

# An Analysis of Automated License Plate Reader Legislation

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# Outline

- ALPR overview
- Privacy and Fourth Amendment concerns
- Evaluation framework and criteria
- Analysis
- Conclusion

# ALPR overview

- Devices that capture computer readable images of license plates (Greenberg, 2015)
- Can be mounted in stationary or mobile situations (Electronic Frontier Foundation, n.d.)
- Capable of capturing 1,800 plates per minute at speeds up to 160mph (Roberts and Casanova, 2012)
- More than 2.5 BILLION plates were scanned by 200 LEA in 2016-17 (Maass and Lipton, n.d.)

# ALPR overview

- Devices run by private and public entities
  - Law enforcement (local, county, state, tribal)
  - Federal agencies (ICE)
  - Shopping centers
  - Housing subdivisions
  - Tow truck companies
  - Private individuals

(Aegerter, 2013; Capelouto, 2018; Schmelzer, 2019; Thompson, 2018)

# ALPR overview

- Data collected can include:
  - Plate #
  - GPS and date/time stamp
  - Bumper sticker details
  - Driver images
- 99.5% of scanned plates were not under suspicion at time of scan (Maass and Lipton, n.d.)
- American Civil Liberties Union estimates less than 0.2% of scans are related to criminal activity or registration issues (Electronic Frontier Foundation, n.d.)

# ALPR overview

- 2012 Police Executive Research Forum survey results
  - 71% of respondents used ALPR
  - 85% of respondents planned to either start using or expand current usage
- LEA can share ALPR data via “hot list” and can purchase private database access (Dyer and Stroud, 2015)
- LEA ALPR data retention varies widely – from one month or less, to indefinitely (Lum et al., 2018)

# Privacy and Fourth Amendment concerns

“As I look ahead over the next 10 to 20 years, that balance of Fourth Amendment liberty and privacy versus security and law enforcement is an enormous issue”

Supreme Court Justice Brett Kavanaugh (Bravin, 2019)

# Privacy and Fourth Amendment concerns

- NYPD targeted mosques using ALPR (Goldman and Apuzzo, 2012)
- ICE contracted with ALPR vendor to access its nationwide ALPR database (Brandom, 2018)
- Va. judge found LEA ALPR data collection violated state privacy law, ordered it stopped (Jackman, 2019)
- Va Supreme Court upheld lower court ruling (Stanley 2019)

# Privacy and Fourth Amendment concerns

- Richmond, CA city council voted to discontinue ALPR usage over data sharing concerns (Ruggiero, 2019)
- Federal “Fusion” Center improperly shared ALPR data in violation of CA state law (Maass, 2019)
- Police departments encourage public to register private ALPR devices (Lane, 2019; City of Marietta, 2019)
- ALPR vendor ALPR database compromised (Claburn, 2019)

# Privacy and Fourth Amendment concerns

- Multiple police departments encourage officers to “grid” patrol to mass collect ALPR data (Grauer, 2019)
- ALPR vendor offering free access to ALPR data for its customers (Rekor Systems, 2019)

# Evaluation framework and criteria

- Existing laws for all 50 U.S. states were searched for laws regarding ALPRs
- Bills not yet signed into law were excluded
- Laws were examined for
  - Restrictions on government use
  - Restrictions on private or individual use
  - Required training for government use
  - Data retention
  - Data exemption from open records laws



# Analysis

- 16 states have some type of law regarding some aspect of ALPR
  - 2007 - 1 (NH)
  - 2009 – 1 (MA)
  - 2011 – 1 (CA)
  - 2013 – 2 (AR, UT)
  - 2014 – 3 (FL, MD, TN)
  - 2015 – 2 (MN, NC)
  - 2016 – 1 (OK)
  - 2017 – 1 (MT)
  - 2018 – 3 (GA, NE, VT)
  - 2019 – 1 (MS)

# Analysis

- 10 states have law that restricts either government or private use of ALPR devices
  - 6 states regulate government use only (CA, MN, MT, NE, NH, UT)
  - 2 states regulate private use only (ME, VT)
  - 2 states regulate both government and private use (AR, OK)
- 5 states require training before government employee can use ALPR or access data (MN, MT, NH, NC, VT)

# Analysis

- 12 states regulate data retention (AR, CA, GA, ME, MN, MT, NE, NH, NC, TN, UT, VT)
  - Each state carves out exception for active law enforcement investigation or intelligence operation
  - Smallest is New Hampshire at 3 minutes
  - Largest is Georgia at 30 months
  - Average length of data retention is 206 days
  - Oklahoma doesn't specify retention period, but does require deletion after use is completed

# Analysis

- 12 states exempt ALPR data from open records request (CA, FL, GA, ME, MD, MN, MT, NE, NC, TN, UT, VT)
- Random: OK only allows ALPR usage for automobile insurance verification

# Conclusion

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# References

- Aegerter, G. (2013, July 9). License plate data not just for cops: Private companies are tracking your car. Retrieved March 18, 2019, from NBC News website: <http://www.nbcnews.com/news/world/license-plate-data-not-just-cops-private-companies-are-tracking-flna6C10684677>
- Brandom, R. (2018, January 26). ICE has struck a deal to track license plates across the US. Retrieved March 19, 2019, from <https://www.theverge.com/2018/1/26/16932350/ice-immigration-customs-license-plate-recognition-contract-vigilant-solutions>
- Bravin, J. (2019, May 7). Kavanaugh Warns Technology Will Force Re-Examination of Rights, War Powers. *Wall Street Journal*.
- Capelouto, J. D. (2018, December 6). Fixed license plate reader in Marietta leads to first arrest. Retrieved March 19, 2019, from Ajc website: <https://www.ajc.com/news/licence-plate-reader-marietta-leads-first-arrest/19NxjhRRoJAkAvMiZVpRkJ/>
- City of Marietta. (2019, January 7). MPD Announces New SMILE Program. Retrieved March 18, 2019, from Marietta, GA website: <https://www.mariettaga.gov/CivicAlerts.aspx?AID=2074>



# References

- Dryer, R. L., & Stroud, S. S. (2015). Automatic License Plate Readers: An Effective Law Enforcement Tool or Big Brother's Latest Instrument of Mass Surveillance? Some Suggestions for Legislative Action. *Jurimetrics*, 55(2), 225–274.
- Electronic Frontier Foundation. (n.d.). Automated License Plate Readers (ALPRs). Retrieved from <https://www.eff.org/pages/automated-license-plate-readers-alpr>
- Goldman, A., & Apuzzo, M. (2012, February 23). With cameras, informants, NYPD eyed mosques. Retrieved from <https://www.ap.org/ap-in-the-news/2012/with-cameras-informants-nypd-eyed-mosques>
- Grauer, Y. (2019, July 8). Arizona police agencies gather & share license plate data, but few ensure rules are being followed. Retrieved September 12, 2019, from Arizona Mirror website: <https://www.azmirror.com/2019/07/08/arizona-police-agencies-gather-share-license-plate-data-but-few-ensure-rules-are-being-followed/>
- Greenberg, P. (2015). Automated License Plate Readers. Retrieved from <http://www.ncsl.org/research/telecommunications-and-information-technology/automated-license-plate-readers.aspx>



# References

- Jackman, T. (2019, April 2). Judge orders Fairfax police to stop collecting data from license plate readers. Retrieved April 2, 2019, from [https://www.washingtonpost.com/crime-law/2019/04/02/judge-orders-fairfax-police-stop-collecting-data-license-plate-readers/?utm\\_term=.c624b64cc31b](https://www.washingtonpost.com/crime-law/2019/04/02/judge-orders-fairfax-police-stop-collecting-data-license-plate-readers/?utm_term=.c624b64cc31b)
- Lane, K. (2019, June 27). Mobile Police urge residents to join surveillance network to help catch criminals. Retrieved July 1, 2019, from <https://mynbc15.com/news/local/mobile-police-urge-residents-to-join-surveillance-network-to-help-catch-criminals>
- Lum, C., Koper, C. S., Willis, J., Happeny, S., Vovak, H., & Nichols, J. (2018). The rapid diffusion of license plate readers in US law enforcement agencies. *Policing: An International Journal*, 1–46. <https://doi.org/10.1108/PIJPSM-04-2018-0054>
- Maass, D. (2019). Here's Why You Can't Trust What Cops and Companies Claim About Automated License Plate Readers. Retrieved March 19, 2019, from <https://www.eff.org/deeplinks/2019/03/heres-why-you-cant-trust-what-cops-and-companies-claim-about-automated-license>
- Maass, D., & Lipton, B. (n.d.). Data Driven: Explore How Cops Are Collecting and Sharing Our Travel Patterns Using Automated License Plate Readers. Retrieved from <https://www.eff.org/pages/automated-license-plate-reader-dataset>

# References

- Police Executive Research Forum. (2012). *How are innovations in technology transforming policing?* Retrieved from [http://www.policeforum.org/assets/docs/Critical\\_Issues\\_Series/how%20are%20innovations%20in%20technology%20transforming%20policing%202012.pdf](http://www.policeforum.org/assets/docs/Critical_Issues_Series/how%20are%20innovations%20in%20technology%20transforming%20policing%202012.pdf)
- Rekor Systems. (2019, August 21). Rekor Systems Launches Public Safety Network. Retrieved September 12, 2019, from Rekor Recognition Systems website: <https://rekorsystems.com/news/rekor-systems-launches-public-safety-network/>
- Roberts, D. J., & Casanova, M. (2012). *Automated License Plate Recognition (ALPR) Systems: Policy and Operational Guidance for Law Enforcement*. Retrieved from International Association of Chiefs of Police website: [https://www.theiacp.org/sites/default/files/all/i-j/IACP\\_ALPR\\_Policy\\_Operational\\_Guidance.pdf](https://www.theiacp.org/sites/default/files/all/i-j/IACP_ALPR_Policy_Operational_Guidance.pdf)
- Ruggiero, A. (2019, June 29). East Bay city ends contract with license readers over fear of ICE use. Retrieved June 30, 2019, from <https://www.eastbaytimes.com/2019/06/28/east-bay-city-ends-contract-with-license-readers-over-fear-of-ice-use/>
- Schmelzer, E. (2019, July 15). Denver-area neighborhoods are installing license plate readers to record every vehicle that passes by. Retrieved July 22, 2019, from <https://www.denverpost.com/2019/07/09/license-plate-reader-hoa-colorado-flock-safety/>



# References

- Thompson, A. (2018, September 19). In-Town Suites installs tag readers to combat crime. Retrieved March 19, 2019, from CBS46 News Atlanta website: [https://www.cbs46.com/in-town-suites-installs-tag-readers-to-combat-crime/video\\_b48f0309-bc41-57bb-8b7b-c782790fd159.html](https://www.cbs46.com/in-town-suites-installs-tag-readers-to-combat-crime/video_b48f0309-bc41-57bb-8b7b-c782790fd159.html)