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Digital Signature Solutions, PKI & Security Consulting

SBA 8(a) Certified

FIPS-201 PIV Registration and the Smart Card
April 11, 2006

Infomosaic: Founded 2000

- Judith Spenser Talked About Two Projects Yesterday
  - NIH-Educause PKI Interoperability (Infomosaic's SecureXML and SecureSign products were used in this effort)
  - E-Auth SAML Assertion From PKI Credentials (The PKI to SAML Assertion Step Down Translator was developed by Infomosaic)

- US Army is using Infomosaic SecureXML Digital Signature Software in their Financial Disclosure Management Application.

- Maryland Department of Transportation has Successfully Issued More Than 200 PIV Cards to Their 1st Responders and Senior Officials Using Infomosaic SecurePIV Registration System

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My Contact Info

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PIV Lifecycle

- PIV Registration

- PIV Card Printing

- PIV Card Certificate Issuance

- PIV Card Usage

  – Logical Access

  – Physical Access

- PIV Card Renewal/Revocation

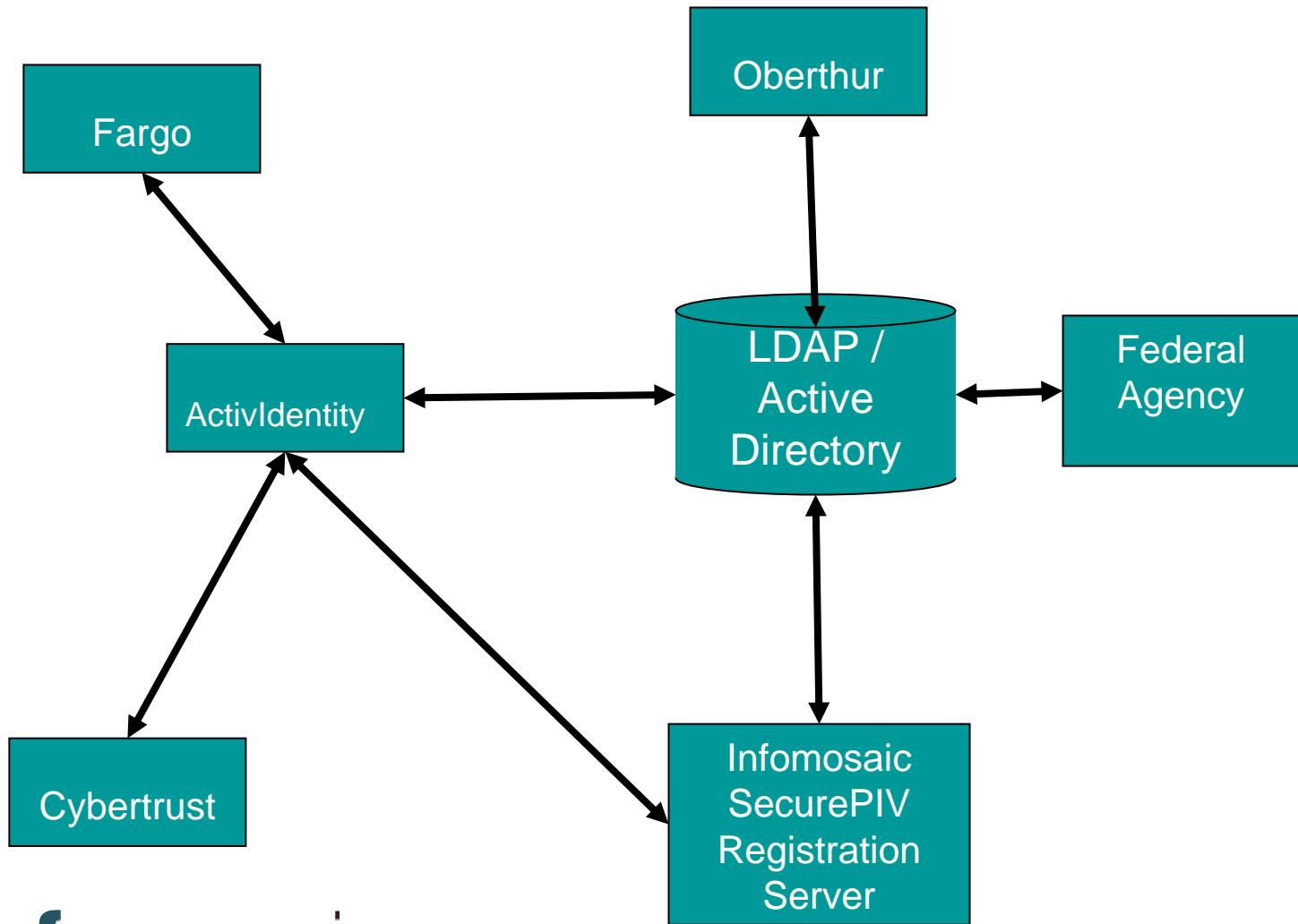Digital Signature Solutions, PKI & Security Consulting

SecurePIV High Level Features

- Can be configured to either utilize a mobile trailer for both registration and issuance of smart card for applicants or to use an offsite card printing and onsite certificate issuance.
- The process is a 2 Phase process
- Supports FIPS 201 roles (Sponsor, Applicant, Registrar, Issuer and & Signatory)
- Supports smart card profile of FIPS 201
- Supports commercial, state and local government PKI infrastructure designed to be interoperable with the Federal Governments FIPS 201 processes
- Emergency support function support provided to support hand held identification and verification during emergencies
- Allows for capture and inclusion of agency specific OIDs in the X509 certificate extentions.
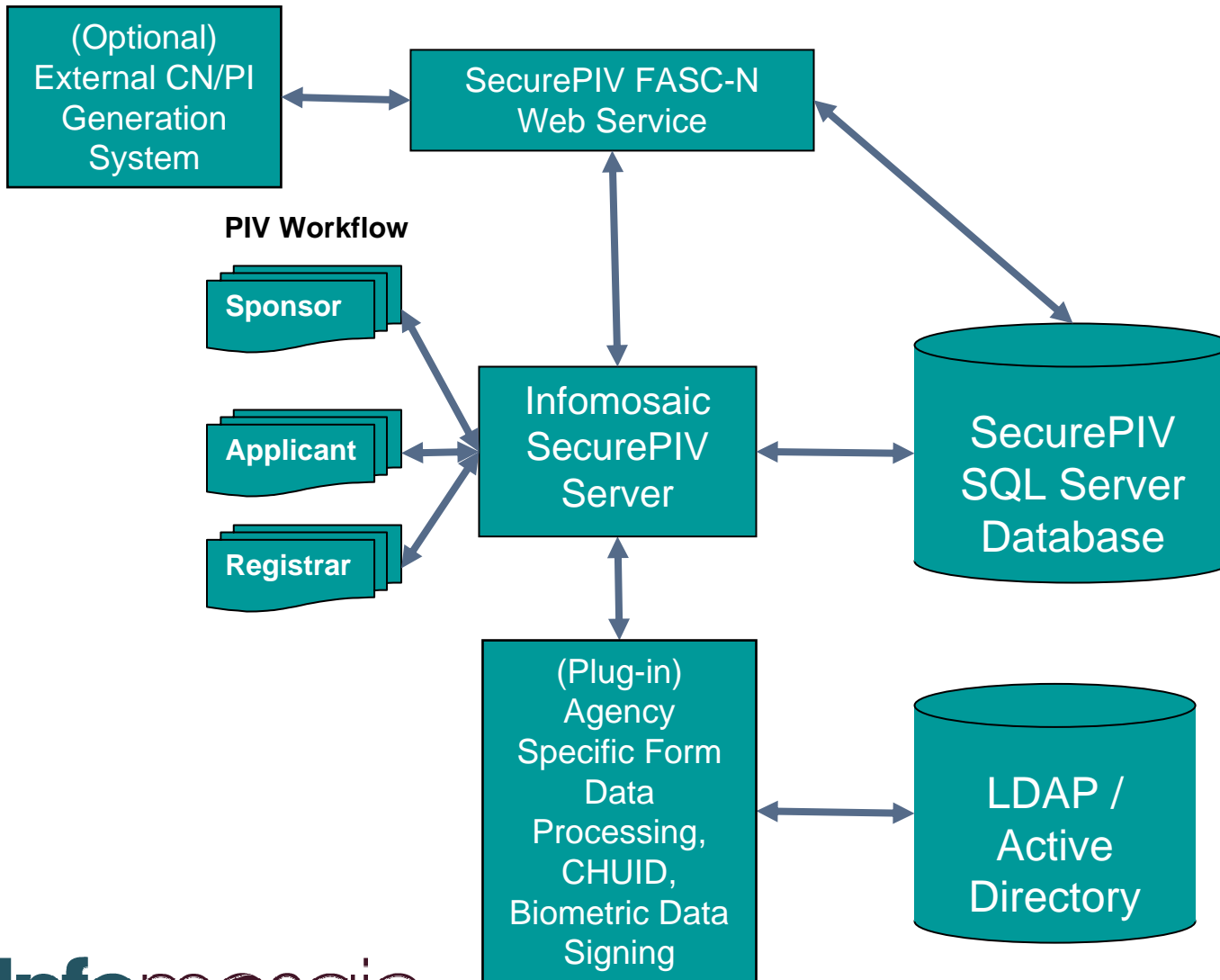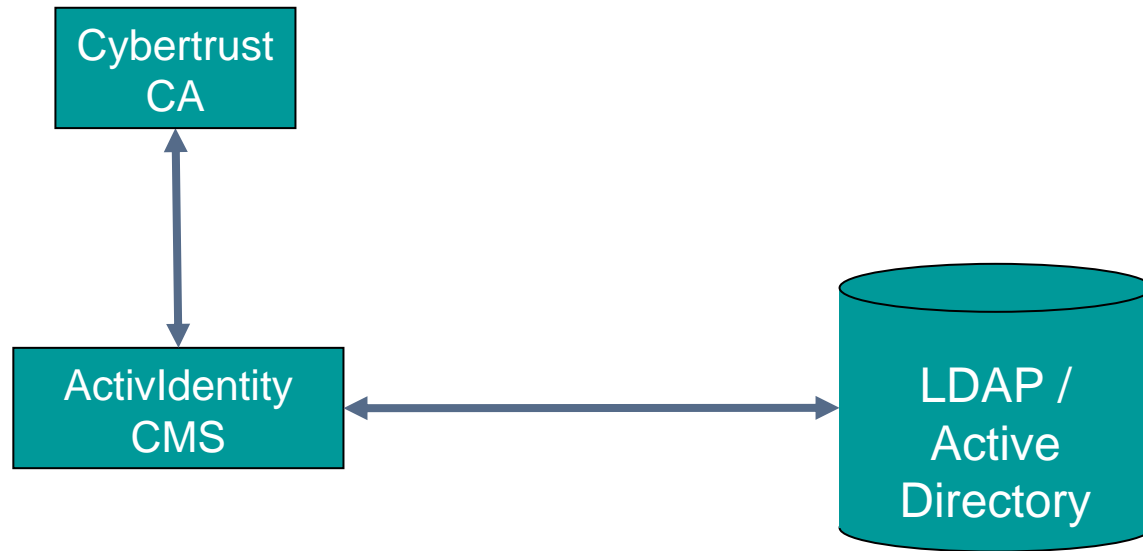- PIV II Compliant: Signs CHUID and Biometric Information

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SecurePIV Overall Architecture

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SecurePIV Workflow

Card Issuance

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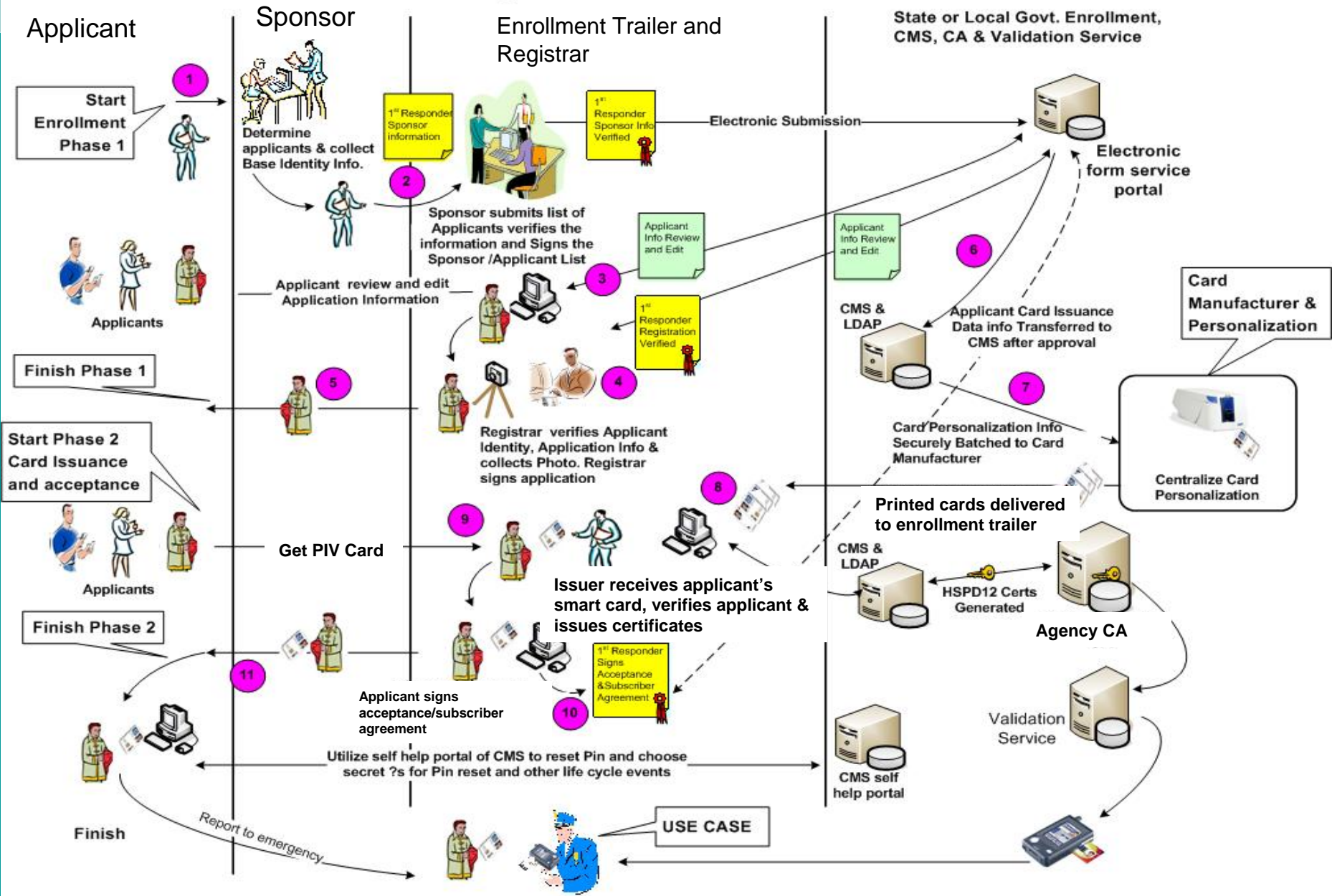Digital Signature Solutions, PKI & Security Consulting

SecurePIV Workflow

All The PIV Data

	Attribute Name	Cybertrust OID Values	Sun One Syntax	Notes	PIVmobile AD name	ADS Syntax
1	pivUPN	1.3.6.1.4.1.23337.3.1.2.1	1.3.6.1.4.1.1466.115.121.1.15	Within MS environments the standard UPN attribute should also be populated	UPN	Unicode String
2	pivCHUIDSigned	1.3.6.1.4.1.23337.3.1.2.2	1.3.6.1.4.1.1466.115.121.1.5			Octet String
3	pivFASCN	1.3.6.1.4.1.23337.3.1.2.3	1.3.6.1.4.1.1466.115.121.1.5		pivFASCN pivFASCN2	Octet String Case Insensitive String
4	pivGUID	1.3.6.1.4.1.23337.3.1.2.4	1.3.6.1.4.1.1466.115.121.1.5		pivGUID3 pivGUID4?	Octet String Case Insensitive String
5	pivCardExpirationDate	1.3.6.1.4.1.23337.3.1.2.5	1.3.6.1.4.1.1466.115.121.1.26	YYYYMMDD format numbers		IA5 String
6	pivCardID -- telexNumber	1.3.6.1.4.1.23337.3.1.2.6	1.3.6.1.4.1.1466.115.121.1.26	CMS populates		IA5 String
7	pivSponsorName	1.3.6.1.4.1.23337.3.1.2.7	1.3.6.1.4.1.1466.115.121.1.15			Unicode String
8	pivRegistrarName	1.3.6.1.4.1.23337.3.1.2.8	1.3.6.1.4.1.1466.115.121.1.15			DN with String
9	pivIDProofed	1.3.6.1.4.1.23337.3.1.2.9	1.3.6.1.4.1.1466.115.121.1.7			Boolean
10	pivDateReadyForIssuance	1.3.6.1.4.1.23337.3.1.2.10	1.3.6.1.4.1.1466.115.121.1.15			Unicode String
11	pivIssuanceStationOperator	1.3.6.1.4.1.23337.3.1.2.11	1.3.6.1.4.1.1466.115.121.1.15	CMS populates		Unicode String

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All The PIV Data

| 12	pivCardType	1.3.6.1.4.1.23337.3.1.2.12	1.3.6.1.4.1.1466.115.121.1.15			IA5 String
13	pivXMLData	1.3.6.1.4.1.23337.3.1.2.13	1.3.6.1.4.1.1466.115.121.1.15	Finger print data. In signed state. If collected		Unicode String
14	pivContactlessSerialNumber	1.3.6.1.4.1.23337.3.1.2.14	1.3.6.1.4.1.1466.115.121.1.15	CMS populates		DN with String
15	pivPRTPhotograph	1.3.6.1.4.1.23337.3.1.2.15	1.3.6.1.4.1.1466.115.121.1.5	Zone 1 300 DPI		Octet String
16	pivPRTLastName	1.3.6.1.4.1.23337.3.1.2.16	1.3.6.1.4.1.1466.115.121.1.15	Zone 2 line 1		Unicode String
17	pivPRTFirstMiName	1.3.6.1.4.1.23337.3.1.2.17	1.3.6.1.4.1.1466.115.121.1.15	Zone 2 line 2		Unicode String
18	pivPRTSignature	1.3.6.1.4.1.23337.3.1.2.18	1.3.6.1.4.1.1466.115.121.1.5	Zone 3		Octet String
19	pivPRTAgencySpecificData1	1.3.6.1.4.1.23337.3.1.2.19	1.3.6.1.4.1.1466.115.121.1.15	Zone 4		DN with String
20	pivPRTRank	1.3.6.1.4.1.23337.3.1.2.20	1.3.6.1.4.1.1466.115.121.1.15	Zone 5		Unicode String
21	pivPRT2DbarCodeType	1.3.6.1.4.1.23337.3.1.2.21		Zone 6		Interger
22	pivPRTEmployeeAffiliation	1.3.6.1.4.1.23337.3.1.2.22	1.3.6.1.4.1.1466.115.121.1.15	Zone 8	pivPRTAffiliation	Unicode String
23	pivPRTHeader	1.3.6.1.4.1.23337.3.1.2.23	1.3.6.1.4.1.1466.115.121.1.15	Zone 9		Unicode String
24	pivPRTAgencyName	1.3.6.1.4.1.23337.3.1.2.24	1.3.6.1.4.1.1466.115.121.1.15	Zone 10 (static)		Unicode String
25	pivPRTAgencySeal	1.3.6.1.4.1.23337.3.1.2.25	1.3.6.1.4.1.1466.115.121.1.5	Zone 11 (static)		Octet String
26	pivPRTFooter	1.3.6.1.4.1.23337.3.1.2.26	1.3.6.1.4.1.1466.115.121.1.15	Zone 12		Unicode String
27	pivPRTIssuanceDate	1.3.6.1.4.1.23337.3.1.2.27	1.3.6.1.4.1.1466.115.121.1.26	Zone 13 YYYYMM MDD		IA5 String
28	pivPRTExpirationDate	1.3.6.1.4.1.23337.3.1.2.28	1.3.6.1.4.1.1466.115.121.1.26	Zone 14 YYYYMM DD		IA5 String
29	pivPRTCardColorType	1.3.6.1.4.1.23337.3.1.2.29	1.3.6.1.4.1.1466.115.121.1.15	Zone 15 Red, Blue, Green, White		Unicode String
30	pivPRTBorderColor	1.3.6.1.4.1.23337.3.1.2.30	1.3.6.1.4.1.1466.115.121.1.15	Zone 16		Unicode

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All The PIV Data

31	pivPRTAgencySpeificData2	1.3.6.1.4.1.23337.3.1.2.31	1.3.6.1.4.1.1466.115.121.1.15	Zone 17		Unicode String
32	pivPRTCardSerialNumber	1.3.6.1.4.1.23337.3.1.2.32	1.3.6.1.4.1.1466.115.121.1.26	Zone 1(Back)		IA5 String
33	pivPRTIssuerIDNumber	1.3.6.1.4.1.23337.3.1.2.33	1.3.6.1.4.1.1466.115.121.1.26	Zone 2(Back)		IA5 String
34	pivPRTMagmeticStripe	1.3.6.1.4.1.23337.3.1.2.34	1.3.6.1.4.1.1466.115.121.1.27	Zone 3 (Back)		Integer
35	pivPRTReturnToAddr	1.3.6.1.4.1.23337.3.1.2.35	1.3.6.1.4.1.1466.115.121.1.15	Zone 4 (Back) (static)		Unicode String
36	pivPRTHeight	1.3.6.1.4.1.23337.3.1.2.36	1.3.6.1.4.1.1466.115.121.1.15	Zone 5 (Back)		Unicode String
37	pivPRTEyeColor	1.3.6.1.4.1.23337.3.1.2.37	1.3.6.1.4.1.1466.115.121.1.15	Zone 5 (Back)		Unicode String
38	pivPRTHairColor	1.3.6.1.4.1.23337.3.1.2.38	1.3.6.1.4.1.1466.115.121.1.15	Zone 5 (Back)		Unicode String
39	pivPRTEmergyResponderDetails	1.3.6.1.4.1.23337.3.1.2.39	1.3.6.1.4.1.1466.115.121.1.15	Zone 6 (Back)		Unicode String
40	pivPRTSection499Title1&Lang	1.3.6.1.4.1.23337.3.1.2.40	1.3.6.1.4.1.1466.115.121.1.15	Zone7 (Back) (Static)		Unicode String
41	pivPRT3of9BarcodeType	1.3.6.1.4.1.23337.3.1.2.41	1.3.6.1.4.1.1466.115.121.1.27	Zone 8 (Back)		Integer
42	pivPRTAgencySpecificData3	1.3.6.1.4.1.23337.3.1.2.42	1.3.6.1.4.1.1466.115.121.1.15	Zone 9 (Back)		Unicode String
43	pivPRTAgencySpecificData4	1.3.6.1.4.1.23337.3.1.2.43	1.3.6.1.4.1.1466.115.121.1.15	Zone 10 (Back)		Unicode String
44	pivPRT2DbarCodeData	1.3.6.1.4.1.23337.3.1.2.44	1.3.6.1.4.1.1466.115.121.1.40	Ref 21		Octet String
45	pivPRTMagStripeTrack1	1.3.6.1.4.1.23337.3.1.2.45	1.3.6.1.4.1.1466.115.121.1.5	Ref 34		Octet String
46	pivPRTMagStripeTrack2	1.3.6.1.4.1.23337.3.1.2.46	1.3.6.1.4.1.1466.115.121.1.5	Ref 34		Octet String
47	pivPRTMagStripeTrack3	1.3.6.1.4.1.23337.3.1.2.47	1.3.6.1.4.1.1466.115.121.1.5	Ref 34		Octet String
48	pivPRT3of9BarcodeData	1.3.6.1.4.1.23337.3.1.2.48	1.3.6.1.4.1.1466.115.121.1.15	Ref 41		Unicode String
49	pivAgencyCode	1.3.6.1.4.1.23337.3.1.2.49	1.3.6.1.4.1.1466.115.121.1.27	Fasc-n subcompo nent		Integer

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FIPS-201 Physical Card Layout
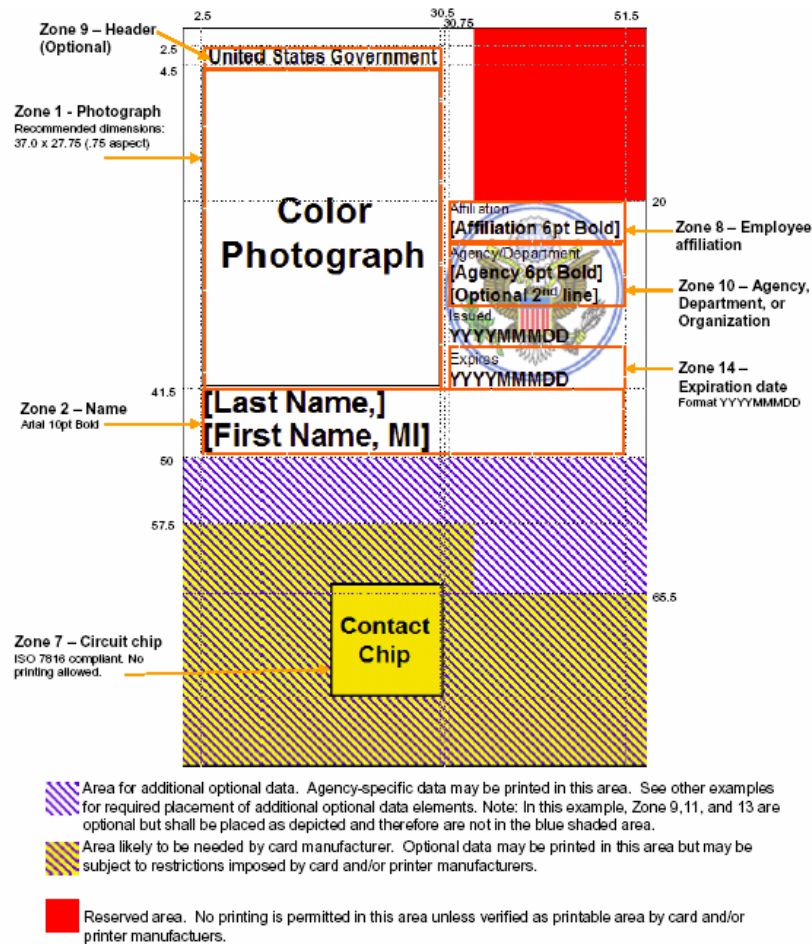
FIPS-201 Physical Card Layout

Figure 4-2. Card Front—Optional Data Placement—Example 1

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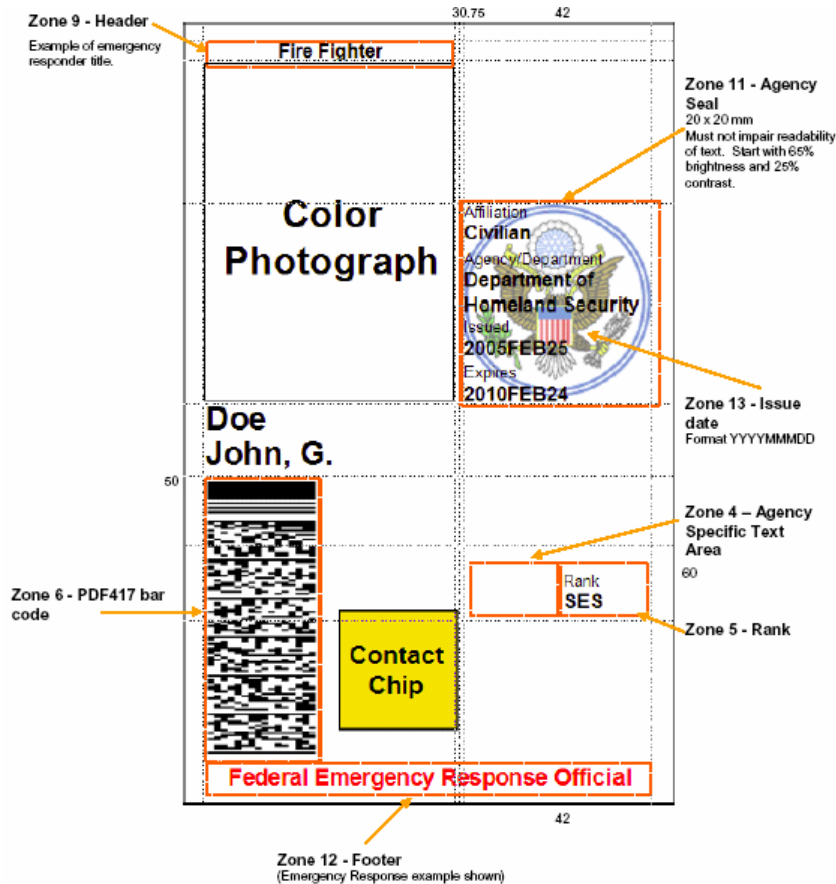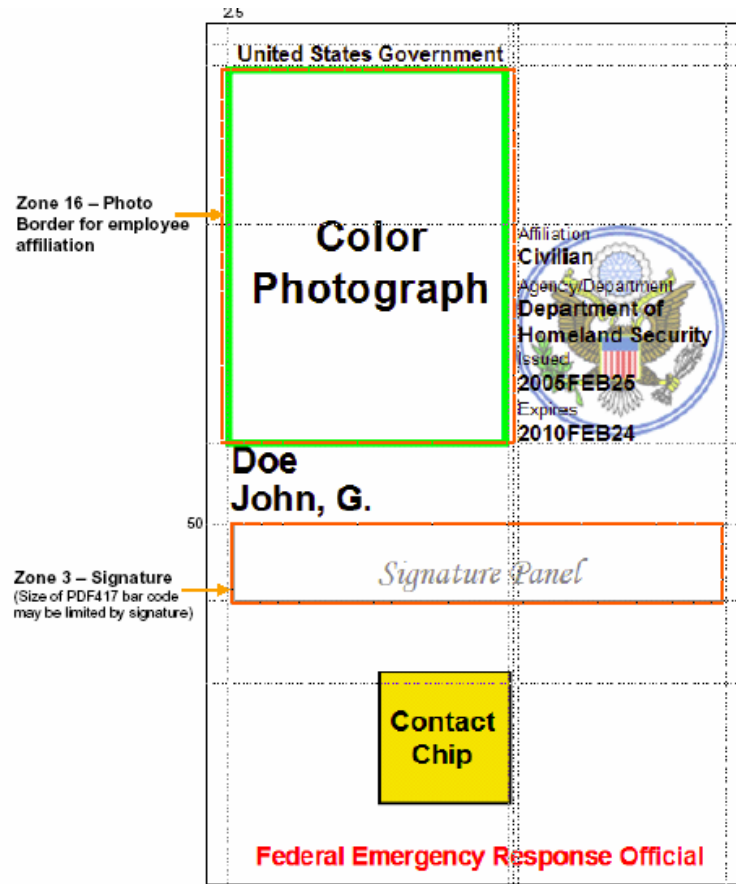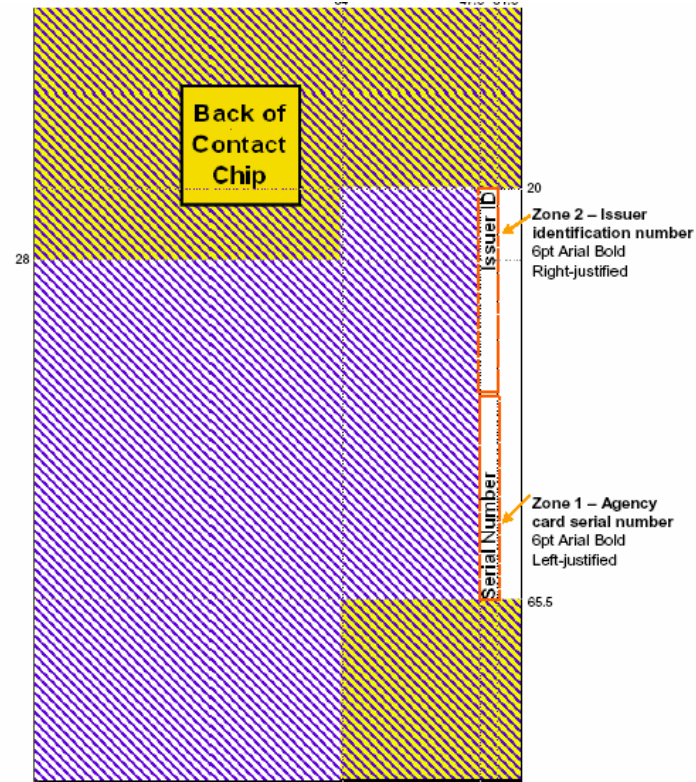
FIPS-201 Physical Card Layout

Figure 4-3. Card Front—Optional Data Placement—Example 2

FIPS-201 Physical Card Layout

Figure 4-6. Card Back—Printable Areas and Required Data
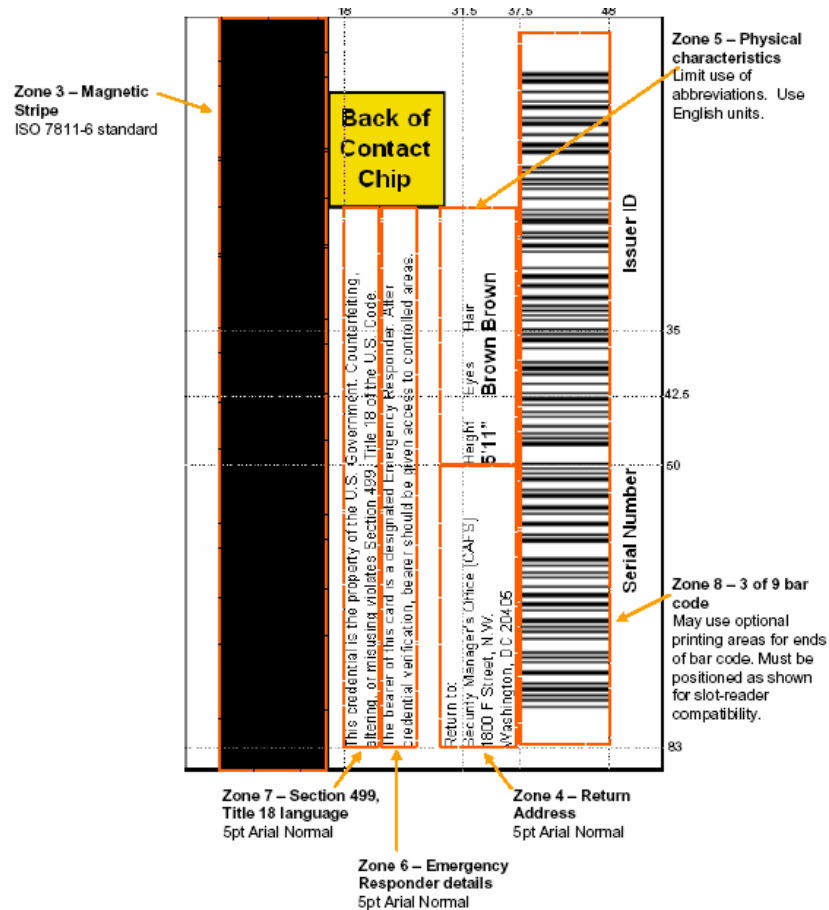
FIPS-201 Physical Card Layout

Figure 4-7. Card Back—Optional Data Placement—Example 1

PIV Card Data For Physical Layout

STATE OF MARYLAND

COLOR PHOTO w/
18% Gray Background

Affiliation
First Responder

Agency
**MD Dept of
Transportation**

Issued
2005AUG31

Expires
2008AUG30

DOUGH,
JOHN, A

STATUS   LOCATION
EMPLOYEE   CO

Contact
Chip

Emergency Response Official

This credential is the property of the State of Maryland. The counterfeit, alteration, or misuse of this credential constitutes a violation of COMAR 8-303 and section 499, Title 18 of the U.S. Code.

The bearer of this card is a designated Emergency Responder. After credential verification, bearer may be given access to controlled areas.

Return to:
Maryland Emergency Management Agency
5402 Rue Saint Lo Drive
Reisterstown, MD 31136

Contact
Chip

3578987766990   **MDOT00MPA100001**

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PIV Card Data For Physical Layout

Card front
Photo(z1) – 300 DPI Jpeg Photo
LastName (z2L1) – 10Pt Bold Arial
FirstName, MI(z2L2) – 10 Pt Bold Arial
Status (agency Spec. Data1 z4) (Employee,Contractor,Volunteer)
Location (rank z5) – 6Pt Bold Arial   (CO, ST, City ?)
Expiration Date(z13) – 6Pt Bold Arial YYYYMMMDD
Issuance Date(z14) – 6Pt Bold Arial YYYYMMMDD
*Affiliation(z8) – 6Pt Bold (Static value of 'First Responder')
*Agency(z10) – 6Pt Bold Arial 2 lines (Static value of "MD Dept of" and "Transportation"
2d bar code(z6) – Not for the 23rd

Back of card
Mag stripe(z3) – For future Use
Std bar code(zb8) – Not for the 23rd
Card serial number (zb1) – 6Pt Arial (13 digit number starting at ?) left justified
*Card Issuer ID (zb2) – 6Pt Arial Static value of 'MDOT00MPA100001" right justified

Static Data Front
*Header (z9) – 6Pt Arial Bold Static 'State of Maryland'
*Footer (z12) – 6Pt Arial Bold Red text 'Emergency Response Official'
*Agency Seal (z11) – Static Gif MD Seal 20x20mm 65%brightness 25% contrast
*Headings – Zone heading or tage 5Pt normal weight Arial font size
*Color -- Static White → Red color transition at z2 across card

Static Data Back of card
*Property of statement(zb7) – 5Pt Arial Normal see above text
*1st responder Notice (zb6) – 5Pt Arial Normal see above text
*Return to Address(zb4) – 5Pt Arial Normal see above text

* Means that this is Static Information on the Cards and will be handled by the Print layout template
TEXT in Red means that in the Future These values could be Dynamic in a Broader Community by Maryland

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PIV Card Physical Layout Issues

Questions:

1) What is the Location information support to be What are the Options in the first responder world for this is "CO" for county what are the Options: ST for State City for City?

2) What is the length of serial Number should it be zero filled number string 00000000000001 and increment?

3) What is the sub fields of the Card Issuer string mean? What does the "00MPA100001" portion mean?

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Major Non-PKI Issues: Registration Form Design

Major Non-PKI Issues: Registration Form Design

○ Contractor
○ Volunteer

Applicant Emergency Response Support Function(s)*

☑ R-ESF #1 - Transportation
☑ R-ESF #2 - Communications Infrastructure
☑ R-ESF #3 - Public Works and Engineering
☑ R-ESF #4 - Firefighting
☑ R-ESF #5 - Information and Planning
☑ R-ESF #6 - Mass Care
☑ R-ESF #7 - Resource Support
☑ R-ESF #8 - Health, Mental Health and Medical Services
☑ R-ESF #9 - Urban Search and Rescue
☑ R-ESF #10 - Hazardous Materials
☑ R-ESF #11 - Food
☑ R-ESF #12 - Energy
☑ R-ESF #13 - Law Enforcement
☑ R-ESF #14 - Media Relations and Community Outreach
☑ R-ESF #15 - Donations and Volunteer Management
☑ VIP

Available Actions x
- Continue Workflow
- Forward
- Download
- Close

Certification of Sponsor

It is illiegal for anyone to give false or fictitious information for a Maryland Identification Card. Since this certification is considered part of the application, anyone who provides or certifies to a false or fictitious statement or information herein may be prosecuted and/or have his or her ID Card cancelled.

Sponsor's Signature
(This field will show the signer's subject name as provided by the digital certificate used for signing and is automatically filled by the system)

Manoj K Srivastava

Sponsor's Signature Date
(This field will show the signing date/time as recorded by the by the system)

3/7/2006

Applicant Section

All fields marked with * are required.

Editable fields onced signed can't be changed. Please make sure the values entered/selected are accurate.

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Major Non-PKI Issues: Registration Form Design

Available Actions x
- Continue Workflow
- Forward
- Download
- Close

Registrar's Approval

○ I Disapprove

If Disapproved, Comments

Certification of Registrar

It is illegal for anyone to give false or fictitious information for a Maryland Identification Card. Since this certification is considered part of the application, anyone who provides or certifies to a false or fictitious statement or information herein may be prosecuted and/or have his or her ID Card cancelled.

Registrar's Signature
(This field will show the signer's subject name as provided by the digital certificate used for signing and is automatically filled by the system)

Registrar's Signature Date
(This field will show the signing date/time as recorded by the by the system)

Applicant Section

Certification of Applicant

I certify, under penalty of perjury, that the statements made on this application are true and correct to the best of my knowledge, information and belief.

By checking this box and signing this form using my PIV Card certificate I agree to fully comply with the rules which govern this card:

☐

Applicant's Signature
(This field will show the signer's subject name as provided by the digital certificate used for signing and is automatically filled by the system)

Applicant's Signature Date
(This field will show the signing date/time as recorded by the by the system)

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Back End Mapping: Agency Specific Data

- **Emergency Response Support Function**

- **Applicant Work Location**

- **Card Issuance Date Offset**

- **Card Expiration Year Duration**

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Emergency Response Support Function

```xml
<setting name="OidMapping" serializeAs="Xml">
    <value>
    <ArrayOfString
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-
    instance"
       xmlns:xsd="http://www.w3.org/2001/XMLSchema">
     <string>R-ESF #1=1.3.6.1.4.1.13636.15.1</string>
     <string>R-ESF #2=1.3.6.1.4.1.13636.15.2</string>
     <string>R-ESF #3=1.3.6.1.4.1.13636.15.3</string>
     <string>R-ESF #4=1.3.6.1.4.1.13636.15.4</string>
     <string>R-ESF #5=1.3.6.1.4.1.13636.15.5</string>
     <string>R-ESF #6=1.3.6.1.4.1.13636.15.6</string>
     <string>R-ESF #7=1.3.6.1.4.1.13636.15.7</string>
     <string>R-ESF #8=1.3.6.1.4.1.13636.15.8</string>
     <string>R-ESF #9=1.3.6.1.4.1.13636.15.9</string>
     <string>R-ESF #10=1.3.6.1.4.1.13636.15.10</string>
     <string>R-ESF #11=1.3.6.1.4.1.13636.15.11</string>
     <string>R-ESF #12=1.3.6.1.4.1.13636.15.12</string>
     <string>R-ESF #13=1.3.6.1.4.1.13636.15.13</string>
     <string>R-ESF #14=1.3.6.1.4.1.13636.15.14</string>
     <string>R-ESF #15=1.3.6.1.4.1.13636.15.15</string>
     <string>VIP=1.3.6.1.4.1.13636.15.100</string>
    </ArrayOfString>
    </value>
  </setting>
```

Applicant Emergency Response Support Function(s)
*

- [ ] R-ESF #1 - Transportation
- [ ] R-ESF #2 - Communications Infrastructure
- [ ] R-ESF #3 - Public Works and Engineering
- [ ] R-ESF #4 - Firefighting
- [ ] R-ESF #5 - Information and Planning
- [ ] R-ESF #6 - Mass Care
- [ ] R-ESF #7 - Resource Support
- [ ] R-ESF #8 - Health, Mental Health and Medical Services
- [ ] R-ESF #9 - Urban Search and Rescue
- [ ] R-ESF #10 - Hazardous Materials
- [ ] R-ESF #11 - Food
- [ ] R-ESF #12 - Energy
- [ ] R-ESF #13 - Law Enforcement
- [ ] R-ESF #14 - Media Relations and Community Outreach
- [ ] R-ESF #15 - Donations and Volunteer Management
- [ ] VIP

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Agency Work Location: To Flow To FASC-N

```
<setting name="LocationCodeOIMapping" serializeAs="Xml">
    <value>
     <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-
       instance"
       xmlns:xsd="http://www.w3.org/2001/XMLSchema">
     <string>AA=0001</string>
     <string>AL=0002</string>
     <string>BA=0003</string>
     <string>BC=0004</string>
     <string>CA=0005</string>
     <string>CE=0006</string>
     <string>CH=0007</string>
     <string>CR=0008</string>
     <string>CV=0009</string>
     <string>DO=0010</string>
     <string>FR=0011</string>
     <string>GA=0012</string>
     <string>HA=0013</string>
     <string>HO=0014</string>
     <string>KE=0015</string>
     <string>MO=0016</string>
     <string>PG=0017</string>
     <string>QA=0018</string>
     <string>SM=0019</string>
     <string>SO=0020</string>
     <string>TA=0021</string>
     <string>WA=0022</string>
     <string>WI=0023</string>
     <string>WO=0024</string>
     <string>MD=0025</string>
     </ArrayOfString>
    </value>
   </setting>
```

Applicant Work Location*

- ○ Maryland State
- ○ Anne Arundel County
- ○ Allegany County
- ○ Baltimore County
- ○ Baltimore City
- ○ Caroline County
- ○ Cecil County
- ○ Charles County
- ○ Carroll County
- ○ Calvert County
- ○ Dorchester County
- ○ Frederick County
- ○ Garrett County

- ○ Harford County
- ○ Howard County
- ○ Kent County
- ○ Montgomery County
- ○ Prince George's County
- ○ Queen Anne's County
- ○ St. Mary's County
- ○ Somerset County
- ○ Talbot County
- ○ Washington County
- ○ Wicomico County
- ○ Worcester County

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Card Issuance/Expiration Date Offset/Duration

```xml
<setting name="CardIssuanceDateOffsetInDays" serializeAs="String">
    <value>0</value>
</setting>
<setting name="CardExpirationDateOffsetInYears" serializeAs="String">
    <value>5</value>
</setting>
```

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FASC-N Issues

- ## How is CN/PI Generated?
  - Maintain compatibility with agency's current emp-id generation method (required FASC-N service to call existing application for PI/CN, a feature supported by Infomosaic SecurePIV)
  - Start from 1 or some other initial value

- ## How is Organization Identifier Determined?
  - Allow registration form data to flow through to the FASC-N Service

SecurePIV FASC-N Web Service

Infomosaic FASCN Web Service: Issued FASC-N

AC	SC	CN	CS	ICI	PI	OC	OI	POA	Fascn Binary Value	Fascn Hex Value	Issue Date
0032	0001	100151	0	1	2100000051	2	0001	1	11010 00001 00001 11001 01000 10110 00001 00001 00001 10000 10110 10000 00001 00001 10000 10101 10000 10110 00001 10110 10000 10110 01000 10000 00001 00001 00001 00001 00001 00001 10101 10000 01000 00001 00001 00001 10000 10000 11111 10011	D0 43 94 58 21 0C 2D 00 86 15 85 83 68 59 10 08 42 10 86 B0 40 42 18 43 F3	2/16/2006 10:14:40 AM
0032	0001	100150	0	1	2100000050	2	0001	1	11010 00001 00001 11001 01000 10110 00001 00001 00001 10000 10110 10000 00001 00001 10000 10101 00001 10110 00001 10110 10000 10110 01000 10000 00001 00001 00001 00001 00001 00001 10101 00001 01000 00001 00001 00001 10000 10000 11111 10011	D0 43 94 58 21 0C 2D 00 86 15 0D 83 68 59 10 08 42 10 86 A1 40 42 18 43 F3	2/16/2006 9:12:14 AM
									0001 00001 11001 01000 10110 00001 00001 00001 0110 10000 00001 00001 10000 00100 10011 10110 0110 10000 10110 01000 10000 00001 00001 00001 0001 00001 00100 10011 01000 00001 00001 00001 0000 11111 10011	D0 43 94 58 21 0C 2D 00 86 04 9D 83 68 59 10 08 42 10 84 93 40 42 18 43 F3	2/16/2006 6:28:06 AM
									0001 00001 11001 01000 10110 00001 00001 00001 0110 10000 00001 00001 10000 00100 00010 10110 0110 10000 10110 01000 10000 00001 00001 00001 0001 00001 00100 00010 01000 00001 00001 00001 0000 11111 10011	D0 43 94 58 21 0C 2D 00 86 04 15 83 68 59 10 08 42 10 84 82 40 42 18 43 F3	2/16/2006 6:24:23 AM
									0001 00001 11001 01000 10110 00001 00001 00001 0110 10000 00001 00001 10000 00100 11100 10110 0110 10000 10110 01000 10000 00001 00001 00001 0001 00001 00100 11100 01000 00001 00001 00001 0000 11111 10011	D0 43 94 58 21 0C 2D 00 86 04 E5 83 68 59 10 08 42 10 84 9C 40 42 18 43 F3	2/16/2006 6:16:19 AM

1 2 3 4 5 6 7 8 9 10 …

Coulumn Name	Explanation
AC	Agency Code
SC	System Code
CN	Credential Number
CS	Credential Series (Series Code)
ICI	Individual Credential Issue (Credential Code)
PI	Person Identifier
OC	Organizational Category
OI	Organizational Identifier
POA	Person/Organization Association Category

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Summary

- Each Agency's FIPS-201 Compliant PIV Process Implementation Requires Several Levels of Cooperation Within the Agency

- Get All The Issues on the Table in the Beginning

- Try to Make Form Design and Other Agency Specific Data Decision Sooner Than Later

- Be Ready to Change Form and/or Data

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