License PL8S Design Standards and Other Updated Vehicle Policies
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License PL8S Design Standards and Other Updated Vehicle Policies
License Plate Standards – Not just important to Law Enforcement

By Brian Ursino, AAMVA, Director of Law Enforcement

What we Have:
• Best Practice for Improving ALPR Effectiveness through Uniform License Plate Design & Manufacture;
• AAMVA License Plate Policy

What we Need:
• An AAMVA License Plate Standard (more info coming in this session)
License Plates Are Simple Safety and Law Enforcement Tools Used For:

- Vehicle identification
- Reflectivity at night
- Enforcing toll and parking fees
- Enforcing vehicle registration laws
- Stolen vehicle recovery
- Criminal apprehension
- Amber Alerts
- Police officer safety: identifying vehicles at safe distance
- National security
Two is better than One:
The National Picture Today
Examples of Costs of Removing the Front License Plate

- **$7.5 billion**
  - Annual monetary losses from motor vehicle thefts. A front plate significantly increases the chances of these vehicles being identified.

- **$23.1 million**
  - In 2012, Colorado reported that the E-470 corridor would have lost in toll collection without front license plates.

- **539,000**
  - Approximate number of toll violations that could not be tracked or their revenue recovered in Virginia in 2011—due to displaying rear plates only.

Keeping front license plates means more revenue per year.
Every day, Front License Plates Help Law Enforcement solve crimes

- Since 1998, the International Association of Police Chiefs (IACP) has sponsored Looking Beyond the License Plate, an annual award program
  - Law enforcement officers from across the country submit stories in which license plates were used to solve serious crimes.
  - To date, over two thousand of stories have been submitted.
  - Roughly 2 in 10 of these stories describe a crime solved because of the presence of a front license plate on a vehicle.
AIC 2014
Plate Design Best Practices

GR8-PL8S

Cathie Curtis, Director of Vehicle Programs
Guiding Principals

- By adopting the AAMVA best practices for plate design and manufacture, jurisdictions will improve accurate plate identification by the DMVs, Law Enforcement, tolling authorities, parking districts and other license plate end users.

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

- Jurisdictions should standardize their license plates (including specialty plates), e.g., placement of graphics, font and font size, alphanumerics, plate numbers, use of stacked characters, etc.

- Motor vehicle agencies should consult with jurisdictional law enforcement, and if applicable local law enforcement representatives, prior to adopting new license plate standards or designs. Other stakeholders should be consulted as appropriate.
Improving Automated License Plate Reader Effectiveness through Uniform License Plate Design & Manufacture

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: AAMVA Recommendations for Uniform License Plates
C: ALPR Case Law License Plate Recommendations
E: IACP Resolution (supporting front license plates and the AAMVA Best Practice Guide)
F: License Plate Design Booklet (current design information compiled from survey of AAMVA Jurisdictions)
AAMVA Recommendations for Plate Design and Manufacture

How do Maine’s plates compare to AAMVA’s best practices?
License Plate Display

• Two license plates should be issued for all passenger type vehicles and single unit trucks.

• One plate can be issued for tractors, motorcycles, and all types of trailers.

• Both front and rear license plates should be displayed in the location designated by the manufacturer.

• All license plates should be required to be displayed horizontally.

• License plate frames and covers should be prohibited.
License plates should be manufactured in two sizes, depending on their use. Passenger type vehicles, tractors, trucks, trailers, etc., should be issued standard 6" x 12" plates. Smaller plates measuring 4" x 7" may be used on motorcycles or other small vehicles.

- Fully retro-reflective license plates should be adopted and used.

- License plates must be readable in daylight and night using low beam headlights, under optimal conditions at a distance of no less than 75 feet.
Reissuance

- Plates should be reissued or replaced on a regular basis to ensure that they remain retro-reflective and the information they display remains legible.
Graphics on license plates should not distort or interfere with the readability of the alphanumeric characters or with any other identifying information on the plate by either human eye or machine readable technology such as Automated License Plate Readers (ALPR).
Graphics

• Examples of graphics that may interfere with the ability to identify the plate number.
Jurisdiction of Origin and Plate Number Placement

- The name of the issuing jurisdiction should be prominently displayed on the top center of the plate.

- Only the issuing jurisdiction’s name should appear on license plates. Designs and logos for out-of-jurisdiction universities or organizations should be minimized to avoid confusion.

- Alphanumeric characters commonly referred to as the registration number or plate number should be displayed in the center of the license plate.
Plate Numbers

- Non alphanumeric characters such as hearts, dashes, etc. should not be part of the license plate number, even when such characters are available on standard keyboards.

- Select ink pigments for alphanumeric characters that allow for high-contrast recognition for infrared and visible light illumination to the human eye.
Unique Plate Numbers

Unique plate numbers increase the accurate retrieval of vehicle registration information.

Each plate number combination in a jurisdiction should be unique, and not duplicated on different types of plates.
Unique Plate Numbers

- Standardized fonts and font sizes allows for better OCR accuracy and for readability by the human eye.

- Plate numbers that look-alike are discouraged.

ABC OOO vs. ABC 000
The font and spacing should present each alphanumeric as a distinct and identifiable character. Characters at least 2.5 inches in height and proportionally wide, spaced .25 inches apart.

Standardized fonts and font sizes that clearly distinguish alphas and numerics should be used. For example, similar characters like A and R, 8 and B, and 0 (zero), O and Q should be easily distinguishable from each other.

Example: AOOB plate RQQ8
Stacked Characters

Where stacked and half-height characters are used, it is recommended they be part of the official plate number.

Where one character appears above another, the top character should be entered first, immediately followed by the bottom character, in sequence, with the other characters on the plate.
Stacked Characters

The plate number would be PH2979

The plate number would be CRSAMP
Stacked Characters

- Stacked characters should be vertical – not staggered or slanted – and no less than half size of regular plate characters to ensure readability.

- No more than two (2) characters should be stacked
Plate Type Identifiers

- Plate type identifiers displayed on license plates should be standardized and placed in a uniform location on the license plate within a jurisdiction, e.g., commercial, dealer, etc.
“Specialty plate” means an official license plate issued for recognition or fund raising.

Placement and use of logos and graphics should be uniform to provide improved jurisdiction identification.
Decorative Plate

- “Decorative plate” means a license plate or other similar device that is not issued for registration purposes by a jurisdiction or agency responsible for the registration of the vehicle.

- The use of decorative plates that resemble official license plates issued by a jurisdiction should be prohibited.

- A decorative plate may contain alpha or numeric characters but the alpha or numeric characters are not recorded in the jurisdictional records and should not be in a format similar to an official plate.
Decals

- New validating stickers may be issued upon renewal of registration in lieu of issuing new plates for the vehicle.

- Secondary decals should be placed on the windshield for jurisdictions that have multiple uses for the stickers.

- Retro-reflective decals should be color-coded with durable printing.

- Motor vehicle agencies should consult with jurisdictional law enforcement, and if applicable local law enforcement representatives, prior to adopting new color schemes for registration stickers.
Security Features

• Security features make license plates difficult to counterfeit and should be employed.

• Be visible from a distance and not interfere with plate message legibility.

• Bar codes and embedded identifiers that are visible by infrared and/or visible light could assist in counterfeit detection.

• Holograms and ‘invisible’ images seen only through infrared light may be used by ALPRs in the future to assist in license plate recognition.
Summary

- The ultimate objective of issuing these guidelines is to recommend uniformity in the design and manufacture of license plates that better enables government officials and other entities with an operational need to read license plates.

- Jurisdictions should strive to meet these uniform standards as opportunities and funding become available.

- It is understood that some plate design changes require legislative authority while other design changes can be made administratively.
Next Steps

• Established a Plate Design Standards Working Group

• Members of the Vehicle and Law Enforcement Committees and AAMVA Staff Liaisons

• Currently working on a draft document

• Anticipate completion Summer 2015
Next Steps

• Best Practice - a method or technique that has consistently shown results superior to those achieved with other means.

• Standard - something considered by an authority or by general consent as a basis of comparison; an approved model.
Plate Design Standards Task Force

- It is the intent to develop standards that improve accurate plate identification both by humans and technology used by entities such as Toll Authorities (automated toll collection) and Law Enforcement.

- It is not the intent to develop standards that are so restrictive that they jeopardize a jurisdiction’s ability to market their state (promotion of tourism) recognize or honor certain groups or promote special interests and special interest groups, nor jeopardize revenue received from specialty and personalized license plates.

- To be published Spring/Summer 2015
Contact Information

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INSERT FERGUS PRESENTATION
• What Is A Policy?
  – A policy is a statement that defines the overall principles, goals and objectives of AAMVA.
  – Policy positions may reference recommendations made in standards or best practices by name, but should be limited to statements that clearly define the position of AAMVA with regards to a specific issue.
License Plate Standards and Vehicle Policy

• Over The Last Two Years, The Standing Committee Has Reviewed 60 Policies:
  – 12 remained as they were originally written
  – 44 were revised/updated, then approved by the Board of Directors and published.
  – 4 are still under review, should be completed by October 2014
License Plate Standards and Vehicle Policy

- The Process
  - AAMVA Member Proposal
    - Jurisdiction, Committee, Working Group, Associate
    - Standing Committee Review
    - Regional Review
      - May go back to Standing Committee
    - Board of Directors Review
    - Majority Vote at Annual Membership Meeting
License Plate Standards and Vehicle Policy

• How Can a Jurisdiction Use a Policy?
  – Comparing Departmental and Administrative Procedures
  – Program Planning
  – Making Determinations on AAMVA Consensus
  – These Policies Should Also Serve as the Official Positions of AAMVA
  – It Should Be Noted That While Not All Policies Are Supported By Every AAMVA Member
  – Can Help Jurisdictions With Proposed Legislation
License Plate Standards and Vehicle Policy

- www.aamva.org/AAMVA-Policy-Positions/

AAMVA Policy Positions

In accordance with the AAMVA strategic plan, the AAMVA membership is currently auditing all policies published by the association. As the review process is extensive and can be time consuming, AAMVA will continually provide updated versions of the policies as they are approved by the membership and AAMVA Board of Directors. For purposes of reference, the AAMVA Policy Positions should be considered a living document with policies that are likely either under review or being considered in a more contemporary environment. However, users should note that the version published on this site is the most current version available that has been authorized by both the AAMVA leadership and its membership.

If you have any questions about the status of a particular policy, please contact AAMVA’s Senior Manager of Government Affairs, Cian Cashin, at ccashin@aamva.org.

Download the AAMVA Policy Positions

Policy Submission Form
License Plate Standards and Vehicle Policy

Proposed Policy Submission Form

Name ________________________________

Agency ______________________________

Address ________________________________

City ___________________________ State ____________ Zip Code ____________

Telephone __________________________ Email Address __________________________

Proposed policy language:

______________________________________________________________________________

Does this proposed policy amend or change an existing policy? If so, which one?

______________________________________________________________________________

Does this proposed policy change have cross-jurisdictional impacts? If so, please explain.

______________________________________________________________________________

Policy Proposal Seconded by __________________________ Email of who Seconded __________________________

Submission date __________________________

SUBMIT FORM

(Click Submit Form to send completed form to ccchin@aamva.org)
Policy Positions of the American Association of Motor Vehicle Administrators
License Plate Standards and Vehicle Policy

Vehicle Policies
- General
- Certificate of Origin
- Commercial Vehicles Declared Gross Weight
- Commercial Vehicle Safety Alliance
- Federally Owned Vehicles
- Federally Owned Vehicles Certificate of Release
- Gray Market Vehicle Model Year Determination
- Inspection
- Leased Vehicles
- License Plates
- License Plate Covers/Frames
- Licensing of Businesses Engaged in Motor Vehicle-Related Activities
- Manufacturer's Statement of Origin (MSO)/Manufacturer's Certificate of Origin (MCO)
- Data in National Crime Information Center (NCIC) Format
- Model Year in Title/Registration Records for Passenger Cars, Trucks, Motorcycles and Trailers
- Motor Vehicle Agency Record Information Exchange
- Motor Homes and Multi-Stage Vehicles
- Non-Resident Vehicle Dealer License Compact
- Notary Requirements
- Offroad Vehicles
- Odometer Requirements
- Out-of-State Vehicle Registration
- Participation in the National Motor Vehicle Title Information System (NMVTIS)
- Raised Vehicles
- Recreational Park Trailer
- Resident – Definition
- Single Axis Tow Dolly
- Specially Designated Plates Should Not Be Issued to Rental Vehicles
- Temporary License Plates
- Tinted Glazing of Vehicle Windows
- Touting Canadian Vehicles Imported Into the United States
- Touting of Trailers
- Touting of Vehicles Being Transferred to Another Jurisdiction Without Proper Ownership Documents
- Touting of Vehicles Built in Multi-Stages
- VIN Inspection
- VIN Uniformity

Uniform Laws and Procedures
- Admissibility of Evidence of Non-Use of Safety Belt in Mitigation of Damages
- Cooperation with Legislators
- Cooperation with Other Agencies and Organizations
- Crash Prevention
- Federal Motor Carrier Safety Legislation
- Interdisciplinary Cooperation
- Research
- Statutes to Substitute Alcohol Concentration for Blood Alcohol Content
- Uniform Vehicle Code
License Plate Standards and Vehicle Policy

• License Plate History
  – Earliest possible references to vehicle registration and possibly license plates date back to ancient Rome at the time of Julius Caesar, 102 - 44 B.C. There are references to the licensing of chariots, but whether a number was marked on the chariot itself or onto an plate is not known.
License Plate Standards and Vehicle Policy

• License Plate History
  – New York became the first state to require vehicle registration as of April 25, 1901, and then California later that year.
  – The first New York issues were homemade plates, bearing the initials of the owner without any numbers.
  – Massachusetts was the first state to actually issue plates, beginning in 1903. By 1918, all 48 of the contiguous United States were issuing license plates.
License Plate Standards and Vehicle Policy

• License Plate History
  – Beginning in 1957, most types of North American plates have been a standard size, six by twelve inches.
  – Delaware porcelain license plates premiered in 1941, issued as matched pairs to new registrants. Soon afterward the wartime economy resulted in the state no longer issuing or requiring the display of plate "pairs".
License Plate Standards and Vehicle Policy

• License Plate History
  – In 1986, historic replicas became legal to display on vehicles.
  – There is only one company actively supplying the demand for these plates. Delaware is the only state that allows private manufacture of plates for legal registration purposes, and the only state to have retained the famed porcelain plates in the modern era.
License PL8S Design Standards and Other Updated Vehicle Policies
Up Next:
10:30 am – 10:45 am
Networking Break
Diamond Foyer

10:45 am – 12:00 pm
CONCURRENT SESSIONS
Licensing Undocumented Immigrants: DMV & Law Enforcement Implications
Diamond Room 1

Your Digital John Hancock: Updates from the e-Odometer Task Force and the Security of Electronic Signatures
Diamond Room 2