during a domestic related robbery/kidnapping in October of 2022 and warrants were obtained on the suspect at that time. Multiple ALPR hit notifications across the county were received. Officers located the vehicle in an apartment in Madison and the suspect was arrested without incident.
- Information from an ALPR at 1st Avenue South and Korean Veterans Boulevard led to the recovery of a Hyundai Tucson SUV reported stolen from Clearwater, Florida, and the arrest of the Nashville man driving it.

PRECISION POLICING

During the ALPR Pilot Program, approximately **71 million** license plates were read which resulted in **112 arrests**.

Out of the **112** individuals arrested, **103** were linked to a *local* criminal history.

These **103** individuals share a total of **829 arrests** on **1,593 charges** with the following characteristics:

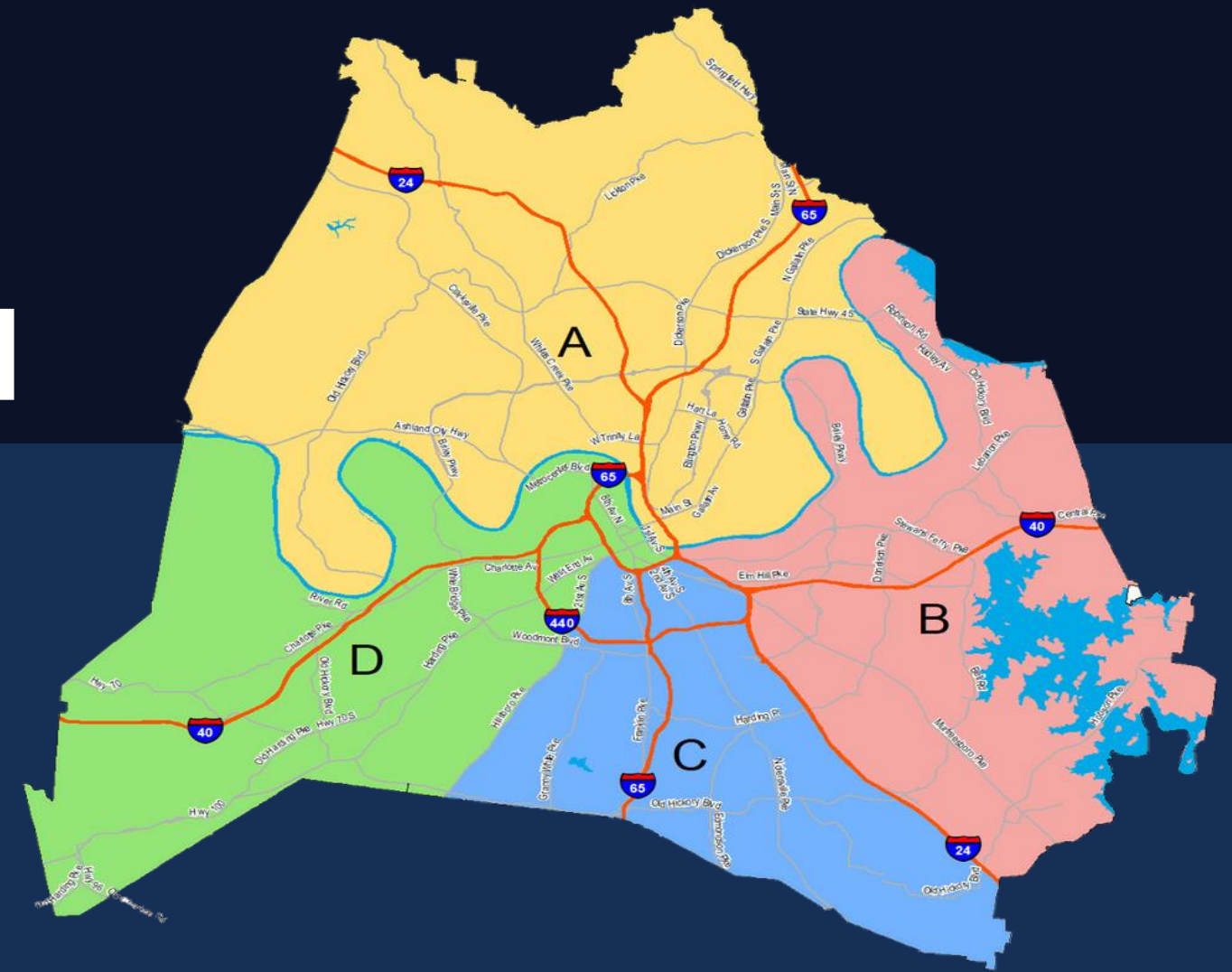
- 87 **violent felony charges**
- 30 **robbery charges**
- 128 **auto theft charges**
- 50 **burglary charges**
- 87 **misdemeanor assault charges**
- 371 **drug charges**
- 47 **gun charges**

AUTHORIZED USE

The authorized use of ALPR technology is limited by Metro Code 13.08.080 to "investigating and prosecuting felony offenses associated with violent crime including gun violence, homicide, and assault."

QUADRANTS:

DETERMINED BY POPULATION



Quadrant	Population	% of total population	Area in Square feet	% of total area	Crash reports	% of total crash reports	Dispatched CFS	% of total dispatched CFS
					2017-2021	2017-2021	2017-2021	2017-2021
A	164,999	23.10%	5,599,081,377	38.20%	42,287	25.30%	389,012	26.90%
B	188,981	26.40%	3,529,978,319	24.10%	43,628	26.10%	342,821	23.70%
C	194,710	27.20%	2,147,526,285	14.70%	41,355	24.80%	315,656	21.80%
D	167,019	23.30%	3,372,797,511	23.00%	39,657	23.80%	399,698	27.60%

FIXED CAMERA LOCATIONS

Analysts from our Strategic Development Division created a crime density layer map of 2021-2022 Part I Violent Crime Incidents, which include **homicide, rape, robbery, and aggravated assault.**

Analysts then obtained geographical information system (GIS) layer map for Nashville's Major and Collector Street Plan.



FIXED CAMERA LOCATIONS

Analysts then identified violent crime hotspots which intersected with a major or collector street. [From this:](#)

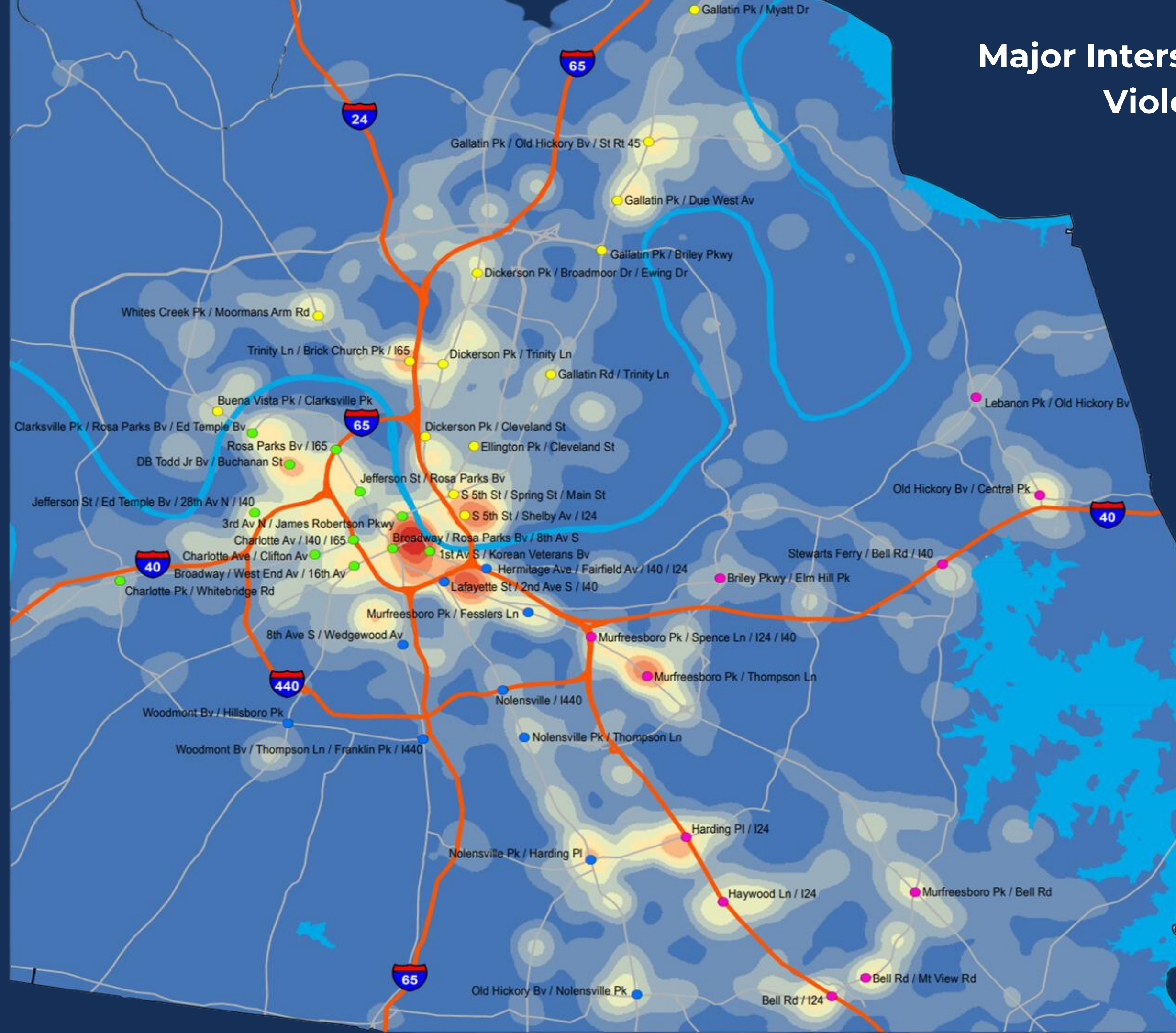
47 potential sites identified:

- A - 14
- B - 11
- C - 10
- D - 11

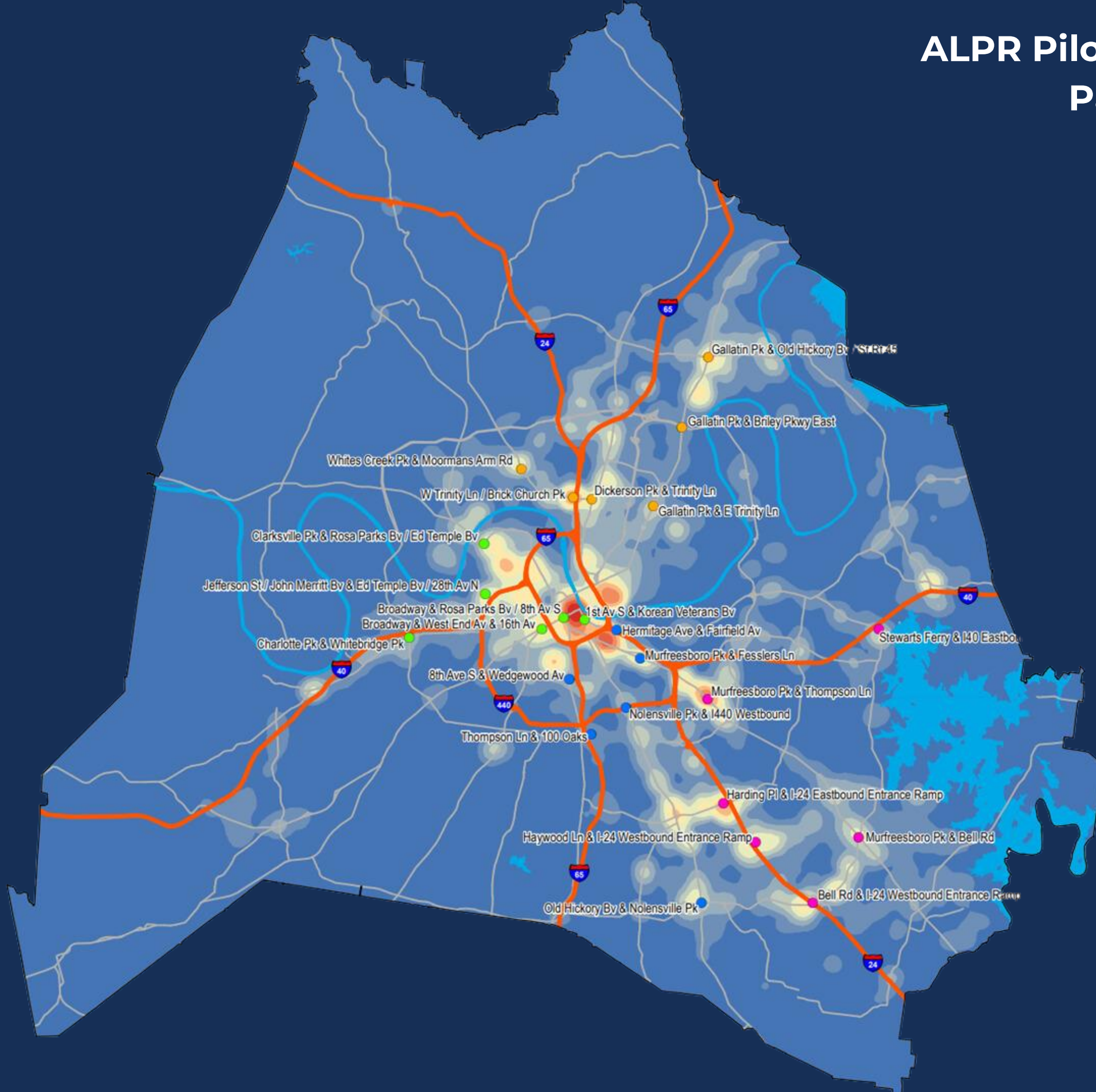
24 sites were selected after utility poles were found suitable based on additional structural testing.



Major Intersections Near Part I Violent Crime Hotspots 2021-2022



ALPR Pilot Site and Violent UCR Part 1 Incident Hotspots 2021-2022



**Violent UCR Part I
Incident Density**

	Lower Density
	Higher Density

License Plate Reader Site

	A
	B
	C
	D

EQUIPMENT

1 Fixed LPR Cameras:

- 24 locations
- Solar Powered
- Data moved by cellular
- Placed in intersection covering all lanes of travel with required signage

2 Mobile LPR Cameras:

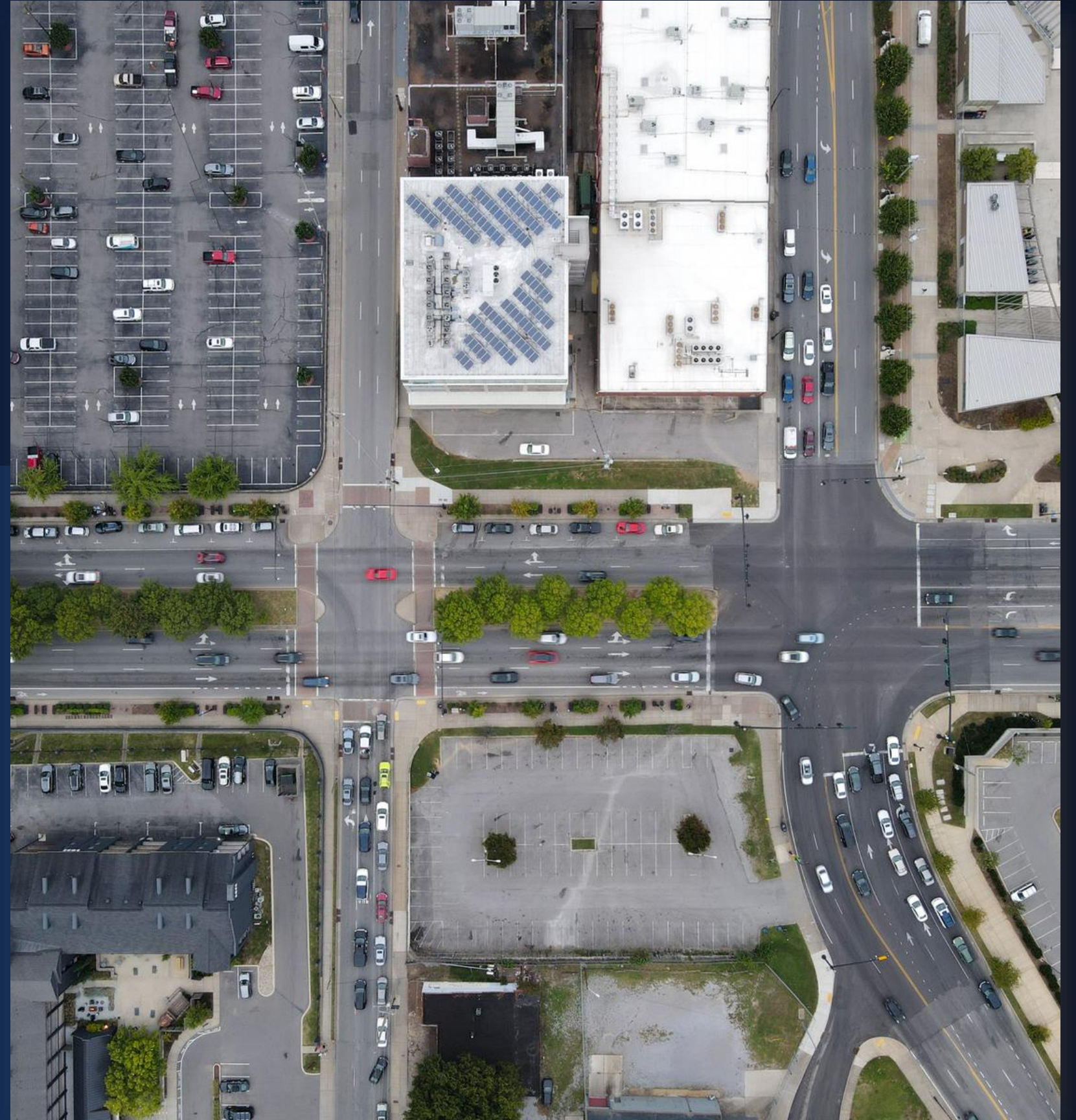
- 10 units
- Assigned to personnel working with the Community Field Intelligence Teams, Traffic Division, and Violent Crimes Division.

3 Portable LPR Cameras:

- 7 portable trailers
- Solar Powered
- Data moved by cellular

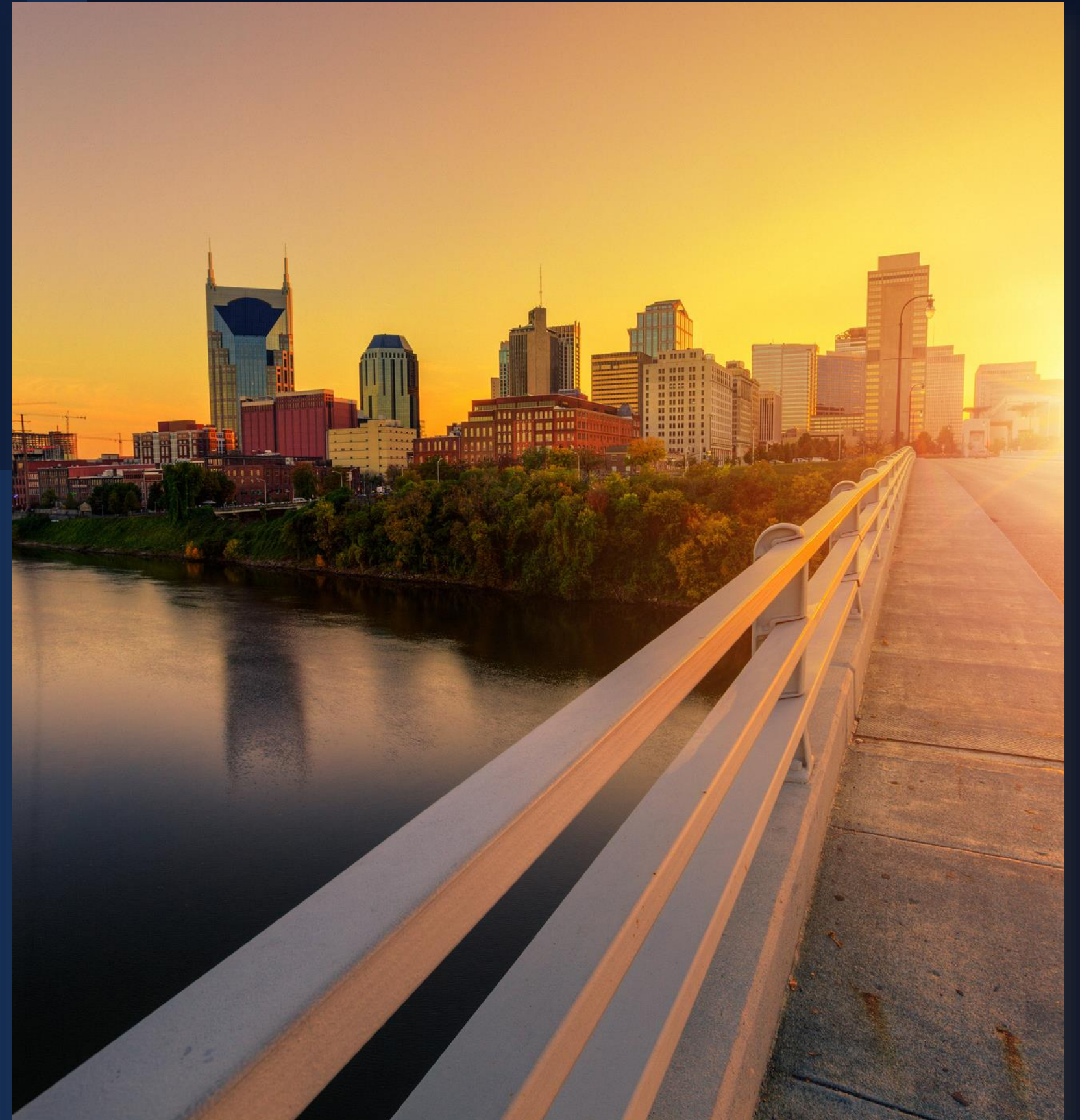
ALPR: HOW THEY WORK

- ALPR reads license plate letters and numbers.
- ALPR reads are run against information in the NCIC.
- MNPD use a dual verification process and runs the plate in NCIC before officers are notified.
- NCIC is governed and managed by the FBI and TBI.
- MNPD is audited by FBI and TBI.
- MNPD has an employee, a Terminal Agency Coordinator (TAC), who is responsible for ensuring MNPD remains in compliance with FBI and TBI standards.



ALPR: HIT DEFINITIONS

- **Total ALPR Camera Reads** is the number of times the camera reads a license plate.
- **Total Hit Notifications** are the combined totals from all the vendors participating in the LPR pilot program.
- A **Hit Notification** is any alert from the vendor notifying the operators the numbers and letters scanned by their ALPR camera matched a partial or entire NCIC entry and requires a human verification.
- A **Verified Hit** is a hit notification that an MNPD employee has visually inspected and verified as a match. All the numbers, letters, and state are identical to the corresponding NCIC Entry for a qualifying category NCIC Entry.
- These hit notifications can consist of multiple alerts on the same vehicle or may be of a category that does not require a police action.



RESULTS

Recovered Vehicles Value Total:	\$1,044,100
Number of Recovered Guns:	14
Number of Recovered Vehicles:	87
Number of Recovered Plates:	14
Number of Adult Arrests:	81
Number of Juvenile Arrests:	31
Total Arrests:	112
Total Number of Felony Charges:	130

FUTURE DEPLOYMENT



GOAL

Install ALPR Fixed Cameras on Major Roadways (evenly) in all 4 Quadrants


LOCATIONS

- Briley Parkway
- Thompson Lane
- Woodmont Boulevard
- White Bridge Pike
- Old Hickory Boulevard
- Ellington Parkway
- Bell Road
- Trinity Lane
- Lebanon Pike
- Elm Hill Pike
- Donelson Pike
- Murfreesboro Pike
- Nolensville Pike
- Franklin Pike
- Hillsboro Pike
- West End Avenue
- Highway 100
- Harding Pike
- Clarksville Pike
- Whites Creek Pike
- Brick Church Pike
- Dickerson Pike
- Gallatin Pike

THANK YOU



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