




Appendix L: National Interoperability (NIOP) ICD

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National Interoperability
Interface Control Document
Version 1.02

FINAL

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Modification History

Date	Version	Modifications
September/ October 2018	NIOP X.XX	<ol style="list-style-type: none"> Conformed the Southern States Interoperability ICD to National Interoperability ICD. Incorporated revisions requested by the NIOP Working group. <ol style="list-style-type: none"> Entry and Exit Date/Time with the Time zone to be added in the spare fields in transaction data. [Edited and created separate fields in November 2018.] Add GS and US as License Plate State Codes. [Removed US in November 2018.] Update Tag Agency ID Appendix. Updated Tag ID to 10 characters. Use of the word "Local" (Local Hub/Local Agency). Add to Definitions, if needed. Updated Classification Fields to be 4 characters and optional. Updated Tag Class Fields to be 4 characters and not optional. Edited XML Definitions. Conform document to NIOP: <ol style="list-style-type: none"> Edited Southern States ICD to conform to NIOP. Replaced Southern States specific drawing with NIOP map. Removed abbreviations and terms that are no longer used. Added Table from M. Kolb & added ATA column. Cross-referenced Agencies with Hubs. Changed the reference to IBR-REC 6 to IBR-REC-7. Moved appendices to separate documents.
November 2018	NIOP 1.00	<p>Edited based on NIOP Technical Meeting November 7-8, 2018.</p> <p>Added XML Definitions and samples from ETCC.</p> <p>Removed remaining SSIOPs and references.</p> <p>11/26/18: As suggested by M. Kolb:</p> <ol style="list-style-type: none"> Removed "CSC" where appropriate. Section 1, Introduction: The table column labeled "File Extension" may be better titled "File Extension / Submission Type" Removed or replaced "file" with "submission" where appropriate.
February 2019	NIOP 1.01	<p>Added Appendix E License Plate Types.</p> <p>Corrected appendix naming convention.</p>
March 2019	NIOP 1.02	Added revised XML examples.
May 2019	NIOP 1.02 FINAL	Removed DRAFT, updated date and made FINAL.

1 Introduction

The purpose of this document is to describe and record the interfaces for National interoperability.

This document, the *National Interoperability Interface Control Document*, defines the formats for all data that is transmitted between the NIOP Hubs who participate in National Interoperability (NIOP).

The interface data types defined are:

Data Type	File Extension / Submission Type	Usage
Tag Validation List	{Bulk Identifier}TVL	Tag Validation List (TVL) data shall be created by each Home Agency to inform the Away Hubs and Agencies as to the status of tags and license plates associated with an account held by the Home Agency.
Transaction Data	STRAN	Created by the Away Hub (based on transactions from the Away Agencies) to inform the Home Hub of all toll transactions occurring at Away Agency facilities for tags and/or license plates belonging to a Home Agency as determined by its inclusion in the TVL active at the time of the transaction. Away Hub determines Home Agency ID if not already specified by the Away Agency. One STRAN data submission is created per Away/Home Agency pair.
Adjustment/Correction Data	SCORR	Created by the Away Hub (based on correction data from the Away Agencies) to replace toll transaction information already sent to the Home Hub with updated/corrected information. Such adjustment/correction data will be provided to the Home Agency to which the original transaction information was originally delivered. Note: replacement data represents current values, not delta from previously submitted values. Adjustments and resubmittals may be included in the same SCORR submission. Adjustment/Correction Data also includes resubmitted transactions.
Reconciliation Data	SRECON	Created by the Home Hub (based on reconciliation data from the Home Agencies) to inform the Away Hub as to the disposition of toll transactions processed by the Home Agency belonging to the original Transaction Data submission. Performing detailed transaction level reconciliation allows the Away Agency and the Away Hub to ensure that all transactions included in the original Transaction Data submission were properly received and processed.
Acknowledgement Data	ACK	Created by the Hub which received a submission to inform the Hub which sent the submission that the submission was received in its entirety. Acknowledgement data shall be sent for each of the above referenced submissions.

2 General Data Requirements

1. All participating Hubs shall support the exchange of data as XML files utilizing SFTP for Tag Validation List data and their corresponding Acknowledgements. Participating Hubs shall support the exchange of individual data records or blocks of records as XML utilizing secure Web Services for Transaction data, Correction data, Reconciliation data and their associated Acknowledgements. Support of Web Services shall include support of faults, as well as timeouts as defined in the exception handling section below.
2. When using XML file data exchange over SFTP, all files (except for the Acknowledgement data) shall be compressed (ZIPed) using .ZIP compression.
3. When using XML file data exchange over SFTP, upon compression, file names shall be converted from {FILE_NAME}.{FILE_TYPE} to {FILE_NAME}_{FILE_TYPE}.ZIP and all file names shall be created using uppercase characters only.
4. Data records shall be formatted utilizing Extensible Markup Language (XML).
5. This document adopts the terms Home and Away as defined by the Business Rules for NIOP. The Home Agency is the entity that establishes and/or maintains the customer's account and issues the tag(s). The Away Agency is any agency that is not the customer's Home Agency. The Away Agency is typically the agency on whose facility the transaction transpired. An Away Agency may transmit data to a Home Agency through an Away Hub and Home Hub.
6. The date/time values contained in a file name represents the creation date/time of the file and shall always match the date/time value contained in the file's header record.
7. All date/time values within the data contents of a submission shall be transmitted as Coordinated Universal Time (UTC) unless otherwise indicated.
8. A field "Type" of "Date/Time" shall be transmitted with no time zone data and shall assume a time zone of "+00:00". Date/Time format shall be "YYYY-MM-DDThh:mm:ssZ". Where,
 YYYY = 4-digit year
 MM = 2-digit month (zero filled)
 DD = 2-digit day of the month (zero filled)
 T = The 'T' character signifies the start of the time value
 hh = 2-digit hour (00-23)
 mm = 2-digit minute
 ss = 2-digit second
 Z = The "Z" character indicating UTC designation.
Fields utilizing this format are, generally, not customer facing.
9. A field containing "Date/Time w/TZ" shall be transmitted with time zone data. "Date/Time w/TZ" shall be "YYYY-MM-DDThh:mm:ss±HH:MM". Field utilizing this format are, generally, customer facing and allow the recipient to display date/time information with the appropriate date/time for the time zone.
10. A field "Type" of "Char" can contain any combination of alphanumeric and/or special characters as further defined in the sections below. These fields shall be left-justified with no leading characters or trailing blanks.
11. A field "Type" of "Num" shall contain only numeric characters (0 through 9). These fields shall be left-justified with no leading zeroes.

12. As Agencies strive to accept Transaction entry and exit locations without any manual intervention or configuration, it is recommended each Agency notify their Local Hub of entry and exit location additions and changes so that transactions are not rejected due to a location not being known. Hubs will notify the Other Hubs who will then, in turn, notify their Local Agencies.
13. Where XML Tags in the XML Definitions are different from the Field Name in the Data Records/Fields, the XML Tag shall take precedence.

2.1 Web Services Guidelines

2.1.1 General Web Services Guidelines

1. Simple Object Access Protocol (SOAP) Web Services shall be used.
2. Web Services send and receive example:
 - a. If Central US IOP (CUSIOP) Hub needs to send data to Southeast US IOP (SEIOP) Hub, CUSIOP Hub shall use the Web Services provided by SEIOP Hub.
 - b. If SEIOP Hub needs to send data to CUSIOP Hub, SEIOP Hub shall use the Web Services provided by CUSIOP Hub.
3. There are no limits on the number of transactions sent via Web Services.

2.1.2 General Exception Handling for Web Services

When using Web Services interfaces, the exception-handling schemes are defined as part of the Web Service Definition Language (WSDL) for each web service, generally denoted as faults. Faults can generally be categorized into two types: those that are recoverable and those that are unrecoverable.

Recoverable Faults are transient or temporary in nature. Such faults are raised by the provider to signal to the consumer that the request can be resubmitted after an elapsed time period with the expectation the transient condition has been resolved.

Unrecoverable Faults are raised when the provider is unable to process a request and resubmission without correction would result in the same fault. An example would be invalid data within the request which must be corrected in order for the request to be resubmitted and processed successfully.

The following construct defines each of these faults

```
<!-- Faults -->
<xsd:element name="RecoverableFault">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="message" nillable="true" type="xsd:string"/>
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>

<xsd:element name="UnrecoverableFault">
  <xsd:complexType>
```

```
<xsd:sequence>
  <xsd:element name="message" nillable="true" type="xsd:string"/>
</xsd:sequence>
</xsd:complexType>
</xsd:element>
</xsd:schema>
</wsdl:types>
```

In addition to the above two fault types, any web service request may result in a timeout condition. A timeout condition occurs when no response is received from the provider within some configurable timeout interval. When a timeout occurs, the consumer typically does not know if the provider actually received the request. The consumer may resubmit the request with the expectation that if the prior submission was received and successfully processed, the provider will return the same response that would have been sent had the timeout condition not occurred. Such re-submissions would not result in the request being reprocessed resulting in possible duplication.

2.2 SFTP File Transfer Guidelines

When transferring files between Hubs via SFTP, the guidelines in this section should be followed.

Inbound Files to a Hub from another Hub ("Other Hub"):

1. Each Other Hub ("Other Hub") connects to the Hub's SFTP server with their credentials.
2. Each Other Hub shall push STVL (when sending a TVL) and STVL ACK (when responding to a TVL) files to the Hub.
3. Each Other Hub shall have their own "Inbound" directories on the Hub's SFTP server for STVL and STVL ACK submissions. Note: Directories are not needed for the other submission types (STRAN, STRAN ACK, SRECON, SRECON ACK, SCORR, and SCORR ACK) since they shall be transferred via Web Services.

For example, on the CUSIOP Hub SFTP server:

```
/SEIOPHUB/{env}/inbound/STVL/
/SEIOPHUB/{env}/inbound/STVL_ACK/
```

Where {env} = PROD or PREPROD

4. Each Other Hub shall copy (SFTP) files from their local directories to the appropriate Hub's SFTP server Inbound "/temp" directory.

For example, on the CUSIOP Hub SFTP server:

```
/SEIOPHUB/{env}/inbound/STVL/temp
/SEIOPHUB/{env}/inbound/STVL_ACK/temp
```

5. Each Other Hub shall make sure that their SFTP file transfer is successful.
 - a. Compare the Local file size and the Remote file size
 - b. If both are equal, it is a successful transfer
6. If the file transfer is successful, the Other Hub shall "move" the file from the "/temp" directory to the "/current" directory.

For example, on the CUSIOP Hub SFTP server:

Move from:

/SEIOPHUB/{env}/inbound/STVL/temp

To:

/SEIOPHUB/{env}/inbound/STVL/current

7. If the file transfer fails, the Other Hub shall delete the file from the “/temp” directory.

Outbound Files from a Hub to another Hub (“Other Hub”):

1. Since the Hubs push STVL and STVL ACK files to each other and are “inbound” to the receiving Hub, the Hub-to-Hub file transfers are treated as Inbound. There shall be no Outbound Hub-to-Hub file transfers.

3 Tag Validation List (TVL) Data

3.1 Usage

Tag Validation List (TVL) data shall be created by each Home Agency to inform the Away Hubs and Agencies as to the status of tags and license plates associated with an account held by the Home Agency. The Home Hub will combine TVLs from each Home Agency before sending the TVL to the Other Hub(s). The Away Hub forwards the TVL information to each Away Agency in the format agreed upon between the entities.

Because the transfer of TVL data is expected to involve significant volume of data at once, the transfer of TVL data will not be supported through Web Services.

3.2 File Name

{NIOP_Hub_ID}_{HOME_AGENCY_ID}_YYYYMMDDHHMMSS.{Bulk Indicator}TVL

Example: 9002_9002_20171201001015.BTVL

3.3 Data Records/Fields

Tag Validation List Header Record				
Field	Type	Max Length	Required/Optional	Description
Submission Type	Char	4	Required	Defines the type of data in the file. Value: STVL
Submission Date/Time	Date/Time	20	Required	The date/time (UTC) the file was created. Shall match the date/time in the file name.
NIOP Hub ID	Char	4	Required	The ID assigned to the Home Hub when transmitting the Tag Validation Data from the Home Hub to the Away Hub. Refer to Appendix A for valid values.
Home Agency ID	Char	4	Required	The ID assigned to the Home Agency. This is the agency that manages the customer account to which toll charges may be posted. For consolidated TVLs this is the Home Hub ID. Refer to Appendix A for valid values.

Tag Validation List Header Record				
Field	Type	Max Length	Required/ Optional	Description
Bulk Indicator	Char	1	Required	Indicates whether this file is a bulk update (Bulk TVL) or differential update (Differential TVL). Bulk updates shall replace all previously transmitted tag/plate data for the Home Agency ID. Differential updates shall contain all changes since the last Bulk and shall be used to indicate new tag/plate data and/or updates in tag/plate status. Values: B – Bulk D – Differential
Bulk Identifier	Num	9	Required	Incremental Identifier for each Bulk TVL generated. When a Differential is created, the Bulk Identifier shall be included identifying from which Bulk the Differential should be applied.
Record Count	Num	10	Required	The number of detail records contained in this file. Values: 0 – 9999999999

Tag Validation List Detail Record				
Field	Type	Max Length	Required/ Optional	Description
Home Agency ID	Char	4	Required	The ID assigned to the Home Agency. This is the agency that manages the customer account to which toll charges may be posted. Refer to Appendix B for valid values. For example, NTTA = 0041.
Tag Agency ID	Char	4	Required	An identifier used by NIOP that corresponds to one or more Region and/or Agency field values read directly from a transponder. The Region/Agency fields encoded in a transponder represent the entity that originally issued the transponder. Refer to Appendix C, NIOP Tag Agency ID column for valid values and how they map to actual data encoded on the transponder.
Tag Serial Number	Char	10	Required	Serial Number that may be read from the transponder. Leading zeroes included. 10 decimal digits 0 – 9 converted to a character field.
Tag Status	Char	1	Required	Tag Status. Values: V – Valid (applies to both Bulk and Differential TVL) Z – Zero/Negative Balance (applies to both Bulk and Differential TVL) I – Invalid (only used for Differential TVL). Notes: 1. Omitting a tag from a Bulk TVL automatically makes the tag Invalid. 2. Some Home Agencies do not support the “Z” Tag Status value and will put their Zero/Negative Balance tags into the “I” Tag Status.
For each Discount Type, there would be an array with the following fields:				

Tag Validation List Detail Record				
Field	Type	Max Length	Required/ Optional	Description
Discount Plans	Char	12	Optional	An array of Regional or NIOP supported discount plans associated with the transponder. Would also be used to support cross agency non-revenue status. Discount Plans are currently not supported. The definition for this data element will be provided when support for it becomes necessary and/or is defined by NIOP.
Discount Plan Start Date	Date/Time	20	Optional	Discount Plan start date (UTC).
Discount Plan End Date	Date/Time	20	Optional	Discount Plan end date (UTC).
Tag Type	Char	1	Optional	Type of transponder. If not specified, standard windshield mounted tag is assumed. Values: S – Switchable L – License Plate F – Feedback G - Feedback and Switchable
Tag Class	Num	4	Required	The number of axles associated with the tag. Default to “2” axle when not available. Values 2-15. Note: Vehicle classifications may differ between Home Agencies and have different meanings based on the business rules for the Agency or Region.
For each Account Transponder Number, there would exist an array of associated plates with the following fields.				
License Plate Country	Char	2	Optional	Country code associated with the license plate. Values: US – United States CA – Canada MX – Mexico “-“ – Used for plates not in the referenced documentation in “License Plate State”. If a License Plate Number is provided, the License Plate Country must be provided.
License Plate State	Char	2	Optional	Standard Postal Service State abbreviation (or Province abbreviation for Canada). For Mexico, this field would contain MX. Values: Publication 28, Appendix B – US State abbreviations http://pe.usps.com/text/pub28/28apb.htm Publication 28, Appendix A.A32 – Canadian Province abbreviations http://pe.usps.com/text/pub28/28apa_005.htm “GS” – Used for plates issued by any Federal agency. “-“ – Used for plates not in the referenced documentation. If a License Plate Number is provided, the License Plate State must be provided.
License Plate Number	Char	15	Optional	Plate letters/numbers. Shall follow format required for DMV lookups including required prefixes, suffixes, or handling of special characters as dictated by the state which issued the plate.
License Plate Type	Char	30	Optional	Plate type as required for DMV lookups. If Home Agency provides License Plate Type, Away Agency must match to that License Plate Type and must include License Plate Type in any plate based transactions.

Tag Validation List Detail Record				
Field	Type	Max Length	Required/ Optional	Description
License Plate Effective From	Date/Time	20	Optional	Date/time (UTC) license plate became associated to the current Tag. If not provided, is assumed to be effective when first seen in this record.
License Plate Effective To	Date/Time	20	Optional	<p>Date/time (UTC) license plate stopped being associated to the current Tag. If not provided, is assumed to still be effective as of the date of this record.</p> <p>When the plate is no longer associated to the current Tag, a line item shall be included in the next Differential TVL for the Tag with this field set to the date/time the plate was no longer associated. The next Bulk TVL would exclude the association of the plate to the current Tag.</p>
For each Account Transponder Number, the following additional elements of information may be provided				
Account Number	Char	50	Optional	The unique account number at the Home Agency of the associated tag and plate data. May not be provided for all agencies.
Fleet Indicator	Char	1	Optional	<p>Flag used to denote whether or not the indicated tag is associated with a fleet account (e.g., rental car company, etc.). If indicator is not provided, account is assumed to not be a fleet account.</p> <p>Values: Y – Account is a fleet account N – Account is not a fleet account</p>

3.4 XML Definition



TagValidationList_1
1152018.xml

3.5 Processing Requirements

- Consolidated TVLs (not Agency-specific TVLs) will be sent from the Home Hub to each Away Hub.
- The Home Hub shall only include Transponder Data for Agencies that are nationally interoperable through the specific Home Hub. In other words, if an Agency is regionally interoperable and not nationally interoperable through the Home Hub, its tags should not be included in the TVL.
- The transmission of the file to the Away Hub shall be completed by the Home Hub over SFTP.
- In the event that an invalid header record is encountered (e.g., character data in a numeric field, mismatch between the number of records indicated in the header record and the actual number of detail records found, etc.), the Away Hub shall reject the file and notify the Home Hub via the Acknowledgement data.
- In the event that an invalid detail record is encountered (e.g., inappropriate TAG_STATUS, etc.), the Away Hub shall reject the detail record and notify the Home Hub via the Acknowledgement data that one (or more) detail records were rejected. The Away Agency will continue to process and use the remaining records in the TVL. The Away Hub shall make available to the Home Hub a report showing each detail record that was rejected and the reason for its rejection. This information will be communicated back to the Home Agency as appropriate.

Because the Tag and associated Plate is not forwarded to the Away Agency when rejected, the Away Agency will treat any transactions associated with the Tag or Plate as no match on TVL.

6. The Home Hub shall perform appropriate sanity checks on the Bulk TVL data file prior to its transmission to the Away Hub. The Away Hub shall perform appropriate sanity checks on the Bulk TVL data file after receiving the transmission from the Home Hub. Such sanity checks should include, but not be limited to:
 - a. A configurable threshold of unusual growth in the number of tags from previous version, initially set to (recommended 3-5%)
 - b. A configurable threshold of unusual change in number of tags with a particular tag status, initially set to (recommended 3-5%)
 - c. Acknowledgement Data with Return Code of 03 should be used when the sanity checks fail.
7. The Home Hub shall only include information for tags and plates which are associated to accounts managed by a Home Agency certified with the Hub.
8. The frequency of Bulk TVL data file transmissions shall be as stipulated in the Business Rules.
9. The frequency of Differential TVL data file transmissions shall be as stipulated in the Business Rules.
10. There may be 1 tag with multiple associated license plates and 1 license plate associated with multiple tags.
11. When a Tag is replaced in an existing vehicle, two line items should be included in the next Differential TVL: one for the existing Tag becoming invalid (showing the plate association ended by setting the License Plate Effective To value); the second for the new Tag (showing the plate association by setting the License Plate Effective From value). The next Bulk TVL would include only the new Valid Tag with the associated plate.
12. When a tag is included in a differential all the active license plates should be included with that tag that would have been included in the bulk. If active license plates are not included in the differential with that tag, any previous supplied active license plates will be considered to be expired.

3.6 Sample Submission

Below example includes 3 Tags, the first having 2 Plates associated to it, the second having a single plate, and the third having no plate.



TagValidationListSa
mple_11192018.xml

4 Transaction Data

4.1 Usage

Transaction data shall be created by the Away Hub to inform the Home Hub of all toll transactions occurring at Away Agency facilities.

4.2 Data Records/Fields

Transaction Data Header Record				
Field	Type	Max Length	Required/ Optional	Description
Submission Type	Char	5	Required	Defines the type of data in the submission or web service request. Value: STRAN
Submission Date/Time	Date/Time	20	Required	The date/time (UTC) the submission was created or the web service request was submitted.
NIOP Hub ID	Char	4	Required	The ID assigned to the Away Hub when transmitting Transaction Data from the Away Hub to the Home Hub. Refer to Appendix A for valid values.
Away Agency ID	Char	4	Required	The Agency ID of the Away Agency. This is the agency on whose facility the transaction took place. Refer to Appendix B for valid values.
Home Agency ID	Char	4	Required	The ID assigned to the Home Agency when transmitting Transaction Data from the Away Hub to the Home Hub. Refer to Appendix B for valid values.
Transaction Data Sequence Number	Num	12	Required	A sequence number generated by the entity creating the Transaction Data unique to that entity across all Transaction Data and Correction Data submissions. Used to correlate the Transaction Data and Reconciliation Data.
Record Count	Num	9	Required	The number of detail records contained in this submission or web service request. Values: 0 – 999999999

Transaction Data Detail Record				
Field	Type	Max Length	Required/ Optional	Description
Record Type	Char	4	Required	<p>Record Type.</p> <p>Values:</p> <p>TB01 – Tag Toll - Barrier Type</p> <p>TC01 – Tag Toll - Closed Type (either from a single entry/exit pair or from a constructed trip comprised of multiple toll zones)</p> <p>TC02 – Tag Toll - Closed Unmatched Type (either from a single entry/exit pair or from a constructed trip comprised of multiple toll zones). Used when either the entry or exit toll zone has been inferred.</p> <p>VB01 – Video Toll - Barrier Type</p> <p>VC01 – Video Toll - Closed Type (either from a single entry/exit pair or from a constructed trip comprised of multiple toll zones)</p> <p>VC02 – Video Toll - Closed Unmatched Type (either from a single entry/exit pair or from a constructed trip comprised of multiple toll zones). Used when either the entry or exit toll zone has been inferred.</p> <p>Note: Video Record Types are used when the transaction originates as a Video Transaction.</p>
Transaction Reference ID	Num	20	Required	The unique reference number for the Away Agency for this transaction. This number is unique across all Record Types (i.e., the same number is not found in two different Record Types). Would be returned in the reconciliation submission to uniquely identify the transaction being reconciled to the Away Agency. This reference ID would also be included in any subsequent adjustment/correction data required for this transaction.
Exit Date/Time	Date/Time	20	Required	The date/time (UTC) the vehicle exited the facility. For Barrier type transactions, this is the date/time the vehicle used the facility. For Unmatched type transactions, this may be inferred information.
Facility ID	Char	10	Required	Unique identifier of the facility on which the transaction took place. An Away Agency may have one or more facilities under its control. For example, NJ Turnpike Authority controls both the NJ Turnpike and the Garden State Parkway. This would be a character representation as the Away Agency wants this facility represented on a customer statement.
Facility Description	Char	30	Required	The facility description that corresponds to the Facility ID. To be used for customer statements as necessary by the Home agency.
Exit Plaza	Char	15	Required	Unique (for the Facility ID) identifier of the plaza on the facility at which the vehicle exited the facility. For Barrier type transactions, this is the plaza used. For Unmatched type transactions, this may be inferred information.
Exit Plaza Description	Char	30	Required	The exit plaza description that corresponds to the Exit Plaza. To be used for customer statements as necessary by the Home agency. For Unmatched type transactions, this may be inferred information.
Exit Lane	Char	4	Required	Lane identifier at which the vehicle exited the facility. For Barrier type transactions, this is the lane used. For Unmatched type transactions, this may be inferred information.
Entry Date/Time	Date/Time	20	Required for TC and VC transactions	The date/time (UTC) the vehicle entered the facility. For Barrier type transactions, this is unused. For Unmatched type transactions, this may be inferred information.

Transaction Data Detail Record				
Field	Type	Max Length	Required/ Optional	Description
Entry Plaza	Char	15	Required for TC and VC transactions	Unique (for the Facility ID) identifier of the plaza on the facility at which the vehicle entered the facility. For Barrier type transactions, this is unused. For Unmatched type transactions, this may be the inferred information.
Entry Plaza Description	Char	30	Required for TC and VC transactions	The entry plaza description that corresponds to the Entry Plaza. To be used for customer statements as necessary by the Home agency. For Barrier type transactions, this is unused. For Unmatched type transactions, this may be inferred information.
Entry Lane	Char	4	Required for TC and VC transactions	Lane identifier at which the vehicle entered the facility. For Barrier type transactions, this is unused. For Unmatched type transactions, this may be inferred information.
Tag Agency ID	Char	4	Required	An identifier used by NIOP that corresponds to one or more Region and/or Agency field values read directly from a transponder. The Region/Agency fields encoded in a transponder represent the entity that originally issued the transponder. Refer to Appendix C, NIOP Tag Agency ID column for valid values and how they map to actual data encoded on the transponder. If the TVL is used to look-up license plate information for a video transaction, the Tag Agency ID, Tag Serial Number, and Tag Status shall be populated by the Away Agency. Refer to Appendix C for valid values.
Tag Serial Number	Char	10	Required	Serial Number as read from the transponder. Leading zeroes included. 10 decimal digits 0 – 9 converted to a character field. If the TVL is used to look-up license plate information for a video transaction, the Tag Agency ID, Tag Serial Number, and Tag Status shall be populated by the Away Agency.
Tag Status	Char	1	Required	Tag Status associated with the Exit Date/Time as determined by the Away Agency from the then active TVL. If the TVL is used to look-up license plate information for a video transaction, the Tag Agency ID, Tag Serial Number, and Tag Status shall be populated by the Away Agency. Values: V – Valid I – Invalid Z – Zero/Negative Balance
Occupancy Indicator	Char	1	Optional	HOV switch position or other means used to indicate vehicle occupancy. For facilities with multiple gantries/toll points that could comprise a trip, this would be the switch position/indicator used to calculate the toll. Values: 1 – SOV 2 – HOV2 3 – HOV3+
Vehicle Classification	Char	4	Optional	Classification of the vehicle based on the Away Agency's classification structure/rules and used to calculate the Toll Amount. This field does not require validation by the Home Agency.
Toll Amount	Num	9	Required	Toll amount in Cents.

Transaction Data Detail Record				
Field	Type	Max Length	Required/ Optional	Description
Discount Plan	Char	12	Optional	<p>The discount plan, if any, as determined by the Away Agency that was applicable when calculating the Toll Amount. Used by the Home Agency, if necessary, on the customer statement. Must match to a valid Discount Plan from the TVL for this tag/plate.</p> <p>Discount Plans are currently not supported. The definition for this data element will be provided when support for it becomes necessary and/or is defined by NIOP.</p>
License Plate Country	Char	2	Required (only for V transactions)	<p>Issuing country of the license plate as determined by the Away Agency and matched to the Home Agency data from the TVL.</p> <p>Values: US – United States CA – Canada MX – Mexico “-“ – Used for plates not in the referenced documentation.</p> <p>If a License Plate Number is provided, the License Plate Country must be provided.</p>
License Plate State	Char	2	Required (only for V transactions)	<p>Issuing jurisdiction of the license plate as determined by the Away agency and matched to the Home agency data from the TVL.</p> <p>Values: Publication 28, Appendix B – US State abbreviations http://pe.usps.com/text/pub28/28apb.htm Publication 28, Appendix A.A32 – Canadian Province abbreviations http://pe.usps.com/text/pub28/28apa_005.htm “GS” – Used for plates issued by any Federal agency. “-“ – Used for plates not in the referenced documentation.</p> <p>If a License Plate Number is provided, the License Plate State must be provided.</p>
License Plate Number	Char	15	Required (only for V transactions)	License Plate Number as determined by the Away Agency and matched to the Home Agency data from the TVL.
License Plate Type	Char	30	Optional (only for V transactions)	License Plate Type as determined by the Away Agency and matched to the Home Agency data from the TVL. If the TVL did not contain a plate type, then it is should not be included.
Vehicle Classification Adjustment Flag	Char	1	Optional	<p>Used to indicate if the Vehicle Classification presented in the transaction was adjusted by the Away Agency as compared to the TVL tag classification. Allows the Home Agency to include a statement notice, if applicable, indicating that the tag classification was adjusted or to track mismatch frequency.</p> <p>Values: A – Axles adjusted</p> <p>It is noted that this field is used by OTA for transactions when the vehicle classification has been adjusted (transactions originating at OTA).</p>

Transaction Data Detail Record				
Field	Type	Max Length	Required/Optional	Description
System Matched Flag	Char	1	Optional	0 = System did not force (system) match the entry and exit transaction. 1 = System did force (system) match the entry and exit transaction. It is noted that this field is used by OTA for transactions originating at OTA that were force matched.
Spare 1	Char	20	Optional	Spare field for future growth. Defined by the CUSIOP Hub as the Guaranteed Transaction flag, where 1 = Guaranteed, 0 = Not Guaranteed, blank = not used.
Spare 2	Char	20	Optional	Spare field for future growth. Defined by the CUSIOP Hub as the Activation Date and Time of the TVL used to determine the Guaranteed Flag. This field should be in a Date/Time (UTC) format.
Spare 3	Char	20	Optional	Spare field for future growth.
Spare 4	Char	20	Optional	Spare field for future growth.
Spare 5	Char	20	Optional	Spare field for future growth.
Exit Date/Time w/TZ	Char	25	Required	The date/time with TZ the vehicle exited the facility. For Barrier type transactions, this is the date/time the vehicle used the facility. For Unmatched type transactions, this may be inferred information. Format shall be "YYYY-MM-DDThh:mm:ss±HH:MM.
Entry Date/Time w/TZ	Char	25	Required if the Entry Date/Time is provided	The date/time with TZ the vehicle entered the facility. For Barrier type transactions, this is the date/time the vehicle used the facility. For Unmatched type transactions, this may be inferred information. Format shall be "YYYY-MM-DDThh:mm:ss±HH:MM. For example: 2018-10-05T08:15:30-05:00 2018-06-06T06:14:30-04:00

4.3 XML Definition



TransactionData_11
152018.xml

4.4 Processing Requirements

N/A

4.5 Sample Submission



TransactionDataSa
mple_03182019.xml

5 Adjustment/Correction Data

5.1 Usage

Correction data shall be created by the Away Hub to replace toll transaction information already sent to a Home Hub and subsequently to the Home Agency. Correction data is intended to inform the Home Agency of updated/corrected information to the original transaction sent. This Data is also used for resubmitting transactions.

5.2 Data Records/Fields

Adjustment/Correction Data Header Record				
Field	Type	Max Length	Required/Optional	Description
Submission Type	Char	5	Required	Defines the type of data in the submission or web service request. Value: SCORR
Submission Date/Time	Date/Time	20	Required	The date/time (UTC) the submission was created or web service request was submitted.
NIOP Hub ID	Char	4	Required	The ID assigned to the Away Hub when transmitting Correction Data from the Away Hub to the Home Hub. Refer to Appendix A for valid values.
Away Agency ID	Char	4	Required	The Agency ID of the Away Agency. This is the agency on whose facility the transaction took place. Refer to Appendix B for valid values.
Home Agency ID	Char	4	Required	The Agency ID of the Home Agency. This is the Home Agency ID assigned where the Correction Data will be sent. The Away Agency should specify the Home Agency ID that was returned on the Reconciliation Data submission corresponding to the Transaction Data submission that originally contained the transaction. In the event the Hub provided the Reconciliation Data for a transaction where the Reconciliation Data was late or had transaction/content format error, The Home Agency ID should be the Hub ID who provided the Reconciliation Data unless the Away Agency specified the Home Agency to begin with. Refer to Appendix A and B for valid values.

Adjustment/Correction Data Header Record				
Field	Type	Max Length	Required/ Optional	Description
Correction Data Sequence Number	Num	12	Required	<p>A sequence number generated by the entity creating the Correction Data unique to that entity across all Transaction Data and Correction Data submissions. Used to correlate the Correction Data and Reconciliation Data.</p> <p>As Applicable:</p> <p>The Away Agency generates the unique number when sending Correction Data to the Away Hub.</p> <p>The Away Hub generates the unique number when sending Correction Data to the Home Hub, associating their number to the number received from the Away Agency.</p> <p>The Home Hub generates the unique number when sending Correction Data to the Home Agency, associating their number to the number received from the Away Hub.</p>
Record Count	Num	9	Required	<p>The number of detail records contained in this submission.</p> <p>Values: 0 – 999999999</p>

Adjustment/Correction Data Detail Record				
Field	Type	Max Length	Required/ Optional	Comment
Record Type	Char	5	Required	<p>Record Type being adjusted.</p> <p>Values:</p> <p>TB01A – Tag Toll - Barrier Type - Adjustment</p> <p>TC01A – Tag Toll - Closed Type – Adjustment</p> <p>TC02A – Tag Toll - Closed Unmatched Type – Adjustment</p> <p>VB01A – Video Toll - Barrier Type – Adjustment</p> <p>VC01A – Video Toll - Closed Type – Adjustment</p> <p>VC02A – Video Toll - Closed Unmatched Type - Adjustment</p>
Correction Date/Time	Date/Time	20	Optional	<p>The date and time (UTC) the adjustment was made by the Away Agency.</p> <p>Required for adjustments. Not required for transaction resubmittals.</p>

Adjustment/Correction Data Detail Record				
Field	Type	Max Length	Required/ Optional	Comment
Correction Reason	Char	1	Optional (Adjustment Reason or Resubmit Reason must be populated; if an adjustment is resubmitted, both must be populated)	<p>The reason for the adjustment.</p> <p>Values:</p> <p>C – Class adjusted. Apply toll/class from this record. New toll may be equal to or lower than original toll amount only.</p> <p>I – Ignore original transaction. Back out original transaction (full credit to account).</p> <p>L – Location information corrected. Apply toll/location from this record. New toll may be equal to or lower than original toll amount.</p> <p>T – Toll adjusted. Apply toll from this record. New toll may only be lower than original toll amount.</p> <p>O – Other adjustment/correction. Apply fields from this record. New toll may be equal to or lower than the original toll amount.</p> <p>For adjustments where the original transaction is required to be backed out, an “I” must be sent by the Visited Agency before a “C”, “L”, “T” or “O”.</p>
Resubmit Reason	Char	1	Optional (Adjustment Reason or Resubmit Reason must be populated; if an adjustment is resubmitted, both must be populated)	<p>The reason for the resubmitted transaction or adjustment:</p> <p>Values:</p> <p>R – Resubmittal of transaction or adjustment previously rejected with Posting Dispositions of N or T.</p> <p>S – Resubmitted Transaction or adjustment because disposition received by Away Agency with “System/Communication Issue”.</p>
Other Correction Description	Char	255	Required for Adjustment Reason O only	Free form field used by the Away Agency to indicate further details for Adjustment Reason O (Other).
Correction Count	Num	3	Required	<p>An incrementing sequence number for each adjustment of a Transaction identified by its specific Transaction Reference ID.</p> <p>Values: 1 – 999</p>
Resubmit Count	Num	3	Required	Incremented every time a transaction or adjustment is resubmitted; This should be 0 the first time an adjustment (Correction Data) is transmitted.
Home Agency Reference ID	Num	20	Optional	Reference ID provided by the Home Agency within the Reconciliation Submission for either the original transaction or the most recent adjustment/correction.
All other fields from the Transaction Data Detail				<p>All fields from the original transaction detail (refer to Transaction Data structure for details) will be retransmitted with the appropriate fields corrected to their required values.</p> <p>Notes:</p> <ol style="list-style-type: none"> Transaction Reference ID from the original transaction remains the same for any related adjustment/correction transactions. For the “I” Correction Reason, the Toll Amount shall be the negative value of the original Toll Amount or the previous accepted adjustment when multiple adjustments are made. The Toll Amount should be the value of the new Toll Amount that needs to be applied at the Home Agency.

Example:

The original amount is \$1.00

The new toll amount value should be \$.75

The first adjustment record is an "I" with "-100" as the toll amount.

The second adjustment is "T" with "75" as the toll amount.

5.3 XML Definition



CorrectionData_111
52018.xml

5.4 Processing Requirements

1. The Home Agency is responsible for making certain the credit adjustment from the Away Agency is processed before another adjustment.
2. When an "I" is expected prior to another adjustment, it shall be in the same correction data before the subsequent adjustment/correction record and applied first.
3. The Correction Data submission from the Away Agency is specific to Home Agency (or Hub).
4. Adjustment Count and Resubmit Count are incremented as follows:

Case				SCORR				
	Transaction Type	Posting Disposition	Description	Transaction Type	Adjustment Reason	Adjustment Count	Resubmit Reason	Resubmit Count
1	Toll	N, T	Toll transaction returned with a disposition of N or T. Transaction is resubmitted.	Toll Resubmittal	N/A	0	R	Increment
2		S	Toll transaction returned with a disposition of S. Transactions is resubmitted.	System Issue Resubmittal	N/A	0	S	Increment
3		P	Toll transaction returned with a disposition of P. No action taken.					
4		D, I, C, O	Toll transaction returned with a disposition that may not be resubmitted. No action taken.					
5	Toll Adjustment	P	Toll Adjustment where Toll Transaction returned with a disposition of P.	Toll Adjustment	C, I, L, O, T	Increment	N/A	0
6		N, T	Toll Adjustment returned with a disposition of N or T. Toll Adjustment is resubmitted.	Toll Adjustment	C, I, L, O, T	Do Not Increment	R	Increment
7		S	Toll Adjustment returned with a disposition of S. Toll Adjustment is resubmitted.	Toll Adjustment	C, I, L, O, T	Do Not Increment	S	Increment
8		D, I, C, O	Toll Adjustment returned with a disposition that may not be resubmitted. No action taken.					

5.5 Sample Submission



CorrectionDataSam
ple_03182019.xml

6 Reconciliation Data

6.1 Usage

Reconciliation data shall be created by the Home Hub to inform the Away Hub as to the disposition of transactions/corrections processed. The Away Hub will forward the disposition to the Away Agency per the agreement between those entities.

6.2 Data Records/Fields

Reconciliation Data Header Record				
Field	Type	Max Length	Required/ Optional	Description
Submission Type	Char	6	Required	Defines the type of data in the submission or web service request. Value: SRECON
Submission Date/Time	Date/Time	20	Required	The date/time (UTC) the submission was created or web service request was submitted.
NIOP Hub ID	Char	4	Required	The ID assigned to the Home Hub when transmitting Reconciliation Data from the Home Hub to the Away Hub. Refer to Appendix A for valid values.
Home Agency ID	Char	4	Required	The ID assigned to the Home Agency when transmitting Reconciliation Data from the Home Hub to the Away Hub. Refer to Appendix B for valid values.
Away Agency ID	Char	4	Required	The Agency ID of the Away Agency. This is the agency on whose facility the transaction took place. This field should be populated with the Away Agency ID not the Away Hub ID. Refer to Appendix B for valid values.
Data Sequence Number	Num	12	Required	The unique sequence number (Transaction or Correction Data) to which this Reconciliation Data is associated. This is the Transaction Data Sequence Number or the Correction Data Sequence Number.
Record Count	Num	9	Required	The number of detail records contained in this submission. Values: 0 – 999999999

Reconciliation Data Detail Record				
Field	Type	Max Length	Required/ Optional	Comment
Transaction Reference ID	Num	20	Required	The unique reference number created by the Away Agency for this transaction. This number is unique across all Record Types (i.e., the same number is not found in two different Record Types). Returned in the reconciliation data to uniquely identify the transaction being reconciled to the Away Agency.

Reconciliation Data Detail Record				
Field	Type	Max Length	Required/ Optional	Comment
Adjustment Count	Num	3	Required	The incrementing sequence number for each adjustment of a Transaction identified by its specific Transaction Reference ID. For original Transactions, this field would contain zero (0). Values: 0 – 999
Resubmit Count	Num	3	Required	Incremented every time a transaction or adjustment is resubmitted; This should be 0 the first time a transaction or adjustment is transmitted.
Reconciliation Home Agency ID	Char	4	Required	The ID assigned to the Home Agency to which the Transaction Data or Correction Data was sent and who responded with the posting disposition. Refer to Appendix B for valid values.
Home Agency Reference ID	Num	20	Optional	The unique reference ID created by the Home Agency for this transaction as a result of posting the transaction to a customer account.
Posting Disposition	Char	1	Required	The processing disposition for the transaction by the Home Agency. Values indicating Home will pay Away: P – Posted successfully or accepted. The transaction was accepted by the Home Agency. Values indicating the transaction was rejected and no funds are due to the Away Agency: D – Duplicate transaction. Includes exact duplicates as well as duplicates determined by the Home Agency based on its business rule logic. Cannot be resubmitted. I – Invalid Tag/Plate (tag/plate was communicated as invalid and should not have been sent in the first place). Cannot be resubmitted. N – Not posted. Transaction was received after the guarantee period or the Tag Status was Zero/Negative Balance and the account had insufficient funds. Can be resubmitted by the Away Agency /Hub if the account is determined as having sufficient funds (based on the most recent Tag Validation List). S – System or communication issue prevents receiving the Posting Disposition from the Home Agency within the Home Agency Performance SLA for Interoperable transaction processing. The Away Agency can resubmit with the same Transaction Reference ID and the Home Agency will process the transaction considering the original submission date and applicable guarantee. T – Transaction content/format error. Transaction could be corrected and resubmitted with the same Transaction Reference ID. C – Tag/plate not on file. Cannot be resubmitted. O – Transaction too old. Cannot be resubmitted.

Reconciliation Data Detail Record				
Field	Type	Max Length	Required/ Optional	Comment
Posted Discount Plan	Char	12	Optional	The Away Agency discount plan used when the transaction was posted. This is only applicable when the Home Agency offers the Away Agency discount plan to its customers. Discount Plans are currently not supported. The definition for this data element will be provided when support for it becomes necessary and/or is defined by NIOP.
Posted Amount	Num	9	Required	Toll amount in Cents posted to the account or accepted by the Home Agency and owed to the Away Agency. US Currency.
Posted Date/Time	Date/Time	20	Required	The date/time (UTC) the Home Agency posted or accepted the transaction to the customer's account. Note, this field is not used for settlement reporting purposes.
Transaction Flat Fee	Num	9	Required	Flat Fee in cents. The Home Hub or Home Agency shall calculate the fees for each Posted (accepted) transaction. Note: Fees may not be applied to transaction adjustments.
Transaction Percent Fee	Num	9	Required	Percent Fee in cents. The Home Hub or Home Agency shall calculate the fees for each Posted (accepted) transaction. Note: Fees may not be applied to transaction adjustments.
Spare 1	Char	20	Optional	Spare field for future growth.
Spare 2	Char	20	Optional	Spare field for future growth.
Spare 3	Char	20	Optional	Spare field for future growth.
Spare 4	Char	20	Optional	Spare field for future growth.
Spare 5	Char	20	Optional	Spare field for future growth.

6.3 XML Definition



ReconciliationData.
xml

6.4 Processing Requirements

1. Prior to sending the Reconciliation Data submission, the Home Hub shall verify each Transaction Data detail record has a corresponding Reconciliation Data detail record; and no unmatched Reconciliation Data records have been included in the Reconciliation Data submission.
2. In the event the Hub provided the Reconciliation Data for a transaction where the Reconciliation Data was late, had transaction/content format error or Tag/plate not on file, the Home Agency ID should be the Hub who provided the Reconciliation Data unless the Away Agency specified the Home Agency to begin with.

6.5 Sample Submission



ReconciliationData
Sample_10112016_si

7 Acknowledgement Data

7.1 Usage

Acknowledgment data shall be created by the Hub which received the file or web service request to inform the Hub which sent it that the data transmitted was received in its entirety. Acknowledgement data shall be sent for each of the previously referenced files or web service requests.

The TVL acknowledgements shall be implemented via SFTP and the transaction, correction, and reconciliation data acknowledgements shall be implemented via Web Services.

Specific to acknowledgment of a Tag Validation List (TVL) Data file, an initial Acknowledgement Data file shall be sent back to the Hub which sent the TVL. Additionally, a second Acknowledgement submission with Return Code value '10' shall be created by the Away Hub and shall be sent to the Home Hub to provide the date/time the TVL is considered active by the Away Hub and all of its Local Agencies. Please refer to section 7.4, "Return Code".

Specific to acknowledgement of a Reconciliation Data (SRECON) submission, an initial Acknowledgement shall be sent back to the Hub which sent the SRECON. Additionally, a second Acknowledgement submission with Return Code value '13' shall be created by the Away Hub based on the SRECON ACK received from the Away agency. This second ACK will be used for Reconciliation reporting. Please refer to section 7.4, "Return Code".

7.2 File Data Exchange over SFTP

File Name: {NIOP_HUB_ID}_{FROM_AGENCY_ID}_{FILE_NAME}_{RETURN CODE}_{FILE_TYPE}.ACK

First ACK for a TVL:

Example: 9001_9001_9002_9002_20171201001015_00_BTVL.ACK

Second ACK for a TVL:

Example: 9001_9001_9002_9002_20171201001015_10_BTVL.ACK

First ACK for an SRECON:

Example: 9002_9002_9001_0035_0040_20171201041015_00_SRECON.ACK

Second ACK for an SRECON:

Example: 9002_9002_9001_0035_0040_20171201041015_13_SRECON.ACK

7.3 Data Exchange using Web Services over VPN

Provider: Hub which sent a web service request

Consumer: Hub which received a web service request

Trigger: Hub upon receiving a web service request confirms the content is either acceptable for processing or determines the content cannot be processed.

Operation: Synchronous Request-Response.

Format: WSDL

7.4 Data Record/Fields

Acknowledgement Data Detail Record				
Field	Type	Max Length	Required/Optional	Comment
Submission Type	Char	3	Required	Defines the type of data in the file or web service request. Value: ACK
Original submission Type	Char	10	Required	The submission type of the original file or web service request being acknowledged as received from the To Agency ID. This value together with the field below uniquely identifies the original submission.
Original Submission Date/Time	Date/time	20	Required	The submission date/time (UTC) provided in the header of the original file or web service request being acknowledged as received from the To Agency ID. This value together with the field above uniquely identifies the original submission.
NIOP Hub ID	Char	4	Required	As Applicable: The ID assigned to the "To" Hub when transmitting Acknowledgement Data from the "From" Agency to the "To" Hub. The ID assigned to the "From" Hub when transmitting Acknowledgement Data from the "From" Hub to the "To" Hub. The ID assigned to the "From" Hub when transmitting Acknowledgement Data from the "From" Hub to the "To" Agency. Refer to Appendix A for valid values.
From Agency ID	Char	4	Required	The Agency/Hub generating the acknowledgement. Refer to Appendix A and B for valid values.
To Agency ID	Char	4	Required	The Agency/Hub that originated the file or submission being acknowledged. Refer to Appendix A and B for valid values.
ACK Date/Time	Date/Time	20	Required	The acknowledgement date/time (UTC); or in case of Return Code 13, the Reconciliation Date/Time; or in the case of Return Code 10, the Activation Date/Time.

Acknowledgement Data Detail Record				
Field	Type	Max Length	Required/ Optional	Comment
Return Code	Char	2	Required	<p>A code indicating the status of the submission being acknowledged.</p> <p>Values:</p> <p>00 – Submission was successfully received and verified. Submission is accepted and processed.</p> <p>01 – Header record count does not match the number of detail records found in the submission. Entire submission is rejected.</p> <p>02 – Detail record(s) found with invalid data. Remainder of submission was processed. Submission is partially accepted and processed.</p> <p>03 – Sanity check failure. (Bulk TVL - Sanity checks failed. Differential TVL – Bulk Identifier was invalid.) Submission is rejected and not processed.</p> <p>04 – Transaction Reconciliation Data (or Correction Reconciliation Data) does not match corresponding Transaction Data (or Correction Data). The number of reconciliation records do not match the number of records in the original transaction submission) (Reconciliation Data only – partial reconciliation) Submission is rejected and not processed.</p> <p>05 – Duplicate submission sequence number. The entire submission is rejected and not processed.</p> <p>07 – Invalid ZIP file or other file structure defect, for data file exchange over SFTP. Invalid data resulting in rejection of entire data submission, for data exchange using web services. The entire submission is rejected and not processed.</p> <p>10 – Acknowledgement date/time of a TVL at Away Hub communicating the operative date/time of the TVL for purposes of comparison to transaction date/time. Second ACK of the TVL only.</p> <p>11 – Reconciliation calculations are incorrect (toll amounts and fees may have a calculation error). (ACK to a Reconciliation Data) Submission is accepted and processed.</p> <p>12 – File received late. This is used when a TVL or Reconciliation Data is received after the allotted time. For TVLs the previous TVL will be used. The entire submission is rejected and not processed.</p> <p>13 – SRECON Reconciliation Date/Time created by the Away Hub based on the Away Agency's Acknowledgement of the SRECON data submission. Note, this date/time would be used for reconciliation reporting. If the date/time falls within the current reconciliation period, all reconciliation records in the associated Reconciliation submission with a Posting Disposition value of "P" shall be paid from the Home agency to the Away Agency.</p>

7.5 XML Definition



Acknowledgement.
xml

7.6 Processing Requirements

1. This file or web service request shall contain a single record only. For each data submission received by a Hub, the Hub shall generate Acknowledgement data and transmit the file or web service request back to the Hub which sent the data submission.
2. The ACK Date/Time (UTC) field shall be used by the Hub which sent the original data submission as the acknowledgement date/time of the transmitted data.
3. The Hub that received a file or web service request shall generate a report showing all detail records that were skipped due to invalid data (RETURN_CODE = '02') and shall have this report available, if needed, for the Hub that sent the data submission.
4. Specific to acknowledgment of a Tag Validation List (TVL) Data file, an initial Acknowledgement Data file shall be sent back to the Hub which sent the TVL. Additionally, a second Acknowledgement Data file with Return Code value '10' shall be sent to provide the date/time the TVL is considered operative by the Away Hub and all of its local Agencies. The second Acknowledgement Data file will only be sent after an initial Acknowledgement Data file with Return Code '00' or '02' has already been delivered.
5. Specific to acknowledgement of an SRECON data submission, an initial Acknowledgement shall be sent back to the Hub which sent the SRECON. Additionally, a second Acknowledgement submission with Return Code value '13' shall be created by the Away Hub based on the SRECON ACK received from the Away agency. This submission contains the Reconciliation Date/Time (UTC) that will be communicated to the Home Agency, through the Home Hub when applicable. If the Reconciliation Date/Time falls within the current reconciliation period, all reconciliation records in the associated Reconciliation submission with a Posting Disposition value of "P" shall be paid from the Home agency to the Away Agency for the current reconciliation period.

7.7 Sample Submission



AcknowledgementSa
mple.xml

Appendix A: NIOP Hub IDs

The NIOP Hubs are assigned a numeric ID value. These values are listed in [NIOP ICD Appendix A – RELEASED YYYYMMDD.xlsx](#).

Appendix B: NIOP Agency IDs

The agencies participating in National Interoperability are assigned unique Agency IDs. The NIOP Agency IDs listed in [NIOP ICD Appendix B – Last Update RELEASED.xlsx](#) are the values to be used for the “Home Agency ID” and “Away Agency ID” fields in the Tag Validation List and Transaction Data.

Each NIOP Agency may only be nationally interoperable through one Hub.

Appendix C: NIOP Tag Agency IDs

A single RFID transponder must be uniquely identifiable by all members of NIOP. A transponder is identified by the combination of the NIOP Tag Agency ID and Tag Serial Number.

RFID transponders are encoded with an agency designation. The agency designation of a particular tag is encoded in accordance with the particular communication protocol to which the tag responds. A single tag may respond to one or more communications protocol. Developers of tag reader interfaces (e.g., lane controllers, POS terminals) require these specific agency designations to determine the NIOP Tag Agency ID.

This table in [NIOP ICD Appendix C – RELEASED YYYYMMDD.xlsx](#) defines the NIOP Tag Agency ID. The Agency designation encoding for each tag communication protocol is listed. The Tag Agency ID is intended to designate a specific RFID transponder, irrespective of the tag communication protocol used to acquire the transponder read.

The Tag Agency IDs in [NIOP ICD Appendix C – RELEASED YYYYMMDD.xlsx](#) are the values to be used for the “Tag Agency ID” fields in the Tag Validation List and Transaction Data.

Appendix D: Tag Validation List Schedule

The Tag Validation List schedules are included in this section. These schedules may change from time to time.

The content of this section is located in [NIOP ICD Appendix D – RELEASED YYYYMMDD.xlsx](#).

Appendix E: License Plate Types

The defined License Plate Types are included in this section.

The content of this section is located in [NIOP ICD Appendix E – RELEASED YYYYMMDD.xlsx](#).

Appendix A: NIOP Hub IDs

National Interoperability Interface Control Document - Appendix - A

Date	Modifications
18-Oct-18	B. Jewell: Created from ICD.
11/25/2018	B. Jewell: Updated abbreviations to conform with the Business Rules.
11/26/2018	B. Jewell: Updated the following as suggested by M. Kolb a. Changed "E-Zpass" to "E-ZPass". b. Changed "Western US Hub" to "Western Region Hub".

NIOP Hub ID	Hub Description
9001	Southeast US Hub (SEIOP)
9002	Central US Hub (CUSIOP)
9003	Northeast (E-ZPass) Hub (EZIOP)
9004	Western Region Hub (WRIOP)

Appendix B: NIOP Agency IDs

National Interoperability Interface Control Document - Appendix - B

Date	Modifications
10/18/2018	B. Jewell: Created from ICD.
11/8/2018	B. Jewell, M. Kolb: Added and populated Home and Away Agency columns and Notes.
11/25/2018	B. Jewell: Accepted revisions from R. Carrier.

NIOP Agency ID	Assigned NIOP Hub	Home Agency	Away Agency	Agency Description	Note
0017	9001	X	X	South Carolina DOT (SCDOT)	
0033	9001	X	X	North Carolina Turnpike Authority (NCTA)	
0034	9001	X	X	Georgia State Road and Tollway Authority (SRTA)	
0035	9001	X	X	Florida Turnpike Enterprise (FTE)	
0036	9001	X	X	Central Florida Expressway Authority (CFX)	
0037	9001		X	Miami Dade Expressway Authority (MDX)	
0038	9001		X	Tampa Hillsborough Expressway Authority (THEA)	
0039	9001	X	X	Lee County Florida	
0062	9001		X	Southern Connector SC	
0040	9002	X	X	Texas DOT (TxDOT)	
0041	9002	X	X	North Texas Tollway Authority (NTTA)	
0042	9002	X	X	Harris County Toll Road Authority (HCTRA)	
0043	9002		X	Central TX Regional Mobility Authority (CTRMA)	
0046	9002	X	X	E-470 Colorado	
0047	9002		X	Northwest Parkway Colorado	
0050	9002			Greater New Orleans Expressway Commission (Lake Pontchartrain Causeway)	
0051	9002			Louisiana DOT and Development (LADOTD)	
0055	9002	X	X	Oklahoma Turnpike Authority	
0056	9002	X	X	Kansas Turnpike Authority	
0070	9002		X	Ft. Bend County Toll Road Authority	
0002	9003		X	New Jersey Highway Authority (NJHA)	
0003	9003		X	New Jersey Turnpike Authority (NJTA)	
0004	9003	X	X	New York State Thruway Authority (NYSTA)	
0005	9003	X	X	Port Authority of New York & New Jersey (PANYNJ)	
0006	9003	X	X	Pennsylvania Turnpike Commission (PTC)	
0007	9003		X	South Jersey Transportation Authority (SJTA)	
0008	9003	X	X	MTA Bridges & Tunnels (MTAB&T)	
0009	9003		X	Delaware River Port Authority (DRPA)	
0010	9003	X	X	Virginia DOT (VDOT)	
0013	9003		X	Peace Bridge, New York	
0015	9003	X	X	Illinois State Toll Highway Authority (ISTHA)	
0016	9003	X	X	Maryland Transportation Authority (MdTA)	
0018	9003		X	New York State Bridge Authority (NYSBA)	
0019	9003	X	X	Delaware DOT (DelDOT)	
0021	9003	X	X	Massachusetts DOT (MassDOT)	
0022	9003	X		New Jersey CSC (NJCS)	
0024	9003	X	X	West Virginia Parkways Authority (WVPA)	
0025	9003		X	Delaware River and Bay Authority (DRBA)	
0026	9003	X	X	New Hampshire DOT (NHDOT)	
0027	9003		X	Burlington County Bridge Commission (BCBC)	
0028	9003	X	X	Maine Turnpike Authority (MeTA)	
0029	9003		X	Delaware River Joint Toll Bridge Commission (DRJTBC)	
0030	9003	X	X	Indiana Toll Road Concession Company (ITRCC)	
0031	9003	X	X	Ohio Turnpike and Infrastructure Commission (OTIC)	
0032	9003	X	X	Rhode Island Turnpike and Bridge Authority (RITBA)	
0044	9003	X	X	Skyway Concession Company (SCC)	
0045	9003	X	X	Louisville-Southern Indiana Ohio River Bridges (LSIORB)	
0048	9003			Minnesota DOT (MnDOT)	
0049	9003			Blue Water Bridge	
0059	9003		X	Niagara Falls Bridge Commission	
0060	9003		X	Thousand Islands Bridge Authority	
0058	9004	X	X	Utah DOT (UDOT)	
0077	9004	X	X	Washington DOT (WashDOT)	
0101	9004	X	X	Bay Area Toll Authority (BATA)	
0103	9004	X	X	Transportation Corridor Agencies (TCA)	
0105	9004		X	Golden Gate Bridge, Highway and Transportation District (GGBHTD)	
0106	9004	X	X	Los Angeles County Metropolitan Transportation Authority (LA Metro)	
0107	9004	X	X	Orange County Transportation Authority (OCTA)	
0108	9004	X	X	Riverside County Transportation Commission (RCTC)	
0109	9004	X	X	San Diego Association of Governments (SANDAG)	
0110	9004		X	Santa Clara Valley Transportation Authority (VTA)	
0111	9004		X	South Bay Expressway, LLC (SBX)	
0112	9004		X	Alameda County Transportation Commission (ACTC)	
0113	9004		X	San Francisco County Transportation Authority (SFCTA)	
0114	9004		X	San Bernardino County Transportation Authority (SBCTA)	
0116	9004	X	X	Port of Hood River (PoHR)	
0011				Highway 407, Canada	Has not indicated they are doing NIOP.
0014				Ambassador Bridge, Michigan	Has not indicated they are doing NIOP.
0054				Capufe, Mexico	Has not indicated they are doing NIOP.
0057				Puerto Rico Highway and Transportation Authority	Has not indicated they are doing NIOP.
0061				Halifax Dartmouth Bridge Commission	Has not indicated they are doing NIOP.
0066				TI Corp (Canada)	Has not indicated they are doing NIOP.
0115				Concession A25 S.E.C.	Has not indicated they are doing NIOP.
0118				McAllen-Hidalgo & Anzalduas Bridges	Has not indicated they are doing NIOP.
n/a				New Brunswick (Canada) Highway Corporation	Has not indicated they are doing NIOP.

Appendix C: NIOP Tag Agency IDs

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Date	Modifications
18-Oct-18	B. Jewell: Created from ICD.
11/25/2018	B. Jewell: Accepted revisions from R. Carrier.
11/26/2018	B. Jewell: Made the following revisions as suggested by M. Kolb. a. NIOP Tag Agency ID 127 – Removed. The cell should be blank since these are not 6C transponders and this might cause confusion in the future. b. General Note B - Removed. c. General Note C - Removed. d. General Note E - changed “NIOP/SSIOP HUB (Tvl) Tag Agency ID” to “NIOP Tag Agency ID” and changed “EZG Hub” to “EZIOP Hub”. Updated references.
12/18/2018	M. Kolb: Made the following revisions: a. NIOP Tag Agency ID 0050 - added Native 6C ID 451. b. Added NIOP Tag Agency ID value of 0062 to Southern Connector (was previously n/a). c. Added NIOP Tag Agency ID values 0119, 0120, 0121, 0122, 0124, 0125 d. Added Native 6C ID 2306
1/15/2019	B. Jewell: Updated based on email from Bill Brownsburger on behalf of SRTA, as follows: SRTA would like to update their agency ID listings in the NIOP Appendix C listing of tag agency IDs. SRTA has already been assigned two tag agency IDs: 034 and 063. In the table, 034 was identified to be used for their SeGo tags (which haven't been issued for several years but are still on the road) and 063 for their 6C (which are the only tags SRTA currently issues). SRTA's 6C tags are their main tag population at this point. SRTA has been using agency ID 034 for all of their Southeast hub communications, and would prefer to keep this as their 'primary' tag Agency ID, to be used for their 6C tags. So the change essentially amounts to changing 034 to be their 6C tags and 063 to be their SeGo tags. This will not affect currently-implemented systems at all, as 034 is the only tag agency ID currently in use.
5/30/2019	M. Kolb: Made the following revisions: a. Added Native TDM IDs 120 and 125 b. Added NIOP Tag Agency ID value of 0102
10/17/2019	M. Kolb: Made the following revisions: Added NIOP Tag Agency IDs 0070, 0071, 0099 and 0126 Assigned NIOP Tag Agency ID 0080

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NIOP Tag Agency ID	Native ETC Program	Protocols	Native TDM ID	Native 6C ID	Native SeGo ID	ATA	Reserved EZG Agency ID	State	Original Issuing Agency	Note
0002	E-ZPass	TDM	2				002	NJ	New Jersey Highway Authority (NJHA)	
0003	E-ZPass	TDM	3				003	NJ	New Jersey Turnpike Authority (NJTA)	
0004	E-ZPass	TDM	4				004	NY	New York State Thruway Authority (NYSTA)	
0005	E-ZPass	TDM	5				005	NY	Port Authority of New York & New Jersey (PANYNJ)	
0006	E-ZPass	TDM	6				006	PA	Pennsylvania Turnpike Commission (PTC)	
0007	E-ZPass	TDM	7				007	NJ	South Jersey Transportation Authority (SJTA)	
0008	E-ZPass	TDM	8				008	NY	MTA Bridges & Tunnels (MTAB&T)	
0009	E-ZPass	TDM	9				009	NJ	Delaware River Port Authority (DRPA)	
0010	E-ZPass	TDM	10				010	VA	Virginia DOT (VDOT)	
0011	407ETR	TDM	11				011	Canada	Highway 407, Canada	
0013	E-ZPass	TDM	13				013	NY	Peace Bridge, New York	
0014	A-Pass	TDM	14				014	MI	Ambassador Bridge, Michigan	Believe that they currently use 6C transponders.
0015	E-ZPass	TDM	15				015	IL	Illinois State Toll Highway Authority (ISTHA)	
0016	E-ZPass	TDM	16				016	MD	Maryland Transportation Authority (MdTA)	
0017	Palmetto Pass	TDM/SeGo	17		2568 (0x0A08)		017	SC	South Carolina DOT (SCDOT)	Issues dual protocol transponders.
0018	E-ZPass	TDM	18				018	NY	New York State Bridge Authority (NYSBA)	Does not currently issue its own transponders.
0019	E-ZPass	TDM	19				019	DE	Delaware DOT (DelDOT)	
0021	E-ZPass	TDM	21				021	MA	Massachusetts DOT (MassDOT)	
0022	E-ZPass	TDM	22				022	NJ	New Jersey CSC (NJCSC)	
0024	E-ZPass	TDM	24				024	WV	West Virginia Parkways Authority (WVPA)	
0025	E-ZPass	TDM	25				025	NJ	Delaware River and Bay Authority (DRBA)	
0026	E-ZPass	TDM	26				026	NH	New Hampshire DOT (NHDOT)	
0027	E-ZPass	TDM	27				027	NJ	Burlington County Bridge Commission (BCBC)	Does not currently issue its own transponders.
0028	E-ZPass	TDM	28				028	ME	Maine Turnpike Authority (MeTA)	
0029	E-ZPass	TDM	29				029	NJ	Delaware River Joint Toll Bridge Commission (DRJTBC)	
0030	E-ZPass	TDM	30				030	IN	Indiana Toll Road Concession Company (ITRCC)	
0031	E-ZPass	TDM	31				031	OH	Ohio Turnpike and Infrastructure Commission (OTIC)	
0032	E-ZPass	TDM	32				032	RI	Rhode Island Turnpike and Bridge Authority (RITBA)	
0033	Quick Pass	TDM/6C/SeGo	33	33	2567 (0x0A07)	NCTA	033	NC	North Carolina Turnpike Authority (NCTA)	NCTA segregates protocols by serial number range. As such, all three protocols can be mapped to a single Agency ID without the risk of overlapping.
0034	Peach Pass	6C				GSTA	034	GA	Georgia State Road and Tollway Authority (SRTA)	For their 6C transponders. See ID 063 for their SeGo transponders.

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NIOP Tag Agency ID	Native ETC Program	Protocols	Native TDM ID	Native 6C ID	Native SeGo ID	ATA	Reserved EZG Agency ID	State	Original Issuing Agency	Note
0035	SunPass	SeGo			2561 (0x0A01)	FDOT	035	FL	Florida Turnpike Enterprise (FTE)	The CRC in the FTE tag is formatted differently than most others.
0036	E Pass	TDM/SeGo	36		2565 (0x0A05)		036	FL	Central Florida Expressway Authority (CFX)	CFX segregates protocols by serial number range. As such, both protocols can be mapped to a single Agency ID without the risk of overlapping.
0039	LeeWay	SeGo			2563 (0x0A03)		039	FL	Lee County Florida	
0044	E-ZPass	TDM					044	IL	Skyway Concession Company (SCC)	
0045	RiverLink	TDM/6C	45	449			045	KY	Louisville-Southern Indiana Ohio River Bridges (LSIORB)	LSIORB segregates protocols by serial number range. As such, both protocols can be mapped to a single Agency ID without the risk of overlapping.
0046	ExpressToll	6C		194			046	CO	E-470 Colorado	
0048	MnPass				2569 (0x0A09)		048	MN	Minnesota DOT (MnDOT)	
0049	?	6C		2529			049	MI	Blue Water Bridge	
0050	TollTag	6C/SeGo		451	50 (0x0032)	LPC.	050	LA	Greater New Orleans Expressway Commission (Lake Pontchartrain Causeway)	GNOEC tag ID is formatted a little different than others. They do not have a CRC and their ID is in the space where the CRC generally is. In addition, they segregate protocols by serial number. As such, both protocols can be mapped to a single Agency ID without the risk of overlapping.
0051	GeauxPass	6C/SeGo		450	51 (0x0033)	GNO2	051	LA	Louisiana DOT and Development (LADOTD)	LADOTD segregates protocols by serial number range. As such, both protocols can be mapped to a single Agency ID without the risk of overlapping.
0054	IAVE Pass	SeGo			203 (0x00CB)	CPFI	054	Mexico	Capufe, Mexico	Believe they may have migrated to 6C.
0057	AutoExpreso	6C		448			057	PR	Puerto Rico Highway and Transportation Authority	
0058	Express Pass	6C		1409			058	UT	Utah DOT	
0059		TDM	59				059	NY	Niagara Falls Bridge Commission	Does not currently issue its own transponders.
0060		TDM	60				060	NY	Thousand Islands Bridge Authority	Does not currently issue its own transponders.
0061	MACPASS	SeGo			197 (0x00C5)	CAHD	061	Canada	Halifax Dartmouth Bridge Commission	
0062		6C/TDM	n/a	62			062	SC	Southern Connector SC	
0063	Peach Pass	SeGo			200 (0x00C8)		063	GA	Georgia State Road and Tollway Authority (SRTA)	For their SeGo transponders. See ID 034 for their 6C transponders.
0064	SunPass	SeGo			2570 (0x0A0A)		064	FL	Florida Turnpike Enterprise (FTE)	Second ID assigned to FTE.
0065	SunPass	SeGo			2571 (0x0A0B)		065	FL	Florida Turnpike Enterprise (FTE)	Third ID assigned to FTE.
0066	TReO	6C		2305			066	Canada	TI Corp (Canada)	
0070		6C		70			070	AL	American Roads (AR)	
0071		6C		71			071	MI	Detroit Windsor Tunnel (DWT)	
0077	Good To Go	6C/SeGo		77 / 78	218 (0x00DA)		077	WA	Washington DOT (WashDOT)	WashDOT segregates protocols by serial number range and has also segregated its Agency ID 77 and 78 transponders by serial number range. As such, both protocols and all the current Agency IDs can be mapped to a single Agency ID without the risk of overlapping.
0080	E-ZPass	TDM	80				080		Cline Avenue Bridge LLC	
0081							081		Reserved for future E-ZPass expansion	
0082							082		Reserved for future E-ZPass expansion	

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NIOP Tag Agency ID	Native ETC Program	Protocols	Native TDM ID	Native 6C ID	Native SeGo ID	ATA	Reserved EZG Agency ID	State	Original Issuing Agency	Note
0083							083		Reserved for future E-ZPass expansion	
0084							084		Reserved for future E-ZPass expansion	
0085							085		Reserved for future E-ZPass expansion	
0086							086		Reserved for future E-ZPass expansion	
0087							087		Reserved for future E-ZPass expansion	
0088							088		Reserved for future E-ZPass expansion	
0089							089		Reserved for future E-ZPass expansion	
0090							090		Reserved for future E-ZPass expansion	
0091							091		Reserved for future E-ZPass expansion	
0092							092		Reserved for future E-ZPass expansion	
0093							093		Reserved for future E-ZPass expansion	
0094							094		Reserved for future E-ZPass expansion	
0095							095		Reserved for future E-ZPass expansion	
0096							096		Reserved for future E-ZPass expansion	
0097							097		Reserved for future E-ZPass expansion	
0098							098		Reserved for future E-ZPass expansion	
0099	E Pass	TDM/SeGo	99		2659 (0x0A63)		099	FL	Central Florida Expressway Authority (CFX)	Second ID assigned to CFX.
0100							100		Reserved for future E-ZPass expansion	
0101	FasTrak	6C		101			101	CA	Bay Area Toll Authority (BATA)	
0102		6C		102			102	Canada	Atlantic Highway Management Corporation Limited (AHMCL)	
0103	FasTrak	6C		103			103	CA	Transportation Corridor Agencies (TCA)	
0106	FasTrak	6C		106			106	CA	Los Angeles County Metropolitan Transportation Authority (LA Metro)	
0107	FasTrak	6C		107			107	CA	Orange County Transportation Authority (OCTA)	
0108	FasTrak	6C		108			108	CA	Riverside County Transportation Commission (RCTC)	

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NIOP Tag Agency ID	Native ETC Program	Protocols	Native TDM ID	Native 6C ID	Native SeGo ID	ATA	Reserved EZG Agency ID	State	Original Issuing Agency	Note
0109	FasTrak	6C		109			109	CA	San Diego Association of Governments (SANDAG)	
0115	A25	6C		115			115	Canada	Concession A25 S.E.C.	A25 segregates protocols by serial number range. As such, both protocols can be mapped to a single Agency ID without the risk of overlapping.
0116	BreezeBy	6C		116	220 (0x00DC)		116	OR	Port of Hood River (PoHR)	Open question on their old SeGo transponders and whether there is serial number overlap with their 6C transponders.
0118	EZ Cross	6C		118			118	TX	McAllen-Hidalgo & Anzalduas Bridges	
0119		6C		119			119	TX	Pharr-Reynosa International Bridge	
0120		6C	120	120			120	n/a	TransCore	
0121		6C		121			121	TX	Cameron County Regional Mobility Authority (CCRMA)	
0122		6C		122			122	TX	Starr County	
0124		6C		124			124	MI	Mackinac Bridge Authority	
0125		6C	125	125			125	n/a	BestPass	
0126		6C		126			126	n/a	Kapsch	
0127	FasTrak	Title-21					127	CA	WRIOP (WRIOP Hub) - For Title 21 Tags	The Western Region IOP (WRIOP) will include Title 21 Tags with converted serial numbers to map to eight (8) characters in an interim until Regions are able to accept more than eight (8) characters.
1100	TxTAG	SeGo			21550 (0x542E)	TEX.	040	TX	Texas DOT (TxDOT)	
1101	EZ Tag	SeGo			102 (0x0066)	HCTR	067	TX	Harris County Toll Road Authority (HCTRA)	
1110	TollTag	SeGo			20052 (0x4E54)	DNT.	041	TX	North Texas Tollway Authority (NTTA)	
1111	TollTag	SeGo			182 (0x00B6)	DFW.	053	TX	NTTA / DFW	
1112	TollTag	SeGo			TBD		069	TX	NTTA	Additional ID assigned to NTTA.
1120	EZ Tag	SeGo			100 (0x0064)	HCTR	042	TX	Harris County Toll Road Authority (HCTRA)	
1121	EZ Tag	SeGo			222 (0x00DE)	MTAH	068	TX	HCTRA / Houston Metro	
1130		SeGo			n/a	n/a	043	TX	Central TX Regional Mobility Authority (CTRMA)	Does not issue its own transponders.
1131		SeGo			n/a		052	TX	Ft. Bend County Toll Road Authority	Does not issue its own transponders.
1250	PikePass	SeGo			20299 (0x4F4B)	OTA.	055	OK	Oklahoma Turnpike Authority	
1300	K Tag	SeGo			19284 (0x4B54)	KTA.	056	KS	Kansas Turnpike Authority	
n/a		n/a	n/a				000	n/a	Reserved - Manufacturer (Kapsch)	
n/a		n/a	n/a				001	n/a	Reserved	
n/a			n/a				012	FL	MetroDade, Florida	No longer issues transponders.
n/a		TDM	n/a				020	n/a	Advantage I-75	Not sure they still issue transponders. Were never reciprocal.
n/a			n/a				023	Canada	New Brunswick (Canada) Highway Corporation	Do not believe they ever actually issued any transponders.
n/a		SeGo			n/a		037	FL	Miami Dade Expressway Authority (MDX)	Does not issue its own transponders.
n/a		SeGo			n/a		038	FL	Tampa Hillsborough Expressway Authority (THEA)	Does not issue its own transponders.

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NIOP Tag Agency ID	Native ETC Program	Protocols	Native TDM ID	Native 6C ID	Native SeGo ID	ATA	Reserved EZG Agency ID	State	Original Issuing Agency	Note
n/a		6C		n/a			047	CO	Northwest Parkway Colorado	Does not issue its own transponders.
n/a		6C		104			104	CA	California Department of Transportation (Caltrans)	Does not issue its own transponders.
n/a		6C		105			105	CA	Golden Gate Bridge, Highway and Transportation District (GGBHTD)	Does not issue its own transponders.
n/a		6C		110			110	CA	Santa Clara Valley Transportation Authority (VTA)	Does not issue its own transponders.
n/a		6C		111			111	CA	South Bay Expressway, LLC (SBX)	Does not issue its own transponders.
n/a		6C		112			112	CA	Alameda County Transportation Commission (ACTC)	Does not issue its own transponders.
n/a		6C		113			113	CA	San Francisco County Transportation Authority (SFCTA)	Does not issue its own transponders.
n/a		6C		114			114	CA	San Bernardino County Transportation Authority (SBCTA)	Does not issue its own transponders.
n/a		6C		2306			n/a	England	MercyFlow	

General Notes:

- A. Several agencies that have been shown in other tables and documents have been removed as they no longer collect tolls or have never collected tolls.
- B. The "Reserved EZG Agency ID" represents the mapped ID that will be presented by the MPR reader to the lane controller for transponders read with the indicated Native IDs.
- C. The "NIOP Tag Agency ID" represents the mapped ID that will be presented by the EZIOP Hub to other regional Hubs for transponders in its TVL and for transactions with the given "Reserved EZG Agency ID".
- D. The following ATA tag references were removed from the table above since they are no longer in use:
 - a. MPA. – Massport
 - b. TNB. – Tacoma Narrows Bridge
 - c. TXDT - Texas DOT (original issue)
 - d. SATX – Texas DOT (San Antonio)
 - e. PRIB – Texas DOT (Pharr Bridge/Trindel)
 - f. LDO. – Laredo, Texas
 - g. CASJ – St. John’s Bridge, Canada
 - h. CAAH – Atlantic Highway, Canada

Appendix D: Tag Validation List Schedule

National Interoperability Interface Control Document - Appendix - D

Date	Modifications
18-Oct-18	B. Jewell: Created from ICD.
11/26/2018	B. Jewell: Removed CUSIOP and SSIOP Schedules as suggested by M. Kolb.

D: NIOP Tag Validation List Schedule

The times notes below are times when each NIOP Hub is expected to receive each other's TVL on a daily basis.

TVL	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Bulk	3AM						
Differential		3:00 AM	3:00 AM	3:00 AM	3:00 AM	3:00 AM	3:00 AM

Appendix E: License Plate Types

Revision	Revised By	Revision Notes
20190128	M. Kolb	Created.
20190129	B. Jewell	<p>Added the following detail from MK's email:</p> <p>The spreadsheet has two tabs:</p> <ul style="list-style-type: none"> • Plate Type – lists the DMV defined plate types for select states. The E-ZPass Group does not track this against all 50 states and also cannot vouch for the long-term accuracy of this data. For NIOP purposes, we will need to encourage individual states to keep on top of this with their own DMV and update accordingly. It should also be noted that NY technically has plate types for many other types of plates. However, the NY DMV only requires plate type (due to potential plate duplication) for plates whose content is a 1-5 digit number. Plates with alphas or 6+ digits are unique/not duplicated and, hence, do not really require plate type. There are some plate types that are not shown and indicate as “not available for general lookup”. These represent plates that are not stored by the DMV in their normal DMV database and are either not available for lookup at all or are only available via alternative lookup methods. However, for the purposes of hosting these plates on an ETC account, it may be necessary for the toll agencies to create a “plate type” for these plates. • No Type – lists states that do not have plate type. Note that NY is listed here as well with a note regarding the caveat above.

License Plate Country	License Plate State	License Plate Type	Plate Description
US	CT	All Terrain	All Terrain
US	CT	Ambulance	Ambulance
US	CT	Camp Trailer	Camp Trailer
US	CT	Camper	Camper
US	CT	Combination	Combination
US	CT	Commercial	Commercial
US	CT	Congressional Medal of Honor	Congressional Medal of Honor
US	CT	Construction	Construction
US	CT	Dealer	Dealer
US	CT	Experimental Test	Experimental Test
US	CT	Factory	Factory
US	CT	Farm	Farm
US	CT	Fire Apparatus	Fire Apparatus
US	CT	General Dist Bus	General District Bus
US	CT	Handicapped	Handicapped
US	CT	Handicapped COMB	Handicapped COMB
US	CT	Handicapped Motorcycle	Handicapped Motorcycle
US	CT	Hearse	Hearse
US	CT	Historical	Historical
US	CT	Interstate	Interstate
US	CT	Legislature	Legislature
US	CT	Livery	Livery
US	CT	Motorcycle	Motorcycle
US	CT	Municipal	Municipal
US	CT	Passenger	Passenger
US	CT	Permits	Permits
US	CT	POW CMPR	POW CMPR
US	CT	POW COMB	POW COMB
US	CT	POW Veteran	POW Veteran
US	CT	Public Service Bus	Public Service Bus
US	CT	School Bus	School Bus
US	CT	School Bus Livery	School Bus Livery
US	CT	Senate	Senate
US	CT	Service Bus	Service Bus
US	CT	Snowmobile	Snowmobile
US	CT	Special Mobile Equip	Special Mobile Equip
US	CT	State	State
US	CT	State Serv Bus	State Serv Bus
US	CT	State STV	State STV
US	CT	Student Transport - Comb	Student Transport - Comb
US	CT	Student Transport - Serv Bus	Student Transport - Serv Bus
US	CT	Taxi	Taxi
US	CT	Trailer	Trailer
US	CT	Transporter	Transporter
US	CT	US Congress	US Congress
US	CT	US Senate	US Senate
US	CT	Van Pool	Van Pool
US	CT	Veteran	Veteran
US	CT	Veteran CMPR	Veteran CMPR
US	CT	Veteran COMB	Veteran COMB
US	CT	Vol Firefighter COMB	Vol Firefighter COMB

License Plate Country	License Plate State	License Plate Type	Plate Description
US	CT	Vol Firefighter COMM	Vol Firefighter COMM
US	CT	Volunteer Firefighter	Volunteer Firefighter
US	CT	Wrecker	Wrecker
US	IL	0	Specialty, Motorcycle and all other not defined by other types
US	IL	1	Passenger Car
US	IL	1	Passenger Car - Vanity
US	IL	1	Passenger Car - Personalized
US	IL	2	Temporary Plate
US	IL	Not available for general lookup	Apportioned
US	IN	AM	Motorcycle - Antique
US	IN	AN	Antique Vehicle
US	IN	AR	Amateur Radio
US	IN	AT	Organizational - Indiana Arts Commission
US	IN	BA	Organizational - Boy Scouts
US	IN	BA	Motorcycle - Boy Scout Trust
US	IN	BH	Organizational - Lincoln's Boyhood Home
US	IN	BR	College/University - Indiana University
US	IN	BU	College/University - Ball State
US	IN	CB	Bus - Church
US	IN	CP	City Police
US	IN	CT	Organizational - Department of Child Services - Kids First
US	IN	CT	Motorcycle - Department of Child Services - Kids First
US	IN	DA	Organizational - D.A.R.E.
US	IN	DC	Motorcycle - Disabled Veteran (Blue)
US	IN	DF	Passenger - Disabled Veteran (Yellow)
US	IN	DH	Passenger - Disabled Veteran
US	IN	DM	Motorcycle - Disabled Veteran (Yellow)
US	IN	EO	Elected Official
US	IN	FA	Organizational - FFA Foundation
US	IN	FA	Motorcycle - FFA Trust
US	IN	GB	Bus
US	IN	GB	Bus - Other
US	IN	HL	Organizational - Health Foundation of Greater Indianapolis
US	IN	HM	Motorcycle - Disability
US	IN	HP	Passenger - Disability
US	IN	HS	Organizational - Hoosier Safety
US	IN	HS	Motorcycle - Secure Indiana
US	IN	HT	Organizational - Environment
US	IN	HT	Motorcycle - Health Trust
US	IN	IS	College/University - Indiana State University
US	IN	MC	Motorcycle
US	IN	MO	Passenger - Municipal
US	IN	NA	Organizational - Land of the Indians
US	IN	NA	Motorcycle - Native American Trust
US	IN	NG	Military - National Guard
US	IN	NG	Motorcycle - National Guard
US	IN	NH	Bus - Bus C Not for Hire (High Digit)
US	IN	Not available for general lookup	Governor
US	IN	Not available for general lookup	Apportioned
US	IN	Not available for general lookup	Permanent Trailer
US	IN	PA	Passenger

License Plate Country	License Plate State	License Plate Type	Plate Description
US	IN	PA	Passenger
US	IN	PH	Military - Purple Heart
US	IN	PL	Passenger - Vanity
US	IN	PM	Motorcycle - Purple Heart
US	IN	PS	Military - Pearl Harbor
US	IN	PU	College/University - Purdue University
US	IN	PW	Military - POW
US	IN	PW	Motorcycle - POW
US	IN	RV	Recreational Vehicle
US	IN	SB	Bus - School (High Digit)
US	IN	SE	Semi-Trailer Permanent
US	IN	SH	Organizational - Sheriff Association
US	IN	SI	College/University - University of Southern Indiana
US	IN	SP	In God We Trust
US	IN	SP	College/University - Ivy Tech
US	IN	SP	College/University - Butler University
US	IN	SP	College/University - De Pauw University
US	IN	SP	College/University - University of Evansville
US	IN	SP	College/University - Indiana University/Purdue University
US	IN	SP	College/University - Ivy Tech Community College
US	IN	SP	College/University - Indiana State University
US	IN	SP	College/University - University of Indianapolis
US	IN	SP	College/University - Notre Dame
US	IN	SP	College/University - Purdue University
US	IN	SP	Organizational - Go Colts
US	IN	SP	Organizational - Professional Firefighters
US	IN	SP	Organizational - Indiana Shriner
US	IN	SP	Organizational - Breast Cancer Awareness
US	IN	SP	Organizational - Freemason
US	IN	SP	Organizational - Choose Life
US	IN	SP	Organizational - Habitat for Humanity
US	IN	SP	Organizational - Black Expo
US	IN	SP	Organizational - Organization of Nursing Executives
US	IN	SP	Organizational - Fraternal Order of Police
US	IN	SP	Organizational - State Police
US	IN	SP	Organizational - Juvenile Diabetes
US	IN	SP	Organizational - Clark-Floyd Counties Convention and Tourism Bureau
US	IN	SP	Organizational - Riley Hospital
US	IN	SP	Organizational - 4H Foundation
US	IN	SP	Organizational - Speedway Hall of Fame
US	IN	SP	Military - Support Our Troops
US	IN	SP	Motorcycle - Other Specialty
US	IN	SR	Passenger -State Representative
US	IN	SS	Passenger - State Senator
US	IN	TK	Truck - Standard
US	IN	UC	Passenger - US Congressman
US	IN	US	Passenger - US Senator
US	IN	VT	College/University - Ivy Tech
US	IN	WR	Recovery Vehicle
US	IN	XM	Motorcycle - Municipal
US	IN	XS	Bus - Municipal School Bus

License Plate Country	License Plate State	License Plate Type	Plate Description
US	MA	AHN/R	Camper - Normal Series
US	MA	AHR/R	Camper - Reserved Series
US	MA	AHV/R	Camper - Vanity Series
US	MA	AMN/R	Ambulance - Normal Series
US	MA	AMN/R	Animal Ambulance
US	MA	AMR/R	Ambulance - Reserved Series
US	MA	APN/R	Apportioned
US	MA	ATN/A	Authority - MBTA Police
US	MA	ATN/A	Authority - Berkshire Regional Transit
US	MA	ATN/A	Authority - Brockton Area Transit
US	MA	ATN/A	Authority - Cape Ann Transit
US	MA	ATN/A	Authority - Cape Cod Regional Transit
US	MA	ATN/A	Authority - Franklin Regional Transit
US	MA	ATN/A	Authority - Greater Attleboro
US	MA	ATN/A	Authority - Greenfield Montague Transit
US	MA	ATN/A	Authority - Lowell Regional Transit
US	MA	ATN/A	Authority - Southeast Transit
US	MA	ATN/A	Authority - MBTA
US	MA	ATN/A	Authority - Mass Turnpike
US	MA	ATN/A	Authority - Merrimack Valley Regional
US	MA	ATN/A	Authority - Metro West Regional Transit
US	MA	ATN/A	Authority - Montachusett Regional Transit
US	MA	ATN/A	Authority - Nantucket Regional Transit
US	MA	ATN/A	Authority - Pioneer Valley Transit
US	MA	ATN/A	Authority - Southeastern Regional Transit
US	MA	ATN/A	Authority - Water Resources Authority
US	MA	ATN/A	Authority - Worcester Regional Transit
US	MA	AXN/A	Motorcycle - Authority - MBTA
US	MA	BUN/R	Bus - Normal Series
US	MA	BUR/R	Bus - Reserved Series
US	MA	BUV/R	Bus - Vanity Series
US	MA	CON/R	Commercial - Normal Series
US	MA	CON/R	Commercial -Electric Vehicle
US	MA	CON/R	Commercial - Hearse
US	MA	CON/R	Commercial - Snow Removal
US	MA	COR/R	Commercial - Reserved
US	MA	COR/R	Commercial - Reserved - Hearse
US	MA	COV/R	Commercial - Vanity Series
US	MA	DLN/B	Passenger - Car Dealer
US	MA	DLV/B	Passenger - Car Dealer Vanity
US	MA	DMN/B	Motorcycle - Dealer
US	MA	FAN/B	Farmer
US	MA	LVN/R	Livery - Normal Series
US	MA	LVR/R	Livery - Reserved Series
US	MA	LVV/R	Livery - Vanity Series
US	MA	MCN/B	Motorcycle-Normal Series
US	MA	MCR/B	Motorcycle-Reserved Series
US	MA	MCR/B	Motorcycle-Reserved Series-Antique
US	MA	MCR/B	Motorcycle-Reserved Series - Blue Knight
US	MA	MCR/B	Motorcycle-Reserved Series - Red Knight
US	MA	MCS/B	Motorcycle - Special Series-Disability

License Plate Country	License Plate State	License Plate Type	Plate Description
US	MA	MCS/B	Motorcycle - Special Series-Veteran
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Gold Star Family
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Cong. Medal of Honor
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Legion of Valor
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Silver Star
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Bronze Star
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Distinguished Flying Cross
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Purple Heart
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Pearl Harbor Survivor
US	MA	MCS/B	Motorcycle - Special Series-Veteran - Ex-POW
US	MA	MCV/B	Motorcycle - Vanity Series
US	MA	MVN/M	Municipal - Fire
US	MA	MVN/M	Municipal - Police
US	MA	MVN/M	Municipal - Normal
US	MA	MVN/M	Municipal - Boston
US	MA	MXN/M	Motorcycle - Municipal
US	MA	MXN/M	Motorcycle - Municipal
US	MA	OCN/B	Owner Contractor
US	MA	PAN/G	Passenger - Normal Series (Green characters)
US	MA	PAN/R	Passenger - Normal Series
US	MA	PAR/R	Passenger - Reserved Series
US	MA	PAS/R	Passenger - Special Series - Handicapped
US	MA	PAS/R	Passenger - Special Series - Nantucket Island
US	MA	PAS/R	Passenger - Special Series - Plymouth 400th Anniversary
US	MA	PAS/R	Passenger - Special Series - Blackstone Valley
US	MA	PAS/R	Passenger - Special Series - Cape & Islands
US	MA	PAS/R	Passenger - Special Series - Islands & Cape
US	MA	PAS/R	Passenger - Special Series - Electric Vehicle
US	MA	PAS/R	Passenger - Special Series - Fish & Wildlife
US	MA	PAS/R	Passenger - Special Series - Right Whale
US	MA	PAS/R	Passenger - Special Series - Invest in Children
US	MA	PAS/R	Passenger - Special Series - Animal Coalition
US	MA	PAS/R	Passenger - Special Series - Conquer Cancer
US	MA	PAS/R	Passenger - Special Series - Firefighter Memorial
US	MA	PAS/R	Passenger - Special Series - Breast Cancer
US	MA	PAS/R	Passenger - Special Series - United We Stand
US	MA	PAS/R	Passenger - Special Series - Basketball Hall of Fame
US	MA	PAS/R	Passenger - Special Series - Red Sox
US	MA	PAS/R	Passenger - Special Series - Jimmy Fund
US	MA	PAS/R	Passenger - Special Series - Olympic Spirit
US	MA	PAS/R	Passenger - Special Series - Bruins/Youth Hockey
US	MA	PAS/R	Passenger - Special Series - Patriots
US	MA	PAS/R	Passenger - Special Series - Mini Fenway Park
US	MA	PAS/R	Passenger - Special Series - Celtics/ Boston Children's
US	MA	PAS/R	Passenger - Special Series - Choose Life
US	MA	PAS/R	Passenger - Special Series - U Mass
US	MA	PAS/R	Passenger - Special Series - Medical Doctor
US	MA	PAS/R	Passenger - Special Series - Ham Radio Operator
US	MA	PAS/R	Passenger - Special Series - Antique
US	MA	PAS/R	Passenger - Special Series - Antique Vanity

License Plate Country	License Plate State	License Plate Type	Plate Description
US	MA	PAS/R	Passenger - Special Series - News Photographer
US	MA	PAS/R	Passenger - Special Series - Low Speed Vehicle
US	MA	PAS/R	Passenger - Special Series - Limited Use Vehicle
US	MA	PAS/R	Passenger - Special Series - Governor's Council
US	MA	PAS/R	Passenger - Special Series - Honorary Consular Corps.
US	MA	PAS/R	Passenger - Special Series - Foreign Organization
US	MA	PAS/R	Passenger - Special Series - Veteran
US	MA	PAS/R	Passenger - Special Series - Disabled Veteran
US	MA	PAS/R	Passenger - Special Series - Disabled Veteran
US	MA	PAS/R	Passenger - Special Series - Purple Heart
US	MA	PAS/R	Passenger - Special Series - Bronze Star
US	MA	PAS/R	Passenger - Special Series - Silver Star
US	MA	PAS/R	Passenger - Special Series - Support Veterans
US	MA	PAS/R	Passenger - Special Series - Pearl Harbor Survivor
US	MA	PAS/R	Passenger - Special Series - Medal of Honor
US	MA	PAS/R	Passenger - Special Series - Legion of Valor
US	MA	PAS/R	Passenger - Special Series - Ex POW
US	MA	PAS/R	Passenger - Special Series - Distinguished Flying Cross
US	MA	PAS/R	Passenger - Special Series - Gold Star Family
US	MA	PAS/R	Passenger - Special Series - National Guard
US	MA	PAS/R	Passenger - Special Series - Disaster/ Emergency Vehicle
US	MA	PAS/R	Passenger - Special Series - State Senate
US	MA	PAS/R	Passenger - Special Series - State House of Reps.
US	MA	PAS/R	Passenger - Special Series - US Congress
US	MA	PAS/R	Passenger - Special Series - US Senate
US	MA	PAV/R	Passenger - Vanity Series
US	MA	PAY/V	Passenger - Year of Manufacture Series
US	MA	PAY/V	Motorcycle -Year of Manufacture
US	MA	RPN/B	Repair
US	MA	RPV/B	Repair - Vanity
US	MA	SBN/R	School Bus - Normal Series
US	MA	SBR/R	School Bus - Reserved Series
US	MA	SMN/R	Semi Trailer - Normal Series
US	MA	SMR/R	Semi Trailer - Reserved Series
US	MA	SPN/Y	Pupil - Normal Series
US	MA	STN/S	State Trooper
US	MA	STN/S	State
US	MA	STN/S	Environmental Police
US	MA	SXN/S	Motorcycle - State Police/ Trooper
US	MA	SXN/S	Motorcycle - Environmental Police
US	MA	TAN/R	Taxi - Normal Series
US	MA	TAR/R	Taxi - Reserved Series
US	MA	TPN/B	Transporter
US	MA	TRN/R	Trailer - Normal Series
US	MA	TRR/R	Trailer - Reserved Series
US	MA	VPN/R	Vanpool - Normal Series
US	ME	AC	Agriculture Commercial
US	ME	AF	Agriculture Farm Vehicle
US	ME	AG	Agriculture Support
US	ME	AM	Ambulance/Hearse
US	ME	AP	Apportioned

License Plate Country	License Plate State	License Plate Type	Plate Description
US	ME	AQ	Antique Auto
US	ME	AW	Animal Welfare
US	ME	BB	Black Bear
US	ME	BC	Breast Cancer Support
US	ME	BH	Barbara Bush Children's Hospital
US	ME	BU	Bus
US	ME	CC	Conservation Commercial
US	ME	CD	Conservation Disability
US	ME	CI	Municipal
US	ME	CI	Municipal-Police
US	ME	CI	County Govt.
US	ME	CL	Conservation Trailer
US	ME	CM	Combination
US	ME	CO	Standard Commercial
US	ME	CR	Conservation
US	ME	CS	County Sheriff
US	ME	CV	Custom Vehicle
US	ME	DL	New Car Dealer
US	ME	DS	Special Veteran-Handicapped
US	ME	DV	Disabled Veteran
US	ME	DX	Disability
US	ME	ED	Equipment Dealer
US	ME	EM	EMS
US	ME	EX	Experiment
US	ME	FD	Fire Fighter
US	ME	FM	Farm Vehicle
US	ME	GS	Gold Star Family
US	ME	HF	Honorary Foreign Consul
US	ME	HL	Maine House
US	ME	HS	Maine Senate
US	ME	HT	Heavy Trailer Dealer
US	ME	HW	Heavy Wrecker
US	ME	LB	Lobster
US	ME	LC	Lobster Commercial
US	ME	LO	Loaner
US	ME	LT	Light Trailer Dealer
US	ME	MC	Motorcycle
US	ME	MD	Motorcycle Dealer
US	ME	MH	Motor Home
US	ME	MM	Municipal Motorcycle
US	ME	MO	Medal Of Honor
US	ME	MQ	Antique Motorcycle
US	ME	MX	Handicapped Motorcycle
US	ME	PC	Standard Passenger
US	ME	PH	Purple Heart
US	ME	PM	Purple Heart Motorcycle
US	ME	PO	Former POW
US	ME	PS	Pearl Harbor Survivor
US	ME	RV	Conservation Motor Home
US	ME	SE	Special Equipment
US	ME	SP	State Police

License Plate Country	License Plate State	License Plate Type	Plate Description
US	ME	SR	Street Rod
US	ME	ST	State Vehicle
US	ME	SW	Sportsman
US	ME	TD	Transporter
US	ME	TL	Trailer - Annual Renewal
US	ME	TL	Trailer - Long Term
US	ME	TR	Tractor
US	ME	TS	Support Troops
US	ME	TT	Commercial Tractor
US	ME	TX	Vehicle For Hire (Taxi)
US	ME	UC	Used Car Dealer
US	ME	UM	University Of Maine System
US	ME	VM	Special Veteran Motorcycle
US	ME	VT	Special Veteran
US	ME	VX	Disabled Veteran-Handicapped
US	ME	WB	Wabinaki
US	ME	WR	(Light) Wrecker
US	ME	WX	Handicapped Motor Home
US	ME	XV	Disabled Veteran Motorcycle
US	NH	AGRI	Agriculture
US	NH	AMBU	Ambulance
US	NH	AMOT	Motorcycle - Antique
US	NH	ANTI	Antique
US	NH	APRO	Apportioned
US	NH	COMM	Commercial
US	NH	CONEQ	Construction Equipment
US	NH	CPASS	Conservation Heritage - Moose (ends with C)
US	NH	DVETE	Disabled Veteran - Passenger
US	NH	FARM	Farm
US	NH	FPOW	Former POW
US	NH	HCAP	Handicap Passenger
US	NH	HMOTO	Motorcycle - Handicap
US	NH	HPASS	Conservation Heritage - Moose (ends with H)
US	NH	HRSE	Hearse
US	NH	IANTI	Antique - Vanity
US	NH	IAPRO	Apportioned - Vanity
US	NH	ICOMM	Commercial - Vanity
US	NH	ICPAS	Conservation Heritage - Moose - Vanity
US	NH	IDVET	Disabled Veteran - Passenger - Vanity
US	NH	IFPOW	Former POW - Vanity
US	NH	IHCAP	Handicap Passenger - Vanity
US	NH	IHMOTO	Motorcycle - Handicap - Vanity
US	NH	IMOTO	Motorcycle - Vanity
US	NH	INGNH	National Guard - Vanity
US	NH	INPUR	Passenger - Purple Heart - Vanity
US	NH	IPASS	Initial Passenger - Vanity
US	NH	IPMOT	Motorcycle - Purple Heart - Vanity
US	NH	ISPCPS	Moose (Conservation) Park - Vanity
US	NH	ISPPS	Passenger - State Park - Vanity
US	NH	ISROD	Street Rod - Vanity
US	NH	ITRAI	Trailer - Vanity

License Plate Country	License Plate State	License Plate Type	Plate Description
US	NH	IVMOT	Motorcycle - Veteran - Vanity
US	NH	IVVET	Passenger - Veteran - Vanity
US	NH	MOTO	Motorcycle
US	NH	NGNH	National Guard
US	NH	NHNG	National Guard
US	NH	Not available for general lookup	Supreme Court
US	NH	Not available for general lookup	Superior Court
US	NH	Not available for general lookup	State Police
US	NH	Not available for general lookup	Municipal Police
US	NH	Not available for general lookup	Motor Vehicle Department
US	NH	Not available for general lookup	State Senate
US	NH	Not available for general lookup	State House of Representatives
US	NH	Not available for general lookup	Governor's Council
US	NH	Not available for general lookup	US Congress
US	NH	Not available for general lookup	US Senate
US	NH	Not available for general lookup	Attorney General
US	NH	Not available for general lookup	US Attorney
US	NH	Not available for general lookup	Governor
US	NH	NPHBR	Pearl Harbor Survivor - Vanity
US	NH	NPURP	Passenger - Purple Heart
US	NH	PADMN	Permanent - State - ADMINISTRATION
US	NH	PAGRI	Permanent - State - AGRICULTURE
US	NH	PASS	Standard Passenger
US	NH	PBANK	Permanent - State - BANKING
US	NH	PCIVIL	Permanent - State - CIVIL DEFENSE
US	NH	PDRED	Permanent - State - DRED
US	NH	PEDUC	Permanent - State - EDUCATION
US	NH	PENVS	Permanent - State - ENV SVC/POLICE STAND
US	NH	PERM	Permanent - City of Town
US	NH	PESE	Permanent - State - PEASE AIRFORCE
US	NH	PFISH	Permanent - State - FISH & GAME
US	NH	PHBR	Pearl Harbor Survivor
US	NH	PHGWY	Permanent - State - HIGHWAY
US	NH	PHMOT	Motorcycle - Purple Heart
US	NH	PHWEL	Permanent - State - NH HOSPITAL & WELFARE
US	NH	PJUDL	Permanent - State - JUDICIAL
US	NH	PLABR	Permanent - State - LABOR
US	NH	PLIBR	Permanent - State - LIBRARY
US	NH	PLIQR	Permanent - State - LIQUOR
US	NH	PMISC	Permanent - State - MISCELLANEOUS
US	NH	PMOTR	Permanent - State - LOCAL GVT MOTORCYCLE
US	NH	PNATG	Permanent - State - NATIONAL GUARD
US	NH	PPLOT	Permanent - State - POLICE STAND TRAINING
US	NH	PPRIS	Permanent - State - PRISON
US	NH	PREVN	Permanent - State - REVENUE ADMINISTRATOR
US	NH	PSAFTY	Permanent - State - SAFETY/HIGHWAY ENFORCEMENT
US	NH	PSWEP	Permanent - State - SWEEPSTAKES
US	NH	PTRAL	Permanent - State - STATE GOVERNMENT TRAILERS
US	NH	PUNIV	Permanent - State - UNIVERSITY WATER POLLUTION/CONTROL
US	NH	PYDEV	Permanent - State - YOUTH DEVELOPMENT
US	NH	SBUS	School Bus

License Plate Country	License Plate State	License Plate Type	Plate Description
US	NH	SCOMM	Special Commercial
US	NH	SPCPS	Moose (Conservation) Park
US	NH	SPPAS	Passenger - State Park
US	NH	SROD	Street Rod
US	NH	TRAI	Trailer
US	NH	VMOTO	Motorcycle - Veteran
US	NH	VVETE	Passenger - Veteran
US	NY	ARG	Air National Guard
US	NY	AYG	Army National Guard
US	NY	BOB	Birthplace of Baseball
US	NY	CCK	County Clerk
US	NY	CCK	County Clerk President Plate
US	NY	CME	Coroner
US	NY	CME	Medical Examiner
US	NY	CMH	Congressional Medal of Honor
US	NY	DLR	Dealer
US	NY	FAR	Farm
US	NY	GAC	Governor's Additional Car
US	NY	GSC	Governor's Second Car
US	NY	GSM	Gold Star Mothers
US	NY	JCA	Court of Appeals
US	NY	JCL	Court of Claims
US	NY	JSC	Supreme Court-Appellate Div
US	NY	JWV	Jewish War Veterans
US	NY	LMA	Limited Use Motorcycle - type A
US	NY	LMB	Limited Use Motorcycle - type B
US	NY	LMC	Limited Use Motorcycle - type C
US	NY	MED	Medical Doctor
US	NY	MOT	Motorcycle Handicap
US	NY	NLM	Naval Militia
US	NY	NYA	New York State Assembly
US	NY	NYA	NYS Assembly Second Plate
US	NY	NYC	New York Council
US	NY	NYS	New York State Senate
US	NY	NYS	NYS Senate-Second Plate
US	NY	PAS	Passenger Handicap
US	NY	PHS	Pearl Harbor Survivors
US	NY	SOS	Survivors of the Shield
US	NY	SRN	Justice Supreme Crt Appl Term
US	NY	STA	State Pair
US	NY	STA	State Single
US	NY	STG	State National Guard
US	NY	SUP	Supreme Court Justice
US	NY	TRA	Transporter
US	NY	USC	U.S. Congress
US	NY	USS	U.S. Senate
US	NY	VAS	Volunteer Ambulance Services
US	RI	1	Private Passenger
US	RI	2	Commercial
US	RI	3	Trailer
US	RI	4	Motorcycle

License Plate Country	License Plate State	License Plate Type	Plate Description
US	RI	5	Public Service
US	RI	6	Camper
US	RI	7	Suburban
US	RI	8	School Bus
US	RI	9	Jitney
US	RI	10	State
US	RI	11	City
US	RI	12	Town
US	RI	13	Police
US	RI	14	State Police
US	RI	15	Fire Apparatus
US	RI	16	House
US	RI	17	Senate
US	RI	18	Radio Operator
US	RI	19	Antique
US	RI	20	Disabled Veteran
US	RI	21	Farm
US	RI	22	Taxi
US	RI	23	New Car Dealer
US	RI	24	Used Car Dealer
US	RI	25	In-Transit
US	RI	26	Transporter
US	RI	27	Bailee
US	RI	28	Manufacturer
US	RI	29	Racer Tow
US	RI	30	State Police Cycle
US	RI	31	Police Cycle
US	RI	32	Cycle Dealer
US	RI	33	Ex-POW
US	RI	34	Boat Dealer
US	RI	35	40 & 8
US	RI	36	Purple Heart
US	RI	37	Veteran
US	RI	38	National Guard
US	RI	39	Combination
US	RI	99	Special Design Plate
US	VT	A	Pleasure Car
US	VT	A	Vanity
US	VT	A	Amateur Radio Operator
US	VT	A	American Legion
US	VT	A	Antique
US	VT	A	Building Bright Futures
US	VT	A	Conservation - Catamount
US	VT	A	Conservation - Peregrine Falcon
US	VT	A	Emergency Medical Service
US	VT	A	Exhibition
US	VT	A	Ex-POW
US	VT	A	Fire/ Rescue Association
US	VT	A	Freemason
US	VT	A	Gold Star Family
US	VT	A	Handicap

License Plate Country	License Plate State	License Plate Type	Plate Description
US	VT	A	Lion's Club
US	VT	A	Low Numbers
US	VT	A	National Guard
US	VT	A	Pearl Harbor Survivor
US	VT	A	Purple Heart
US	VT	A	Rotary
US	VT	A	Street Rod
US	VT	A	Veteran
US	VT	A	Veteran - Handicap
US	VT	A	Veteran - Afghanistan Campaign
US	VT	A	Veteran - Foreign Wars
US	VT	A	Veteran - Vietnam War
US	VT	A	Veteran - World War II
US	VT	A	Vietnam Veterans of America
US	VT	A	State - House Speaker
US	VT	A	State - House of Representative
US	VT	A	State - Senate
US	VT	A	US House
US	VT	A	US Senate
US	VT	B	Trailer - Vanity
US	VT	B	Federal Program
US	VT	B	Off Highway Tractor
US	VT	B	Zone Plate
US	VT	B	Truck
US	VT	B	Truck - Amateur Radio Operator
US	VT	B	Truck - American Legion
US	VT	B	Truck - Antique
US	VT	B	Truck - Apportioned
US	VT	B	Truck - Conservation
US	VT	B	Truck - Emergency Medical Service
US	VT	B	Truck - Exhibition
US	VT	B	Truck - Ex-POW
US	VT	B	Truck - Fire/ Rescue Association
US	VT	B	Truck - Freemason
US	VT	B	Truck - Gold Star Family
US	VT	B	Truck - Handicap
US	VT	B	Truck - Lion's Club
US	VT	B	Truck - National Guard
US	VT	B	Truck - Pearl Harbor Survivor
US	VT	B	Truck - Purple Heart
US	VT	B	Truck - Rotary
US	VT	B	Truck - Special Purpose
US	VT	B	Truck - Veteran
US	VT	B	Truck - Veteran - Handicap
US	VT	B	Truck - Veteran - Foreign Wars
US	VT	B	Truck - Veteran - Gulf War
US	VT	B	Truck - Veteran - Iraq Campaign
US	VT	B	Truck - Veteran - Korean War
US	VT	B	Truck - Vietnam Veterans of America
US	VT	C	Trailer - Apportioned
US	VT	C	Trailer - Contractor

License Plate Country	License Plate State	License Plate Type	Plate Description
US	VT	C	Trailer - Heavy
US	VT	C	Trailer - Light
US	VT	D	Agriculture
US	VT	E	Auction Car Dealer
US	VT	E	Farm Machinery Dealer
US	VT	E	Finance Car Dealer
US	VT	E	Highway Building Equipment Dealer
US	VT	E	New Car Dealer
US	VT	E	Used Car Dealer
US	VT	E	Transporter
US	VT	E	Trailer - Dealer
US	VT	E	Motorcycle - Dealer
US	VT	G	Motorcycle
US	VT	G	Motorcycle - Antique
US	VT	G	Motorcycle - Handicap
US	VT	I	Bus
US	VT	I	Bus - Local Transit
US	VT	J	Volunteer
US	VT	J	Municipal (Local Government)
US	VT	J	Municipal - Sheriff
US	VT	K	DMV
US	VT	K	Driver Education
US	VT	K	Game Warden
US	VT	K	State - State Colleges
US	VT	K	State - State Government
US	VT	K	State - State Officers
US	VT	K	State - State Police

License Plate Country	License Plate State	Notes
US	DC	
US	DE	
US	FL	
US	MD	
US	NC	
US	NJ	
US	OH	
US	PA	
US	WV	
US	NY	Plate type is only required for all numeric plates consisting of 1-5 digits. Entries on the "Plate Type" tab are the most common ones with that pattern.