



American Association of
Motor Vehicle Administrators

Improving Automated License Plate Reader Effectiveness through Uniform License Plate Design & Manufacture

**AAMVA Annual International Conference
Charlotte, NC**

August 21, 2012

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The Guide contains the following Sections:

- Section 1: Problem Statement
- Section 2: License Plate History & Background
- Section 3: Fundamentals of ALPRs
- Section 4: Law Enforcement & Public Safety Benefits
- Section 5: Mobility & Revenue Loss
- Section 6: Best Practices for License Plate Design and
Manufacture

Appendices:

- A: ALPR Working Group Member List
- B: License Plate Design Booklet (current design
information compiled from survey of AAMVA
Jurisdictions)
- C: ALPR Case Law License Plate Recommendations
- D: Texas Traffic Institute Research Paper (2012)
- E: IACP Resolution (supporting front license plates and
the AAMVA Best Practice Guide)
- F: AAMVA Recommendations for Uniform License Plates



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Improving Automated License Plate Reader Effectiveness through Uniform License Plate Design & Manufacture 1.0 Problem Statement

Inconsistent business rules utilized by the entities who issue license plates result in “misreads”, diminishing law enforcement’s ability to identify and apprehend suspected criminals or terrorists, recover stolen vehicles, or assist people in need of assistance. In addition, these inconsistencies hamper Customs and Border Protection’s (CBP) ability to correctly identify vehicles crossing international borders using ALPR technology.

These inconsistencies include, but are not limited to:

- use of stacked characters and whether they are part of the official license plate number
- use of non-alpha/numeric characters
- license plate design and manufacture
- license plate covers, frames and lighting
- one vs. two plate requirements



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2.0 License Plate History & Background

Since their inception more than a century ago, the license plate has primarily been used to display information for fast and accurate identification of a motor vehicle and to demonstrate compliance with motor vehicle registration laws.

Specialty and vanity plates have since emerged and become a source of revenue for highway funding, toll authorities and sponsoring organizations. They also promote the issuing jurisdiction and many worthy causes.



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3.0 Fundamentals of ALPRs

This section provides an overview of automated license plate readers (ALPR), the license plate reading process, and key challenges in license plate reader systems as they relate to license plate design



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5.0 Mobility

This section discusses how Automated License Plate Reader (ALPR) systems benefit public mobility in ways that continue to expand as ALPR technology is deployed in support of wide-ranging public and private projects.

For example, ALPR systems benefit toll collection on roads and bridges, mitigate the impact toll collection has on transportation efficiency and the environment, and help provide revenue assurance for highway lane management, maintenance and improvement.



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6.0 Best Practices in License Plate Design and Manufacture

The purpose of this section is to identify best practices in license plate design, manufacture and issuance to aid jurisdictions in creating and issuing license plates best suited to vehicle identification. The lack of national standards regarding the design and manufacturing of license plates limits the effectiveness of ALPR technology meant to assist in improving highway and public safety.

License plates serve a common purpose across jurisdictions. They should also share common characteristics that allow readability, usability, and connections to vehicle registration records.



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7.0 Conclusion & Recommendation

The purpose of this section is to identify best practices in license plate design, manufacture and issuance to aid jurisdictions in creating and issuing license plates best suited to vehicle identification. The lack of national standards regarding the design and manufacturing of license plates limits the effectiveness of ALPR technology meant to assist in improving highway and public safety.

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