TransUnion

TU4.1 User Guide

March 4, 2015

Version 1.27

© 2015 TransUnion LLC
All Rights Reserved

No part of this publication may be reproduced or distributed in any form or by any means, electronic or otherwise, now known or hereafter developed, including, but not limited to, the Internet, without the explicit prior written consent from TransUnion LLC.

Requests for permission to reproduce or distribute any part of, or all of, this publication should be mailed to:

Law Department
TransUnion
555 West Adams
Chicago, Illinois 60661

The “tu” logo, TransUnion, and other trademarks, service marks, and logos (the “Trademarks”) used in this publication are registered or unregistered Trademarks of TransUnion LLC or their respective owners. Trademarks may not be used for any purpose whatsoever without the express written permission of the Trademark owner.

transunion.com

TU4.1 User Guide

Table of Contents

About This Guide 1

Getting Started 2
- Basic TU4.1 Concepts 2
- Understanding TU4.1 FFI Construction 2
- TU4.1 Error Processing 3
- How a No Hit (No Subject Found) Response is Returned 6
- Requesting Services for a Single Subject 6
  - How to Request a Single Service for a Single Subject 7
  - How A Single Service for a Single Subject is Returned 8
  - How to Request Two Services for a Single Subject 10
  - How Two Services for a Single Subject are Returned 11
  - Requesting Two Score Models for a Single Subject Using Model Data 13
- Requesting Services for Multiple Subjects 14
  - Understanding Processing Rules for Multiple Subjects 14
  - How to Request a Single Service for Multiple Subjects 15
  - How a Single Service for Multiple Subjects is Returned 16
  - How to Request Two Services for Multiple Subjects 18
  - How Two Services for Multiple Subjects are Returned 19
  - Unsuccessful Request for Two Services for Multiple Subjects 22
  - Requesting a Single Score Model for Two Subjects Using Model Data 23

Standalone Service Descriptions 26
- Account Reporting Review 28
- Collection Credit Report 31
- Collection Prioritization Engine (CPE) 2.0 35
- Compliance Verification 39
- Compliance Verification 2.0 42
- Contact Identity Services 46
- Credit Report 52
- Creditor Contact Search 59
- Decision Systems Services 61
- Employment Credit Report 71
- Fraud Detect and Fraud ID-Tect 75
- Government Report 81
- High Risk Fraud Search 84
- ID Report (07770) 90
- ID Report (07450) 94
- ID Report with Score 98

ID Search (07760)....102
ID Search (07400)....105
IDA Model Report....108
Identity Manager Verification (Fraud Management Platform)....111
Identity Manager Verification 2.0....121
Individual Monitoring Report....138
Insurance Prefill....143
L2C Model Report....145
Model Report....152
Reverse Phone Append....156
Small Business Identification....158
SSN Report....164
SSN Search....167
Total ID Service Code....170
Vehicle History Score Report....174

Add-on Service Descriptions....178
Service and Model Renaming....178
How Do I Request an Add-on Service....181
How is My Add-on Service Returned....181
CreditVision® Account History....182
CreditVision® Address History....184
ARM Alert....186
Authorized User Alert....191
Auto Summary....193
CARFAX Raw Data....195
Contact Locator....196
Credit Summary....198
Creditor Contact Information....199
Device Verification Service....200
FDCPA Case Search....207
Geo Code....208
High Risk Fraud Alert....210
ID Mismatch Alert....215
Identity Alerts....216
Identity Manager Verification....222
Identity Manager Verification 2.0....226
Inquiry Analysis....229
Lender Score Disclosure....231
OFAC Name Screen....233
Phone Append....236
Prefill Vehicle....239
Small Business Identification....243
SSN Analysis....248
Vehicle History Score Group....249
Models....250
Sample FFI/FFR With Models Requested and Returned....252
Using Multi-model Cascade....255
Using Characteristics Models....256
Model Service Codes....258

Account Opening Fraud Score....263
Minimum/Maximum Values.... 266
Score Percentile Ranking....270
TransUnion Contact Score....273
CreditVision® Models and Factor Codes....278
CreditVision® Premium Algorithms....286
DELPHI (1997 Redevelopment) Message Codes.... 288
EDGE Score Factor Codes.... 289
Energy Model Score Factor Codes....292
FACETS Score Factor Codes.... 293
FICO® Insurance Score Message Codes....294
FICO® Score, Revenue Score, and Bankruptcy Score Message Codes.... 297
FICO® NG Score Factor Codes.... 307
ID Analytics (IDA) Models and Factor Codes.... 312
Supplemental Recovery Model.... 322
L2C Model and Factor Codes....323
Life Insurance Persistency Score Factor Codes....329
New DELPHI Score Factor Codes.... 330
TransUnion Account Management Models Factor Codes....331
TransUnion Auto Model Adverse Action Codes....335
TransUnion Bankruptcy 1.0 Factor Codes 337
TransUnion Broadband Factor Codes.... 340
TransUnion Characteristic Sets.... 341
TransUnion Debt Management Factor Codes.... 378
TransUnion Income Estimator 3.0 and Debt-to-Income Estimator 3.0....378
TransUnion Income Estimator 3.0.... 378
TransUnion Debt-to-Income Estimator 3.0....383
TransUnion Medical Recovery Scores 3.0.... 386
TransUnion New Account Models Factor Codes....389
TransUnion Recovery 3.0 Models....393
TransUnion Telecom Model Score Factor Codes.... 395
TransUnion Wireless Model 3.0 Score Factor Codes.... 397
TransUnion Wireless 2 Model Score Factor Codes.... 398
TransUnion Wireless Model Score Factor Codes.... 399
VantageScore® Factor Codes....400
Vehicle History Score....411
VIN Prefill.... 412
VHS for Financial Services.... 415

FFI Segments....417
Codes for TransUnion Services....419
AD11 — Address Segment.... 433
AF01 — Access File Segment....435
AI01 — Additional Information Segment....436
CC11 — Credit Card Segment.... 436
CD01 — Customer Data Segment....437
CI01 — Consumer Identifier Segment....437
DB01 — Decision Systems Customer Branch Segment.... 438
DI01 — Decision Systems Custom Information Segment....438
EM11 — Employment Segment....439

END1 — Transaction Ending Segment....440
EU01 — End Usage Segment....440
FA11 — Future Address Segment....442
ID01 — Identification Segment....443
ID02 — Miscellaneous Identification Segment....444
IP01 — Input Parameters Segment....445
LK01 — Creditor Contact Search UP Request Segment....446
MD01 — Model Data Segment....446
MD03 — Model Data Segment....447
NM11 — Name Segment....448
OD01 — Output Delivery Segment....449
OR01 — Optional Request Segment....450
PI11 — Personal Information Segment....452
PN01 — Phone Number Segment....452
RA01 — Request Add on Service Segment....453
RP01 — Request Service Segment....454
RP02 — Request Service Segment Decision Systems....456
RP03 — Request Service Segment (Insurance Service)....457
RS11 — Reporting Subscriber Segment....459
SH01 — Subject Header Segment....459
TT01 — Transaction Tracking Segment....460
TU4I — Transaction Control Segment....460
UA11 — Unparsed Address Segment....463
UF11 — Future Unparsed Address Segment....464
VH01 — Vehicle Information Segment....465
VN01 — Vendor Information Segment....466

FFR Segments....467
AD11—Address Segment....470
AD02—Extended Address Segment....475
AH11—Account History Segment....477
AM01—Address Analysis Segment....478
AO01—Add on Status Segment....480
AR01—Attribute Segment....481
AS01—Auto Loan Summary Segment....482
AT11—Additional Trade Account Segment....483
BR01—Business Record Segment....484
CA01—Credit Availability Summary Segment....489
CC11—Credit Card Segment....490
CD01—Customer Data Segment....490
CH01—Characteristic Segment....491
CI01—Consumer Identifier Segment....491
CL11— Collection Account Segment....491
CL13—Account Reporting Review Collection Account Segment....496
CORR—Segment....501
CO01—County Information Segment....502
CP11—Compliance Segment....503
CR01—Contact Result Segment....505
CR02—Additional Contact Result Segment....506
CS11—Consumer Statement Segment....507

DA01—Data Analysis Segment.....508
DB01—Decision Systems Customer Branch Segment.....511
DC11—Deceased Information Segment.....512
DI01—Decision Systems Custom Information Segment.....513
DR01—Decision Systems Response Segment.....514
ED01—Edit Segment.....517
EF01—Extended Fields Segment.....517
EM11—Employment Segment.....519
END1—Transaction Ending Segment.....521
ERRC—Error Code Segment.....521
ERRT—Error Text Segment.....522
FA11—Future Address Segment.....522
FI01—Collection Credit Report Special Indicators Segment.....525
FT01—Collection Credit Report Segment.....526
GC01—Geo Code Segment.....527
ID01—Identification Segment.....528
ID02—Miscellaneous Identification Segment.....529
IN11—Inquiry Segment.....530
IN12—Collection Credit Report Inquiry Segment.....531
LK11 — Creditor Contact Information Segment.....532
MC01—Message Code Segment.....533
MI01—Miscellaneous Statement Segment.....535
ML01—Mileage Segment.....535
ML02—Mileage Segment.....536
MT01—Message Text Segment.....538
NM11—Name Segment.....539
NU01—Number Of Segment.....542
OB01—Owning Bureau Identification Segment.....542
OB02—Owning Bureau Identification Segment.....543
PD01—Property Data Segment.....544
PH01—Service Header Segment.....544
PH02—Service Header Segment.....545
PH03—Service Header Segment.....545
PH04—Service Header Segment.....546
PI11—Personal Information Segment.....546
PN01—Phone Number Segment.....547
PN02—Phone Number Segment.....550
PP11—Extended Payment Pattern Segment.....551
PR11—Public Record Segment.....552
PS01—Points Summary Segment.....555
PS02—Points Summary Segment.....557
QH01—Inquiry History Segment.....560
RE01—Region Analysis Segment.....561
RR01—Record Reported History Segment.....562
SA11—Subscriber Address Segment.....563
SC01—Scoring Segment.....563
SD01—Credit Summary Description Segment.....565
SH01—Subject Header Segment.....566
SH02—Subject Header Segment for Special Services.....569
SH03—Subject Header Segment.....570

SH04—Subject Header Segment....570
SH05—Subject Header Segment....573
SH06—Subject Header....574
SM11—Credit Summary Segment....576
SV01—Subject Verification Segment....577
SV02—Subject Verification Segment....579
SV03—Subject Verification Segment....582
TA01—ID Mismatch Alert Segment....586
TC01—Income Estimator Model Score Segment....587
TM11—Trade MOP Totals Segment....589
TR11—Trade Account Segment....590
TR12—Individual Monitoring Report Trade Account Segment....597
TR13—Account Reporting Review Trade Account Segment....599
TT01—Transaction Tracking....607
TU4E—Error Control Segment....608
TU4R—Transaction Control Segment....609
TX01—Text Statement Segment....610
UA11—Unparsed Address Segment....611
UF11—Future Unparsed Address Segment....614
VH01—Vehicle Information Segment....617
VS01—Verification Summary Segment....620
WS01—Individual Monitoring Report Satisfaction Segment....622
YI01—Year of Issuance Segment....622
ZC01—ZIP Code Segment....624

Appendices....626
Appendix A: Name, Address, and Phone Codes....626
Sample Addresses....626
Street Type Codes....630
State Codes....637
Unit Type Codes....640
Prefix Codes....640
Suffix Codes....643
RPA Phone Type Codes....645
Appendix B: Industry and Use Type Permissible Purpose Codes....646
Industry Codes....646
Use Type Codes....653
Appendix C: Account Codes....666
Account Type Codes....666
Manner of Payment (MOP) Codes....669
Remark Codes....669
Payment Pattern Logic....675
Payment Pattern Account Codes....676
Appendix D: Public Record Codes....677
Public Record Source Codes....677
Public Record Types....678
Appendix E: Puerto Rico Name and Address Logic....679
Special Logic for Hispanic Surnames....680
Special Logic for Hispanic Addresses....681
Appendix F: Edit and Error Codes....683

Edit Response Records..... 683
Error Response Records..... 687
Appendix G: The TU4.1 Format in the U.S. and Canada.....700
Appendix H: Test Files..... 702

Glossary..... 705

About This Guide

The TU4.1 User Guide describes the fixed-format inquiry (FFI) and fixed-format response (FFR) that are used in TU Release 4.1 Version 0 (TU4.1).

Who Should Use This Guide

The intended audience for this guide consists of the programmers who maintain the systems that use TU4.1 to conduct electronic transactions with the TransUnion consumer database.

How to Use This Guide

If you are new to TU4.1 then go to Getting Started on page 2, which contains an introduction to basic TU4.1 concepts and how to code inquiry strings to request services for single subjects and multiple subjects.

If you are familiar with TU4.1 programming, go to a specific section for any needed information:

- **Standalone Service Descriptions**: Describes the standalone services that are supported by TU4.1. Each product section lists the segments that can be included in an inquiry as well as the segments that can be returned in response.
- **Add-on Service Descriptions**: Describes each TransUnion add-on product supported by TU4.1. Each product section shows how to include the product in an FFI as well as the segments that can be returned in response.
- **FFI Segments**: Describes the segments of the TU4.1 fixed-format inquiry (FFI) including segment order, length, fields, and so on.
- **FFR Segments**: Describes the segments of the TU4.1 fixed-format response (FFR) including segment order, length, and fields.
- **Appendix A: Name, Address, and Phone Codes**: Lists the codes used to specify names and addresses in TU4.1 such as codes for states, street types, prefixes, and suffixes. Also contains examples of how to code addresses in TU4.1 as well as a list of phone type codes returned by the Reverse Phone Append database.
- **Appendix B: Industry and Use Type Codes**: Lists subscriber industry codes and use type codes.
- **Appendix C: Trade and Account Codes**: Lists codes for elements of account information. These include account type codes, account rating codes, and remark codes. This appendix also describes payment pattern logic.
- **Appendix D: Public Record Codes**: Lists public record source codes.
- **Appendix E: Puerto Rico Name and Address Logic**: Describes how to enter Hispanic names and addresses in the TU4.1 format, and provides examples of how to code them.
- **Appendix F: Edit and Error Codes**: Describes the types of input errors that generate edit and error segments, and lists edit and error codes.
- **Appendix G: The TU4.1 Format in the U.S. and Canada**: Describes the differences between the U.S. and Canadian applications of the TU4.1 format.
- **Appendix H: Test Files**: Lists the test files you can use to test the system setup.
- **Glossary**: Describes commonly used terms in TU4.1.

Getting Started

In this section you will learn about:

- Basic TU4.1 concepts
- TU4.1 FFI construction
- Error processing
- No–hit responses
- Requesting services for a single subject
- Requesting services for multiple subjects

Basic TU4.1 Concepts

Concepts to know before you begin working with TU4.1:

- **Standalone services** – A standalone service is one that does not depend on any other service for its delivery. Examples are the Credit Report, Model Report, and Employment Credit Report. To find out more about how to code for standalone services, go to Standalone Service Descriptions on page 26.
- **Add-on services** – Add-on services are only returned as a part of a request for a standalone service. Examples are the Score Models, High Risk Fraud Alert, and Creditor Contact Information. To find out more about how to code for add-on services, go to Add-on Service Descriptions on page 178.
- **FFI Segments** – The inquiry segment type. For example, AD01 for the address with segment data such as House Number, Street Name, City, State, and Zip code. For information about FFI segments, go to FFI Segments on page 417.
- **FFR Segments** – The response segment type. For example, PI01 for personal information such as Social Security Number and Date of Birth. For information about FFR segments, go to FFR Segments on page 467.

Understanding TU4.1 FFI Construction

All segments in the TU4.1 fixed format inquiry (FFI) have a fixed length and segment type.

Specific Segment Requirements of the TU4.1 FFI

In addition to the general requirement that all segments have a correct length and type, FFIs have these specific segment requirements:

Use UPPER CASE for FFI Data

All FFI data, except for User Reference data, must be in UPPER CASE format.

Use TU4I and END1 to Begin and End the FFI

The most important of these is that each FFI must begin with a TU4I (Transaction Control) segment and end with an END1 segment. The TU4I segment contains the subscriber and bureau identification information needed to allow access to the consumer information database. The END1 segment signals the end of the transaction. If either of the TU4I or END1 segments are missing or invalid, then a TU4E record is returned and the transaction is terminated.

Specify a TransUnion Service to Use

The FFI also requires at least one RP01 (Request Service) segment that specifies a TransUnion service. If the service requires permissible purpose, then the RP01 must also specify an inquiry type.

Services that require permissible purpose:

- Credit Report
- Model Report
- ID Report with Score
- Employment Credit Report
- SSN Report
- ID Report
- Government Report
- Collection Credit Report
- Decision Systems Services

Identify the End User

The FCRA requires subscribers who resell credit information to identify the end users of the services they request. If the subscriber code does not contain this information, the FFI must include an EU01 (End Usage) segment, which immediately follows the TU4I segment. If a reseller sends an FFI that does not identify the end user in either the subscriber code or an EU01 segment, a TU4E record is returned.

Specify Distribution Method if other than FFR

After a TU4.1 FFI is sent, the default response is to return an FFR through the standard electronic response distribution method. If a subscriber wants results delivered in a different format or through a different distribution method, then the FFI must include an OD01 (Output Delivery) segment. This segment is not required unless the subscriber wants to change these default settings.

> **Note:** TU40 Version 0 subscribers can use the Version Switch field in the TU4I segment to send a TU40 v0 FFI and receive a TU40 v1 FFR.

Understanding TU4.1 FFI Segment Order

The ordering of the segments is very important. For example, addresses need to be positional: TU4.1 assumes the first address segment contains the current address; the second address segment contains the first previous address; and so on. If the address is personal, then it must follow an SH01 (Subject Header) segment. If the address is an employment address, then it must follow an EM11 (Employment) segment.

The subject data segments must follow an SH01 segment and each SH01 segment must be followed by at least one subject data segment. All other segment requirements are service-dependent. Refer to Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178 of this manual for more details regarding required segments for specific services.

TU4.1 Error Processing

If an FFI is sent that has an incorrect segment length or type, the result is a fatal error: TU4.1 returns a TU4E (error response) record and terminates the transaction.

> **Note:** A TU4E record is returned instead of an FFR whenever an error occurs that results in the termination of a service request. The TU4E record identifies the service requested and up to five error conditions. Add-on services are not identified or delivered. Refer to Appendix F: Edit and Error Codes on page 683 for more information about generating errors and understanding error codes.

Sample Error Transaction

The following example shows an FFI that does not contain the correct password:

```
TU4I0111USERREFERENCE       0622Z 05633723XXXX1N
SH011
NM111BSACOMMON                DIANE       S
PI11666500964
AD11 46          BANK              FANTASY ISLAND
IL60750
RP0107000N    I
OD010104001
OD010201001
END1009
```

Segment ID	Segment Name
TU4I	Transaction Control
SH01	Subject Header
NM11	Name
PI11	Personal Information
AD11	Address (Current)
RP01	Request Service
OD01	Output Delivery
END1	End

Transmitting the FFI results in this error response:

```
TU4E062011USERREFERENCE           0622Z 0563372320110907114336
PH0101207000
ERRC0111209
END1010004
```

Segment ID	Segment Name
TU4E	Transaction Error Response
PH01	Service Header
ERRC	Error

Segment ID	Segment Name
END1	End

Note: If the system detects an error before the service is identified, the resulting TU4E record does not specify a service in the PH01 segment.

Response to Unsuccessful Multi-Service Request

If the FFI requested a Credit Report and Fraud Detect for two subjects but did not provide the address information, which is required for the Credit Report, then a TU4E is returned for the Credit Report. The FFI does, however, provide enough information for the system to return a Fraud Detect service in which the address is not required.

The response below shows these results: a TU4E is returned for the Credit Report request and an FFR (beginning with the TU4R segment) is returned for Fraud Detect:

Segment ID	Segment Name
TU4E	Error Control
PH01	Service Header (Credit Report)
ERRC	Error Code
END1	End
TU4R	Transaction Control
CD01	Customer Data
PH01	Service Header (Fraud Detect)
SH01	Subject Header (Subject 1)
NM11	Name
PI11	Personal Information
YI01	Year Of Issuance
ID01	Identification
DA01	Data Analysis (Driver’s License)
CC11	Credit Card
SH01	Subject Header (Subject 2)
NM11	Name
PI11	Personal Information
YI01	Year Of Issuance
ID01	Identification
DA01	Data Analysis (Driver’s License)
CC11	Credit Card

Segment ID	Segment Name
DA01	Data Analysis (Credit Report)
END1	End

Note: As shown in the example above, all error responses appear at the beginning of the output. If more than one service is requested, the FFR for the successfully processed service follows the error response for the unsuccessfully processed service.

How a No Hit (No Subject Found) Response is Returned

If a *no-hit* occurs (a subject that matches the input information cannot be found), then an FFR is returned that contains the original input information and the inquiry posted for the request. However, no credit segments are returned. The File Hit field in the SH01 segment indicates that the result is a no-hit.

The following example shows the FFR that is returned for a Credit Report request that results in a no-hit:

```
TU4R062011USERREFERENCE     0622Z 0563372320110907115852
PH0101207000
SH01027101N00N06TRN20110907
NM11070I1BSACOMMON          SMITH
S
PI11029I666500964
AD11105I1146          BANK          FANTASY ISLAND     IL60750
20110907
END1010007
```

Segment ID	Segment Name
TU4R	Transaction Control
PH01	Service Header
SH01	Subject Header
NM11	Name
AD11/UA11	Address
END1	End

Requesting Services for a Single Subject

The following section provides information about how service requests for a single subject are requested, returned, and processed.

How to Request a Single Service for a Single Subject

The following example is a request for a single service (a Credit Report) for a single subject and shows the order in which these basic segments must be transmitted to TransUnion. This request also includes a request for two add-on services. TransUnion recommends using this submission method.

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
VN01	Vendor Info (If using one)
CD01	Customer Data, required if using TUNetAccess (TUNA)
SH01	Subject Header
AF01	Access File
NM11	Name
PI11	Personal Information
AD11	Address (Current)
AD11	Address (Previous)
RP01	Request Service (Credit Report)
OR01	Optional Request
OD01	Output Delivery
OD01	Output Delivery
RA01	Request Add-on Service (Model)
RA01	Request Add-on Service (High Risk Fraud Alert)
END1	End

```
TU4I1111USERREFERENCE           0622Z 05633723XXXX1N
EU01YOUR COMPANY        XX
VN01SOFTWARE            123456    12
CD0105YOUR COMPANY
SH011
AF01
NM111BSACOMMON                DIANE
S
PI1166650096419751212
AD11 46          BANK                                FANTASY
ISLAND             IL60750
AD11 123        PO BOX 123                      FANTASY
ISLAND             IL60750
RP0107000N    I
OR01 Y
```

```
OD010104001

OD010201001

END1015
```

How A Single Service for a Single Subject is Returned

The following list shows the order of segments that may be returned for a Credit Report with the FICO® Score, High Risk Fraud Alert, and Creditor Contact Information (phone) for an individual subject.

> **Note:** Only one file is generally returned for each consumer. The only exception is that two files may be returned for Puerto Rico consumers.

Segment ID	Segment Name
TU4R	Transaction Control
CD01	Customer Data
PH01	Service Header (Credit Report)
SH01	Subject Header (Subject 1, File 1)
CI01	Consumer Identifier
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert (was Trans Alert)
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM01	Credit Summary
SD01	Credit Summary Description
PR11	Public Record
CL11	Collection
TR11	Trade
TM11	Trade MOP Totals
MI01	Miscellaneous Statement
CS11	Consumer Statement
IN11	Inquiry
OB01/OB02	Owning Bureau Identification
AO01	Add-on Status (Creditor Contact Information)

Segment ID	Segment Name
LK11	Creditor Contact Information
SA11	Subscriber Address
PN01	Phone Number
AO01	Add-on Status (High Risk Fraud Alert)
MC01	Message Code
AO01	Add-on Status (Model)
SC01	Scoring (FICO® Score)
SH01	Subject Header (Subject 1, File 2)
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM11	Credit Summary
SD01	Credit Summary Description
PR11	Public Record
CL11	Collection
TR11	Trade
TM11	Trade MOP Totals
CS11	Consumer Statement
IN11	Inquiry
OB01/OB02	Owning Bureau Identification
AO01	Add-on Status (Creditor Contact Information)
LK11	Creditor Contact Information
SA11	Subscriber Address
PN01	Phone Number
AO01	Add-on Status (High Risk Fraud Alert)
MC01	Message Code
AO01	Add-on Status (Model)
SC01	Scoring (FICO® Score)

Segment ID	Segment Name
END1	End

How to Request Two Services for a Single Subject

To request multiple standalone services, the FFI must include an RP01 segment for each service (a maximum of two RP01s). If two services are requested in a single transaction, and one of the services cannot be processed, then the system delivers the one service that can be processed and returns an error for the service that cannot be processed.

Services are returned in the order requested (except for the error records that are returned first). For example, if a Credit Report and Fraud Detect are requested in this order and the Fraud Detect service cannot be processed, then the error record for Fraud Detect is returned first followed by the Credit Report. However, if both services process successfully, then the Credit Report is returned first followed by the Fraud Detect.

The following example shows a request for two standalone services, each of which is requested with one or more add-on services (for example, Credit Report with a score model and High Risk Fraud Alert) for an individual subject:

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
VN01	Vendor
CD01	Customer Data
SH01	Subject Header
AF01	Access File
NM11	Name
NM11	Name (Also Known As)
PI11	Personal Information
ID01	Identification
CC11	Credit Card
AD11/UA11	Address (Current)
PN01	Phone Number
AD11/UA11	Address (Previous)
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
RP01	Request Service (Credit Report)
OR01	Optional Request

Segment ID	Segment Name
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (Model)
RA01	Request Add-on Service (High Risk Fraud Alert)
RP01	Request Service (Fraud Detect)
OD01	Output Delivery
RA01	Request Add-on Service (Fraud Model)
END1	End

How Two Services for a Single Subject are Returned

The following shows an example of the segments that may be returned for a successfully processed Credit Report and Fraud Detect request for a single subject:

Segment ID	Segment Name
TU4R	Transaction Control
CD01	Customer Data
PH01	Service Header (Credit Report)
SH01	Subject Header
CI01	Consumer Identifier
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM11	Credit Summary
SD01	Credit Summary Description
PR11	Public Record
CL11	Collection
TR11	Trade
TM11	Trade MOP Totals

Segment ID	Segment Name
MI01	Miscellaneous Statement
CS11	Consumer Statement
IN11	Inquiry
OB01/OB02	Owning Bureau
AO01	Add-on Status (High Risk Fraud Alert)
QH01	Inquiry History
MC01	Message Code
DC11	Deceased Information
YI01	Year Of Issuance
MT01	Message Text
AO01	Add-on Status (Model)
SC01	Scoring (Model)
END1	End
TU4R	Transaction Control
PH01	Service Header (Fraud Detect)
SH01	Subject Header
NM11	Name
PI11	Personal Information
DC11	Deceased Information
YI01	Year Of Issuance
AD11/UA11	Address (Home)
ZC01	Zip Code
CO01	County Information
PN01	Phone Number (Home)
ZC01	Zip Code
CO01	County Information
RE01	Region Analysis
EM11	Employment
AD11/UA11	Address (Business)
ZC01	Zip Code
CO01	County Information
PN01	Phone Number (Business)
DA01	Data Analysis (Phone)
ZC01	Zip Code

Segment ID	Segment Name
CO01	County Information
RE01	Region Analysis
ML01	Mileage
ID01	Identification
CC11	Credit Card
DA01	Data Analysis (Credit Card)
SV01	Subject Verification
AO01	Add-on Status
SC01	Scoring (Fraud Model)
END1	End

Requesting Two Score Models for a Single Subject Using Model Data

The following example shows a request for two score models on a standalone service for a single subject, and shows the order in which these segments must be transmitted to TransUnion:

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
VN01	Vendor
CD01	Customer Data
SH01	Subject Header
NM11	Name
NM11	Name (Also Known As)
PI11	Personal Information
ID01	Identification
CC11	Credit Card
MD01	Model Data – Total Gross Monthly Income Amount
MD01	Model Data – Applicant's Age
MD01	Model Data – Length at Current Residence
MD01	Model Data – Type of Account at Contributor's Institution
MD01	Model Data – Type of Account at Other Institution
AD11/UA11	Address (Current)

Segment ID	Segment Name
PN01	Phone Number
AD11/UA11	Address (Previous)
EM11	Employment
AD11	Address
PN01	Phone Number
RP01	Request Service (Standalone Service)
OR01	Optional Request
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (Custom Score Model #1)
RA01	Request Add-on Service (Custom Score Model #2)
END1	End

Requesting Services for Multiple Subjects

The following section provides information about how service requests and score models for multiple subject are requested, returned, and processed.

Understanding Processing Rules for Multiple Subjects

For requests that include two subjects, follow these processing rules:

- When multiple subjects are requested for a service, a Subject Header segment (SH01) must be provided for each subject. The FFI must also include the corresponding identification segments—Name (NM11), Personal Information (PI11), Address (AD11 or UA11), Employment (EM11) and Phone (PN01)—for each subject.
- The required identification segments vary by service. If a service requires name and address information, the FFI must include a name and address for each subject. There are no spouse fields defined for the NM11 and PI11 segments. This design supports the option to allow different last names and addresses for different subjects.
- If the input data is valid for one subject but invalid for the other subject, then the standalone service requested and any add-ons are processed for the valid subject only. The invalid subject is discarded.
- Currently, a maximum of two subjects are allowed for each transaction. If more than two subjects are received, the first two subjects are processed and the additional subjects are ignored.

The following sections describe how to use the TU4.1 FFI to send different types of requests to TransUnion and show the FFR that is returned for each of these requests. Be advised that the following examples do not necessarily show all the possible segments that may be returned in the FFR for the services listed. For that information, refer to Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178.

How to Request a Single Service for Multiple Subjects

The following example demonstrates a request for a single standalone service (a Credit Report) for two subjects and shows the order in which these basic segments must be transmitted to TransUnion. The FFI also includes a request for two add-on services (a model and High Risk Fraud Alert).

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
VN01	Vendor
CD01	Customer Data
SH01	Subject Header (Subject 1)
NM11	Name
NM11	Name (Also Known As)
PI11	Personal Information
AD11/UA11	Address (Current)
PN01	Phone Number
AD11/UA11	Address (Previous)
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SH01	Subject Header (Subject 2)
NM11	Name
NM11	Name (Also Known As)
PI11	Personal Information
AD11/UA11	Address (Current)
PN01	Phone Number
AD11/UA11	Address (Previous)
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
RP01	Request Service (Credit Report)
OR01	Optional Request
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (Model)

Segment ID	Segment Name
RA01	Request Add-on Service (High Risk Fraud Alert)
END1	End

How a Single Service for Multiple Subjects is Returned

For a successful multiple-service request, the returned FFR identifies the requested service and returns the subject segments in the order in which the SH01 segments appeared in the FFI.

The logical order of segments returned in this type of FFR:

- Service Header (PH01) segment that identifies the standalone service delivered.
- Segments that identify the first subject.
- Service-specific detail segments for the first subject.
- Add-on Service Header (AO01) and associated detail segments for each add-on service returned for the first subject.
- Segments that identify the second subject.
- Service-specific detail segments for the second subject.
- Add-on Service Header (AO01) and associated detail segments for each add-on service returned for the second subject.
- Important Note: You will not receive an error response if one of the consumers' inquiries results in an error and the other one can be processed. Only the consumer that processed is returned. TransUnion recommends submitting a single consumer on a transaction.

The next example is a FFR that reflects this segment order.

The following example shows a successfully processed request for a Credit Report, ID Mismatch Alert, FICO® Score, and High Risk Fraud Alert returned for two subjects:

Segment ID	Segment Name
TU4R	Transaction Control
CD01	Customer Data
PH01	Service Header
SH01	Subject Header (1st Subject, 1st File)
CI01	Consumer Identifier
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert (was Trans Alert)
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number

Segment ID	Segment Name
SM11	Credit Summary
SD01	Credit Summary Description
TR11	Trade
TM11	Trade MOP Totals
IN11	Inquiry
OB01/OB02	Owning Bureau Identification
AO01	Add-on Status (High Risk Fraud Alert)
QH01	Inquiry History
MC01	Message Code
AO01	Add-on Status (FICO® Score)
SC01	Scoring (FICO® Score)
SH01	Subject Header (2nd Subject, 1st File)
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM11	Credit Summary
SD01	Credit Summary Description
TR11	Trade
TM11	Trade MOP Totals
IN11	Inquiry
OB01/OB02	Owning Bureau Identification
AO01	Add-on Status (High Risk Fraud Alert)
QH01	Inquiry History
MC01	Message Code
AO01	Add-on Status (FICO® Score)
SC01	Scoring (FICO® Score)
END1	End

How to Request Two Services for Multiple Subjects

The following example shows a multiple-subject request that contains two RP01 segments: one each for Credit Report and for Fraud Detect. The example also contains multiple RA01 segments to request a High Risk Fraud Alert, a Model, and a Fraud Model as add-on services. A maximum of two standalone services can be requested in one FFI.

All services—both standalone and add-on—are returned for both subjects if all required service data is provided for both subjects.

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
CD01	Customer Data
VN01	Vendor
SH01	Subject Header (Subject 1)
NM11	Name
PI11	Personal Information
ID01	Identification
CC11	Credit Card
AD11/UA11	Address
PN01	Phone Number
AD11/UA11	Address
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SH01	Subject Header (Subject 2)
NM11	Name
PI11	Personal Information
ID01	Identification
CC11	Credit Card
AD11/UA11	Address
PN01	Phone Number
AD11/UA11	Address
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
RP01	Request Service (Credit Report)

Segment ID	Segment Name
OR01	Optional Request
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (FICO® Score)
RA01	Request Add-on Service (High Risk Fraud Alert)
RP01	Request Service (Fraud Detect)
OD01	Output Delivery
RA01	Request Add-on Service (Fraud Model)
END1	End

How Two Services for Multiple Subjects are Returned

The following FFR shows the segments returned for the successfully processed request for a Credit Report (with FICO® Score and High Risk Fraud Alert) and Fraud Detect (with the Fraud model) for multiple subjects:

Segment ID	Segment Name
TU4R	Transaction Control
CD01	Customer Data
PH01	Service Header (Credit Report)
SH01	Subject Header (Subject 1, File 1)
CI01	Consumer Identifier
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert (was Trans Alert)
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM11	Credit Summary
SD01	Credit Summary Description
PR11	Public Record
CL11	Collection
TR11	Trade

Segment ID	Segment Name
TM11	Trade MOP Totals
IN11	Inquiry
OB01/OB02	Owning Bureau Identification
AO01	Add-on Status (High Risk Fraud Alert)
QH01	Inquiry History
MC01	Message Code
YI01	Year Of Issuance
AO01	Add-on Status (FICO® Score)
SC01	Scoring (FICO® Score)
SH01	Subject Header (Subject 2, File 1)
CI01	Consumer Identifier
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert [was Trans Alert]
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM11	Credit Summary
SD01	Credit Summary Description
PR11	Public Record
CL11	Collection
TR11	Trade
TM11	Trade MOP Totals
IN11	Inquiry
OB01/OB02	Owning Bureau Identification
AO01	Add-on Status (High Risk Fraud Alert)
QH01	Inquiry History
MC01	Message Code
YI01	Year Of Issuance
AO01	Add-on Status (FICO® Score)
SC01	Scoring (FICO® Score)
END1	End

Segment ID	Segment Name
TU4R	Transaction Control
PH01	Service Header (Fraud Detect)
SH01	Subject Header (Subject 1)
NM11	Name
PI11	Personal Information
DC11	Deceased Information
YI01	Year Of Issuance
AD11/UA11	Address (Home)
ZC01	ZIP Code
CO01	County Information
PN01	Phone Number (Home)
ZC01	ZIP Code
CO01	County Information
RE01	Region Analysis
EM11	Employment
AD11/UA11	Address (Business)
ZC01	ZIP Code
CO01	County Information
PN01	Phone Number (Business)
ZC01	ZIP Code
CO01	County Information
RE01	Region Analysis
ML01	Mileage
ID01	Identification
DA01	Data Analysis (Driver’s License)
CC11	Credit Card
DA01	Data Analysis (Credit Card)
AO01	Add-on Status
SC01	Scoring (Fraud Model)
SH01	Subject Header (Subject 2)
NM11	Name
PI11	Personal Information
DC11	Deceased Information
YI01	Year Of Issuance

Segment ID	Segment Name
AD11/UA11	Address (Home)
ZC01	ZIP Code
CO01	County Information
PN01	Phone Number (Home)
ZC01	ZIP Code
CO01	County Information
RE01	Region Analysis (Home)
EM11	Employment
AD11/UA11	Address (Business)
ZC01	ZIP Code
CO01	County Information
PN01	Phone Number (Business)
ZC01	ZIP Code
CO01	County Information
RE01	Region Analysis (Business)
ID01	Identification
DA01	Data Analysis (Drivers License)
CC11	Credit Card
DA01	Data Analysis (Credit Card)
SV01	Subject Verification
AO01	Add-on Status
SC01	Scoring (Fraud Model)
END1	End

Unsuccessful Request for Two Services for Multiple Subjects

The following example shows a request for a Credit Report and Fraud Detect for two subjects containing no address information for either subject:

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
VN01	Vendor
CD01	Customer Data

Segment ID	Segment Name
SH01	Subject Header (Subject 1)
NM11	Name
PI11	Personal Information
ID01	Identification
CC11	Credit Card
SH01	Subject Header (Subject 2)
NM11	Name
PI11	Personal Information
ID01	Identification
CC11	Credit Card
RP01	Request Service (Credit Report)
OR01	Optional Request
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (Model)
RA01	Request Add-on Service (High Risk Fraud Alert)
RP01	Request Service (Fraud Detect)
OD01	Output Delivery
END1	End

Requesting a Single Score Model for Two Subjects Using Model Data

The following example shows a request for a single score model on a standalone service for multiple subjects, and shows the order in which these segments must be transmitted to TransUnion:

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
VN01	Vendor
CD01	Customer Data
SH01	Subject Header (first subject)
NM11	Name
NM11	Name (Also Known As)
PI11	Personal Information

Segment ID	Segment Name
ID01	Identification
CC11	Credit Card Information
MD01	Model Data—Total Gross Monthly Income Amount
MD01	Model Data—Applicant's Age
MD01	Model Data—Length at Current Residence
MD01	Model Data —Type of Account at Contributor's Institution
MD01	Model Data—Type of Account at Other Institution
AD11/UA11	Address (Current)
PN01	Phone Number
AD11/UA11	Address (Previous)
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SH01	Subject Header (second subject)
AF01	Access File
NM11	Name
NM11	Name (Also Known As)
PI11	Personal Information
ID01	Identification
CC11	Credit Card Information
MD01	Model Data—Total Gross Monthly Income Amount
MD01	Model Data—Applicant's Age
MD01	Model Data—Length at Current Residence
MD01	Model Data—Type of Account at Contributor's Institution
MD01	Model Data—Type of Account at Other Institution
AD11/UA11	Address (Current)
PN01	Phone Number
AD11/UA11	Address (Previous)
EM11	Employment
AD11/UA11	Address
PN01	Phone Number

Segment ID	Segment Name
RP01	Request Service (Standalone Service)
OR01	Optional Request
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (Custom Model)
END1	End

Standalone Service Descriptions

A standalone service is one that does not depend on any other service for its delivery. This section shows, for each TransUnion standalone service, the segments that are required to create an FFI for that service and the FFR segments that are returned in response. Refer to Getting Started on page 2 for additional examples of TU4.1 FFIs, including examples of joint inquiries.

> **Note:** Quick access to TransUnion technical support information is available online at https://techservices.transunion.com.

Service renaming

To maintain the highest levels of service and reliability, TransUnion restructured its service line in 2004. In the process, many of the services were renamed. Refer to the table below for a list of services by old name and, where applicable, new name.

What service information is in this document?

For each service described in this document, information is presented in this order:

- Brief description of the service.
- List of the segments that an FFI for this service can include. The segments are listed in the order in which they must be transmitted.
- Processing rules that affect this service's FFI.
- List of the segments that an FFR returned for this service can include. The actual segments returned depend on the settings and information sent in the FFI.

The FFR segment list also includes segments for all add-on services that are available for return with this standalone service.

Below is a list of the services. The table lists the previous service name, the new service name, and the service code. The services appear in alphabetical order by new service name.

New Service Name	Old Service Name	Service Code
Account Reporting Review	GLANCE	08890
Collection Credit Report	FACT	07700
Collection Prioritization Engine (CPE) 2.0	N/A	07025
Compliance Verification	N/A	06790
Compliance Verification 2.0	N/A	06792
Contact Identity Services:		
Contact Locator	N/A	03152
Contact Verification	N/A	03150

New Service Name	Old Service Name	Service Code
Contact Verification Plus	N/A	03151
Credit Report	Credit Report	07000
Creditor Contact Search	LOOK UP	07600
Employment Credit Report	PEER	06000
Fraud Detect / Fraud ID-Tect	Fraud Detect / Fraud ID-Tect	06600
Government Report	GAD	07003
High Risk Fraud Search	Hawkeye	06510
ID Report	IDSearchplus	07770
ID Report	ReTRACEplus	07450
ID Report with Score	ScoreSearch	07750
ID Search	IDSearch	07760
ID Search	ReTRACE	07400
IDA Model Report	N/A	06100
Identity Manager Verification	Fraud Management Platform	06670
Identity Manager Verification 2.0	N/A	06672
Individual Monitoring Report Delete	WATCH Delete	07112
Individual Monitoring Report Satisfaction	WATCH Satisfaction	07113
Individual Monitoring Report Set	WATCH Set	07111
Insurance Prefill	N/A	07920
Instant Credit Risk Screen	ACQUIRE Express	09910
Instant Deposit Screen	ACQUIRE Connect	09930
Instant Prescreen	ACQUIRE Select	09900
Instant Review	ACQUIRE Review	09920
L2C Model Report	N/A	06200
Model Report	Score Report	08000
Reverse Phone Append	Reverse Phone Append	07040
Small Business Identification	N/A	07710
SSN Report	TRACEplus	07300
SSN Search	TRACE	07200
Total ID	Total ID	06710
Vehicle History Score Report	N/A	07951

Account Reporting Review

Service Code 08890

Account Reporting Review allows contributors of tradeline data to access their own information on the TransUnion consumer database. TransUnion restricts the use of Account Reporting Review by an internal validation process that links the subscriber's inquiry subscriber code to the tradeline subscriber code. This prevents one subscriber from using Account Reporting Review to view the data of another. The linkage of inquiry to tradeline subscriber is not automatic. Subscribers who want to use Account Reporting Review must first arrange for this linkage by contacting their account representative. There are two versions of the Account Reporting Review available: Standard and CreditVision®.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an Account Reporting Review Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
RP01	Request Service	1 Per Service	Required	
RS11	Reporting Subscriber	1 Per Service	Optional	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
END1	End	1 Per Transaction	Required	

Account Reporting Review Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Account Reporting Review processing rules.

RP01 (Request Service) Segment

To request an Account Reporting Review Report, the service code 08890 must be provided in the Request Service segment.

(Reporting Subscriber) Segment

If this segment is sent and the subscriber code is included, the first four positions of the subscriber code must be provided. To target a specific account for the search, this segment can also include an account number identifying the information to be reviewed.

Sample FFI for Account Reporting Review:

```
TU4I1011GLANCE                    06TRZ
05633723PSWD1NSH011NM111ABOU
HOSSEN
JAMIL
PI11583555870           AD111738         URB SANTA ISIDRA
3
B11       FAJARDO
PR00738
RP0108890N
IOD010201001
01OD010104001

01END100009
```

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the Account Reporting Review service in the order of return. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH02	Service Header	Valid results for Account Reporting Review are:

Segment ID	Segment Name	Notes
		GL0 - No matching trade account found on subject's file **GL1** - One or more matching trade accounts found on subject's file
SH01	Subject Header	
NM11	Name	
NM11	Name (Secondary)	
PI11	Personal Information	
AD11/UA11	Address	
AD11/UA11	Address	
CL13	Account Reporting Review Collection Account	A two-character industry code is returned if the subscriber's settings in the validation file are activated for this feature. Suppression information is returned in the Trade or Collection Account segment for Account Reporting Review. If present, the suppression information also applies to associated Consumer Statement and Additional Trade Account segments.
TR13	Account Reporting Review Trade Account	A two-character industry code is returned if the subscriber's settings in the validation file are activated for this feature. Suppression information is returned in the Trade or Collection Account segment for Account Reporting Review. If present, the suppression information also applies to associated Consumer Statement and Additional Trade Account segments.
PP11	Extended Payment Patterns	CreditVision® only.
AT11	Additional Trade Account	
AH11	Account History	CreditVision® only.

Segment ID	Segment Name	Notes
END1	End	

Collection Credit Report

Service Code 07700

The Collection Credit Report is a summarized and reformatted credit report that focuses on file activity within the past 12 months. It targets the skiptracing and collections industries to aid collectors in locating recently delinquent accounts before the accounts become seriously delinquent.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Collection Credit Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Alias)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Collection Credit Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Collection Credit Report processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

> **Note:** Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request a Collection Credit Report, the service code 07700 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service, a Request Add-on segment can be provided for each add-on service desired except for Models. If this segment is not used, the system reverts to the subscriber's default options.

> **Note:** Currently, the only way to request a Model for Collection Credit Report is to be set up for the model in the Collection Credit Report DEFAULT COMBINATION field of the subscriber file. A model cannot be requested at the transaction level for Collection Credit Report.

The following add-on services can be requested with a Collection Credit Report:

- Phone Append
- High Risk Fraud Alert
- Models
- Inquiry Analysis

The add-ons below are only available through settings in the subscriber validation file.

- ID Mismatch Alert
- CreditVision® Address History

Sample FFI for Collection Credit Report

```
TU4I1011COLLECTION RPT          06TRZ
05633723PSWD1NSH011NM111BSACOMMON
DIANE
S
PI11098500964           AD11146
BANK
FANTASY ISLAND
IL60750
RP0107700N
IOD010201001
01OD010104001

01END100009
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Collection Credit Report in the order of return. The shaded segments are the add-on service segments that can be returned for a Collection Credit Report if add-ons are requested. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NM11	Name	
NM11	Name (Alias)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address (multiple)	
PN01	Phone Number	
EM11	Employment	
AD11	Address	
FI01	Collection Credit Report Special Indicators	

Segment ID	Segment Name	Notes
PR11	Public Record	
FT01	Collection Credit Report	
MI01	Miscellaneous Statement	
CS11	Consumer Statement	
IN12	Inquiry	
OB01/OB02	Owning Bureau Identification	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
QH01	Inquiry History	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status Income Estimator	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator score	
AO01	Add-on Status (Characteristic)	
CH01	Characteristic	
AO01	Add-on Status (Model)	
TC01	Income Estimator Score	
AO01	Add-on Status (Inquiry Analysis)	
IN11	Inquiry	
NM11	Name	
NM11	Name (maternal)	
AD11	Address (current)	
AD11	Address (previous)	
PN01	Phone Number	
EM11	Employment	
END1	End	

Collection Prioritization Engine (CPE) 2.0

Service Code 07025

Collection Prioritization Engine (CPE) 2.0 is an online batch service that enables subscribers to rate the accounts in their portfolio according to their recovery and revenue potential. The CreditVision® version of CPE 2.0 returns enriched data elements and new data elements not available in the standard version.

Note: CPE 2.0 is available only as an online batch service via OLB file transmission. It is not available as a single CPU-to-CPU transaction.

For more information, including examples of requests and responses, about CPE 2.0 and other services via OLB, see the Online Batch Getting Started Guide.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a CPE 2.0 Report through OLB in the order in which the segments must be transmitted. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Optional	
VN01	Vendor	1 Per Transaction	Required for vendors	
SH01	Subject Header	1 Per Transaction	Required	
IP01	Input Parameters	1 Per Transaction	Conditionally Required	Required when using subscriber options to control add-on services returned.
NM11	Name	1 Per Subject	Required	
NM11	Name (Secondary)	1 Per Subject	Optional	
NM11	Name (Alias)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	3 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
RP01	Request Product	1 Per Product	Required	
OR01	Optional Request	1 Per Product	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Product	Optionally Required	
END1	End	1 Per Transaction	Required	

CPE 2.0 Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to CPE 2.0 processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

Note: Contact your account representative if you need to know whether a permissible purpose code is required.

IP01 Input Parameters Segment

Use the IP01 segment to provide a Level Number or a Balance Amount for the account. This segment is used in conjunction with the subscriber's subscriber settings for CPE 2.0 to determine which add-ons to return with the report.

If the subscriber has CPE 2.0 settings specified in the subscriber file and the FFI does not include the IP01 segment, only the core product is returned with any valid add-ons requested at the transaction level.

RP01 (Request Service) Segment

To request a CPE Report, the service code 07025 must be provided in the Request Service segment. This is not required for every transaction but is rather dependent on a subscriber code and its settings.

RA01 (Request Add-on) Segment

To request an add-on service, a Request Add-on segment can be provided for each eligible add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons and models.

RA01 segments can return the following add-ons with a CPE 2.0 Report:

- Phone Append
- Inquiry Analysis
- High Risk Fraud Alert
- Models

The following add-ons are available only through settings in the subscriber validation file.

- CreditVision® Address History
- ID Mismatch Alert
- Geo Code
- OFAC Name Screen
- Credit Summary
- Contact Locator
- Contact Score

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the CPE 2.0 Report in the order of return. The shaded segments are the add-on service segments that can be returned for a CPE 2.0 Report when all eligible add-ons are delivered. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
PH01	Product Header	
SH06	Subject Header	
NM11	Name	
NM11	Name (Secondary)	
NM11	Name (Alias)	
PI11	Personal Information	
TA01	Id Mismatch Alert (was Trans Alert)	
AM01	Address Analysis	
AD11	Address	
EM11	Employment	
AD11	Address	
SM01	Credit Summary	
SD01	Credit Summary Description	

Segment ID	Segment Name	Notes
DC11	Deceased Information	Deceased Information segment is only returned when the Subscriber is valid for this option.
PR01	Public Record (Bankruptcy Info)	Public Record segment is only returned when the Subscriber is valid for this option.
MI01	Miscellaneous Statement	
CP11	Compliance	Compliance information may be returned when certain conditions are present on the consumer's file.
CS11	Consumer Statement	
OB01/OB02	Owning Bureau Identification	
AO01	Add-on status (Phone Append)	
PN01	Phone Number	
AO01	Add-on status (HRFA)	
QH01	Inquiry History	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on status (Score Model)	
SC01	Scoring (Score Model)	
AO01	Add-on status (Credit Characteristics)	
CH01	Characteristic	
AO01	Add-on status (Geo Code)	
GC01	Geo Code Status and data	
AD11	Current Address Entered	
AO01	Add-on status (OFAC)	
MT01	Message Text	
AO01	Add-on status (Inquiry Analysis)	
IN11	Inquiry	
NM11	Name	
NM11	Name (Secondary)	
AD11	Address (current)	
AD11	Address (previous)	

Segment ID	Segment Name	Notes
PN01	Phone Number	
EM11	Employment	
END1	End	

Note: When a subscriber requests an add-on service at the transaction level via an RA01 segment and is not eligible to receive it, then an AO01 segment is returned with a service status code of 03 subscriber code not authorized for requested service.

Compliance Verification

Service Code 06790

Compliance Verification provides additional verification of the consumer's date of birth and some level of basic match scoring, data validity, FACT Act High-Risk Fraud Alert messages, and Office of Foreign Asset Control (OFAC) review. This service is intended to assist those subscribers who have a need to comply with the USA PATRIOT Act.

Compliance Verification provides access to:

- TransUnion's consumer credit database to verify the consumer's input name, current and previous addresses, and SSN against the same on the consumer's file.
- RPA [Reverse Phone Append], which is automatically invoked to provide a second verification of the consumer's name and current address associated with the telephone number entered.
- TransUnion's consumer database to obtain the consumer's Date of Birth, which eventually becomes part of the scoring criteria for the service.
- High Risk Fraud Alert, which is automatically invoked for selected messages.
- OFAC Name Screen, which is automatically invoked as a security check.
- Fraud tables, but only with corporate approval.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request Compliance Verification in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
				Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Current address	1 Per Subject	Required	
AD11/UA11	Previous Address	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Service	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Compliance Verification Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Compliance Verification processing rules.

RP01 (Request Service) Segment

To request Compliance Verification, provide the service code in the Request Service segment.

Sample FFI for Compliance Verification

```
TU4I1011COMPLIANCE VER          0622Z
05633723PSWD1NSH011NM111LHACOMMON
LAUDIA

I11060867743           AD11030101
PELHAM
HICAGO
IL60750
P0106790N
IOD010201001
```

```
1OD010104001
1END100009
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Compliance Verification service in the order of return. The shaded segments are the add-on service segments —High Risk Fraud Alert and OFAC Name Screen—that are automatically returned as part of the Compliance Verification service.

The High Risk Fraud Alert add-on is returned first, followed by OFAC Name Screen.

Note: The segments marked "Fraud Analysis" below are returned only when the subscriber is set up to receive fraud messages.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	Returned only if present in the FFI.
PH01	Service Header	
SH01	Subject Header	
PS02	Points Summary (Enhanced)	
SV02	Subject Verification	
NM11	Name	
PI11	Personal Information	
DC11	Deceased Information (Fraud Analysis)	
YI01	Year Of Issuance (Fraud Analysis)	
AD11/UA11	Current Address (Input)	
AD11/UA11	Previous Address (Input)	
ZC01	Zip Code (Fraud Analysis)	
CO01	County Information (Fraud Analysis)	
AD11/UA11	Current Address (File)	
AD11/UA11	Previous Address (File)	
PN01	Phone Number	
ZC01	Zip Code (Fraud Analysis)	
CO01	County Information (Fraud Analysis)	
RE01	Region Analysis (Fraud Analysis)	
ID01	Identification (Fraud Analysis)	

Segment ID	Segment Name	Notes
DA01	Data Analysis (Fraud Analysis)	
CC01	Credit Card (Fraud Analysis)	
DA01	Data Analysis (Fraud Analysis)	
SV02	Subject Verification	
NM11	Name	
AD11/UA11	Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year Of Issuance (Input)	
YI01	Year Of Issuance (File)	
YI01	Year Of Issuance (Fraud Analysis)	
MT01	Message Text	
AO01	Add-on Status (OFAC Name Screen)	
MT01	Message Text	
END1	End	

Compliance Verification 2.0

Service Code 06792

Compliance Verification 2.0, an enhanced version of the original Compliance Verification service, is a streamlined identity management solution that assists in subscribers' compliance efforts with various rules and regulations, including Identity Theft Red Flag, the USA Patriot Act, and the Office of Foreign Assets Control (OFAC). Compliance Verification 2.0 provides access to the following resources:

- TransUnion's consumer reporting database, which is compiled from public and private information reported to our credit bureau from financial institutions to verify the consumer's input name, current and previous addresses, and SSN, as allowed under the privacy requirements of the Gramm-Leach-Bliley Act.
- Contact Identity Services (CIS), which provides phone company-sourced data to provide a second verification of the consumer's name, the current address, and the phone number.
- TransUnion's Content Solutions (TUCS) database to obtain the consumer's date of birth, which is used to compare the input date of birth when provided.

- Verification Points Summary, which provides a match level (match, no match, partial match, or not found) for each input consumer identity element, the number of data sources checked, and a verification score summarizing how well the input data matched the multi-sourced data.
- High Risk Fraud Alert (HRFA), which is automatically invoked to analyze the input SSN and check consumers' records for fraud statements.
- Office of Foreign Assets Control (OFAC) Name Screen, which is automatically invoked as a security check to determine if the input consumer name appears on the OFAC list.
- Data returned from CIS and/or TransUnion's consumer reporting database when the input data does not match.
- New optional phone attributes from CIS, which provide descriptive information about the input phone number.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Compliance Verification 2.0 Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, FFI Segments on page 417.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Current address	1 Per Subject	Required	
AD11/UA11	Previous Address	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
				or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Compliance Verification 2.0 Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Compliance Verification 2.0 processing rules.

RP01 (Request Service) Segment

To request Compliance Verification 2.0, provide the service code in the Request Service segment.

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Compliance Verification 2.0 service in the order of return. The shaded segments are the add-on service segments—Fraud Message, High Risk Fraud Alert, and OFAC Name Screen—that are automatically returned as part of the Compliance Verification 2.0 service. The High Risk Fraud Alert add-on is returned first, followed by OFAC Name Screen.

Note: The segments marked "Fraud Analysis" below are returned only when the subscriber is set up to receive fraud messages.

Segment ID	Description	Notes
TU4R	Transaction Control	
CD01	Customer Data	Returned only if present in the FFI.
PH01	Service Header	
SH01	Subject Header	
PS02	Points Summary (Enhanced)	
SV02	Subject Verification	
NM11	Name (Input)	
NM11	Name (File)	
PI11	Personal Information	
DC11	Deceased Information (Fraud Analysis)	
YI01	Year Of Issuance (Fraud Analysis)	
AD11/UA11	Current Address (Input)	
AD11/UA11	Previous Address (Input)	

Segment ID	Description	Notes
ZC01	Zip Code (Fraud Analysis)	
CO01	County Information (Fraud Analysis)	
AD11/UA11	Current Address (File)	
AD11/UA11	Previous Address (File)	
PN01	Phone Number (Input)	
ZC01	Zip Code (Fraud Analysis)	
CO01	County Information (Fraud Analysis)	
RE01	Region Analysis (Fraud Analysis)	
ID01	Identification (Fraud Analysis)	
DA01	Data Analysis (Fraud Analysis)	
CC01	Credit Card (Fraud Analysis)	
DA01	Data Analysis (Fraud Analysis)	
SV02	Subject Verification	
NM11	Name (File)	
AD11/UA11	Address (File)	
PN01	Phone Number (Input)	
PN01	Phone Number (File)	
AO01	Add-on Status (Fraud Messages)	
MC01	Message Code	
MT01	Message Text	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year Of Issuance (Input)	
YI01	Year Of Issuance (File)	
MT01	Message Text	
AO01	Add-on Status (OFAC Name Screen)	
MT01	Message Text	
END1	End	

Contact Identity Services (Contact Locator, Contact Verification, Contact Verification Plus)

Service Code 03152 / 03150 / 03151

The following three services are included in the Contact Identity Services group:

Service Name	Service Code
Contact Locator	03152
Contact Verification	03150
Contact Verification Plus	03151

These services combine telephone company-sourced data with intelligent match logic and proprietary analytics to verify, update, and enhance consumer contact identity information. Additionally, these three CIS solutions have been enhanced to search the TransUnion consumer database, the TransUnion consumer inquiry database, and the Aggregated database when the desired identity is not available in the telephone company-sourced database, improving match rates and service performance.

Note: These service requests are for an individual only. If a second subject is included in the request, the second subject is ignored.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Contact Identity Services Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
NM11	Name (Primary)	1 Per Subject	Conditionally Required	The NM11 for primary last name) and the PI11 for SSN) are required

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional	Notes
				for the SSN+Name search capability.
NM11	Name (Business/ Gov)	1 Per Subject	Conditionally Required.	
PI11	Personal Information	1 Per Subject	Conditionally Required	The NM11 for primary last name) and the PI11 for SSN) are required for the SSN+Name search capability.
AD11/UA11	Address (current)	1 Per Subject	Conditionally Required	
PN01	Phone Number (for searching records)	1 Per Subject	Conditionally Required	
PN01	Phone Number (for de-duplicating records)	15 Per Subject	Optional	A value of "21" indicates that the phone number is for de-duplicating search results. If blank or containing any value other than "21," indicates that the phone number is for searching records.
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Any additional segments not listed above will be ignored.

Contact Identity Services Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Contact Identity Services processing rules.

RP01 (Request Service) Segment

To request a Contact Identity Service, provide one of these service codes in the Request Service segment:

- 03152 Contact Locator
- 03150 Contact Verification
- 03151 Contact Verification Plus

The add-on(s) below are only available through settings in the subscriber validation file:

- Contact Score

Fixed Format Response (FFR)

The following lists show each possible segment that may be returned for one of the Contact Identity Services in the order of return. Each list depicts the possible returned segments for a specific type (hit / no-hit) transaction. For detailed information regarding each of these segments, see FFI Segments on page 417.

FFR Returned for Hit Response

The table below shows each possible segment that may be returned for a Contact Locator, Contact Verification, or Contact Verification Plus report if the search result is a hit.

Segment ID	Segment Name	Current Maximum Returned	Notes
TU4R	Transaction Control	1 Per Transaction	
PH04	Service Header	1 Per Service	
SH03	Subject Header	1 Per Subject	
CR01	Contact Result	1 Per Listing	See CIS Match Code Matrix.
CR02	Additional Contact Results	1 Per Listing	The CR02 segment is returned only when an SSN is provided in the service inquiry or when Linking Match Indicator needs to return a value "Y".
NM11	Name (Primary, Residential, Business/ Government or Calling Party Name	1 Per Listing	Calling Party Name is returned only for Contact Verification Plus.
PI11	Personal Information (echo input SSN)	1 Per Subject	The PI01 segment is returned only when an SSN is provided in the inquiry.
AD11/UA11	Address	1 Per Listing	

Segment ID	Segment Name	Current Maximum Returned	Notes
EF01	Extended Fields – returned only to subscribers who have selected this option.	1 Per Listing	
PN01	Phone	1 Per Listing	
END1	End	1 Per Transaction	

FFR Returned for No-Hit Response

The table below shows each possible segment that may be returned for a Contact Locator, Contact Verification, or Contact Verification Plus report if the search result is a no-hit ("Total number of listings returned = 0").

Segment ID	Segment Name	Current Maximum Returned
TU4R	Transaction Control	1 Per Transaction
PH04	Service Header	1 Per Transaction
SH03	Subject Header	1 Per Subject
NM11	Name Primary and/or Business/ Government	1 Per Subject
PI11	Personal Information	1 Per Subject
AD11/UA11	Address	1 Per Listing
EF01	Extended Fields (returned only to users who selected this option)	1 Per Listing
PN01	Phone	1 Per Listing
END1	End	1 Per Transaction

CIS Match Code Matrix

The table below shows the CIS match codes that explain how well the provided input data match the database. The code is returned in the CR01 segment of the CIS FFR.

Match Code	First Name or Initial	Last Name or Business Name	Street Address	City and / or ZIP	State	Phone	Match Code Description
AT	X	X	X	X	X	X	Verified full Name, Address, and Phone.

Match Code	First Name or Initial	Last Name or Business Name	Street Address	City and / or ZIP	State	Phone	Match Code Description
A	X	X	X	X	X		Verified full Name and full Address.
CT		X	X	X	X	X	Verified Last Name, full Address, and Phone.
C		X	X	X	X		Verified Last Name and full Address.
DT	X	X	X		X	X	Verified full Name, Street Address and Phone.
D	X	X	X		X		Verified full Name and Street Address.
FT		X	X		X	X	Verified Last Name, Street Address and Phone.
F		X	X		X		Verified Last Name and Street Address.
GT	X	X	X Partial	X	X	X	Verified full Name, partial street address, City/ZIP, and Phone.
G	X	X	X Partial	X	X		Verified full Name, partial street address, and City/ ZIP.
IT		X	X Partial	X	X	X	Verified Last Name, partial street address, City/ZIP, and Phone.
I		X	X Partial	X	X		Verified Last Name, partial street address, and City/ ZIP.
JT	X	X	X Blank	X	X	X	Verified full Name, blank address in the listing, City/ ZIP, and Phone.
J	X	X	X Blank	X	X		Verified full Name, blank address in the listing, City/ ZIP.

Match Code	First Name or Initial	Last Name or Business Name	Street Address	City and / or ZIP	State	Phone	Match Code Description
LT		X	X Blank	X	X	X	Verified Last Name, blank address in the listing, City/ZIP, and Phone.
L		X	X Blank	X	X		Verified Last Name, blank address in the listing, City/ZIP.
MT	X	X		X	X	X	Verified full Name, City/ZIP, and Phone.
M	X	X		X	X		Verified full Name, and City/ZIP.
OT		X		X	X	X	Verified Last Name, City/ZIP, and Phone.
O		X		X	X		Verified Last Name, and City/ZIP.
QT	X	X			X	X	Verified full Name and Phone.
Q	X	X			X		Verified full Name.
ST		X			X	X	Verified Last Name and Phone.
S		X			X		Verified Last Name.
PT			X	X	X	X	Verified full Address and Phone.
P			X	X	X		Verified full Address.
T						X	Verified Phone.
Y							Too many results (100 or more).
Z							None of the above field combinations or name + SSN match.
Blank							Unknown

Match Code	First Name or Initial	Last Name or Business Name	Street Address	City and / or ZIP	State	Phone	Match Code Description
							A value of 00 is logged as the Match Code Returned criterion when no Match Code is returned. This is logged for Contact Verification Plus.

Credit Report

Service Code 07000

The Credit Report is a compilation of data on an individual that is helpful in making decisions in many types of consumer transactions. The Credit Report contains various data about the consumer, including indicative information (name, addresses, and Social Security number), employment information, and the consumer's credit history. This information is obtained from credit grantors, public records, collection agencies, and employers. There are two versions available: the Standard Credit Report and the CreditVision® Enriched Credit Report.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Credit Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
ID01	Identification	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
AI01	Additional Information	1 Per Service	Optional	
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Credit Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Credit Report processing rules.

TU4I (Transaction Control) Segment

If the transaction is a point-of-sale transaction, be sure the Point-of-Sale Indicator field is set to Y.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I

segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

RP01 (Request Service) Segment

To request a Credit Report, the service code 07000 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert, Models or Creditor Contact Information), a Request Add-on Segment can be provided for each add-on service desired. If this segment is not used, the system will revert to the subscriber's default options for add-ons and models.

The following add-on services can be requested on the Credit Report:

- Phone Append
- High Risk Fraud Alert
- Creditor Contact Information
- Models
- Inquiry Analysis
- Identity Alerts
- Identity Manager Verification
- Identity Manager 2.0
- Lender Score Disclosure
- Authorized User Alert
- SSN Analysis
- ARM Alert
- Auto Summary

The following add-ons are available only through settings in the subscriber validation file.

- ID Mismatch Alert
- Geo Code
- OFAC Name Screen
- Contact Locator
- Contact Score
- Credit Summary
- CreditVision® Address History
- CreditVision® Account History

Sample FFI for Credit Report

```
TU4I1011CREDIT REPORT           0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER

PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0107000N
IOD010104001
```

```
OD010201001
 END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Credit Report in the order of return. The shaded segments are the add-on service segments that can be returned for a Credit Report if add-ons are requested. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
CI01	Consumer Identifier	
NM11	Name	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address (current and multiple previous)	
PN01	Phone Number	
EM11	Employment	
AD11/UA11	Address (employment)	
SM11	Credit Summary	
SD01	Credit Summary Description	
PR11	Public Record	One- or two-digit industry codes may be returned depending on subscriber setup. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.
CL11	Collection Account	One- or two-digit industry codes may be returned depending on subscriber setup. For a list of industry codes, refer to Appendix B: Industry and Use Type

Segment ID	Segment Name	Notes
		Permissible Purpose Codes on page 646.
TR11	Trade Account	One- or two-digit industry codes may be returned depending on subscriber setup. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.
PP11	Extended Payment Pattern	This option is available by subscriber default only. It cannot be requested or canceled at the transaction level.
AT11	Additional Trade Account	
AH11	Account History	
TM11	Trade MOP Totals	
MI01	Miscellaneous Statement	
CS11	Consumer Statement (file)	
IN11	Inquiry	One- or two-digit industry codes may be returned depending on subscriber setup. For subscribers receiving the Enriched Credit Report, a two-digit industry code is automatically returned. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.
OB01/OB02	Owning Bureau Identification	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (Creditor Contact Information)	Creditor Contact Information is automatically returned for any public records in the Credit Report FFR if the consumer's current address on file is a California (state code=CA) address.
LK11	Creditor Contact Information	
SA11	Subscriber Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	

Segment ID	Segment Name	Notes
QH01	Inquiry History	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	This segment is returned only when requested. The default is to return messages in an MC01 segment.
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status Income Estimator	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator score	
AO01	Add-on Status (Characteristic)	
CH01	Characteristic	
AO01	Add-on Status (Geo Code)	
GC01	Geo Code	
AD11/UA11	Current Address	
AO01	Add-on Status (Geo Code)	
GC01	Geo Code	
FA11/UF11	Future Address	
AO01	Add-on Status (Generic Fraud Model)	
SC01	Scoring	
AO01	Add-on Status (ID Fraud Model)	
SC01	Scoring	
TT01	Transaction Tracking	
AO01	Add-on Status (Identity Manager Verification 2.0)	
VS01	Verification Summary	
MC01	Message Code (Verification Key Message Code)	
MT01	Message Text (Verification Key Message Text)	
SV03	Subject Verification (Input vs. TU File)	

Segment ID	Segment Name	Notes
SV03	Subject Verification (Input vs. Non-credit Source File)	
PN02	Phone Number (for input personal phone)	
ZC01	ZIP Code (for input current address ZIP analysis)	
RE01	Region Analysis (for analysis on input current address city, state, ZIP code, and phone)	
ZC01	ZIP Code (for input employment address ZIP analysis)	
RE01	Region Analysis (for analysis on input employment address city, state, ZIP code, and phone)	
ML02	Mileage (for analysis on distance between personal and employment locations)	
DA01	Data Analysis (for input Driver's License analysis)	
MC01	Message Code	
DC11	Deceased Information (for Message 6000)	
YI01	Year of Issuance (for Message Code 5505)	
MT01	Message Text	
AO01	Add-on Status (Identity Alerts)	
MC01	Message Code	
MT01	Message Text	
AO01	Add-on Status (OFAC Name Screen)	
MT01	Message Text	
AO01	Add-on Status (Inquiry Analysis)	
IN11	Inquiry	
NM11	Name	
NM11	Name (maternal)	
AD11/UA11	Address (current)	
AD11/UA11	Address (previous)	
PN01	Phone Number	
EM11	Employment	

Segment ID	Segment Name	Notes
AO01	Add-on Status (Identity Manager Verification)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Authorized User Alert)	
MT01	Message Text	
AO01	Add-on Status (SSN Analysis)	
SV01	Subject Verification	
AO01	Add-on Status (ARM Alert)	
MT01	Message Text (ARM Alert – Raw Data)	
MT01	Message Text (ARM Alert – Message)	
AO01	Add-on Status (Auto Summary)	
AS11	Auto Loan Summary	
LK11	Creditor Contact Information	
SA11	Subscriber Address	
PN01	Phone Number	
CA01	Credit Availability Summary	
END1	End	

Creditor Contact Search

Service Code 07600

Creditor Contact Search decodes a single subscriber code and returns the name, address, and, if available, telephone number of the subscriber requested. If the subscriber requests a Phone Search Only, Creditor Contact Search returns only a telephone number. Creditor Contact Search does not generate a print image.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Creditor Contact Search in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
RP01	Request Service	1 Per Service	Required	
LK01	Creditor Contact Search	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Creditor Contact Search Processing Rules

This section describes how to use the RP01 (Request Service) segment with Creditor Contact Search.

RP01 (Request Service) Segment

To request a Creditor Contact Search report, the service code 07600 must be provided in the Request Service segment. This segment can also specify one of the following options in the Processing Request field:

L - Perform Address and Phone Search
P - Perform Phone Search Only

If neither of these options is specified, the system defaults to **L** and searches for both address and phone number.

Sample FFI for Creditor Contact Search

```
TU4I1011LOOKUP                  06TRZ
05633723PSWD1NRP0107600N
LK01CL    Y
095QS001OD010104001
```

```
01OD010201001

01END100005
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Creditor Contact Search report in the order of return. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
PH02	Service Header (error only)	Valid result for the Creditor Contact Search PH02 is: L00 Subscriber not found
LK11	Creditor Contact Information	
SA11	Subscriber Address	
PN01	Phone Number	
END1	End	

Note: Creditor Contact Information returns a PH01 for a normal response or a PH02 if an error (subscriber not found) is encountered.

Decision Systems Services

Various Service Codes

The Decision Systems services are decisioning tools that analyze a consumer's credit file. They use more than 105 credit attributes and any online model to perform either of these tasks:

- Determine whether or not the consumer qualifies for a subscriber's product or service
- Determine whether or not to extend, decrease, restrict, or impose a deposit for delivery of the subscriber's product or service

Decision Systems Services require significant programming on TransUnion's end. Subscribers select a specific set of credit attributes that fit their own credit policies. Please work with your Decision Systems Analyst on programing these services.

Decision Systems Services return only an FFR, not a print image.

These are the Decision Systems Services:

- **Instant Prescreen—Service Code 09900**: An automated cross-sell marketing tool used for prescreening consumers.
- **Instant Credit Risk Screen—Service Code 09910**: An automated decisioning tool used to decide whether or not a consumer qualifies for a credit service.
- **Instant Review—Service Code 09920**: An automated decisioning tool used to manage risk against a subscriber's existing account holders.
- **Instant Deposit Screen—Service Code 09930**: An automated tool used to segment consumers into different levels of credit quality.

  Note: Decision Systems Bundled Service is not yet available in the TU4.1 format.
- **Decision Systems Bundled Service—Service Code 0P100**: An automated tool that lets subscribers request two Decision Systems Services in one FFI. The FFI must include one of these service combinations:

  — Two instances of Instant Prescreen, or
  — Instant Credit Risk Screen and Instant Prescreen, specified in that order

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Decision Systems service in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Optional	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions
SH01	Subject Header	1 Per Service	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM11	Also Reported As	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Conditionally Required	Whether the PI01, EM01, and DB01 segments are required or optional depends on individual subscriber Decision Systems policy requirements.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
				Please consult with the project analyst assigned to the account.
ID01	Identification	1 Per Identification	Optional	
CC11	Credit Card	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Conditionally Required	Whether the PI01, EM01, and DB01 segments are required or optional depends on individual subscriber Decision Systems policy requirements. Please consult with the project analyst assigned to the account.
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
RP02	Request Bundled Service	3 Per Service	Conditionally Required	For use in a Bundled Service transaction only. In the FFI for Bundled Service, the RP01 segment's service code must be 0P100. Specify the codes for the Decision Systems services being requested in the RP02 segments. The segments following the RP02 are specific to the service being requested.
DB01	Decision Customer Branch	1 Per Transaction	Conditionally Required	Whether the PI01, EM01, and DB01 segments are

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
				required or optional depends on individual subscriber Decision Systems policy requirements. Please consult with the project analyst assigned to the account.
DI01	Decision Custom Information	99 Per Transaction	Optional	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
AI01	Additional Information	1 Per Service	Optional	
OD01	Output Delivery	2 Per Service	Required (2)	Each Decision Systems transaction requires two OD01 segments, one for an FFR followed by one for a printed form. If the transaction includes RP02 segments (for Bundled Service), include two OD01 segments for the first RP02 segment and one OD01 for the second RP02 segment. Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Decision Systems Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Decision Systems processing rules.

SH01 (Subject Header) Segment

Only one subject is permitted because a Decision is performed only for an individual. To process a joint application, send two separate TU4I requests. An independent decision will be returned for each request.

RP01 (Request Service) Segment

To request a Decision service, one of the following service codes must be provided in the Request Service segment:

Service	Service Code
Instant Prescreen	09900
Instant Credit Risk Screen	09910
Instant Review	09920
Instant Deposit Screen	09930

Note: For the Decision Systems Bundled Service, the RP01 segment's service code must be 0P100. No FFR is returned specifically for a service code of 0P100. The FFRs returned are for the services requested in the RP02 segments.

RP02 (Request Service) Segment

This segment is used only for the Decision Systems Bundled Service. To specify the Decision Systems services desired in the bundled service, one of the following combinations of service codes must be provided in two separate RP02 segments:

RP02 Segment	Service	Service Code
First	Instant Prescreen	09900
Second	Instant Prescreen	09900
First	Instant Credit Risk Screen	09900
Second	Instant Prescreen	09910

The segments following the RP02 are specific to the service requested. If information is used in every service request (RP02), the information segment must be repeated for each service requested.

EM11 (Employment) Segment

The EM11 segment may be required or optional for subscriber use and is used to report consumer employment information.

DB01 (Decision Systems Customer Branch) Segment

The DB01 segment may be required or optional for subscriber use. This segment, if not otherwise designated, identifies the branch of the requesting subscriber.

DI01 (Decision Systems Information Request) Segment

The DI01 segment is optional for subscriber use.

OD01 (Output Delivery Information) Segment

Subscribers must send two OD01 segments, one for an FFR delivery and one for a printed form. The segments must be sent in this order:

1. OD010104001 (for an FFR)
2. OD010201001 (for a printed form)

For the Decision Systems Bundled Service, the first Decision Systems request (RP02) in the transaction requires two OD01 segments, one for an FFR followed by one for a printed form. The second Decision Systems request (RP02) in the transaction requires only one OD01 segment for an FFR.

Fixed Format Response (FFR)

For the Decision Systems Bundled Service, a fixed format response (FFR) will be sent for each service requested. If two services were requested in the FFI using RP02 segments, two separate FFRs will be returned.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
PH01	Service Header (Decision Systems)	
DB01	Decision Systems Customer Branch	
DI01	Decision Systems Custom Information	
DR01	Decision Systems Response	Subscribers who use multiple matrices can choose to receive a DR01 segment for each matrix.
CS11	Consumer Statement	
TX01	Text Statement	
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status (Income Estimator)	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator Score	

Segment ID	Segment Name	Notes
AO01	Add-on Status (Characteristic)	
CH01	Characteristic	
END1	End Segment	

Decision Systems Bundled Service FFRs

The DB01 segment is returned in both the first and the second FFRs. Minimally, the first FFR contains a blank DB01 segment and the second FFR contains a DB01 segment with the Reference Number for the first service that was returned. This allows the two separate FFRs to be linked together as one transaction.

For example, here is information that might be included in two FFRs returned in response to an Decision Systems Bundled Service FFI:

First FFR	Second FFR
• Service #1 • John Smith • SSN=123-45-6789 • Decision: Approved • Reference ID Service #1: ABCDEFGHIJK1 (Parent Ref ID – see DR01 segment, Reference Number)	• Service #2 • John Smith • SSN=123-45-6789 • Decision: Declined • Reference ID Service #2: MNOPQRSTUVW1 (Child Ref ID – see DR01 segment, Ref. Number) • Parent Reference ID: ABCDEFGHIJK1 (see DB01 segment, Client Use 1)

The list below shows each possible segment, in the order of return, that may be returned for a Credit Report with a Decision. The shaded segments are the add-on service segments that can be returned with the Decision if requested. For detailed information regarding each of these segments, refer to FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
PH01	Service Header (Decision Systems)	
DB01	Decision Systems Customer Branch	
DI01	Decision Systems Custom Information	
DR01	Decision Systems Response	
CS11	Consumer Statement	

Segment ID	Segment Name	Notes
TX01	Text Statement	
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status (Income Estimator)	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator score	
AO01	Add-on Status (Characteristic)	
CH01	Characteristic	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
CI01	Consumer Identifier	
NM11	Name	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AD11	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11	Address	
SM11	Credit Summary	
SD01	Credit Summary Description	
PR11	Public Record	
CL11	Collection	
TR11	Trade	
AT11	Additional Trade Account	
TM11	Trade MOP Totals	
MI01	Miscellaneous Statement	
CS11	Consumer Statement	
IN11	Inquiry	
OB01/OB02	Owning Bureau Identification	

Segment ID	Segment Name	Notes
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (Creditor Contact Information)	
LK11	Creditor Contact Information	
SA11	Subscriber Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
QH01	Inquiry History	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	This segment is returned only when requested. The default is to return messages in an MC01 segment.
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status (Income Estimator)	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator score	
AO01	Add-on Status (characteristic)	
CH01	Characteristic	
AO01	Add-on Status (Geo Code)	
GC01	Geo Code	
AD11/UA11	Address	
AO01	Add-on Status (Geo Code)	
GC01	Geo Code	
FA11/UF11	Future Address	
AO01	Add-on Status (OFAC Name Screen)	
MT01	Message Text	
AO01	Add-on Status (Identity Manager Verification)	The segments below (and including) this AO01 segment and above the AO01 segment for the OFAC Name Screen may be

Segment ID	Segment Name	Notes
		returned only if the subscriber is setup to receive the Identity Manager Verification add-on service (service code: 06680).
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Identity Manager Verification 2.0)	
VS01	Verification Summary	
MC01	Message Code (Verification Key Message Code)	
MT01	Message Text (Verification Key Message Text)	
SH03	Subject Verification (Input vs. TU File)	
SH03	Subject Verification (Input vs. Non-credit Source File)	
PN02	Phone Number (for input personal phone)	
ZC01	ZIP Code (for input current address ZIP analysis)	
RE01	Region Analysis (for analysis on input current address city, state, zip code, and phone)	
ZC01	ZIP Code (for input employment address ZIP analysis)	
RE01	Region Analysis (for analysis on input employment address city, state, zip code, and phone)	
ML02	Mileage (for analysis on distance between personal and employment locations)	
DA01	Data Analysis (for input Driver's License analysis)	
MC01	Message Code	
DC11	Deceased Information (for Message 6000)	
MT01	Message Text	

Segment ID	Segment Name	Notes
AO01	Add-on Status (Generic Fraud Model)	
SC01	Scoring	
AO01	Add-on Status (ID Fraud Model)	
SC01	Scoring	
TT01	Transaction Tracking	
AO01	Add-on Status (Auto Summary)	
AS11	Auto Loan Summary	
LK11	Creditor Contact Information	
SA11	Subscriber Address	
PN01	Phone Number	
CA01	Credit Availability Summary	
END1	End	

Employment Credit Report

Service Code 06000

The Employment Credit Report is used to make decisions about hiring, promoting, reassigning, or retaining an employee. It contains employment, trade account, collection account, public record, and inquiry information and provides an overview of how responsible this individual is regarding financial obligations.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an Employment Credit Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
				Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Employment Credit Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the Employment Credit Report processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

> **Note:** Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request an Employment Credit Report, the service code 06000 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert, Models, or Creditor Contact Information), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons and models.

The following add-on services can be requested on the Employment Credit Report:

- Phone Append
- High Risk Fraud Alert
- Creditor Contact Information
- Model – Income Estimator only

The following add-ons are available only through settings in the subscriber validation file.

- ID Mismatch Alert
- Credit Summary

Sample FFI for Employment Credit Report

```
TU4I1011EMPLOYMENT REPORT      0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER

PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0106000N
IOD010104001

OD010201001

END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Employment Credit Report in the order of return. The shaded segments are the add-on service segments that can be returned for an Employment Credit Report if add-ons are requested. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	

Segment ID	Segment Name	Notes
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NM11	Name	
NM11	Name (Alias)	
PI11	Personal Information	No Date of Birth is returned in the Personal Information segment for Employment Credit Report.
TA01	ID Mismatch Alert (was Trans Alert])	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11/UA11	Address	
SM11	Credit Summary	
SD01	Credit Summary Description	
PR11	Public Record	A two-character industry code is returned if so indicated by the subscriber's validation file settings.
CL11	Collection	No account numbers on trade data are returned on the Employment Credit Report. A two-character industry code is returned if so indicated by the subscriber's validation file settings.
TR11	Trade	No account numbers on trade data are returned on the Employment Credit Report. A two-character industry code is returned if so indicated by the subscriber's validation file settings.
AT11	Additional Trade Account	
TM11	Trade MOP Totals	

Segment ID	Segment Name	Notes
MI01	Miscellaneous Statement	
CS11	Consumer Statement	
IN11	Inquiry	A two-character industry code is returned if the subscriber's validation settings are activated for this feature.
TX01	Text Statement	A Consumer Rights Statement or Addendum may be returned in multiple text segments for Empl Cred Rept.
OB01/OB02	Owning Bureau Identification	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (Creditor Contact Information)	Creditor Contact Information is automatically returned for any public records in the Employment Credit Report FFR if the consumer's current address on file is a California (state code=CA) address.
LK11	Creditor Contact Information	
SA11	Subscriber Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
MT01	Message Text	
AO01	Add-on Status (Income Estimator Model)	
TC01	Income Estimator Score	
END1	End	

Fraud Detect and Fraud ID-Tect

Service Code 06600

Fraud Detect and Fraud ID-Tect are application validation and verification tools that analyze key input elements such as consumer name, home and business addresses, home and business phone

numbers, Social Security number, driver's license number, and credit card number. These two services are similar except for the number and types of messages that are returned:

- **Fraud Detect:** Returns all available messages, including both positive and negative messages. Fraud Detect does not perform subject verification.
- **Fraud ID-Tect:** Returns only negative messages, which the subscriber pre-selects. Fraud ID-Tect does not return message codes such as VALID, N/A, and UNAVAILABLE. Fraud ID-Tect does perform subject verification, which compares the input to the indicative information (the consumer's name, address, and Social Security number) found on the consumer's credit file.

The input information is processed against several databases and algorithmic routines that verify the accuracy of these elements individually and in combination with each other. For example, area code 312 with phone exchange 466 is valid for ZIP code 60661. Fraud Detect and Fraud ID-Tect are useful tools for all credit and service providers in fighting the perpetration of fraud.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a standalone Fraud Detect or Fraud ID-Tect Report in the order in which the segments must be transmitted.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
ID01	Identification	1 Per Identification	Optional	
CC01 CC11	Credit Card	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject (current and previous	Optional	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address (employment)	1 Per Employer	Optional	

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
PN01	Phone Number (employment)	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OD01	Output Delivery	1 Per Service	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Fraud Detect/Fraud ID-Tect Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Fraud Detect/Fraud ID-Tect processing rules.

RP01 (Request Service) Segment

To request a Fraud Detect or Fraud ID-Tect Report, the service code 06600 must be provided in the Request Service segment (RP01).

RA01 (Request Add-on) Segment

To request an add-on service (such as the Fraud Model), a Request Add-on Segment can be provided for each add-on service desired. If this segment is not used, the system will revert to the subscriber's default options for add-ons and models.

This is the only add-on service that can be requested on Fraud Detect or Fraud ID-Tect:

- Fraud Model

Sample FFI for Fraud Detect

```
TU4I1011FRAUD DETECT            06TRZ
05633723PSWD1NSH011ID010102CYB53151
NH
NM111CANAWAY
SANDRA

PI1143585080219530215   AD11010
POLLARD
RD                NASHUA
NH03062
PN01018104150388     CC11AMERICAN EXPRESS
371182250761027
19901201RP0106600N
```

```
IOD010201001
01OD010104001

01END100012
```

Sample FFI for Fraud ID-Tect

```
TU4I1011FRAUD ID-TECT           06TRZ
05633723PSWD1NSH011NM111ALLEN
HEATHER

CC11AMEX
37118225076102
19990800RP0106600N
IOD010201001
01OD010104001

01END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Fraud Detect or Fraud ID-Tect report in the order of return. The shaded segments are the add-on service segments that can be returned for a Fraud Detect/Fraud ID-Tect report if add-ons are requested. For detailed information about these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	The SH01 segment returns only the first eleven bytes of information when it is returned for Fraud Detect. The remaining fields of this segment are used only by services that require permissible purpose.
NM11	Name	
PI11	Personal Information	No Date of Birth is returned in the Personal Information segment for Fraud Detect.
DC11	Deceased Information	
YI01	Year Of Issuance	
AD11/UA11	Address	
ZC01	ZIP Code	

Segment ID	Segment Name	Notes
CO01	County Information	
PN01	Phone Number	
ZC01	ZIP Code	
CO01	County Information	
RE01	Region Analysis	
EM11	Employment	
AD11	Address (employment)	
ZC01	ZIP Code (employment)	
CO01	County Information (employment)	
PN01	Phone Number (employment)	
ZC01	Zip Code (employment)	
CO01	County Information (employment)	
RE01	Region Analysis	
ML01	Mileage	
ID01	Identification	
DA01	Data Analysis	
CC11	Credit Card	
DA01	Data Analysis	
SV01	Subject Verification	
AO01	Add-on Status	
SC01	Scoring (Fraud Model)	
END1	End	

Fraud Detect/Fraud ID-Tect FFR Processing

The segments returned for Fraud Detect/Fraud ID-Tect depend upon the information provided.

YI01 (Year of Issuance) Segment

The YI01 segment is returned when an SSN is provided in the input. This segment returns information based on matching the input SSN against data received from the Social Security Administration. The resulting information varies, from stating that the SSN has not been issued yet to stating that the SSN is clear (valid).

PN01, ZC01, CO01 (Telephone Analysis) Segments

The Telephone Analysis segments can be returned if the consumer's home or business phone number is provided and matches TransUnion's phone database.

The PN01 (Phone Number) segment returns the phone number and type of phone. The ZC01 (ZIP Code) segment returns the city, state, and ZIP code. The CO01 (County Information) segment returns the city, state, and county.

ZC01, CO01 (ZIP Code Analysis) Segments

The ZIP Code Analysis segments can be returned if the consumer's home or business ZIP Code is provided.

The information returned is the result of matching the consumer's ZIP Code against TransUnion's ZIP Code database. The information contained in the ZC01 (ZIP Code) segment includes the ZIP Code and ZIP Code type. The information in the CO01 (County Information) segment includes the city, state, county and county type.

RE01, ML01 (Region Analysis) Segments

Fraud Detect/Fraud ID-Tect performs a region analysis that compares several data elements and can return messages warning of potential fraud. The information is returned if the subscriber code is set up for region analysis; the data returned is dependent on the input supplied. The Regional Analysis information is returned in the RE01 (Region Analysis) and ML01 (Mileage) segments.

DA01 (Data Analysis) Segment for Driver's License

The Data Analysis segment is returned for a driver's license if a driver's license number and a valid driver's license state code are provided.

Fraud Detect/Fraud ID-Tect determines whether the driver's license number conforms to that state's license format. For some states, Fraud Detect/Fraud ID-Tect compares the elements of the application that are embedded in the driver's license number. The information returned indicates if the driver's license is valid or invalid.

DA01 (Data Analysis) Segment for Credit Card

The Data Analysis segment is returned for a credit card account if the credit card number and expiration date are provided.

Fraud Detect/Fraud ID-Tect performs a check digit routine and determines if the credit card number is valid or not. Note that Fraud Detect/Fraud ID-Tect does not know to whom the card belongs, only if it conforms to the check digit routine.

DC11 (Deceased Information) Segment

Fraud Detect/Fraud ID-Tect returns the Deceased Information segment if the SSN is provided in the input. The SSN is matched to data received from the Social Security Administration.

The information returned is the name, address of last residence, address where death claim benefits were last sent, date-of-birth of the deceased, and the date the claim was filed.

SV01 (Subject Verification)

The SV01 (Subject Verification) segment is returned only for Fraud ID-Tect. The following conditions must exist:

- The subscriber code is set up for subject verification analysis
- The consumer's name, address, social security number (optional), or suffix (optional) is provided.

The SV01 segment contains the results of the match between the inquiry's name, address, SSN, and suffix data and the same data present on the online consumer database. Database information is not returned but Fraud ID-Tect indicates whether or not the inquiry matches the database information.

Government Report

Service Code 07003

The Government Report was designed for use by federal, state, county, and city agencies that need information for governmental investigative purposes. The Government Report delivers only identifying information on a consumer, including subject's name, aliases, current and former addresses, and employment.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Government Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM01	Name (Secondary)	1 Per Subject	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Government Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the Government Report processing rules.

RP01 (Request Service) Segment

To request a Government Report, the service code 07003 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on Segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

The following add-on services can be requested on the Government Report:

- High Risk Fraud Alert

The add-on below is available only through settings in the subscriber validation file.

- ID Mismatch Alert (no SSN messages are returned for a Government Report)

Sample FFI for Government Report

```
TU4I1011GOVERNMENT REPORT       0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER

PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0107003N
IOD010104001

OD010201001

END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Government Report in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	In File Since Date is not returned on the Government Report.
NM11	Name	
NM11	Name (Alias)	
PI11	Personal Information	Neither Social Security Number nor Date of Birth are returned on the Government Report.
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address	

Segment ID	Segment Name	Notes
EM11	Employment	
AD11	Address	
OB01/OB02	Owning Bureau Identification	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
MT01	Message Text	
END1	End	

High Risk Fraud Search

Service Code 06510

High Risk Fraud Search is a search of the High Risk Fraud Alert (Fraud Prevention) database. A High Risk Fraud Search response returns High Risk Fraud Alert messages related to input Social Security number, address, and telephone number for the subject being inquired upon. The ID Mismatch Alert message for an invalid ZIP Code is also returned.

Fixed Format Inquiry (FFI)

The following lists show each segment that can be used to request a High Risk Fraud Search in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

To request High Risk Fraud Search using name and address with (optionally) telephone number, social security number, and date of birth:

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
NM11	Name	1 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
AD11/UA11	Address	2 Per Subject (1 current address, 1 previous address)	Required	
PN01	Phone Number	1 Per Subject	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

To request High Risk Fraud Search using SSN only:

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	
SH01	Subject Header	1 Per Transaction	Required	
PI11	Personal Information	1 Per Subject	Required	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

High Risk Fraud Search Processing Rules

This section describes how to use the RP01 segment with High Risk Fraud Search.

RP01 (Request Service) Segment

To request a High Risk Fraud Search, the service code 06510 must be provided in the Request Service segment. You can also set or change the formatting of the returned data so that you receive only message codes, only message text, or both codes and text. To change the format of your response, provide one of these three values (Y, M, or B) in the Processing Request field:

Y	Perform High Risk Fraud Alert. Return Message Code segments only: **MC01:** Message Code **DC01:** Deceased Information **DC11:** Deceased Information **YI01:** Year of Issuance To trigger estimated age processing for the Year of Issuance message, the PI11 segment must include a date of birth or estimated age in addition to the subject's SSN.
M	Perform High Risk Fraud Alert. Return Message Text (MT01) segment only.
B	Perform High Risk Fraud Alert. Return both Message Code and Message Text segments: **MC01:** Message Code **DC01:** Deceased Information **DC11:** Deceased Information **YI01:** Year of Issuance - To trigger estimated age processing for the Year of Issuance message, the PI11 segment must include a date of birth or estimated age in addition to the subject's SSN. **MT01:** Message Text

The add-on below is available only through settings in the subscriber validation file.

- ID Mismatch Alert (returns only ZIP Code messages)

Sample FFI for High Risk Fraud Search

```
TU4I1011HAWKEYE                 06TRZ
05633723PSWD1NSH011PI11333224444
RP0106510N
OD010104001
01OD010201001

01END100007
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the High Risk Fraud Search in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NM11	Name (from input)	
PI11	Personal Information (from input)	
TA01	ID Mismatch Alert	
AD11/UA11	Address (from input)	
PN01	Phone Number (from input)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year Of Issuance	
MT01	Message Text	
END1	End	

High Risk Fraud Search Messages

The High Risk Fraud Search messages and message codes are listed in the following tables. The message tables are in this order: address, Social Security number, telephone number, and system messages.

TransUnion anticipates regular additions of new High Risk Fraud Search messages. We therefore strongly recommend establishing default ranges where indicated (on the following message tables) to handle unrecognized new message codes.

High Risk Fraud Search Address Messages

Address Message Text	Code	Notes
Input (Current/Previous) Address Is A Mail Receiving/Forwarding Service	0001	
Input (Current/Previous) Address Is A Hotel/ Motel Or Temporary Residence	0002	

Address Message Text	Code	Notes
Input (Current/Previous) Address Is A Credit Correction Service	0003	
Input (Current/Previous) Address Is A Camp Site	0004	
Input (Current/Previous) Address Is A Secretarial Service	0005	
Input (Current/Previous) Address Is A Check Cashing Service	0006	
Input (Current/Previous) Address Is A Restaurant /Bar/Night Club	0007	
Input (Current/Previous) Address Is A Storage Facility	0008	
Input (Current/Previous) Address Is An Airport/ Airfield	0009	
Input (Current/Previous) Address Is A Truck Stop	0010	
Input (Current/Previous) Address Is Commercial (Default For Codes 001 - 0500)	0500	Default codes are returned very rarely.
Input (Current/Previous) Address Is A Correctional Institution	0501	
Input (Current/Previous) Address Is A Hospital Or Clinic	0502	
Input (Current/Previous) Address Is A Nursing Home	0503	
Input (Current/Previous) Address Is Institutional (Default For Codes 0501 - 1000)	1000	Default codes are returned very rarely.
Input (Current/Previous) Address Is A U.S. Post Office	1001	
Input (Current/Previous) Address Is Governmental (Default For Codes 1001 - 1500)	1500	Default codes are returned very rarely.
Input (Current/Previous) Address Has Been Reported As Suspicious (POB:#)	1501	
Input (Current/Previous) Address Is A Multi-Unit Building Reported As Suspicious (Unit: #)	1502	
Input (Current/Previous) Address Has Been Reported Misused And Requires Further Investigation (Unit: #)	1503	
Input (Current/Previous) Address Is A Multi-Unit Building Reported Misused And Requires Further Investigation	1504	
Input (Current/Previous) Address Is Reported Used In True-Name Fraud Or Credit Fraud	2001	

Address Message Text	Code	Notes
Input (Current/Previous) Address Has Been Reported More Than Once (Up To 10 POB Or Unit #S)	2502	

Note: A POB or Unit # may follow any of the address messages except for messages 1502 and 1504. These two messages may have a Unit #, but never a POB.

All address messages have a maximum of one POB or Unit # returned with the exception of message 2502, which has a maximum of 10. Unit #s and POBs display in the following format: (Unit: #) or (POB: #). An example of message 2502 output is: (UNIT: 1A, 2B, 3C) or (POB: 22A, 34B).

High Risk Fraud Search Social Security Number Messages

Social Security Number Message Text	Code
Input SSN reported as suspicious or minor SSN	3001
Input SSN reported misused and requires further investigation	3003
Input SSN reported used in true-name fraud or credit fraud	3501
Input SSN reported deceased	4001
SSN Is Not Likely Issued Prior to June 2011	4501
Input SSN issued within last (2,5,10) years; year issued: xxxx-xxxx; state: xx; (est. Age obtained: xx to xx)	5503
Input SSN issued:xxxx-xxxx; state:xx; (est. Age obtained:xx to xx)	5504
Input/file SSN used in death benefits claim for John Consumer. DOB:01/01/1950. DOC: 02/02/1990. ZIP code where benefits were paid is 60657, most likely Chicago, IL. ZIP code last residence is 60657, most likely Chicago, IL.	6000

High Risk Fraud Search Telephone Number Messages

Telephone Number Text	Code
Input telephone number is an answering service	6001
Input telephone number is a cellular telephone	6002
Input telephone number is a public/pay telephone	6003
Input telephone number is commercial	6500
Input telephone number is institutional	7000
Input telephone number is governmental	7500

Telephone Number Text	Code
Input telephone number reported as suspicious	7501
Input telephone number reported misused and requires further investigation	7503
Input telephone number reported used in true-name fraud or credit fraud	8001
Input telephone number requires further investigation (Default for codes 6001 – 9000)	9000 Default codes are returned very rarely.

Note: All telephone messages are followed by the telephone number that matched the phone number on the High Risk Fraud Alert database. The area code is derived from current address ZIP code and the telephone prefix. Telephone numbers display in the following format: (TEL: Area Code-Telephone Number). An example is (TEL: 312-466-8761)

System-Generated Messages

Message Text	Code
Input address(es), SSN and/or telephone number reported together in suspected misuse.	9001
Input addresses, SSN, or telephone number reported by more than one source	9002
Clear for all searches performed	9997

System Availability Messages

Message Text	Code
High Risk Fraud Alert system is partially available	9996
High Risk Fraud Alert system is temporarily unavailable	9998
High Risk Fraud Alert system access not authorized	9999

ID Report (07770)

Service Code 07770

ID Report is a specialized search based on input name and Social Security number (SSN). Input address information is optional. ID Report delivers name and address for up to eight subjects.

ID Report also returns ID Mismatch Alert, High Risk Fraud Alert, and Phone Append (if the subscriber is authorized for these services).

ID Report differs from ID Search in that it requires permissible purpose and contains the following data:

- Consumer statement (CS11 segment)
- Number of inquiries on the subject's file (NU01 segment)

ID Report does not deliver a full credit report; however, an inquiry is posted because a consumer file is accessed in order to return the requested service.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an ID Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Conditionally Required	
AD11/UA11	Address	2 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

ID Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the ID Report processing rules.

EU01 (End Usage) Segment

If the subscriber code provided in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly following the TU4I segment. Only one EU01 segment can be provided per transaction. If more than one EU01 segment is received, a TU4E (error) record is returned.

Note: Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request an ID Report, the service code 07770 must be provided in the Request Service segment.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

The following add-on services can be requested on the ID Report:

- Phone Append
- High Risk Fraud Alert
- Inquiry Analysis

The add-ons below are only available through settings in the subscriber validation file.

- CreditVision® Address History
- ID Mismatch Alert
- OFAC Name Screen

Sample FFI for ID Report

```
TU4I1011ID REPORT                0622Z
05633723PSWD1NSH011NM111BSACOMMON
DIANE
S
PI11098500964           RP0107770N
IOD010104001
01OD010201001

01END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the ID Report in the order of return. The shaded segments are the add-on service segments that can be returned for an ID Report if add-ons are requested. For detailed information regarding these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH04	Subject Header	One of the following Best Match Indicators is returned in the Subject Header segment for each subject returned: **M:** Best Match **H:** Hit—File is a Hit but not a Best Match file. **N:** No-Hit—No files are selected.
NU01	Number of	One NU01 segment per subject is always included in the service response. If no file is found, the NU01 segment contains a zero (000) in the Number field.
NM11	Name	
NM11	Name (Also Known As)	
PI11	Personal Information	No DOB is returned in the PI11 segment if the current consumer address is in California and the report is for employment purposes.

Segment ID	Segment Name	Notes
TA01	ID Mismatch Alert [was Trans Alert]	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11	Address (employment)	
CS11	Consumer Statement	
OB01/OB02	Owning Bureau Information	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (OFAC)	
MT01	Message Text	
AO01	Add-on Status (Inquiry Analysis)	
IN11	Inquiry	
NM11	Consumer Name	
NM11	Name (Maternal)	
AD11	Address	
PN01	Phone Number	
EM11	Consumer's Employer Name	
END1	End	

ID Report (07450)

Service Code 07450

The ID Report is a special search that matches names and addresses to the TransUnion national database. Although it is not necessary to send the subject's SSN, doing so greatly enhances the search process.

An ID Report is distinguished from an ID Search in that it requires permissible purpose and contains the following data:

- Consumer Statement (CS11 segment)
- Number of inquiries on the subject's file (NU01 segment)

The ID Report is not a credit report, but an inquiry is posted.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an ID Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
				FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

ID Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the ID Report processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

Note: Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request an ID Report, the service code 07450 must be provided in the Request Service segment.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

The following add-on services can be requested on the ID Report :

- Phone Append
- High Risk Fraud Alert

The add-on below is available only through settings in the subscriber validation file.

- ID Mismatch Alert

Sample FFI for ID Report

```
TU4I1011ID REPORT                0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER
```

```
PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0107450N
IOD010104001

OD010201001

END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the ID Report in the order returned. The shaded segments are the add-on service segments that can be returned for an ID Report if add-ons are requested. For detailed information regarding these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NU01	Number Of	One NU01 segment per subject is always included in the service response. If no file is found, the NU01 segment contains a zero (000) in the Number field.
NM11	Name	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert [was Trans Alert]	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
CS11	Consumer Statement	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert [was HAWK])	
MC01	Message Code	

Segment ID	Segment Name	Notes
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
END1	End	

ID Report with Score

Service Code 07750

ID Report with Score is a specialized search based on input name and Social Security number (SSN). ID Report with Score delivers personal information—name, alias, address, SSN, employment, date of birth, phone, and maternal name—for up to eight subjects.

ID Report with Score also returns ID Mismatch Alert, High Risk Fraud Alert (if the subscriber is authorized), a consumer statement if present on the file, and, if requested, models on the best match file. The best match file is the highest-scoring file that fulfills name-matching requirements.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an ID Report with Score in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
NM11	Name (As Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional if Address is provided.	
AD11/UA11	Address	2 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

ID Report with Score Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the ID Report with Score processing rules.

TU4I (Transaction Control) Segment

If the transaction is a point-of-sale transaction, be sure the Point-of-Sale Indicator field is set to Y.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

> **Note:** Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request an ID Report with Score, the service code 07750 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert or a Model), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons and models.

The following add-on services can be requested on the ID Report with Score Report:

- Phone Append
- High Risk Fraud Alert
- Model

The add-on below is available only through settings in the subscriber validation file.

- ID Mismatch Alert

Sample FFI for ID Report With Score

```
TU4I1011ID REPORT SCORE         0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER

PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0107750N    IOD010104001
OD010201001
RA0100950  AEND100009
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the ID Report with Score report in the order of return. The shaded segments are the add-on service segments that can be returned for an ID Report with Score report if add-ons are requested. For detailed information regarding these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH04	Subject Header	One of the following Best Match Indicators is returned in the

Segment ID	Segment Name	Notes
		Subject Header segment for each subject returned: **M:** Best Match **H:** Hit—File is a Hit but not a Best Match file. **N:** No-Hit—No files are selected.
NM11	Name	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert [was Trans Alert]	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11	Address	
CP11	Compliance	Compliance information may be returned when certain conditions are present on the consumer's file.
CS11	Consumer Statement	
OB01/OB02	Owning Bureau Information	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status (Income Estimator])	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator score	

Segment ID	Segment Name	Notes
AO01	Add-on Status (characteristic)	
CH01	Characteristic	
END1	End	

ID Search (07760)

Service Code 07760

ID Search is a specialized search based on input name and Social Security number. Input address information is optional. ID Search delivers name and address for up to eight subjects. Additionally, ID Search selects the subject that best matches the input data.

ID Search also returns ID Mismatch Alert, High Risk Fraud Alert, and Phone Append (if the subscriber is authorized for these services).

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an ID Search Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Required	
AD11/UA11	Address	2 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

ID Search Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to ID Search processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

RP01 (Request Service) Segment

To request an ID Search Report, the service code 07760 must be provided in the Request Service segment.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

- Phone Append
- High Risk Fraud Alert

The add-ons below are available only through settings in the subscriber validation file.

- CreditVision® Address History
- ID Mismatch Alert
- OFAC Name Screen

Sample FFI for ID Search

```
TU4I1011ID SEARCH            0622Z
05633723PSWD1NSH011NM111
CRAINE         FRAZER
PI11666449944             AD11             1113 E SNOBILL
FANTASY ISLAND              IL60750
RP0107760N     IOD010104001
OD010201001
END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the ID Search Report in the order of return. The shaded segments are the add-on service segments that can be returned for an ID Search report if add-ons are requested. For detailed information regarding these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH04	Subject Header	One of the following Best Match Indicators is returned in the Subject Header segment for each subject returned: **M:** Best Match **H:** Hit—File is a Hit but not a Best Match file. **N:** No-Hit—No files are selected.
NM11	Name	
NM11	Name (Secondary)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	

Segment ID	Segment Name	Notes
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (OFAC Name Screen)	
MT01	Message Text	
END1	End	

ID Search (07400)

Service Code 07400

ID Search is a special search that matches names and addresses to the TransUnion national database. Although it is not necessary to enter the subject's SSN, doing so greatly enhances the search process. This service is seen as a complement to SSN Search because it returns name, address, SSN, and (if authorized) ID Mismatch Alert and High Risk Fraud Alert messages.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an ID Search Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

ID Search Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the ID Search processing rules.

RP01 (Request Service) Segment

To request an ID Search report, the service code 07400 must be provided in the Request Service segment.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

The following add-on services cay be requested on the ID Search report:

- High Risk Fraud Alert

The add-on below is available only through settings in the subscriber validation file.

- ID Mismatch Alert

Sample FFI for ID Search

```
TU4I1011ID SEARCH                0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER
```

```
PI11850449944           AD11 1113      E SNOBILL
FANTASY ISLAND              IL60750
RP0107400N    IOD010104001
OD010201001
END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the ID Search report in the order returned. The shaded segments are the add-on service segments that can be returned for an ID Search report if add-ons are requested. For detailed information regarding these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NM11	Name	
NM11	Name (Secondary)	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
END1	End	

IDA Model Report

Service Code 06100

The IDA Model Report is for subscribers who want help in automating their decision-making process through the use of IDA scores but do not want credit data or other information. The IDA Model Report can return any of the following IDA models and their combinations:

- Collections Optics Installment Loan (service code: 00663)
- Credit Optics BC2.2 (service code: 00666)
- Credit Optics BC4.2 (service code: 00667)
- ID Score 8.0 Retail (service code: 00668)
- ID Score 8.0 Bankcard (service code: 00669)
- Credit Optics Score (service code: 00N34)
- Collections Optics Early Stage Score (service code: 00N35)
- Collections Optics Late Stage Score (service code: 00N36)

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an IDA Model Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Subject, and 2 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Secondary)	1 Per Subject	Optional	
NM11	Name (Alias)	1 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11	Address	1 Per Subject	Required	
AD11	Address (Previous)	1 Per Subject	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per IDA Model	Conditionally Required	
END1	End	1 Per Transaction	Required	

IDA Model Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the IDA Model Report processing rules.

TU4I (Transaction Control) Segment

If the transaction is a point-of-sale transaction, be sure the Point-of-Sale Indicator field is set to Y.

EU01 (End Usage) Segment

Important: Permissible purpose certification is required only when the IDA Model Report returns Credit Optics Score.

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

Note: Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request an IDA Model Report, the service code 06100 must be provided in the Request Service segment. This service requires permissible purpose when the Credit Optics Score is delivered.

OD01 (Output Delivery) Segment

IDA Model Report does not support the print image output type. If a print image output type is requested in addition to a TU4.1 FFR output type, the print image request is ignored. If a subscriber requests only the print image output, the system returns error 304 (Type of output requested is not supported).

RA01 (Request Add-on) Segment

Subscribers who have specified default settings for their IDA Model Report do not need to include an RA01 segment in their request. Otherwise, an RA01 segment is required for each IDA model that the subscriber is eligible for and wants to receive in this inquiry. To request an IDA model, the Add-on Service Code field must contain the service code of IDA models listed below:

- Credit Optics Score (service code: 00N34)
- Collections Optics Early Stage Score (service code: 00N35)
- Collections Optics Late Stage Score (service code: 00N36)

If the subscriber has not specified any IDA model to be returned by default when setting up the service in the TransUnion system and does not provide any RA01 segment that contains the IDA model service code in an IDA Model Report service inquiry, the system returns error 305 (Model request is missing).

Sample FFI for IDA Model Report

```
TU4I0111IDA MODEL SERVICE       0622Z 01234567PSWD1NEU01ABC
MORTGAGE INC    AFSH011NM111DOE
JOHN           M                    PI11123456789
AD111608         SIERRA                        DR
MODESTO                    CA95351          RP0106100Y
IOR01YTNNNOD010101001
         01RA0100662  ARA0100N34  AEND1010
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the IDA Model Report in the order of return. The shaded segments are the segments that return the IDA model results. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH03	Subject Header	
NM11	Name (Input Primary Name)	

Segment ID	Segment Name	Notes
AD11/UA11	Address (Input Current Address)	
AO01	Add-on Status	
SC01	Scoring	
TT01	Transaction Tracking (IDA Model Transaction Number)	
TX01	Text Statement (Contact information for consumer to dispute Credit Optics Score)	
END1	End	

Identity Manager Verification (Fraud Management Platform)

Note: TransUnion now offers Identity Manager Verification 2.0 that offers additional matching criteria and fraud evaluation levels.

Service Code 06670

Identity Manager Verification is the next generation of Fraud Management Platform (FMP), deploying enhanced back-end processing that forms the foundation for additional options. Like Fraud Management Platform, Identity Manager Verification is a verification tool that helps financial organizations reduce fraud while complying with the increasing number of federal regulations. Identity Manager Verification checks input against multiple databases, analyzes the results, and returns messages and a score indicating the results of that analysis.

The transition from FMP to Identity Manager Verification requires no software changes for subscribers and vendors who want only to replicate current FMP processing. Additional setup is necessary to take advantage of Identity Manager Verification's features such as:

- Output of additional name and address information
- Analysis of input driver's license number
- Use of the ID Fraud model
- High Risk Fraud Alerts on both input and file data

Note: This product is also available as an add-on to the Credit Report. Refer to Add-on Service Descriptions on page 178 for more information.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request the standalone version of Identity Manager Verification in the order in which the segments must be transmitted.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
PI11	Personal Information	1 Per Subject	Optional	Recommended
ID01	Identification	1 Per Identification	Optional	
AD11/UA11	Current Address	1 Per Subject	Required	
AD11/UA11	Previous Address	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address (employment)	1 Per Employer	Optional	
PN01	Phone Number (employment)	1 Per Employer	Optional	
RP01	Request Product	1 Per Product	Required	
OR01	Optional Request	1 Per Product	Optional	Used only if the subscriber wants error codes and text returned for errors, not just codes. See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
RA01	Request Add-on Service	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Identity Manager Verification Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Identity Manager Verification processing rules.

RP01 (Request Service) Segment

To request an Identity Manager Verification report, the Service code 06670 must be provided in the Request Service segment (RP01). When a subscriber sets up the Identity Manager Verification service in the TransUnion system, the subscriber can choose a default way to have fraud messages returned: codes only, text only, or both codes and text. If a subscriber wants to override the default setup to return messages differently for a particular transaction, one of the following Processing Request options can also be provided in the RP01 segment:

Y	Override the subscriber default setup and return messages in codes only in the following segments: **MC01**: Message Code **DC11**: Deceased Information
M	Override the subscriber default setup and return messages in text only in the following segment. **MT01**: Message Text
B	Override the subscriber default setup and return messages in both codes and text in the following segments: **MC01**: Message Code **DC11**: Deceased Information **MT01**: Message Text

RA01 (Request Add-on Service) Segment

To request the ID Score as an add-on for Identity Manager Verification, the subscriber settings must allow the request. If the subscriber is set up for the request, the FFI needs an RA01 segment with an add-on service code of **00662** and a service type of **A**.

The other Identity Manager Verification add-on, OFAC Name Screen, is available only by default with the service, not through an RA01 request.

Sample FFI for Identity Manager Verification

```
TU4I1011ID MANAGER VER          06TRZ
05633723PSWD1NSH011NM111AMMACOMMON
LOUIS

PI11248480031           ID0101A9192342
CA1208200312082006AD11111
99TH                            ST
FANTASY ISLAND
IL60750
PN01013124666700     RP0106670N
IOD010104001

OD010201001

END100011
```

Fixed Format Response (FFR)

The list on the next page shows each possible segment that may be returned for Identity Manager Verification in the order of return.

Note: Although the Identity Manager Verification messages and the Generic Fraud Model are returned in add-on segments (the shaded segments), they are not add-on service but part of the basic Identity Manager Verification service.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Product Header	
SH01	Subject Header	The field for SSN Match indicator is blank.
SV02	Subject Verification	This segment returns Multi-source Matching Summary data if the subscriber is set up to receive it per the subscriber's Identity Manager Verification subscription form.
NM11	Name	
PI11	Personal Information	If value is 'D' for source of vendor database, no SSN is returned.
DC11	Deceased Information	
YI01	Year Of Issuance	Due to SSA SSN randomization, data can only be returned for

Segment ID	Segment Name	Notes
		SSNs that were issued before June 2011.
AD01	Current Input Address	
ZC01	ZIP Code	
AD11/UA11	Previous Input Address	
AD11/UA11	Address (Current File)	
AD11/UA11	Address (Previous File)	
PN01	Phone Number	
RE01	Region Analysis	
EM11	Employment	
AD11/UA11	Address (employment)	
ZC01	ZIP Code (employment)	
PN01	Phone Number (employment)	
RE01	Region Analysis (employment)	
ML01/ML02	Mileage	The ML02 segment is returned in place of the ML01 only if the subscriber is set up to receive it. The default is to return ML01.
ID01	Identification	
DA01	Data Analysis	The DA01 segment for the analysis of the input Driver's License Number will be returned only if subscriber is set up to receive the Driver's License Number analysis as per the subscriber's Identity Manager Verification Subscription Form.
AO01	Add-on Status (Identity Manager Verification messages)	The first AO01 segment starts the messages portion of the FFR. It contains a service code of 00000 and a search status of F02.
MC01	Message Code	
MT01	Message Text	Returned if requested by subscriber in the FFI's RP01 segment.
AO01	Add-on Status (Generic Fraud Model)	The second AO01 segment starts the score model portion of the FFR. It contains a service code of 00R85 and a search status of F02.

Segment ID	Segment Name	Notes
		Currently, only one score model is available with the product.
SC01	Scoring	
AO01	Add-on Status (ID Fraud Model)	The third AO01 segment starts the ID Fraud Model portion of the FFR. It contains a service code of 00662 and a search status of F02.
SC01	Scoring	
TT01	Transaction Tracking	
AO01	Add-on Status (OFAC Name Screen)	
MT01	Message Text	
END1	End	

Multi-Source Matching Summary

The Multi-Source Matching Summary delivers match information about the input data against the file data returned through the Identity Manager Verification service. The summary identifies how well the input first and last names, address, and Social Security number match the same information found in two different source files. For the Identity Manager Verification standalone service, the Multi-Source Matching Summary information is returned in the SV02 segment.

The summary is returned only if the subscriber is set up to receive it per the subscriber's Identity Manager Verification Subscription Form.

Identity Manager Verification Alert Messages

The tables below contain the message text and codes that may be returned for the Identity Manager Verification service. Many current High Risk Fraud Alert messages are used for this service. Where one did not exist, a message was created specifically for Identity Manager Verification.

Note: The messages are sorted in ascending code order in each message section. The messages listed below are currently available with the Identity Manager Verification service. As service enhancements occur, messages in this list may be added or deleted.

Verification Analysis Messages

Message Text	Message Code
Input address does not match file address	2101
Input SSN does not match file SSN	5101
Input phone number does not match file phone number	8101

Message Text	Message Code
Input telephone and address do not match (available for Standalone only)	9101
Input name and address do not match	9105
Input address and other information do not match file phone number	9106
Input date of birth does not match file date of birth	9501
Input driver's license does not match file driver's license	9502
Input driver’s license associated with additional subject(s) not displayed/returned	9503

SSN Analysis Messages

Message Text	Message Code
Input SSN is Invalid	4551
Multiple SSNs on file	5001
Multiple valid SSNs on file	5002
Multiple invalid SSNs on file	5003
SSN issued in (CCYY)	5505
SSN assigned before input date of birth	5551

SSN Issued Messages

Message Text	Message Code
Input SSN issued after age 21	5552
Input SSN issued within last 7 Years	5553

Home Phone Messages

Message Text	Message Code
Input phone number not valid for ZIP code	9102
Input phone number not valid for state	9103
Input phone number not Issued	8501

Message Text	Message Code
Mileage between input phone number and ZIP code greater than 150 miles	9104
Input telephone number is a cellular telephone	6002
Input telephone number is a pager	6005
Input telephone number is toll free	6006
Input telephone number is mobile	6007
Input telephone number is non-geographic	6008
Input telephone number is special services	6009
Input telephone number is new	6010

Home ZIP Messages

Message Text	Message Code
Input ZIP code not valid for city	1801
Input ZIP code not valid for state	1802
Input ZIP code has not been issued	1702
Input ZIP code is new	1703
Input ZIP code is military	1704
Input ZIP code is a PO box	1705
Input ZIP code is unique	1706

Business Phone Messages

Message Text	Message Code
Input business telephone number is a cellular telephone	6012
Input business telephone number is a pager	6015
Input business telephone number is toll free	6016
Input business telephone number is mobile	6017
Input business telephone number is non-geographic	6018
Input business telephone number is special services	6019
Input business telephone number is new	6020
Input business phone number not issued	8551

Message Text	Message Code
Input business phone number not valid for business ZIP code	9152
Input business phone number not valid for business state	9153
Mileage between input business phone number and ZIP code greater than 150 miles	9154

Business ZIP Messages

Message Text	Message Code
Input business ZIP code has not been issued	1752
Input business ZIP code is new	1753
Input business ZIP code is military	1754
Input business ZIP code is a PO box	1755
Input business ZIP code is unique	1756
Input business ZIP code not valid for business city	1851
Input business ZIP code not valid for business state	1852

High Risk Fraud Alert Messages

Message Text	Message Code
Input/file address is a mail receiving/forwarding service	0001
Input/file address is a hotel/motel or temporary residence	0002
Input/file address is a credit collection service	0003
Input/file address is a camp site	0004
Input/file address is a secretarial service	0005
Input/file address is a check cashing service	0006
Input/file address is a restaurant/bar/nightclub	0007
Input/file address is a storage facility	0008
Input/file address is an airport/airfield	0009
Input/file address is a truck stop	0010
Input/file address is commercial	0500
Input/file address is a correctional institution	0501

Message Text	Message Code
Input/file address is a hospital or clinic	0502
Input/file address is a nursing home	0503
Input/file address is institutional	1000
Input/file address is a U.S. Post Office	1001
Input/file address is governmental	1500
Input/file address reported as suspicious	1501
Input/file address is a multi-unit building reported as suspicious (Secondary #)	1502
Input/file address reported misused and requires further investigation. (Street address or POB#)	1503
Input/file address is a multi-unit building reported misused and requires further investigation. (Secondary #)	1504
Input/file address reported used in true name fraud or credit fraud	2001
Input/file address has been reported more than once	2502
Input/file address requires further investigation	3000
Input/file SSN reported as suspicious or minor SSN	3001
Input/file SSN reported misused and requires further investigation	3003
Input/file SSN reported used in true name fraud or credit fraud	3501
Input/File SSN is reported deceased	4001
Input/File SSN Is Not Likely Issued Prior to June 2011	4501
Input/File SSN used in death benefits claim for <Name in Death Master File>. DOB: <Date in Death Master File>. DOC: <Date in Death Master File>. ZIP code where benefits were paid is <ZIP in Death Master File>, most likely <City in Death Master File>, <State in Death Master File>. ZIP code last residence is <ZIP in Death Master File>, most likely <City in Death Master File>, <State in Death Master File>	6000
Input/file telephone number is an answering service	6001
Input/file telephone is a public/pay phone	6003
Input/file telephone number is commercial	6500
Input/file telephone number is institutional	7000
Input/file telephone number is governmental	7500
Input/file telephone number reported as suspicious	7501

Message Text	Message Code
Input/file telephone number reported misused and requires further investigation	7503
Input/file telephone number reported used in true name fraud or credit fraud	8001
Input/file address(es) SSN and/or telephone number reported together in suspected misuse	9001
Input/file address SSN or telephone reported by more than 1 source	9002
Security alert or consumer statement on file relates to true name or credit fraud	9003
Active duty alert on file	9004
Initial fraud alert on file	9005
Extended fraud victim alert on file	9006

Identity Manager Verification 2.0

Service Code 06672

Identity Manager Verification 2.0 is a compliance and fraud detection solution. Identity Manager Verification 2.0 checks input consumer data against multiple databases, analyzes the results, and alerts the subscriber to any data discrepancies as well as suspicious or known fraudulent data.

The Identity Manager Verification (service code 06670) and Identity Manager Verification 2.0 (service code 06672) standalone services have the following major differences:

- Identity Manager Verification 2.0 allows subscribers to define risk thresholds to meet their unique business needs.
- In addition to the detailed fraud analysis, Identity Manager Verification 2.0 also returns a verification summary that allows the subscriber to understand the level of identity risk associated with the input data by way of the new Risk Indicator, Key Alert Messages, and Risk Score features.
- In Multi-source Matching Summary, Identity Manager Verification 2.0 will match more data than Identity Manager Verification does. For example, Identity Manager Verification 2.0 will match DOB, middle name, generation suffix, previous address, and phone number whereas Identity Manager Verification does not perform such matching.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request the standalone version of Identity Manager Verification 2.0 in the order in which the segments must be transmitted.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
PI11	Personal Information	1 Per Subject	Optional	Recommended
ID01	Identification	1 Per Identification	Optional	
AD11	Address (current)	1 Per Subject	Required	
AD11	Address (previous)	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11	Address (employment)	1 Per Employer	Optional	
PN01	Phone Number (employment)	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Service	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on Service	1 Per Add-on Service	Optional	Required only if the subscriber is set up to receive add-on services (such as ID Score or Generic Fraud Model) by request and would like to receive the result of the models.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
MD03	Model Data (for Device Verification 00665)	1 Per DV Input Data	Required	
END1	End	1 Per Transaction	Required	

Identity Manager Verification 2.0 Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the Identity Manager Verification 2.0 processing rules.

RP01 (Request Service) Segment

To request an Identity Manager Verification 2.0 report, the service code 06672 must be provided in the Request Service segment (RP01). When a subscriber sets up the Identity Manager Verification 2.0 service in the TransUnion system, the subscriber can choose a default way to have fraud messages returned: codes only, text only, or both codes and text. If a subscriber wants to override the default setup to return messages differently for a particular transaction, one of the following Processing Request options can also be provided in the RP01 segment:

Y	Override the subscriber default setup and return messages in codes only in the following segments: **MC01**: Message Code **DC11**: Deceased Information
M	Override the subscriber default setup and return messages in text only in the following segment. **MT01:** Message Text
B	Override the subscriber default setup and return messages in both codes and text in the following segments: **MC01**: Message Code **DC11**: Deceased Information **MT01:** Message Text

RA01 (Request Add-on Service) Segment

If subscriber is eligible for the ID Score (service code 00662) or Generic Fraud Model (service code 00R85) and set up to return the two models by request, the subscriber needs to include an RA01 segment with an add-on service code of 00662 or 00R85 and a service type of A in order to receive the model result in the Identity Manager Verification 2.0 output.

To request an add-on service, a Request Add-on Segment can be provided for each add-on service desired. If this segment is not used, the system will revert to the subscriber's default options for add-ons and models.

The following add-on services can be requested on Identity Manager Verification 2.0:

- Device Verification Service (service code 00655)
- ID Score (service code 00662)
- Generic Fraud Model (service code 00R85)

The add-ons below are only available through settings in the subscriber validation file:

- Identity Alerts (service code 06502)
- OFAC Name Screen (service code 06800)

Sample FFI for Identity Manager Verification 2.0

```
TU4I0011ID MANAGER VER 2.0      06TRZ 05633723PSWD1NCD015
001151
D11D    SH011NM111AMMACOMMON
LOUIS
PI11248480031            ID0101A9192342
CA1208200312082006AD11111
99TH                          ST
FANTASY ISLAND             IL60750
07062PN01013124666700
EM11CHICAGO DA BEARS                  LINEBACKER
11072001
007000000Y    AD11111          MAIN
ST
FANTASY ISLAND             IL60750
07062PN01013124661111
RP0106672N
IOR01NTNNYOD010104001

OD010201001
 END1016
```

Fixed Format Response (FFR)

The list below shows each possible segment that may be returned for Identity Manager Verification 2.0 in the order of return.

> **Note:** Although the Identity Manager Verification 2.0 messages are returned following an AO01 (Add-on Status) segment (the shaded segments), they are not add-on services but part of the basic Identity Manager Verification 2.0 service.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	

Segment ID	Segment Name	Notes
VS01	Verification Summary	The Verification Summary information (i.e., VS01 and the following MC01 and MT01 segments) will be returned only if subscriber is set up for this Identity Manager Verification 2.0 feature. Up to five MC01 segments (and MT01 segment if subscriber is set up to return the Key Messages text) may follow the VS01 segment to reveal the codes (and text) of the Key Messages related to the risk level that is returned in the VS01 segment.
MC01	Message Code (Verification Summary Key Message code)	
MT01	Message Text (Verification Summary Key Message text)	
SV03	Subject Verification (input vs. TransUnion credit file subject information matching analysis)	The indicative information matching results will be returned in the SV03 segments only if subscriber is set up for this Identity Manager Verification 2.0 feature. Up to two SV03 segments may be returned if subscriber is set up to verify input data against multiple data sources.
SV03	Subject Verification (input vs. non-credit source file subject information matching analysis)	Optional
NM11	Name (primary name – input)	
NM11	Name (primary name – TransUnion credit file)	The segment will not be returned if TransUnion credit file data is restricted (file is unavailable due to security freeze or other suppression).
NM11	Name (secondary name – TransUnion credit file)	
NM11	Name (alias – TransUnion credit file)	
NM11	Name (primary name – non-credit source file)	
NM11	Name (secondary name – non-credit source file)	
NM11	Name (alias – non-credit source file)	
PI11	Personal Information (input)	Depending on the data sources that a subscriber chooses to verify against when setting up Identity Manager Verification 2.0 in the TransUnion system, up to three

Segment ID	Segment Name	Notes
		PI11 segments may be returned. A full, partial, or estimated DOB may be returned depending on the data source. When a partial DOB is returned: 9999 indicates an incomplete year. 99 for an incomplete month and/or day.
DC11	Deceased Information (return data for message 6000 related to input SSN)	
YI01	Year Of Issuance (return data for message 5505 related to input SSN)	
PI11	Personal Information (SSN & DOB – TransUnion credit file)	The segment will not be returned if TransUnion credit file data is restricted (file is unavailable due to security freeze or other suppression). Depending on the data sources that a subscriber chooses to verify against when setting up Identity Manager Verification 2.0 in the TransUnion system, up to three PI11 segments may be returned. A full, partial, or estimated DOB may be returned depending on the data source. When a partial DOB is returned: 9999 indicates an incomplete year. 99 for an incomplete month and/or day.
DC11	Deceased Information (return data for message 6000 related to TransUnion credit file SSN)	
PI11	Personal Information (DOB – non-credit source file)	The segment will not be returned if TransUnion credit file data is restricted (file is unavailable due to security freeze or other suppression). Depending on the data sources that a subscriber chooses to verify

Segment ID	Segment Name	Notes
		against when setting up Identity Manager Verification 2.0 in the TransUnion system, up to three PI11 segments may be returned. A full, partial, or estimated DOB may be returned depending on the data source. When a partial DOB is returned: 9999 indicates an incomplete year. 99 for an incomplete month and/or day.
AD11/UA11	Address (current address – input)	
ZC01	ZIP Code (for input address ZIP analysis)	
AD11/UA11	Address (previous address – input)	
AD11/UA11	Address (current address – TransUnion credit file)	The segment will not be returned if TransUnion credit file data is restricted (file is unavailable due to security freeze or other suppression).
AD11/UA11	Address (previous address – TransUnion credit file)	
AD11/UA11	Address (current address – non-credit source file)	
AD11/UA11	Address (previous address – non-credit source file)	
PN02	Phone Number (personal phone – input)	
PN02	Phone Number (personal phone – TransUnion credit file)	The segment will not be returned if TransUnion credit file data is restricted (file is unavailable due to security freeze or other suppression).
PN02	Phone Number (personal phone – non-credit source file)	The segment will not be returned if TransUnion credit file data is restricted (file is unavailable due to security freeze or other suppression).
RE01	Region Analysis (for analysis on input current address city, state, ZIP code, and phone)	
EM11	Employment (input)	
AD11/UA11	Address (employment address – input)	

Segment ID	Segment Name	Notes
ZC01	ZIP Code (for input employment address ZIP analysis)	
PN02	Phone Number (employment phone – input)	
RE01	Region Analysis (for analysis on input employment address city, state, ZIP code, and phone)	
ML02	Mileage (for analysis on distance between input personal and employment locations)	
ID01	Identification (Driver's License – input)	
DA01	Data Analysis (for analysis on input Driver's License)	
AO01	Add-on Status (Identity Manager Verification 2.0 messages)	Identity Manager Verification 2.0 is able to return up to 111 alert messages for a subject's identity information from a specific source (for example: input, TransUnion credit file, or a non-credit data source). All the Identity Manager Verification 2.0 messages will be grouped in the section under the AO01 segment that contains the Service Code FRDMSG. Depending on the subscriber setup or processing request provided in the service inquiry, the messages are returned in MC01 segments only (DC01/ DC11 segment for message 6000); MT01 segments only; or both MC01 segments (DC01/ DC11 segment for message 6000) and MT01 segments. If no Identity Manager Verification 2.0 message is triggered, the Search Status will return value F01. Otherwise, F02 will be returned.
MC01	Message Code	
DC11	Deceased Information (for Message 6000)	
MT01	Message Text	
AO01	Add-on Status (Identity Alerts)	1 per add-on service
MC01	Message Code	1 per message
MT01	Message Text (Identity Manager Verification 2.0 Messages)	1 Per Identity Manager Verification 2.0 Message (and Per Data Source if applicable)
AO01	Add-on Status (Generic Fraud Model – 00R85)	The segment is not returned if TransUnion credit file data is restricted (file is unavailable due
SC01	Scoring (Generic Fraud Model)	

Segment ID	Segment Name	Notes
		to security freeze or other supression)
AO01	Add-on Status (ID Score – 00662)	
SC01	Scoring (ID Score)	
TT01	Transaction Tracking (IDASequence Number)	
AO01	Add-on Status (OFAC Name Screen – 06800)	
MT01	Message Text (OFAC Messages)	
AO01	Add-on Status (Device Verification – 00655)	1 per Device Verification Service
SC01	Scoring (Device Score)	1 per Device Verification Score
MC01	Message Code (Device Alert Messages)	1 per Device Verification Alert Message
MT01	Message Text	1 per Device Verification Alert Message
END1	End	

Note: The MC01 segments and/or MT01 segments for Device Verification are returned only if the subscriber is set up to receive *all* Device Alert messages (Device Score scoring factors). Depending on the subscriber setup, the service may return only MC01 segments, only MT01 segments, or both.

Verification Summary

The Verification Summary section delivers the risk level (high, medium, or low) of the identity by comparing the identity verification result to the subscriber-defined risk threshold. It returns the total risk point of the identity verification and indicates the data source to which the input identity information best matches. The Verification Summary section also returns up to five Key Messages to reveal the top reasons that contribute to the risk level assessment. The Verification Summary information is returned in the VS01 segment, MC01 segment, and MT01 segment if subscriber is set up to receive the Key Messages in both codes and text..

The Verification Summary is returned only if the subscriber is set up to receive it per the subscriber's Identity Manager Verification 2.0 Subscription Form.

Multi-source Matching Summary

The Multi-source Matching Summary delivers match information about the input indicative data against the file data sourced from different databases (TransUnion credit database and TransUnion non-credit database or a third party non-credit database depending on subscriber setup). The Multi-source Matching Summary identifies how well the following input indicative data matches the same information found in two different source files: first name, middle name, last name, generation suffix, current address, previous address, social security number, date of birth, and phone number. The Multi-source Matching Summary information is returned in up to

two SV03 segments depending on whether subscriber is set up to verify against one or two databases.

The Multi-source Matching Summary is returned only if the subscriber is set up to receive it per the subscriber's Identity Manager Verification 2.0 Subscription Form.

Identity Manager Verification 2.0 Alert Messages

The tables below contain the message text and codes that may be returned for the Identity Manager Verification 2.0 service. Many current High Risk Fraud Alert messages are used for this service. Where one did not exist, a message was created specifically for Identity Manager Verification 2.0.

Note: The messages are sorted in ascending order of the codes in each message section. The messages listed below are currently available with the Identity Manager Verification 2.0 service. As service enhancements occur, messages in this list may be added or deleted.

The content <xxx> presented in the list below will be replaced with actual data in actual transactions. For example, <CCYY> in the text for message 5505 will be replaced with the actual year of issuance of the input SSN (say, 1956) so that the message 5505 text will be displayed as "Input SSN issued in 1956."

Identity Manager Verification 2.0 may return up to five key messages. These messages convey the top reasons for the risk level assessment returned. The following table shows the key messages that may be returned.

Code	Text
KMSG01	File suppressed or frozen or belongs to minor
KMSG02	OFAC Name Screen match
KMSG03	Consumer alert on file
KMSG04	Reported or suspected fraud related alert
KMSG05	Know-your-customer related alert
KMSG06	SSN related alert
KMSG07	Address related alert
KMSG08	Multiple ID element mismatch alert
KMSG09	Date of birth related alert
KMSG10	Name related alert
KMSG11	Telephone related alert
KMSG12	Drivers License related alert
KMSG13	Device related alert Note: Only available with the Device Verification Service, service code: 00655.

Verification Analysis Messages

Text	Code
Input name does not match file name	1101
Name not found on file	1102
Input current address does not match file current address	2101
Input current address matched file previous address	2102
Address not found on file	2104
Input <current/previous> address matched alternative file address	2105
Input last name and SSN do not match	4101
Input last name and phone number do not match	4102
Input name and DOB do not match	4103
Two or more ID elements do not match	4104
Input SSN does not match file SSN	5101
SSN not found on file	5102
Input phone number does not match file phone number	8101
Phone number not found on file	8102
Input phone number and address do not match.	9101
Input name and address do not match	9105
Input address and other information do not match file phone number	9106
Input date of birth does not match file date of birth	9501

Driver’s License Messages

Text	Code	Notes
Input driver's license does not match file driver's license	9502	The "file driver’s license" information is sourced from a third-party vendor database.
Input driver’s license associated with additional subject(s) not displayed/returned	9503	
Date of birth not found on file	9504	
Input driver’s license format is invalid	9506	

Text	Code	Notes
Input driver’s license soundex is invalid	9507	

SSN Analysis Messages

Text	Code
Input SSN is Invalid	4551
Multiple SSNs on file	5001
Multiple valid SSNs on file	5002
Multiple invalid SSN's on file	5003
Input SSN issued in <CCYY>	5505
Input SSN assigned before input date of birth	5551
Input SSN issued after age 21	5552
Input SSN issued within last 7 Years	5553

Home Phone Messages

Text	Code
Input telephone number is a cellular telephone	6002
Input telephone number is a pager	6005
Input telephone number is toll free	6006
Input telephone number is mobile	6007
Input telephone number is non-geographic	6008
Input telephone number is special services	6009
Input telephone number is new	6010
Input phone number not Issued	8501
Input phone number not valid for ZIP code	9102
Input phone number not valid for state	9103
Mileage between input phone number and ZIP code greater than 150 miles	9104

Home ZIP Code Messages

Text	Code
Input ZIP code has not been issued	1702
Input ZIP code is new	1703
Input ZIP code is military	1704
Input ZIP code is a PO box	1705
Input ZIP code is unique	1706
Input ZIP code not valid for city	1801
Input ZIP code not valid for state	1802

Business Phone Messages

Text	Code
Input business telephone number is a cellular telephone	6012
Input business telephone number is a pager	6015
Input business telephone number is toll free	6016
Input business telephone number is mobile	6017
Input business telephone number is non-geographic	6018
Input business telephone number is special services	6019
Input business telephone number is new	6020
Input business phone number not issued	8551
Input business telephone number not valid for business ZIP code	9152
Input business telephone number not valid for business state	9153
Mileage between input business telephone number and ZIP code greater than 150 miles	9154

Business ZIP Code Messages

Text	Code
Input business ZIP code has not been issued	1752
Input business ZIP code is new	1753
Input business ZIP code is military	1754

Text	Code
Input business ZIP code is a PO box	1755
Input business ZIP code is unique	1756
Input business ZIP code not valid for business city	1851
Input business ZIP code not valid for business state	1852

High Risk Fraud Alert Messages

Message Text	Code	Notes
<data source name> current/previous address is a mail receiving/forwarding service	0001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a hotel/motel or temporary residence	0002	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a credit correction service	0003	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a camp site	0004	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a secretarial service	0005	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a check cashing service	0006	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a restaurant/bar/nightclub	0007	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a storage facility	0008	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is an airport/airfield	0009	Depending on subscriber setup, <data source name> in the message text will be "Input,"

Message Text	Code	Notes
		"TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a truck stop	0010	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is commercial	0500	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a correctional institution	0501	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a hospital or clinic	0502	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a nursing home	0503	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is institutional	1000	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a U. S. Post Office	1001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is governmental	1500	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address reported as suspicious	1501	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address is a multi-unit building reported as suspicious (Unit: <Unit or Apartment #>)	1502	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address reported misused and requires further investigation.	1503	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."

Message Text	Code	Notes
<data source name> current/previous address is a multi-unit building reported misused and requires further investigation. (Unit: <Unit or Apartment #>)	1504	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address reported used in true name fraud or credit fraud	2001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address has been reported more than once (Unit: <Unit or Apartment #>)	2502	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> current/previous address requires further investigation	3000	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> SSN reported as suspicious or minor SSN	3001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> SSN reported misused and requires further investigation	3003	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> SSN reported used in true name fraud or credit fraud	3501	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> SSN reported deceased	4001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> SSN Is Not Likely Issued Prior to June 2011	4501	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> SSN used in death benefits claim for <Name in Death Master File>. DOB: <Date in Death Master File>. DOC: <Date in Death Master File>. ZIP code where benefits were paid is <ZIP in Death Master File>, most likely <City in Death Master File>, <State in Death Master File>. ZIP code last residence is <ZIP in Death Master File>, most likely <City in Death Master File>, <State in Death Master File>.	6000	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."

Message Text	Code	Notes
<data source name> telephone number is an answering service. (Tel: <Phone #>)	6001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> telephone is a public/pay phone. (Tel: <Phone #>)	6003	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> [1] telephone number is commercial (Tel: <Phone #>)	6500	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> telephone number is institutional (Tel: <Phone #>)	7000	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> telephone number is governmental (Tel: <Phone #>)	7500	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> telephone number reported as suspicious (Tel: <Phone #>)	7501	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> telephone number reported misused and requires further investigation (Tel: <Phone #>)	7503	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> telephone number reported used in true name fraud or credit fraud (Tel: <Phone #>)	8001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> address(es) SSN and/or telephone number reported together in suspected misuse	9001	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
<data source name> address, SSN, or telephone reported by more than one source	9002	Depending on subscriber setup, <data source name> in the message text will be "Input," "TransUnion credit file," "TransUnion non-credit file," or "Vendor file."
Consumer statement on file relates to true name fraud or credit fraud	9003	
Active duty alert on file	9004	
Initial fraud alert on file	9005	

Message Text	Code	Notes
Extended fraud victim alert on file	9006	

Individual Monitoring Report

Service Code 07111 / 07112 / 07113

Note: The set and delete parts of Individual Monitoring Report are already available in TU4.1. The availability of TU4.1 output for satisfaction is TBD.

Individual Monitoring Report is TransUnion's individual level account monitoring service. This system checks selected consumer files for a series of conditions, such as a new address or a new inquiry. The subscriber selects the conditions from a predefined set of criteria. An Individual Monitoring Report is returned when one or more of the selected criteria are satisfied.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to set or delete an Individual Monitoring Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Service	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Alias)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Individual Monitoring Report Processing Rules for Set/Delete

Use the FFI segment information in this section to complete an FFI that best conforms to Individual Monitoring processing rules.

RP01 (Request Service) Segment

To set Individual Monitoring, the service code 07111 must be provided in the Request Service segment. Individual Monitoring Report criteria are always defined in the subscriber validation file and not on the fixed-format inquiry record.

To delete previously set Individual Monitoring, the service code 07112 must be provided in the Request Service segment.

EU01 (End Usage) Segment

This segment is used for all Individual Monitoring Report Criteria. If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

> **Note:** Contact your Account Representative if you need to know whether a permissible purpose code is required.

RA01 (Request Add-on) Segment

To request an add-on service (such as Phone Append), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

The following add on service can be requested on Individual Monitoring:

- Phone Append

Sample FFI for Individual Monitoring Report – Set

```
TU4I1011WATCH SET                0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER

PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0107111N
IOD010104001

OD010201001

END100008
```

Individual Monitoring Report Fixed Format Response (FFR) for Set

The following list shows each possible segment that may be returned for the Individual Monitoring Report Set in the order of return. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH02	Subject Header	
NM11	Name	
PI11	Personal Information	
AD11/UA11	Address	
PN01	Phone Number	
END1	End	

Individual Monitoring Report Fixed Format Response (FFR) for Delete

The following list shows each possible segment that may be returned for the Individual Monitoring Report Delete in the order of return. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	

Segment ID	Segment Name	Notes
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH02	Subject Header	
NM11	Name	
PI11	Personal Information	
AD11/UA11	Address	
PN01	Phone Number	
END1	End	

Individual Monitoring Report Fixed Format Response (FFR) for Satisfaction

Note: Individual Monitoring Report criteria and output delivery information are specified in the subscriber's predefined options.

The following list shows each possible segment that may be returned for an Individual Monitoring Report Satisfaction (service code 07113) in the order of return. The shaded segments are the add-on service segments that can be returned for this report if add-ons are requested. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH02	Subject Header	
NU01	Number of	
NM11	Name	
PI11	Personal Information	
AD11/UA11	Address	
PN01	Phone Number	
NM11	Name	
PI11	Personal Information	
AD11/UA11	Address	
PN01	Phone Number	
CS11	Consumer Statement	

Segment ID	Segment Name	Notes
WS01	Individual Monitoring Report Satisfaction	
AD11/UA11	Address	
WS01	Individual Monitoring Report Satisfaction	
TR12	Individual Monitoring Report Trade	Industry code for this product is automatically returned as a two-character code.
SA11	Subscriber Address	
PN01	Phone Number	
WS01	Individual Monitoring Report Satisfaction	
PR11	Public Record	Industry code for this product is automatically returned as a two-character code.
WS01	Individual Monitoring Report Satisfaction	
IN11	Inquiry	For Individual Monitoring Report Satisfactions, the IN11 segment does not return the inquiry type, loan type, or inquiry date. Industry code for this product is automatically returned as a two-character code.
SA11	Subscriber Address	
PN01	Phone Number	
NM11	Name	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11	Address	
WS01	Individual Monitoring Report Satisfaction	
EM11	Employment	
AD11	Address	
WS01	Individual Monitoring Report Satisfaction	
CS11	Consumer Statement	
AO01	Add-on Status (Phone Append)	

Segment ID	Segment Name	Notes
PN01	Phone Number	
END1	End	

Insurance Prefill

Service Code 07920

Insurance Prefill enables subscribers to prefill a consumer's vehicle insurance application with information during the quoting process. Insurance Prefill works in conjunction with one of these add-on services:

- **Prefill Vehicle VIN**: Provides the vehicle identification number and information for a specific vehicle registered to the applicant(s) when a year and make are provided.
- **Prefill Vehicle HH (Household)**: Provides the vehicle identification number and information for all vehicles registered to the applicant's household

Permissible purpose is required. The acceptable Use Types codes include IN, PR, and IS.

Insurance Prefill is not available in all states.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an Insurance Prefill in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Optional	
CD01	Customer Data	1 Per Transaction	Conditionally Required	VHS Service Only –TUNA Transaction data
ID02	Miscellaneous Identification (VHS service only – CARFAX® UserID)	1 Per Transaction	Conditionally Required; for 07922 only	
ID02	Miscellaneous Identification VHS service only (Customer	1 Per Transaction	Optional; for 07922 only	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
	generated Quote Number)			
SH01	Subject Header	1 Per Transaction	Required	First subject
NM11	Name	1 Per Subject	Required	
NM11	Name (Alias)	1 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address (Current)	1 Per Subject	Required	
AD11/UA11	Address (Previous)	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
VH01	Vehicle Information	10 Per Transaction	Required; for 07922 only	
MD01	Model Data	1 Per Transaction	Optional; for 07922 only	VHS Service Only – Garage Address State
SH01	Subject Header (Additional Subjects)	9 Per Transaction	Optional	
NM11	Name	1 Per Subject	Conditionally Required	
NM11	Name (Alias)	1 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address (Current)	1 Per Subject	Conditionally Required	
AD11/UA11	Address (Previous)	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
RP01	Request Service	1 Per Service	Required	Standalone Service Code – 07920
OR01	Optional Request	1 Per Service	Optional	
END1	End	1 Per Transaction	Required	

Fixed Format Response (FFR)

The segments that may be returned for the Insurance Prefill service are shown separately in each add-on service:

- Prefill Vehicle VIN — service code 07922
- Prefill Vehicle HH — service code 07923

L2C Model

Service Code 06200

The L2C Model Report provides additional risk assessment about a consumer beyond traditional risk scores. Covering consumers of all credit profiles and history, the L2C Model Report predicts behavior similar to the way traditional risk models do but uses alternative data for its delinquency predictive calculations.

The L2C Model Report may, depending on the subscriber's settings, return up to four models in a single transaction.

L2C Model Report is provided in two versions with the only difference being the adverse action factor codes returned for these two versions. The same existing TransUnion L2C service codes, segments, and elements are used for both the current and Generation 2 versions of the L2C Models.

- **Standard L2C Model Report** – See the list of available factor codes.
- **Generation 2 L2C Model Report** – There are different adverse action factor codes for this version only. These codes will only be returned to subscribers who are configured in the TransUnion system for the Generation 2 version of L2C Models based on their TransUnion subscriber settings.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an L2C Model in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Alias)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
ID01	Identification			
AD11	Address (Current)	2 Per Subject	Required	
AD11	Address (Previous)			
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	2 Per Service	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

L2C Model Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the L2C Model Report processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

> **Note:** Contact your Account Representative if you need to know whether a permissible purpose code is required. See FFR Segments on page 467.

RP01 (Request Service) Segment

To request an L2C Model Report, the service code 06200 must be provided in the Request Service segment.

OD01 (Output Delivery) Segment

L2C Model Report does not support the print image output type. If a print image output type is requested **in addition to** a TU4.1 FFR output type, the print image request is ignored. If a subscriber requests only the print image output, the system returns this error: **304 Type of output requested is not supported**.

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the L2C Model Report in the order of return. The shaded segments are the add-on service segments that will be returned for an L2C Model Report. Depending on the subscriber's settings, up to four models may be returned in a single transaction. If multiple models are returned, each model returned with a different service code, as indicated in the table below. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH03	Subject Header	
NM11	Name (Input Primary Name)	
AD11	Address (Input Current Address)	
AO01	Add-on Status (L2C Model 00337)	Service Code=00337
SC01	Scoring	Service Code=00337
TX01	Text Statement (Contact information for consumer to dispute L2C score)	
AO01	Add-on Status (L2C Model 00338)	Service Code=00338
SC01	Scoring	Service Code=00338
TX01	Text Statement (Contact information for consumer to dispute L2C score)	
AO01	Add-on Status (L2C Model 00339)	Service Code=00339
SC01	Scoring	Service Code=00339
TX01	Text Statement	

Segment ID	Segment Name	Notes
	(Contact information for consumer to dispute L2C score)	
AO01	Add-on Status (L2C Model 00340)	Service Code=00340
SC01	Scoring	Service Code=00340
TX01	Text Statement (Contact information for consumer to dispute L2C score)	
END1	End	

Use the FFR segment information below to understand how this model is returned in an FFR.

AO01 (Add-on Status) Segment

In response to a request for an L2C Model Report, the table below shows what to expect in the AO01 segment fields:

Note: The content in this table is specific to L2C Standalone Model responses.

Add-on Status (AO01) Segment — Total length: 17 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AO01**.
Segment Length	5	3	N	Value is **017**.
Service Code	8	5	A/N	Displays **00337**.
Service Status	13	2	A/N	Specifies whether the service is available. The only possible value for L2C Model is: **04** - Default service delivered
Search Status	15	3	A/N	N/A - Not used by L2C Model standalone service.

SC01 (Scoring) Segment

Look for these results in the scoring segment returned for an L2C request:

Note: The content in this table is specific to L2C Standalone Model responses.

Scoring (SC01) Segment — Total length: 34 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SC01**.
Segment Length	5	3	N	Value is **034**.
Service Code	8	5	A/N	Displays **00337**.
Sign	13	1	A/N	Contains a plus (+) indicator. L2C score is always positive.
Score	14	5	A/N	Displays the results of the scoring process. If the file is not scored, this field will be blank.
Scoring Indicator Flag	19	1	A/N	N/A - This field is always blank for L2C Model.
Score Derog and Inquiry Alert Flag	20	1	A/N	Indicates whether inquiries impacted the credit score. Possible values for this field are: **Blanks** - No derogatory info was found in the file and/or inquiries did not impact the credit score **I** - Inquiries did impact credit score and, for models that indicate it, no derogatory info found in the file
First Factor	21	3	A/N	Identifies the highest-scoring factor in the calculation. For a list of scoring factors, refer to the Models section of Add-on Service Descriptions on page 178.
Second Factor	24	3	A/N	Identifies the second highest-scoring factor in the calculation.
Third Factor	27	3	A/N	Identifies the third highest-scoring factor in the calculation.
Fourth Factor	30	3	A/N	Identifies the fourth highest-scoring factor in the calculation.
Score Card Indicator	33	2	A/N	Optional: Displays the L2C algorithm version ID. If it is not used, it will be blank.

TX01 (Text Statement) Segment

Look for these results in the text statement segment returned for an L2C request:

Note: The content in this table is specific to L2C Standalone Model responses.

Text Statement (TX01) Segment — Total length: 172 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TX01**.
Segment Length	5	3	N	Value is **172**.
Content Type	8	3	A/N	N/A - This field is always blank for L2C Model.
Statement Identifier	11	3	A/N	N/A - This field is always blank for L2C Model.
Filler	14	3	N	N/A - This field is always blank for L2C Model.
Current Segment Number	17	3	N	Identifies the position, or sequence number, of the current TX01 segment. For L2C Model, **001** will be returned.
Total Segment Number	20	3	N	Specifies the total number of TX01 segments in this FFR. For L2C Model, **001** will be returned.
Statement Text	23	150	A/N	Contains the message text associated with the message code. To dispute an L2C Score, please call **866-268-7156**, or write to **L2C, Inc., P.O. Box 550089, Atlanta, GA 30355**.

Standard L2C Model Score Range and Factor Codes

Note: Customers may have their own unique Reason/Factor Code requirements.

The L2C Model score range is:

0: Indicates a special condition in which the score was not calculated. The standard scoring segment may contain one of these codes to explain why the score was not calculated:

L2C Model Factor Code	Description
AGE	Application age is under 18
DUP	Applicant has too many recent applications
FRN	Application address is outside the US
IDD	Insufficient decisionable data available
INF	Applicant’s identity cannot be verified

1-999: Normal score range that returns up to three of the factor codes listed below. A higher score indicates a lower risk of delinquency.

L2C Model Factor Code	Description
B1	Banking history unacceptable
C1	Insufficient credit experience
C2	Delinquent credit obligations
C3	Number of recent inquiries on credit report
COL	Credit report has collection accounts in conjunction with thin credit history
DLQ	Credit and/or debit history is delinquent
IDD	Insufficient decisionable data available
J1	Mismanagement of obligations
LC0	Credit history is delinquent
LC1	Credit report has no accounts
LC2	Credit history is severely delinquent
LC3	Credit history is too recent
LC4	High risk financial behavior flag
LC5	Credit report has no open accounts
LC6	High risk financial behavior flag
LC7	External data negative score
NHT	Applicant has no credit report

Generation 2 L2C Model Score Range and Factor Codes

Note: Customers may have their own unique Reason/Factor Code requirements.

The L2C Model score range is:

0: Indicates a special condition in which the score was not calculated. The standard scoring segment may contain the following code to explain why the score was not calculated:

Generation 2 L2C Model Factor Code	Description
AZ	No record found

1-999: Normal score range that returns up to three of the factor codes listed below. A higher score indicates a lower risk of delinquency.

Generation 2 L2C Model Factor Code	Description
AA	Insufficient positive club and subscription information found
AC	Insufficient residential information found
AD	Insufficient positive checking account information found
AE	Insufficient information found on identification database
AY	Limited credit history found
BC	Presence of bankruptcy filing
CA	Club and subscription bill charge-off
CB	Credit account charge-off
CD	Checking account closed for cause
EA	Club and subscription payment delinquency
ED	Checks returned for insufficient funds
GB	High interest rate loan application
GD	Checking account opening inquiry
GF	Online payday loan application
HC	Limited time at residence
KE	Frequent address changes
LE	Time on identification database
ME	Deceased record on identification database
OA	No negative factors
PC	High mortgage debt
QC	Variable mortgage payment rate
UA	Club and subscription payment rate
VA	Club and subscription purchase commitment not met

Model Report

Service Code 08000

The Model Report is designed for use by subscribers who do not want the detail supplied by the Credit Report and are primarily interested in summary information that helps to automate their decision-making process. Additionally, the Model Report allows the subscriber to define customized messages that are returned on the report. These customized messages are associated with specific thresholds based on the results of one or two models.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Model Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	2 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Also Reported As)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11/UA11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address	1 Per Employer	Optional	
PN01	Phone Number	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
AI01	Additional Information	1 Per Service	Optional	
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Model Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the Model Report processing rules.

TU4I (Transaction Control) Segment

If the transaction is a point-of-sale transaction, be sure the Point-of-Sale Indicator field is set to Y.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

> **Note:** Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request a Model Report, the service code 08000 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert or Models), a Request Add-on Segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons and models.

The following add on services can be requested on the Model Report:

- Phone Append
- High Risk Fraud Alert
- Models

The add-ons below are available only through settings in the subscriber validation file.

- ID Mismatch Alert
- Credit Summary

Sample FFI for Model Report

```
TU4I1011MODEL  REPORT           0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER
```

```
PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0108000N
IOD010104001

OD010201001

END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Model Report in the order of return. The shaded segments are the add-on service segments that can be returned for a Model Report if add-ons are requested. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
CI01	Consumer Identifier	
NM11	Name	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11	Address	
SM11	Credit Summary	
SD01	Credit Summary Description	
CP11	Compliance	Compliance information may be returned when certain conditions are present on the consumer's file.
CS11	Consumer Statement	

Segment ID	Segment Name	Notes
MT01	Message Text	A subscriber's custom message may be returned in this segment.
OB01/OB02	Owning Bureau Identification	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
QH01	Inquiry History	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Model)	
SC01	Scoring	
AO01	Add-on Status (Income Estimator)	If the FFR returns a TC01 segment, it will not return an SC01 segment.
TC01	Income Estimator score	
AO01	Add-on Status (characteristic)	
CH01	Characteristic	
END1	End	

Reverse Phone Append

Service Code 07040

Reverse Phone Append (RPA) is TransUnion's non-permissible purpose service that uses only a phone number as input. Subscribers can use RPA to verify subjects using telephone and indicative information obtained from our multi-sourced phone database. RPA can return business or residential name and address for the input phone number, specific characteristics of the phone number, and any restrictions associated with the number.

RPA does not return any credit information.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Reverse Phone Append report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Service Request	Required	
PN01	Phone	1 Per Subject	Required	
RP01	Request Service (Reverse Phone Append)	1 Per Service	Required	
OR01	Optional Request (to request error text)	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
END1	End	1 Per Transaction	Required	

Reverse Phone Append Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Reverse Phone Append processing rules.

RP01 (Request Service) Segment

To request a Reverse Phone Append report, the service code 07040 must be provided in the Request Service segment.

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for Reverse Phone Append in the order of return. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	

Segment ID	Segment Name	Notes
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH03	Service Header	
SH05	Subject Header	
NM11	Name (data source = ‘A’ RPA file)	
AD11/UA11	Address (data source = ‘A’ RPA file)	
PN01	Phone Number (data source = ‘A’ RPA file)	
END1		

If there is no match on the RPA database or the subscriber chooses not to receive a certain type of listing (such as unlisted subjects, business listings, or listings with no name), then only the input information, the service header, and the subject header are returned.

Small Business Identification

Service Code 07710

The Small Business Identification service optionally delivers a set of predefined packages of small business attributes for up to three small businesses associated with the subject of the inquiry. Additionally, this service allows subscribers to apply basic filtering options to choose the types of businesses returned.

Service Detail	Description
FCRA Permissable Purpose	Not Required. Small Business Identification information is not sourced from TransUnion's consumer reporting database and is not to be used for credit eligibility or any other FCRA permissible purpose.
Subscriber Configuration Options	• Option to receive Small Business indicator only • Option to receive Small Business CORE and PREMIUM packages, or Small Business CORE, Premium, and Other packages • Option to receive one to three small business records • Options to filter small businesses to return • Option to apply Telco updates to Business Phone and Address

Service Detail	Description
Possible Filter Options	• Select Based on Minimum Confidence Score • Select or Reject Based on Primary SIC or NAICS • Select Based on Number of Years Established • Select Closed Businesses • Select Based on Total Number of Employees • Select Based on Business Total Revenue • Reject by Number of Months Since Last Business Update • Reject by Match Type • Reject by Corporate Entity Type • Reject by Number of Months since Last Executive Update • Reject by Contact Title Group

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request the Small Business Identification service. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Optional	
SH01	Subject Header	1 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
NM11	Name (Secondary)	1 Per Subject	Optional	
NM11	Name (Alias)	3 Per Subject	Optional	
PI11	Personal Information	1 Per Subject	Optional	
AD11	Address	2 Per Subject	Required	
PN01	Phone Number	1 Per Subject	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	
OD01	Output Delivery	1 Per Output Type	Optional	
END1	End	1 Per Transaction	Required	

Small Business Identification Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the Small Business Identification processing rules.

RP01 (Request Service) Segment

To request the Small Business Identification standalone service, the service code 07710 must be provided in the Request Service segment.

Sample FFI for Small Business Identification

```
TU4I1111SMALL BUSINESS ONLINE              0622Z
05633723PSWD1NSH011NM111
PI0166625210219620901    AD1103542
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Small Business Identification standalone service in the order of return when the result is a Hit and Small Business Data Package Options are selected. The Small Business Identification standalone service search result and business data are delivered in the add-on section of the FFR as shaded below. For detailed information regarding these segments, see FFR Segments on page 467.

> **Note:** When the "Return Small Business Indicator Only" option is selected, or a No-Hit or No-Match occurs, only the AO01 segment with the search result indicator is returned. See AO01—Add on Status Segment on page 480 for additional search status details.

Segment ID	Segment Name	Maximum Returned	Notes
TU4R	Transaction Control	1 Per Transaction	
PH01	Service Header	1 Per Service	
SH01	Subject Header	1 Per Subject	
NM11	Name	1 Per Address	This segment is used by the Small Business Identification solution to provide business information. This information is not part of the consumer report and is not to be used for credit eligibility or any other FCRA permissible purpose. Defines the type of name that is returned. Value is: **9** Contact name
PI11	Personal Information	1 Per Subject	
AD11/UA11	Parse/Unparsed Address	2 Per Subject	

Segment ID	Segment Name	Maximum Returned	Notes
PN01	Phone Number	1 Per Phone	
AO01	Add-on Status	1 Per Service	The AO01 segment returns one of the following codes in the Search Status field to indicate if a small business was found that met the subscriber search criteria. Possible values are: • **Y HIT** At least one small business was found that matched subscriber criteria. • **N NO-HIT** No small business was found. • **X NO MATCH** Small business found that did not match subscriber search criteria.
BR01	Business Record	1 Per Business	
PN01	Phone Number	1 Per Business	This segment is used by the Small Business Identification solution to provide business information. This information is not part of the consumer report and is not to be used for credit eligibility or any other FCRA permissible purpose.
AR01	Attribute	1 Per Attribute	
EM11	Employment	1 Per Business	This segment is used by the Small Business Identification solution to provide business information. This information is not part of the consumer report and is not to be used for credit eligibility or any other FCRA permissible purpose.
NM11	Name	1 Per Contact	
END1	End	1 Per Transaction	

Small Business Attribute IDs

List of Small Business Attribute IDs.

Attribute ID	Attribute Name	Description	Package Name
SB000001	Small Business Indicator	Indicates whether or not the business meets the SBA criteria for small business. Possible values are: **Y** Does meet criteria **Blank** Does not meet criteria	PREMIUM PLUS
SB000002	Woman Ownership Indicator	Indicates whether a woman owns the business. Possible values are: **Y** Yes **Blank** No	PREMIUM PLUS
SB000003	Minority Ownership Indicator	Specifies the category of minority ownership of the business. Possible values are: **A** Asian owned **H** Hispanic owned **B** Black owned **I** Indian owned **Blank** Unknown	PREMIUM PLUS
SB000016	Company Total Wallet Size	Sum of Company Cash Equivalents and Company Short Term Debt. Represented in whole dollars. For example: 004160613000 = $4,160,613,000.	ACCOUNTS/ LENDING
SB000017	Company Total Transaction Accounts	Dollar amount of total transaction accounts for the entire business. Represented in whole dollars. For example: 000000459992 = $459,992	ACCOUNTS
SB000018	One Bank Only Probability Percentage	Indicates the probability of this entity utilizing one bank only (9.9999999). For example: 0.6337816 or 0.9327718	ACCOUNTS
SB000019	One Financial Institution Probability Percentage	Indicates the probability of this entity utilizing one financial institution (9.9999999). For example: 0.4113311 or 0.8296314	ACCOUNTS
SB000020	Savings Account Probability Percentage	Indicates the probability of this entity having a savings account (9.9999999). For example: 0.1242926 or 0.0968679	ACCOUNTS
SB000021	Transaction Account Probability Percentage	Indicates the probability of this entity having transaction accounts	ACCOUNTS

Attribute ID	Attribute Name	Description	Package Name
		(9.9999999). For example: 0.7388489 or 0.6607361	
SB000022	Online Banking Probability Percentage	Indicates the probability of this entity utilizing on-line banking (9.9999999). For example: 0.3787236 or 0.1662592	ACCOUNTS/ TREASURY
SB000023	Brokerage Account Probability Percentage	Indicates the probability of this entity having a brokerage account (9.9999999). For example: 0.0019129 or 0.0095146	INVESTMENT
SB000024	CD Accounts Probability Percentage	Indicates the probability of this entity having CDs (9.9999999). For example: 0.0559977 or 0.0245439	INVESTMENT
SB000025	Money Market Accounts Probability Percentage	Indicates the probability of this entity having Money Markets account (9.9999999). For example: 0.0114914 or 0.0086819	INVESTMENT
SB000026	401K Probability Percentage	Indicates the probability of this entity having a 401K (9.9999999). For example: 0.0118267 or 0.3007029	INVESTMENT
SB000027	Investment Account Probability Percentage	Indicates the probability of this entity having investment accounts (9.9999999). For example: 0.1265481 or 0.8347735	INVESTMENT
SB000028	Auto Loan Probability Percentage	Indicates the probability of this entity having an auto loan (9.9999999).	LENDING
SB000029	Equipment Leases Probability Percentage	Indicates the probability of this entity having equipment leases (9.9999999). For example: 0.4250917 or 0.0198489	LENDING
SB000030	Line of Credit Probability Percentage	Indicates the probability of this entity having a line of credit (9.9999999). For example: 0.2408653 or 0.0924892	LENDING
SB000031	Long Term Debt Probability Percentage	Indicates the probability of this entity having long term debt (9.9999999). For example: 0.2374805 or 0.1495829	LENDING
SB000032	Commercial Loan Probability Percentage	Indicates the probability of this entity having a commercial loan (9.9999999). For example: 0.1998596 or 0.2094781	LENDING
SB000033	Commercial Mortgages Probability Percentage	Indicates the probability of this entity having commercial mortgages (9.9999999). For example: 0.2654784 or 0.9353892	LENDING

Attribute ID	Attribute Name	Description	Package Name
SB000034	Short Term Debt Probability Percentage	Indicates the probability of this entity having short term debt (9.9999999). For example: 0.3171189 or 0.0320464	LENDING
SB000035	Sweep Account Probability Percentage	Indicates the probability of this entity having a sweep account (9.9999999). For example: 0.0338104 or 0.0188708	TREASURY
SB000036	Cash Management Account Probability Percentage	Indicates the probability of this entity having a cash management account (9.9999999). For example: 0.9696846 or 0.0532515	TREASURY
SB000037	International Accounts Probability Percentage	Indicates the probability of this entity having international accounts (i.e., letters of credit) (9.9999999). For example: 0.0214342 or 0.5052087	TREASURY
SB000038	Credit Card Accounts Probability Percentage	Indicates the probability of this entity having a credit card (9.9999999). For example: 0.2863527 or 0.8734525	CARD

SSN Report

Service Code 07300

The SSN Report service delivers a name and address on the credit database associated with the input social security number. The SSN Report also provides alias, employment, date of birth, in-file-since-date, phone information, and consumer statements when available.

If more than one file is found matching the input SSN, no file is returned. In this case, only a field indicating the number of matching SSNs (up to six) is returned in the response.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an SSN Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional	Notes
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
AF01	Access File	1 Per Subject	Conditionally Required	
PI11	Personal Information	1 Per Subject	Required	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1S	End	1 Per Transaction	Required	

SSN Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the SSN Report processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

Note: Contact your Account Representative if you need to know whether a permissible purpose code is required.

RP01 (Request Service) Segment

To request an SSN Report, the service code 07300 must be provided in the Request Service segment. This service requires permissible purpose.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

The following add on services can be requested on the SSN Report:

- Phone Append
- High Risk Fraud Alert

Sample FFI for SSN Report

```
TU4I1011SSN REPORT              0622Z
05633723PSWD1NSH011PI11228707251
RP0107300N    IEND100005
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the SSN Report in the order of return. The shaded segments are the add-on service segments that can be returned for an SSN Report if add-ons are requested. For detailed information regarding these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NU01	Number of	
NM11	Name	
NM11	Name (Also Reported As)	
PI11	Personal Information	
AD11/UA11	Address	
PN01	Phone Number	
EM11	Employment	
AD11	Address	
CS11	Consumer Statement	
AO01	Add-on Status (Phone Append)	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	

Segment ID	Segment Name	Notes
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
AO01	Add-on Status (Inquiry Analysis)	
IN11	Inquiry	
NM11	Name	
NM11	Name (maternal)	
AD11	Address (current)	
AD11	Address (previous)	
PN01	Phone number	
EM11	Employment	
END1	End	

SSN Search

Service Code 07200

The SSN Search service delivers each name and address on the database associated with the input social security number.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request an SSN Search in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Required/ Optional
TU4I	Transaction Control	1 Per Transaction	Required	
EU01	End Usage	1 Per Transaction	Conditionally Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Required/ Optional
				Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
PI11	Personal Information	1 Per Subject	Required	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Output Type	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

SSN Search Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to the SSN Search processing rules.

EU01 (End Usage) Segment

If the Subscriber Code input in the TU4I segment indicates that the subscriber is required to provide end-user information, the FFI must include an EU01 segment directly after the TU4I segment. Only one EU01 segment can be provided. If more than one EU01 segment is received, a TU4E (error) record is returned.

RP01 (Request Service) Segment

To request an SSN Search, the service code 07200 must be provided in the Request Service segment.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

An RA01 can return the following add-on service with an SSN Search report:

- High Risk Fraud Alert

Sample FFI for SSN Search

```
TU4I1011SSN SEARCH              0622Z
05633723PSWD1NSH011PI11356463272
RP0107200N
IOD010104001
01OD010201001

01END100007
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the SSN Search in the order of return. The shaded segments are the add-on service segments that can be returned for an SSN Search report if add-ons are requested. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
NM11	Name	The data source value for these fields is always F (file).
PI11	Personal Information	No Date of Birth is returned in the Personal Information segment for SSN Search. The data source value for these fields is always F (file).
AD11/UA11	Address	The data source value for these fields is always F (file).
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
DC11	Deceased Information	
YI01	Year of Issuance	
MT01	Message Text	
END1	End	

Total ID Service Code

Service Code 06710

Total ID verifies the input data against the TransUnion consumer database, performs fraud analysis, and, if the input includes a telephone number, verifies the input data against data retained on the Reverse Phone Append file.

The Total ID logic compares the input consumer's first and last name, current address, previous address, telephone number, and SSN to the consumer database information. Then Total ID uses fraud analysis to verify the consumer's SSN issuance and home and employment telephone numbers against the consumer's current and employment zip codes, driver's license number format, and credit card number format (if contained in the input). Subscribers can select which negative fraud messages should be returned.

Using the input telephone number, the Reverse Phone Append (RPA) logic obtains the current name and address information associated with that number. The input's name and address is verified for a second time against the name and address associated with the telephone number on the RPA database.

Minimum input for Total ID is the consumer's name and address. The consumer's telephone number is an optional field but without a telephone number Total ID cannot search the RPA database. Additional input is optional.

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Total ID Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	
VN01	Vendor	1 Per Transaction	Required for vendors	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.
SH01	Subject Header	1 Per Transaction	Required	
NM11	Name	1 Per Subject	Required	
PI11	Personal Information	1 Per Subject	Optional	
ID01	Identification	1 Per Identification	Optional	
CC11	Credit Card	1 Per Subject	Optional	

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
AD11/UA11	Current address	1 Per Subject	Required	
AD11/UA11	Previous Address	1 Per Subject	Optional	
PN01	Phone Number	1 Per Subject	Optional	
EM11	Employment	1 Per Subject	Optional	
AD11/UA11	Address (employment)	1 Per Employer	Optional	
PN01	Phone Number (employment)	1 Per Employer	Optional	
RP01	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
OD01	Output Delivery	1 Per Service	Optional	Default is the machine readable FFR. You can request Print Image or both FFR and Print image.
RA01	Request Add-on	1 Per Add-on Service	Optional	
END1	End	1 Per Transaction	Required	

Total ID Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Total ID processing rules.

RP01 (Request Service) Segment

To request a Total ID report, the service code 06710 must be provided in the Request Service segment.

RA01 (Request Add-on) Segment

To request an add-on service (such as High Risk Fraud Alert), a Request Add-on segment can be provided for each add-on service desired. If this segment is not used, the system reverts to the subscriber's default options for add-ons.

The following add on services can be requested on the Total ID report:

- High Risk Fraud Alert
- Fraud Model

The add-on below is available only through settings in the subscriber validation file.

- OFAC Name Screen

Sample FFI for Total ID

```
TU4I1011TOTAL ID                0622Z
05633723PSWD1NSH011NM111CRAINE
FRAZER

PI11850449944           AD11 1113      E
SNOBILL
FANTASY ISLAND
IL60750
RP0106710N
IOD010104001

OD010201001

END100008
```

Fixed Format Response (FFR)

The following list shows each possible segment that may be returned for the Total ID report in the order of return. The shaded segments are the add-on service segments that can be returned for a Total ID report if add-ons are requested. The High Risk Fraud Alert is returned first, followed by Fraud Model. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	
PS01	Points Summary	
SV02	Subject Verification	
NM11	Name	
PI11	Personal Information	
DC11	Deceased Information	
YI01	Year Of Issuance	
AD11/UA11	Input Address—Current	
AD11/UA11	Input Address—Previous	
ZC01	Zip Code	
CO01	County Information	
AD11/UA11	File Address—Current Address	
AD11/UA11	File Address—Previous Address	

Segment ID	Segment Name	Notes
PN01	Phone Number	
ZC01	Zip Code	
CO01	County Information	
RE01	Region Analysis	
EM11	Employment	
AD11/UA11	Address (employment)	
ZC01	Zip Code (employment)	
CO01	County Information (employment)	
PN01	Phone Number (employment)	
ZC01	Zip Code (employment)	
CO01	County Information (employment)	
RE01	Region Analysis	
ML01	Mileage	
ID01	Identification	
DA01	Data Analysis	
CC11	Credit Card	
DA01	Data Analysis	
SV02	Subject Verification	
NM11	Name	
AD11/UA11	Address	
PN01	Phone Number	
AO01	Add-on Status (High Risk Fraud Alert)	
MC01	Message Code	
MT01	Message Text	
AO01	Add-on Status (Fraud Model)	
SC01	Fraud Detect Model	
AO01	Add On Status (OFAC Name Screen)	
MT01	Message Text	
END1	End	

Vehicle History Score Report

Service Code 07951

Vehicle History Score services provide a solution to the personal auto insurance market to allow insurance carriers to incorporate vehicle history information into their underwriting and/or rating process. The solution will provide insurance carriers new Point of Sale (POS) services designed to predict likelihood of an insurance loss, based on vehicle related information contained in a vehicle's CARFAX™ vehicle history file.

The Vehicle History Score Report standalone service functions as a media for subscribers to request and receive the following add-on services (see Add-on Service Descriptions on page 178 for more information about these Vehicle History Score add-on services):

- Vehicle History Score (service code: 00940) - If you have a custom Vehicle History Score validated in the TransUnion system, you should use the code assigned to your custom Vehicle History Score instead of the generic service code 00940.
- Vehicle History Score Group (service code: 07952)
- CARFAX Raw Data (service code: 07953)
- VIN Prefill (service code: 07954)
- VHS for Financial Services, Standard (service code: 00610)
- VHS for Financial Services, Premium (service code: 00611)

Fixed Format Inquiry (FFI)

The following list shows each segment that can be used to request a Vehicle History Score Report in the order in which the segments must be transmitted to TransUnion. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
TU4I	Transaction Control	1 Per Transaction	Required	The user reference in the TU41 segment accepts alphanumeric characters, period (.), underscore (_), and dash (–). Does not accept spaces or other special characters.
VN01	Vendor	1 Per Transaction	Optional	
CD01	Customer Data	1 Per Transaction	Conditionally Required	Required for TransUnion Net Access transactions.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional	Notes
ID02	MiscellaneousIdentification	1 Per Transaction	Required	
ID02	MiscellaneousIdentification	1 Per Transaction	Optional	
VH01	Vehicle Information	1 Per Transaction	Required	
VH01	Vehicle Information	9 Per Transaction	Optional	
NM11	Name	1 Per Transaction	Conditionally Required	Required for VIN Prefill.
NM11	Name	9 Per Transaction	Optional	
AD11	Address	1 Per Transaction	Conditionally Required	Required for VIN Prefill.
AD11	Address	9 Per Transaction	Optional	
MD01	Model Data	1 Per Transaction	Optional	
RP03	Request Service	1 Per Service	Required	
OR01	Optional Request	1 Per Service	Optional	See OR01 segment for all options.
END1	End	1 Per Transaction	Required	

Vehicle History Score Report Processing Rules

Use the FFI segment information in this section to complete an FFI that best conforms to Vehicle History Score Report processing rules.

ID02 (Miscellaneous Identification) Segment

Subscriber must provide the CARFAX User ID that is issued by CARFAX, the data provider for the Vehicle History Score services, in an ID02 segment. Subscriber may also optionally provide his/her own Quote ID in an ID02 segment (the Vehicle History Score Report will return a system generated Transaction Tracking Number in the output if subscriber does not provide his/her own Quote ID in the input).

VH01 (Vehicle Information) Segment

At least one VIN (Vehicle Identification Number) must be provided in a VH01 segment, unless the subscriber is using the VIN Prefill service. The Vehicle History Score Report can process up to ten VINs in one service request.

NM11 (Name) Segment

Identifies the name - primary, secondary, or alias - of the subject. Required for VIN Prefill. The Vehicle History Score Report can process up to ten Names in one service request.

AD11 (Address) Segment

Provides an address for the subject, employer, or requested service. Required for VIN Prefill. The Vehicle History Score Report can process up to ten Addresses in one service request.

MD01 (Model Data) Segment

The State Code of the garage address of the vehicle(s) can be provided in an MD01 segment for the Vehicle History Score model service to invoke State specific algorithm.

RP03 (Request Service) Segment

To request a Vehicle History Score Report, the service code 07951 must be provided in the RP03 segment.

Sample FFI for Vehicle History Score Report

```
TU4I0111 VHS REPORT SAMPLE   0622I 01234567PSWD1NID0210C123456
ID0202CUSTOMER_QUOTE_ID_778899
VH013B3XP45K5MT5723892003HONDA
CIVIC
VH012FTZX1766WCB017991998BMW
740
MD01TUVHSRK_STATEIL                 RP0307951
OR01YTNNNEND1010
        END100008
```

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the Vehicle History Score Report service in the order of return. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Brief Explanation of Usage
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
ID02	Miscellaneous Identification	Used to echo back the Quote ID provided in FFI or to return the TransUnion generated Transaction Tracking Number if Quote ID is not provided in input.
PH01	Service Header	

Segment ID	Segment Name	Brief Explanation of Usage
VH01	Vehicle Information	Used to echo back input VIN and as a delimiter to group processing result pertaining to a VIN when subscriber provides multiple VINs in input.
MI01	Miscellaneous Statement	Used to return no-hit message if a VIN is no-hit.
ERRC or ERRT	Error Code or Error Text	Used to return error code or error code & description if a VIN cannot be processed because of error.
VH01	Vehicle Information	Used to return vehicle description data (VIN, Year, Make and Model) in file when a VIN is hit or to return suggested vehicle description data (VIN, Year, Make and Model) when a VIN is invalid and CARFAX is able to suggest a possible vehicle.
AO01	Add-on Status	Used to return the Vehicle History Score add-on service status and search status.
SC01	Scoring	Used to return the Vehicle History Score, Scoring Factors, and Score Card.
AO01	Add-on Status	Used to return the Score Group add-on service status.
MI01	Miscellaneous Statement	Used to return the Score Group add-on service result.
AO01	Add-on Status	Used to return the CARFAX Raw Data add-on service status and search status.
TX01	Text Statement	Used to return the CARFAX raw data.
AO01	Add-on Status	Used to return the VIN Prefill add-on service status.
VH01	Vehicle Information	Used to return successful VIN Prefill vehicle description data.
END1	End	

Add-on Service Descriptions

Add-on services are returned only in conjunction with standalone services. That is, a subscriber can request an add-on service only as part of a request for a standalone service.

This section contains descriptions of the services. Each service description follows this structure:

- Describes briefly the FFI segments necessary to request the add-on
- Explains the processing rules that affect the add-on service's FFI settings
- Lists the segments that an FFR returning the add-on service can include
- Lists messages and message codes if they are returned for the service

Service and Model Renaming

To maintain the highest levels of service and reliability, TransUnion restructured its service line in 2004. In the process, many of the services and models were renamed. Refer to the table below for a list of services by old name and, where applicable, new name.

The services appear in this section in alphabetical order by **new** service name. The exception is the Models section, which appears after the other services.

New Service Name	Old Service Name	Service Code
ARM Alert	N/A	07013
Authorized User Alert	N/A	07014
Auto Summary	N/A	07070
CARFAX Raw Data	N/A	07953
Contact Locator, Full Version	N/A	03159
Contact Locator, Partial Version	N/A	03160
CreditVision® Account History	N/A	07225
CreditVision® Address History	N/A	07220
Credit Summary	N/A	07007
Creditor Contact Information	LOOK	07500
Device Verification Service	N/A	00655
FDCPA Case Search	N/A	07460
Geo Code	Geo Code	07011
High Risk Fraud Alert	HAWK	06500
ID Mismatch Alert	Trans Alert	06400
Identity Alerts	N/A	06502

New Service Name	Old Service Name	Service Code
Identity Manager Verification	Fraud Management Platform	06680
Identity Manager Verification 2.0	N/A	06682
Inquiry Analysis	Inquiry Analysis	07640
Lender Score Disclosure	N/A	06300
OFAC Name Screen	OFAC Advisor	06800
Phone Append	Phone Append	07030
Prefill Vehicle VIN	N/A	07922
Prefill Vehicle HH	N/A	07923
Small Business Identification	N/A	07711
SSN Analysis	N/A	07215
Vehicle History Score Group	N/A	07952
VIN Prefill	N/A	07954
Models	Score Models	Various

The table below lists the models in the order in which they appear in the Models section of this section.

New Model Name	Old Model Name	Service Code
Multi-model Cascade	TransUnion Links	00C01
Credit Characteristics	TransUnion Data Connect	00R14
TransUnion Bankcard Characteristic	N/A	00Q38
TransUnion Auto Characteristics	N/A	00N48
TransUnion Student Loan Characteristics	N/A	00N47
TransUnion Mortgage Characteristics	N/A	00N49
TransUnion Standard Characteristics	N/A	00N05
CreditVision® Account Management Score	N/A	00V64
CreditVision® Auto Score	N/A	00V80
CreditVision® Bankruptcy Score	N/A	00V82
CreditVision® Debt-to-Income Estimator	N/A	00U29
CreditVision® Income Estimator	N/A	00W16
CreditVision® New Account Score	N/A	00W05
CreditVision® Premium Algorithms	N/A	Various

New Model Name	Old Model Name	Service Code
DELPHI	DELPHI	00501
EDGE	EDGE	00X01+00X02
Energy Model	GEM	00241
FACETS	FACETS	00138
FDIC Subprime Definitions	N/A	00H63
FICO® Insurance Score	ASSIST	Various
FICO® Score 98	EMPIRICA	00950
FICO® Score 4	N/A	00P02
FICO® Score 8	N/A	00Q88
FICO® Score 9	N/A	00W18
FICO® Revenue Score	RPM (Revenue Projection Model)	00133
FICO® Bankruptcy Score 98	HORIZON	00601
FICO® NG Score	PRECISION	00227
IDA Models	ID Fraud	Various
L2C Model	N/A	00337
Life Insurance Persistency	N/A	00R97
New DELPHI	New DELPHI	00032
Score Percentile Ranking	N/A	Various
Supplemental Recovery Model	N/A	00N54
TransUnion Account Management 2.0	TransRisk-AM	00730
TransUnion Auto Model	TransRisk Auto	00701
TransUnion Bankruptcy 1.0	TransRisk Bankruptcy	00896
TransUnion Broadband	N/A	00P31
TransUnion Debt Management	N/A	00R80
TransUnion Income Estimator 3.0 and TransUnion Debt-to-Income Estimator 3.0	N/A	00N03 00X99
TransUnion New Account 1.0	TransRisk New Account	00219
TransUnion Telecom Model	Telescope	00336
TransUnion Wireless Model 3	N/A	00P15
TransUnion Wireless Model 2	Spectrum 2002	00R13
TransUnion Wireless Model	Spectrum	00315
VantageScore®	N/A	00P94

New Model Name	Old Model Name	Service Code
VantageScore® 2.0	N/A	00N94
VantageScore® 3.0	N/A	00V60
VantageScore® 3.0 with Positive Factor Codes	N/A	00W40
VantageScore® Authorized User	N/A	00N31
Vehicle History Score	N/A	00940 (If you have a custom Vehicle History Score installed in the TransUnion system, you should use the code assigned to your custom Vehicle History Score instead of the generic service code 00940.)
VHS for Financial Services, Standard	N/A	00610
VHS for Financial Services, Premium	N/A	00611

How Do I Request an Add-on Service

Most add-on service requests can be part of the FFI or can be set up as default options for a subscriber in the subscriber validation file. These defaults specify whether the subscriber wants the add-on service (High Risk Fraud Alert, for example) returned for every transaction or wants the service returned only when requested in the transaction.

Note: Geo Code, OFAC Name Screen, Credit Summary and ID Mismatch are available only as default options.

How is My Add-on Service Returned

Each add-on service returned in the FFR is preceded by an Add-on Status (AO01) segment that contains the service status and, if applicable, the search status. These status values describe whether the service is delivered as requested and if it was not, they describe the problem. See AO01—Add on Status Segment on page 480 for a detailed description.

TU4.1 returns the add-on services in this order:

1. Phone Append
2. Inquiry Analysis
3. Creditor Contact Information

4. High Risk Fraud Alert
5. Models
6. Geo Code
7. OFAC Name Screen
8. Identity Manager Verification
9. Identity Manager Verification 2.0
10. Compliance Verification
11. Authorized User Alert
12. SSN Analysis
13. ARM Alert
14. Auto Summary
15. Small Business Identification

ID Mismatch Alert is returned in the TA01 segment, which is returned right after the Personal Information segment (PI11).

CreditVision® Account History

Service Code 07225

CreditVision® Account History enables subscribers to receive up to 30 months of historical data for six account data fields plus three remarks fields. Account History includes the flexibility to configure how many months of historical data will be delivered - options are a maximum of 12, 18, 24, or the full 30 months of history.

The Account History occurrences will be in synch with the Trade Account's Payment Pattern up to the number of months selected. The first instance of history returned will correspond to the Payment Pattern Start Date and the first instance of the Payment Pattern.

Fixed Format Inquiry (FFI)

Account History is available only by default, per the subscriber validation setting on the following primary services:

- Credit Report

Fixed Format Response (FFR)

When the subscriber is eligible for the Account History service, the history data will be immediately returned following the corresponding trade account data in the Credit Report response. Account History **does not** return following an Add-on (AO01) segment.

The system will return the history data in the Account History (AH11) segment following the trade account data in the Credit Report service response.

The following list shows where the Account History segments are returned in the FFR for the Credit Report in the order of return (highlighted in gray).

Segment ID	Segment Name	Notes
TU4R	Transaction Control	

Segment ID	Segment Name	Notes
CD01	Customer Data	
PH01	Service Header	
SH01	Subject Header	
CI01	Consumer Identifier	
NM11	Name	
NM01	Name (Secondary)	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address (current and multiple previous)	
AD02	Extended Address	
PN01	Phone Number	
EM01	Employment	
AD11/UA11	Address (employment)	
SM11	Credit Summary	
SD01	Credit Summary Description	
PR11	Public Record	
CL11	Collection Account	
TR11	Trade Account	
AT11	Additional Trade Account	
AH11	Account History	
TM11	Trade MOP Totals	
MI01	Miscellaneous Statement	
CS11	Consumer Statement (file)	
IN11	Inquiry	
OB01/OB02	Owning Bureau Identification	
END1	End	

CreditVision® Address History

Service Code 07220

CreditVision® Address History enables subscribers to receive up to a maximum of 20 personal addresses — the current primary address plus up to 19 previous (and/or alternative) addresses — in the service response.

Fixed Format Inquiry (FFI)

Address History is available only by default, per the subscriber validation setting on the following primary services:

- Collection Prioritization Engine 1.0 (Service Code: 07000)
- Collection Prioritization Engine 2.0 (Service Code: 07025)
- Credit Report — Standard and Enriched versions (Service Code: 07000)
- ID Search (Service Code: 07760)
- ID Report (Service Code: 07770)

Fixed Format Response (FFR)

When the subscriber is eligible for the Address History service, all addresses are returned in the same manner in the indicative section of the Credit Report response. Addresses **are not** returned following an Add-on (AO01) segment. When Address History is returned, the primary address is listed first with an address/status of “current”. All other addresses are returned with an address/status of “previous” – up to a maximum of 20 best-ordered addresses.

For ID Search and ID Report, Address History is only delivered on the highest scoring (1st) file returned, regardless of whether this file is considered a "best" match file or a "hit" file. Address History is not returned for no-hit results.

Online Batch will support several output layouts for the CPE 1.X and 2.0 services. A layout has been created that includes up to 20 addresses. Existing CPE 1.X and 2.0 subscribers may also continue to use their existing Alternate FFR layout, and additionally receive a layout containing only the 20 addresses.

Note: The majority of enhanced addresses are normalized to U.S.P.S. standards.

The system returns all address data in the standard address segments in the indicative section of the service response, AD11/UA11, as shown highlighted in gray below. This example is for a Credit Report.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	This segment is returned only if the CD01 segment is sent in the FFI.
PH01	Service Header	
SH01	Subject Header	

Segment ID	Segment Name	Notes
CI01	Consumer Identifier	
NM11	Name	
NM01	Name (Secondary)	
NM11	Name (Also Reported As)	
PI11	Personal Information	
TA01	ID Mismatch Alert	
AM01	Address Analysis	
AD11/UA11	Address (current and multiple previous)	Up to 20 addresses are returned, one primary and 19 previous.
AD02	Extended Address	
PN01	Phone Number	
EM01	Employment	
AD11/UA11	Address (employment)	
SM11	Credit Summary	
SD01	Credit Summary Description	
PR11	Public Record	One- or two-digit industry codes may be returned depending on subscriber setup. For subscribers receiving the Enriched Credit Report, a two-digit industry code is automatically returned. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.
CL11	Collection Account	
TR11	Trade Account	
AT11	Additional Trade Account	
TM11	Trade MOP Totals	
MI01	Miscellaneous Statement	
CS11	Consumer Statement (file)	
IN11	Inquiry	One- or two-digit industry codes may be returned depending on subscriber setup. For subscribers receiving the Enriched Credit Report, a two-digit industry code is automatically returned. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.
OB01/OB02	Owning Bureau Identification	

Segment ID	Segment Name	Notes
END1	End	

ARM Alert

Service Code 07013

Adjustable rate mortgage (ARM) Alert is an add-on service available with the Credit Report. It returns the raw data and corresponding message for each ARM record the consumer has on file.

Fixed Format Inquiry (FFI)

The ARM Alert add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

ARM Alert Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with ARM Alert.

RA01 (Request Add-on) Segment

To request ARM Alert, the service code 07013 must be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

ARM Alert can currently be requested on the following primary service:

- Credit Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for ARM Alert in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (ARM Alert)	The AO01 segment returns one of the following codes in the Search Status field:

Segment ID	Segment Name	Notes
		A01 No Hit – no ARM record(s) found **A02** Hit – ARM record(s) found
MT01	Message Text (ARM Alert – Raw Data)	
MT01	Message Text (ARM Alert – Message)	

Types of ARM Records Returned

Subscribers, depending on their eligibility setup, receive the following types of ARM record data in their ARM Alert service result.

Basic Records Only

Raw Data (in the 1st MT01)	Data Returned in Message (in the 2nd MT01)
1. ARM Indicator (i.e., "#AR#") 2. Mortgage Origination Date 3. FIPS County Code	1. Mortgage Origination Date (labeled as "MORTGAGE ORIGINATION DATE" and in MM/YY format)

Core Records Only

Raw Data (in the 1st MT01)	Data Returned in Message (in the 2nd MT01)
1. ARM Indicator (i.e., "#AR#") 2. Mortgage Origination Date 3. First Interest Rate Reset Date 4. Rate Change Frequency 5. Rate Change Interval 6. Subsequent Rate Change Date 7. FIPS County Code	1. First Interest Rate Reset Date (labeled as "INITIAL RESET" and in MM/YY format)

Premium Records Only

Raw Data (in the 1st MT01)	Data Returned in Message (in the 2nd MT01)
1. ARM Indicator (i.e., "#AR#") 2. Original Interest Rate	1. First Interest Rate Reset Date (labeled as "INITIAL RESET" and in MM/YY format)

Raw Data (in the 1st MT01)	Data Returned in Message (in the 2nd MT01)
3. Mortgage Origination Date 4. Mortgage Amount 5. First Interest Rate Reset Date 6. Rate Change Frequency 7. Rate Change Interval 8. Margin Added to Index Rate 9. Lifetime Rate Cap 10. Index Type 11. Incremental Rate Change Cap 12. Interest Only Loan Indicator 13. Negative Amortization Indicator 14. Months From Origination Until Prepayment Penalty Expiration 15. First Rate Change Cap 16. Index Rate Lookback Period 17. Loan To Value 18. Subsequent Rate Change Date 19. FIPS County Code	2. Lifetime Rate Cap (labeled as “MAX INT RATE” and in ##.###% format) 3. Negative Amortization Indicator (labeled as “NEGATIVE AMORTIZATION”) 4. Interest Only Loan Indicator (labeled as “INTEREST ONLY”)

Returning ARM Record Raw Data

Depending on subscriber eligibility setup and the type of record to be returned, the following ARM record raw data, if present or eligible for return, may be returned in the MT01 segment’s Message Text field (displacements 22 – 171):

Note: If a data for a field is not present in file or not eligible for return per subscriber settings, it will be space filled.

ARM Data Field	Displacement	Length	Type	Description	Notes
ARM Indicator	22	4	A/N	Value is **#AR#**.	
Original Interest Rate	26	5	N	Original interest rate of the mortgage or loan.	There is an implied decimal between the second and third positions.
Mortgage Origination Date	31	4	N	The date the mortgage was first established.	The date is in the format YYMM.
Mortgage Amount	35	7	N	Original loan or mortgage amount.	
First Interest Rate Reset Date	42	4	N	The date the ARM interest rate can initially be adjusted.	The date is in the format YYMM.

ARM Data Field	Displacement	Length	Type	Description	Notes
Rate Change Frequency	46	1	A	Period or frequency the interest rate adjusts after the initial interest rate change date. Used in conjunction with the Rate Change Interval. Valid values include: **M** (monthly) **Q** (quarterly) **Y** (yearly). This field is used in combination with the Rate Change Interval. For example: • A combined value of M12 indicates that the interest rate will be adjusted every 12 months after the initial interest rate adjustment; • A combined value of Q02 indicates that the interest rate will be adjusted every 2 quarters after the initial interest rate adjustment; • A combined value of Y01 indicates that the interest rate will be adjusted every year after the initial interest rate adjustment.	
Rate Change Interval	47	2	N	How often the interest rate adjusts after the initial interest rate change date. Used in conjunction with the Rate Change Frequency.	This field is used in combination with the Rate Change Frequency. Refer to the field above for examples of these combinations.
Margin Added to Index Rate	49	5	N	The incremental or marginal amount added to the index interest rate per adjustment period.	There is an implied decimal between the second and third positions.
Lifetime Rate Cap	54	5	N	The maximum adjustable interest rate for the entire duration of the mortgage or loan.	There is an implied decimal between the

ARM Data Field	Displacement	Length	Type	Description	Notes
					second and third positions.
Index Type	59	3	A/N	Links the adjustable rate mortgage to the specified index type. Valid values include: **LIB** (LIBOR) **DIS** (11th District) **PRM** (Prime) **LAM** (LAMA) **CMT** (Constant Maturity Treasury) **MTA** (Monthly Treasury Average) **BIL** (Treasury Bill) **FNM** (FNMA - Fannie Mae) **OTH** (Other)	
Incremental Rate Change Cap	62	5	N	The maximum amount the interest rate can change per adjustment period.	There is an implied decimal between the second and third positions.
Interest Only Loan Indicator	67	1	A	Identifies the ARM as an interest only type mortgage.	A *blank* return indicates that data was not available to determine if the ARM is an interest-only mortgage.
Negative Amortization Indicator	68	1	A	Indicates that the adjustable rate loan could be negatively amortized.	A *blank* return indicates that data was not available to determine if the loan structure allows for negative amortization.
Months From Origination Until Prepayment Penalty Expiration	69	3	N	Number of months from the origination date the prepayment penalties are waived.	

ARM Data Field	Displacement	Length	Type	Description	Notes
First Rate Change Cap	72	5	N	The maximum amount the interest rate can change on the first adjustment period.	There is an implied decimal between the second and third positions.
Index Rate Lookback Period	77	2	N	Number of look-back days in determining the index interest rate.	
Loan To Value	79	4	N	The combined loan to value is the ratio of the loan amount to the appraised home value.	There is an implied decimal between the second and third positions.
Subsequent Rate Change Date	83	4	N	The date of the subsequent or next ARM interest rate adjustment.	The date is in the format YYMM.
FIPS County Code	87	5	A/N	Federal Information Processing Standards (FIPS) county code. The data indicates the state and county where the mortgage or loan is registered.	
Filler	*92*	*80*	*A/N*	*Not used for returning ARM record raw data.*	

Authorized User Alert

Service Code 07014

Authorized User Alert (AUA) is an add-on service that is delivered with the Credit Report. The AUA message on a Credit Report notifies the subscriber of how many, if any, authorized user accounts are contained in the report.

Fixed Format Inquiry (FFI)

Authorized User Alert add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

AUA Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Authorized User Alert.

RA01 (Request Add-on) Segment

To request Authorized User Alert, the service code 07014 must be provided in a Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

Authorized User Alert can currently be requested on the following primary services:

- Credit Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Authorized User Alert in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Authorized User Alert)	The AO01 segment returns one of the following codes in the Search Status field: **A01** Authorized User Alert no hit (all Clear) **A02** Authorized User Alert hit and messages returned without withholding. **A03** Authorized User Alert hit but some messages not returned because criterion not met.
MT01	Message Text	

Authorized User Alert Messages

The table below contains the message text and codes that may be returned for the Authorized User Alert service.

AUA Message Code	Message Text	Notes
AH01	Number of authorized user accounts is *nnn*.	*nnn* represents a number up to 3 digits.

AUA Message Code	Message Text	Notes
AH98	Percentage of satisfactory open revolving accounts that are authorized user accounts is *nnn*%	*nnn* represents a number up to 3 digits.

Auto Summary

Service Code 07070

The Auto Summary is an add-on service available with the Credit Report and Instant Decision solutions. It provides a snapshot of a consumer's current and previous auto finance history, including estimated annual percentage rate (APR) for each auto loan account returned and the amount of available revolving credit.

Auto Summary Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Auto Summary.

RA01 (Request Add-on) Segment

To request Auto Summary, the service code **07070** must be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

Auto Summary can currently be requested on the following primary services:

- Credit Report
- Instant Prescreen — the result is not returned but may be used in the decision process
- Instant Credit Risk Screen
- Instant Review
- Instant Deposit

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Auto Summary in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

TU4.0 Segment ID	TU4.1 Segment ID	Segment Description	Total Maximum Returned	Notes
AO01	AO01	Add-on service (Auto Summary)	1 per add-on service	The AO01 segment returns one of the following codes in the Search Status field:

TU4.0 Segment ID	TU4.1 Segment ID	Segment Description	Total Maximum Returned	Notes
				Blank Service not delivered due to service status **02**, **03** or **06** **AC1** Auto Summary no hit (no auto loans found and no open revolving credit found) **AC2** Auto Summary hit with both auto loans and open revolving credit found **AC3** Auto Summary hit with auto loans found and no open revolving credit found **AC4** Auto Summary hit with no auto loans found and open revolving credit found
AS01	AS01	Auto Loan Summary	5 per transaction	
LK01	LK11	Creditor Contact Information	1 per auto loan account	
SA01	SA11	Subscriber Address	1 per auto loan account	
PN01	PN01	Phone Number	1 per auto loan account	
CA01	CA01	Credit Availability Summary	1 per transaction	

CARFAX Raw Data

Service Code 07953

CARFAX Raw Data is an add-on service that is available on the Vehicle History Score Report. It returns a vehicle's history data in CARFAX XML data format. Depending on subscriber's configuration setup in the CARFAX system, the CARFAX raw data returned will be either the one for scoring the Vehicle History Score or the one that the subscriber customized in the CARFAX system or both.

Fixed Format Inquiry (FFI)

CARFAX Raw Data is available only by default, per the subscriber validation setting in the CARFAX system.

CARFAX Raw Data Processing Rules

CARFAX Raw Data is currently available on the following primary service:

- Vehicle History Score Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for CARFAX Raw Data in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (CARFAX Raw Data)	Included in the Add-on Status segment may be one of the following CARFAX Raw Data search status codes depending on the service status: • when Service Status = 04 (i.e., when CARFAX Raw Data service is processed and delivered successfully): **R01** VIN is *not a duplicate* and *freshly pulled* CARFAX raw data is passed through. **R02** VIN is *a duplicate* and *archived* CARFAX raw data is passed through. **R03** VIN is *a duplicate* and *freshly pulled* CARFAX raw data is passed through.

Segment ID	Segment Name	Notes
		• when Service Status = 02 (i.e., when CARFAX Raw Data service experiences a system problem): *blank*
TX01	Text Statement	Up to 999 TX01 segments may be used to return a large CARFAX raw data - each TX01 segment's Statement Text field holds 150 bytes of the long CARFAX raw data string. Upon receiving all the TX01 segments, subscriber needs to reconstruct the CARFAX raw data string by combining the data presented in the Statement Text fields of all the TX01 segments.

Contact Locator

Service Codes 03159 and 03160

The Contact Locator add-on service combines multiple data sets with intelligent match logic and proprietary analytics to verify, update, and enhance consumer contact identity information.

The Contact Locator add-on service has two versions:

- The Contact Locator Add-on Full Service version (03159) will return the same comprehensive results as the standalone service, including de-duplication from user-provided phones.
- The Contact Locator Partial Service version (03160) omits most of the listing data and metadata such as match codes, data source, name, address, etc., and only returns phone number and phone type information. The partial service also includes de-duplication from user-provided phones.

Fixed Format Inquiry (FFI)

Contact Locator is available only by default, per the subscriber validation setting on the following standalone services:

- Credit Report
- Collection Prioritization Engine
- Collection Prioritization Engine 2.0

Fixed Format Response (FFR)

The Credit Report, CPE 1, and CPE 2 FFR return an AO01 (Add-on Status) segment to indicate whether the Contact Locator Search request was successfully processed.

The AO01 segment contains the service code and one of the following Search Status indicators:

- **0** — No listings returned (no-hit)
- **N** — NNN = Number of listings returned (hit)
- **Blank** — Service not delivered because the requested service is not available or the requested information is suppressed or cannot be evaluated.

The Search Status field is left-justified and the remainder of the field contains blanks.

The following shows the segments that may be returned for the Contact Locator Add-on. For more information, refer to TransUnion Contact Score on page 273.

Table 1: Contact Locator Add-on — Partial Version

Segment ID	Segment Name	Current Maximum Returned	Notes
AO01	Add-on Status (**Contact Locator - Partial**)	1 Per Subject	
PN01	Phone (de-duplicate)	1 Per De-duplicate Hit	
PN01	Phone	1 Per Listing	

Table 2: Contact Locator Add-on — Full Version

Segment ID	Segment Name	Current Maximum Returned	Notes
AO01	Add-on Status (**Contact Locator - Full**)	1 Per Subject	
PN01	Phone (de-duplicate)	1 Per De-duplicate Hit	
CR01	Contact Result	1 Per Listing	See CIS Match Code Matrix.
CR02	Additional Contact Results	1 Per Listing	The CR02 segment is returned only when an SSN is provided in the service inquiry or when Linking Match Indicator needs to return a value "Y".
NM11	Name (Primary, Residential, Business/ Government or Calling Party Name	1 Per Listing	

Segment ID	Segment Name	Current Maximum Returned	Notes
AD11/UA11	Address	1 Per Listing	
EF01	Extended Fields – returned only to users who have selected this option.	1 Per Listing	
PN01	Phone	1 Per Listing	

Credit Summary

Service Code 07007

Credit Summary is an add-on service that is available with many TransUnion services. It summarizes the content of the credit file by providing the totals of public records, inquiries, and different types of accounts found on the consumer's file along with aggregated amount data for a specific type of credit account. The Credit Summary is available in two versions:

- Total File History
- 12-Month History

Fixed Format Inquiry (FFI)

Credit Summary is available only by default, per the subscriber validation setting. The setting also determines whether the Credit Summary summarizes the Total File History or the 12-Month History. The default is the Total File History.

Fixed Format Response (FFR)

The Credit Summary segments are found following the Indicative information segments returned for a subject in the FFR. The following list shows the possible segments that may be returned for Credit Summary in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name
PH01	Service Header
SH01	Subject Header
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert
AM01	Address Analysis
AD11	Address (current and previous)
PN01	Phone Number

Segment ID	Segment Name
EM11	Employment
AD11	Address (employment)
SM11	Credit Summary
SD01	Credit Summary Description

Credit Summary is available only by default, per the subscriber validation setting on the following primary services:

- Standard Credit Report and Enriched Credit Report
- Model Report
- Employment Credit Report
- CPE 2.0

Creditor Contact Information

Service Code 07500

Creditor Contact Information is an add-on service that is available on reports that display public record, collection, account, trade account, and inquiry data from a consumer's credit file. This add-on service provides information needed to contact subscribers if there are questions regarding the information presented in the report.

Fixed Format Inquiry (FFI)

Use the RA01 segment to request Creditor Contact Information in the FFI. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Note: Creditor Contact Information will automatically be returned for any public records in the Employment Credit Report FFR if the consumer's current address on file is a California (state code = "CA") address.

Creditor Contact Information Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Creditor Contact Information.

RA01 (Request Add-on) Segment

To request Creditor Contact Information, the service code 07500 can be provided in the Request Add-on Service segment with one of the following processing request options:

L Perform Address and Phone Search
P Perform Only Phone Search
N Do not perform Creditor Contact Information search

If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

Creditor Contact Information can currently be requested on the following primary services:

- Credit Report
- Employment Credit Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Creditor Contact Information in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status	
LK11	Creditor Contact Information	Industry code for this product is automatically returned as a two-character code.
SA11	Subscriber Address	
PN01	Phone Number	

Device Verification Service

Service Code 00655

The Device Verification Service (DVS) is an extension to the Identity Management Product Suite for mitigating fraud associated with online transactions. The service provides risk assessment of devices (laptops, desktops, smartphones, tablets, etc.) used by consumers to access a subscriber's website or portal. This layered, multi-dimensional view of the consumer provides subscribers with a comprehensive risk profile (identity + device) for online transactions. This service can be used across industries such as Financial Services, Healthcare, and Insurance.

Device Verification Service can be requested on the following standalone service:

- Identity Manager Verification 2.0 (06672)

Fixed Format Inquiry (FFI)

The table below lists the segments, in the order they should be provided, in an Identity Manager Verification 2.0 standalone service (06672) TU4.1 FFI. Refer to Identity Manager Verification 2.0 on page 121 for more information on how to request the Identity Manager Verification 2.0 standalone service.

Segment ID	Segment Name	Maximum Accepted	Required/ Optional	Notes
RA01	Request Add-on Service	1 Per Model	Conditionally Required	For ID Score 00662
RA01	Request Add-on Service	1 Per Model	Conditionally Required	For Generic Fraud Model 00R85
RA01	Request Add-on Service	1 Per DV	Required	For Device Verification 00655
MD03	Model Data	1 Per DV Input Data	Required	For Device Verification 00655
END1	End	1 Per Transaction	Required	

Note: In addition to being set up in the TransUnion system to be eligible for the Device Verification service, the subscriber must have been also set up in the data provider's system and received the credentials to access the data provider system (e.g., Organization ID and API Key). All Device Verification required input data, including the data provider issued credential, must be provided in the MD03 segment – one per Device Verification input data type – in the Identity Manager Verification 2.0 standalone service request.

MD03 (Model Data) Segment

Model Data (MD03) Segment – Total Length: 300 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Model Attribute ID	10	30	A/N	Depending on the type of input data to submit, one of the following values (in bold) must be present in this field: **org_id** - when used to submit the *Organization ID*. **api_key** - when used to submit the *API Key*. **session_id** - when used to submit the *Session ID*. **service_type** - when the element is used to submit the *Service Type*. **transaction_id** - when the element is used to submit the *Transaction ID*. **event_type** - when the element is used to submit the *Event Type*.

Sample of FFI for Identity Manager Verification 2.0 Standalone with the Device Verification Service

The purpose of the sample is to illustrate how to request the Device Verification service rather than to show a complete Identity Manager Verification 2.0 FFI. Refer to Identity Manager

Verification 2.0 on page 121 for more information on how to request the Identity Manager Verification 2.0 standalone service and Identity Manager Verification 2.0 FFI sample. The bold segments in the sample below indicate the fields specific for the Device Verification service.

```
TU4I …
…
NM01 … Doe John …
AD01 … 123 Main Chicago IL 60661 …
…
RP01 … 06672
…
RA01 … 00655 A
    MD0300655org_id XYZ123
    MD0300655api_key A1B2C3
    MD0300655session_id 1X2Y3Z
    MD0300655service_type SESSION-POLICY
    MD0300655transaction_id 12123434 M
    D0300655event_type PAYMENT
END1 …
```

Fixed Format Response (FFR)

The table below lists the segments, in the order they are returned, in an Identity Manager Verification 2.0 standalone service (06672) TU4.1 FFR. The Device Verification-related segments are shown highlighted in gray in the table below. Refer to Identity Manager Verification 2.0 on page 121 for more information on the Identity Manager Verification 2.0 standalone service result.

Segment ID	Segment Name	Notes
AO01	Add-on Status	Device Verification — 00655
SC01	Scoring	Device Score
MC01	Message Code	Device Alert Messages
MT01	Message Text	Device Alert Messages

AO01 (Add-on Status) Segment

Add-on Status (AO01) Segment — Total length: 17 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Service Status	13	2	A/N	Specifies whether the service is available. Possible values are: **01** Device Verification has returned successfully **02** Device Verification Service encountered an internal problem or

Add-on Status (AO01) Segment — Total length: 17 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				the connection to the data provider is timed-out **03** Subscriber is not eligible for Device Verification but requested it in the Identity Manager Verification 2.0 standalone service request **06** Insufficient data to score a device or the score is out of range [-100, 100] **10** Device Verification input data is incomplete, not formatted correctly, or duplicate **12** Device Verification required input data that is missing or invalid

SC01 (Scoring) Segment

Scoring (SC01) Segment — Total length: 34 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Sign	13	1	A/N	If the preceding AO01 segment's Service Status = **01**, display the sign of the Device Score. If the preceding AO01 segment's Service Status = **06**, this field is blank.
Score	14	5	A/N	If the preceding AO01 segment's Service Status = **01**, display the Device Score (without sign). If the preceding AO01 segment's Service Status = **06**, this field is blank.
Scoring Indicator Flag	19	1	A/N	If the preceding AO01 segment's Service Status = **01**, this field is blank. If the preceding AO01 segment's Service Status = **06**, display the following values: **3** when there is insufficient data to score a device. **4** when the score is out of the range [-100, 100].

Scoring (SC01) Segment — Total length: 34 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
First Factor	21	3	A/N	If the preceding AO01 segment's Service Status = **01**, display the severest device scoring factor code. If the preceding AO01 segment's Service Status = **06**, this field is blank.
Second Factor	24	3	A/N	If the preceding AO01 segment's Service Status = **01**, display the 2nd severest device scoring factor code. If the preceding AO01 segment's Service Status = **06**, this field is blank.
Third Factor	27	3	A/N	If the preceding AO01 segment's Service Status = **01**, display the 3rd severest device scoring factor code. If the preceding AO01 segment's Service Status = **06**, this field is blank.
Fourth Factor	30	3	A/N	If the preceding AO01 segment's Service Status = **01**, display the 4th severest device scoring factor code. If the preceding AO01 segment's Service Status = **06**, this field is blank.

Sample of FFR for Identity Manager Verification 2.0 Standalone with Device Verification Service Result

The purpose of the sample is to illustrate how the Device Verification service result is returned rather than to show a complete Identity Manager Verification 2.0 FFR with all possible data. Refer to Identity Manager Verification 2.0 on page 121 for more information on the Identity Manager Verification 2.0 standalone service output. The bold segments in the sample below indicate the Device Verification service result or the existing Identity Manager Verification 2.0 FFR section that is impacted by the Device Verification service.

```
TU4R …
…
PH01 … 06672
…
VS01 … HIGH … +136 .
    MC01 … KMSG06 …
    MT01 … KMSG06 … SSN RELATED ALERT
    MC01 … KMSG13 …
    MT01 … KMSG13 … DEVICE RELATED ALERT
    MC01 … KMSG04 …
```

```
    MT01 … KMSG04 … REPORTED OR SUSPECTED FRAUD RELATED ALERT
…
AO01 … 0065501 .
    SC01 … 00655-53 … 829711852728 …
    MC01 … 8829 A …
    MT01 … 8829 … MULTIPLE IP ACCESS IN A DAY
    MC01 … 8711 A …
    MT01 … 8711 … IP ADDRESS BLACKLISTED
    MC01 … 8852 A …
    MT01 … 8852 … DEVICE TRUE GEO DIFFERENT FROM PROXY GEO
    MC01 … 8728 A …
    MT01 … 8728 … COOKIES DISABLED
    MC01 … 8854 A …
    MT01 … 8854 … LANGUAGE MISMATCH FOR TRUE GEO
    MC01 … 8826 A …
    MT01 … 8826 … PROXY IP IS HIDDEN
END1 …
```

Explanation for the FFR sample:

- It is assumed that the subscriber is set up to receive the Identity Manager Verification 2.0 Verification Summary and to receive the Verification Summary Key Messages and Device Verification alert messages in both codes and text.
- The Device Score for the transaction is -53.
- The top four scoring factors for the Device Score, in the order of their ranking, are 829, 711, 852 and 728.
- A total of six Device Alert messages are triggered and returned to the subscriber. These messages are, in the order of their ranking, 8829, 8711, 8852, 8728, 8854 and 8826.
- The “Device Related Alert” key message (KMSG13) is returned in the Identity Manager Verification 2.0 Verification Summary.

Error Handling for Device Verification

When the Device Verification service encounters an error, the service will return the error code in an AO01 segment and a SC01 segment in some circumstances. The table below summarizes the error handling.

Error Scenario	AO01		SC01		Description for AO01 Search Status or SC01 Scoring Indicator
	Service Status	Search Status	Returned?	Scoring Indicator	
Device Verification data provider returns an invalid response.	02	043	No		Invalid response from service server
Device Verification data provider returns an “internal system error”.	02	051	No		Internal system error returned for desired service
Connection to Device Verification data provider fails.	02	052	No		Unable to connect to data provider

Error Scenario	AO01		SC01		Description for AO01 Search Status or SC01 Scoring Indicator
	Service Status	Search Status	Returned?	Scoring Indicator	
Connection to Device Verification data provider has timed out.	02	053	No		Request to data provider timed out
Device Verification data provider's system is temporarily unavailable.	02	090	No		The service requested is not available at this time
Subscriber is not eligible for DVS add-on but requested it in the Identity Manager Verification 2.0 standalone FFI.	03		No		
Insufficient data in the data provider's database to score the device.	06		Yes	03	Cannot be scored due to thin file
Device Verification data provider returns a Device Score that is out of range.	06		Yes	04	Score out of range
Service request to Device Verification data provider fails API verification. Subscriber provided Device Verification input data is incomplete or incorrect. Subscriber provides more than one same type of input data, for example, provides API Key twice.	10	054	No		Invalid, incomplete, not formatted correctly, or duplicate type of input data to data provider
Subscriber requests with only an RA01 without any MD03 segment for Device Verification required data. Subscriber provides some but not all 6 Device Verification required input data. Subscriber provides all Device Verification required data but some of the data is invalid as per data provider validation.	12	478	No		Insufficient input

Device Verification Alert Message Codes and Descriptions

Refer to the Device Verification message guide for alert message codes and descriptions. For more information or for a copy of the guide, please see your TransUnion account representative.

FDCPA Case Search

Service Code 07460

The FDCPA Case Search alerts collectors about individuals that may have previously been involved in Fair Debt Collection Practices Act (FDCPA) litigation to assist them in determining strategy. This service is permitted only for collection purposes.

Fixed Format Inquiry (FFI)

FDCPA Case Search is available only by default, per the subscriber validation setting. There is no way to override the default setting at the transactional level. After a subscriber code is activated at the default level, all subsequent transactions will request this add-on service.

EU01 (End Usage) Segment

Subscribers with a KOB of Y (third-party collections) and a permissible purpose type of **0** already specified in their subscriber settings do not have any additional requirements. All other subscribers must include an EU01 segment in the FFI with one of these permissible purpose codes:

CL	Collection of an account.
AR	Intends to use the information as a potential investor, servicer, or current insurer in connection with a valuation of, or assessment of, the credit or prepayment risks.

Any company who is using this service to evaluate a portfolio for purchase should use the **AR** permissible purpose code.

FDCPA Case Search is currently available on the following primary services:

- Credit Report
- Collection Credit Report
- CPE 2.0, batch only

FDCPA can be returned in the FFR or on a print image.

Fixed Format Response (FFR)

The Credit Report FFR returns an AO01 (Add-on Status) segment to indicate whether the FDCPA Case Search request was successfully processed. The FFR contains the service code (07460) and one of these Search Status indicators:

F01 FDCPA Case Search no-hit

F02 FDCPA Case Search potential hit
Blank Service not delivered because the requested service is not available or the requested information is suppressed or cannot be evaluated.

Geo Code

Service Code 07011

Geo Code is an add-on service that is delivered with the Credit Report. It matches the input nine-digit ZIP Code to the Geo Code database and returns geographical coding information: latitude, longitude, census tract/block numbers, Metropolitan Statistical Area (MSA), and state and county codes. If the input ZIP Code has less than nine digits, Geo Code uses the input address information to locate the full nine-digit ZIP Code.

Geo Code information is returned only for current or future addresses, not previous addresses. Geo Code **can** return information for a no-hit. Be sure your code can handle the possibility of an AO01 segment returned with a no-hit.

The default is the setting in the subscriber validation file. Geo Code cannot be requested at the transaction level.

Fixed Format Inquiry (FFI)

Below is a sample FFI showing the order in which address segments must be sent. The current address is entered in the first AD11/UA11 segment, previous address in the second AD11/UA11 segment, and future address is entered in the FA11/UF11 segment following the AD11/UA11 segments.

Segment ID	Segment Name
TU4I	Transaction Control
EU01	End Usage
CD01	Customer Data
SH01	Subject Header
NM11	Name
NM11	Name (Alias)
PI11	Personal Information
ID01	Identification
AD11/UA11	Address (Current)
AD11/UA11	Address (Previous)
FA11/UF11	Address (Future)
PN01	Phone Number
EM11	Employment
AD11/UA11	Employment Address

Segment ID	Segment Name
RP01	Request Service (Credit Report)
OR01	Optional Request
AI01	Additional Information
OD01	Output Delivery
RA01	Request Add-on Service (High Risk Fraud Alert)
END1	End

Geo Code Processing Rules

This section describes some input processing rules for Geo Code:

- A request for Geo Code does **not** require an RA01 segment because control for this service is only through the subscriber validation file. If an RA01 segment is entered with service code 07011, the segment is ignored.
- Geo Code requires a nine-digit ZIP Code. Input addresses with only a five-digit ZIP Code or no ZIP Code may still be geo-coded if the input includes a valid address, city, and state code. Subscribers, however, should be encouraged to enter a nine-digit ZIP Code in order for Geo Code to return the proper results.
- Rural Route and Post Office Box addresses do **not** provide sufficient address data for obtaining the nine-digit ZIP Code. Rural Route and Post Office Box addresses without a nine-digit ZIP Code will be returned with a message of "Insufficient address."
- Geo Code information can be returned for a current address, a future address, or a current address **and** a future address.

  — Joint requests may have two input current addresses geo-coded if the input addresses are different. If the current input addresses are the same, only one current address is geo-coded.
  — Only one future address may be geo-coded for an individual or joint inquiry. If more than one future address is received, the second future address segment is ignored.

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Geo Code in the order returned.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Geo Code)	The AO01 segment returns one of the following codes in the Search Status field: **G00** Geo Code No Match **G01** Zip Code Invalid **G02** Geo Code Match **G03** Geo Code Search Not Performed When No Subject Found **G04** No Future Address Entered **G05** No Current Address Entered

Segment ID	Segment Name	Notes
		G06 Insufficient Future Address **G07** Insufficient Current Address **G08** Geo Code Search Error **G09** Geo Code Not Available
GC01	Geo Code – Status and data	
AD11/UA11	Current Address Entered	
AO01	Add-on Status	
GC01	Geo Code – Status and data	
FA11/UF11	Future Address Entered	

High Risk Fraud Alert

Service Code 06500

High Risk Fraud Alert is an add-on service that is delivered with other TransUnion standalone services. High Risk Fraud Alert was designed to assist organizations in detecting high-risk, suspicious and known fraudulent addresses, social security numbers, and telephone numbers.

Note: High Risk Fraud Alert can return information even for a no-hit. Be sure your code can handle the possibility of an AO01 segment returned with a no-hit.

Fixed Format Inquiry (FFI)

Use the RA01 segment to request High Risk Fraud Alert in the FFI. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

High Risk Fraud Alert Processing Rules

This section describes how to use the RA01 segment with High Risk Fraud Alert.

RA01 (Request Add-on) Segment

To request High Risk Fraud Alert, the service code 06500 must be provided in a Request Add-on Service segment. One of the following processing request options can also be provided:

Y Perform High Risk Fraud Alert Search. This is the default option. Return any of the following segments:

QH01 (Inquiry History)—code 2501 or 5501
MC01 (Message Code)—all codes except 2501/5501/5503/5504/6000
DC11 (Deceased Information)—code 6000
YI01 (Year of Issuance)—code 5503 or 5504

M Perform High Risk Fraud Alert Search. Return Message Text (MT01) segment only.

B Perform High Risk Fraud Alert Search. Return any of the following segments:

QH01 (Inquiry History) —code 2501 or 5501
MC01 (Message Code)—all codes except 2501/5501/5503/5504/6000
DC11 (Deceased Information)—code 6000
YI01 (Year of Issuance)—code 5503 or 5504
MT01 (Message Text)

If one of these options is not provided, the system defaults to the subscriber validation file setting.

High Risk Fraud Alert can be requested with the following standalone services:

- Credit Report
- SSN Search
- SSN Report
- ID Search (07400)
- ID Search (07760)
- ID Report (07450)
- ID Report (07770)
- Employment Credit Report
- Government Report
- ID Report with Score
- Model Report
- Collection Credit Report
- Total ID Report
- CPE 2.0

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the High Risk Fraud Alert service in the order of return:

Segment ID	Segment Name	Notes
AO01	Add-on Status (High Risk Fraud Alert)	Included in the Add-on Status Segment may be one of the following High Risk Fraud Alert Search Status codes: **H01** Available and Clear **H02** Partially Available
QH01	Inquiry History	

Segment ID	Segment Name	Notes
MC01	Message Code	
DC11	Deceased Information	
YI01	Year Of Issuance	
MT01	Message Text	

High Risk Fraud Alert Messages

The High Risk Fraud Alert messages and message codes are listed in the following tables. The message tables are in this order:

- Address
- Social security number
- Telephone number
- System messages

TransUnion anticipates regular additions of new High Risk Fraud Alert messages. We therefore strongly recommend establishing default ranges where indicated (on the following message tables) to handle unrecognized new message codes.

High Risk Fraud Alert Address Messages

Address Message Text	Code	Notes
Input/File (Current/Previous) Address Is A Mail Receiving/ Forwarding Service	0001	
Input/File (Current/Previous) Address Is A Hotel/Motel Or Temporary Residence	0002	
Input/File (Current/Previous) Address Is A Credit Correction Service	0003	
Input/File (Current/Previous) Address Is A Camp Site	0004	
Input/File (Current/Previous) Address Is A Secretarial Service	0005	
Input/File (Current/Previous) Address Is A Check Cashing Service	0006	
Input/File (Current/Previous) Address Is A Restaurant /Bar/ Night Club	0007	
Input/File (Current/Previous) Address Is A Storage Facility	0008	
Input/File (Current/Previous) Address Is An Airport/Airfield	0009	
Input/File (Current/Previous) Address Is A Truck Stop	0010	
Input/File (Current/Previous) Address Is Commercial (Default For Codes 001 - 0500)	**0500**	Default codes are returned very rarely.

Address Message Text	Code	Notes
Input/File (Current/Previous) Address Is A Correctional Institution	0501	
Input/File (Current/Previous) Address Is A Hospital Or Clinic	0502	
Input/File (Current/Previous) Address Is A Nursing Home	0503	
Input/File (Current/Previous) Address is Institutional (Default For Codes 0501 - 1000)	**1000**	Default codes are returned very rarely.
Input/File (Current/Previous) Address Is A U.S. Post Office	1001	
Input/File (Current/Previous) Address Is Governmental (Default For Codes 1001 - 1500)	**1500**	Default codes are returned very rarely.
Input/File (Current/Previous) Address Has Been Reported As Suspicious (POB:#)	1501	
Input/File (Current/Previous) Address Is A Multi-Unit Building Reported As Suspicious (Unit: #)	1502	
Input/File (Current/Previous) Address Has Been Reported Misused And Requires Further Investigation (Unit: #)	1503	
Input/File (Current/Previous) Address Is A Multi-Unit Building Reported Misused And Requires Further Investigation (Unit: #)	1504	
Input/File (Current/Previous) Address Is Reported Used In True-Name Fraud Or Credit Fraud	2001	
Input (Current/Previous) Address Has Been Used (#) Times In The Last (30,60,90) Days On Different Inquiries	2501	
Input/File (Current/Previous) Address Has Been Reported More Than Once (Up To 10 POB Or Unit #S)	2502	

Note: A POB or Unit # may follow any of the address messages except for messages 1502 and 1504. These two message may have a Unit #, but never a POB.

All address messages have a maximum of one POB or Unit # returned with the exception of message 2502, which has a maximum of 10. Unit #s and POBs display in the following format: (Unit: #) or (POB: #). An example of message 2502 output is: (UNIT: 1A, 2B, 3C) or (POB: 22A, 34B).

High Risk Fraud Alert Social Security Number Messages

Social Security Number Message Text	Code	Notes
Input/file SSN reported as suspicious or minor SSN	3001	
Input/file SSN reported misused and requires further investigation	3003	

Social Security Number Message Text	Code	Notes
Input/file SSN reported used in true-name fraud or credit fraud	3501	
Input/file SSN reported deceased	4001	
Input/file SSN is not likely issued prior to June 2011	4501	
Input SSN has been used (#) times in the last (30,60,90) days on different inquiries	5501	
Input/file SSN associated with additional subject(s) not displayed/returned	5502	
Input/file SSN issued within last (2,5,10) years; year issued: xxxx-xxxx; state: xx; (est. Age obtained: xx to xx)	5503	
Input/file SSN issued:xxxx-xxxx; state:xx; (est. Age obtained:xx to xx)	5504	
Input/file SSN used in death benefits claim for John Consumer. DOB:01/01/1950. DOC: 02/02/1990. Zip code where benefits were paid is 60657, most likely Chicago, IL. Zip code last residence is 60657, most likely Chicago, IL.	6000	

Note: The 5502 Message will not be returned with the following services: SSN Search, SSN Report, Government Report, and High Risk Fraud Search. The 5503/5504 message will not be returned for Employment Credit Report.

High Risk Fraud Alert Telephone Number Messages

Telephone Number Text	Code	Notes
Input/file telephone number is an answering service	6001	
Input/file telephone number is a cellular telephone	6002	
Input/file telephone number is a public/pay telephone	6003	
Input/file telephone number is commercial	6500	
Input/file telephone number is institutional	7000	
Input/file telephone number is governmental	7500	
Input/file telephone number reported as suspicious	7501	
Input/file telephone number reported misused and requires further investigation	7503	
Input/file telephone number reported used in true-name fraud or credit fraud	8001	
Input telephone number requires further investigation (Default for codes 6001- 9000)	**9000**	Default codes are returned very rarely.

> **Note:** All telephone messages are followed by the telephone number that matched the phone number on the High Risk Fraud Alert database. The area code is derived from the ZIP Code in the current address and the telephone prefix. Telephone numbers display in the following format: (TEL: Area Code-Telephone Number). An example is (TEL: 312-555-8761).

No telephone messages are returned with SSN Search, ID Search or Government Report services.

System-Generated Messages

Message Text	Code
Input address(es), SSN and/or telephone number reported together in suspected misuse.	9001
Input/file addresses, SSN, or telephone number reported by more than one source	9002
Security alert or consumer statement on file relates to true name or credit fraud	9003
Active duty alert on file	9004
Initial fraud alert on file	9005
Extended fraud victim alert on file	9006
Clear for all searches performed	9997

> **Note:** Messages 9003-9006 will not be returned with these services: Government Report, ID Search (previously IDSearch and ReTRACE), ID Report (previously ReTRACEplus), SSN Search, and High Risk Fraud Search.

System Availability Messages

Message Text	Code
High Risk Fraud Alert system is partially available	9996
High Risk Fraud Alert system is temporarily unavailable	9998
High Risk Fraud Alert system access not authorized	9999

ID Mismatch Alert

Service Code 06400

ID Mismatch Alert is an add-on service that is available with many TransUnion services. It highlights mismatched addresses (comparing the input current address to the file address), invalid ZIP codes, SSN mismatch conditions, and inquiry activity.

ID Mismatch Alert subscribers also have the option of receiving a field-by-field comparison of the input address elements to the file address elements. The results of this analysis are returned in the Address Analysis (AM01) segment.

ID Mismatch Alert information is not requested in the FFI but, for subscribers with the appropriate subscriber validation setting, it is automatically returned for each subject requested.

Note: TransUnion subscribers will get the address mismatch service only as required by law.

Fixed Format Response (FFR)

The following list shows where the ID Mismatch Alert and Address Analysis segments are returned for a subject in the FFR:

Segment ID	Segment Name
PH01	Service Header
SH01	Subject Header
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert
AM01	Address Analysis
ETC.	

Note: One TA01 segment is returned for each ID Mismatch Alert message issued. If there are no mismatches between input and file data and no inquiry activity to report, no ID Mismatch Alert messages are issued.

Identity Alerts

Service Code 06502

The Identity Alerts add-on service provides additional insight into consumer identities by using technically advanced algorithms to detect new fraud threats such as synthetic fraud (fabricated identity elements from multiple consumers combined into a single false identity), application velocity (identity elements used multiple times over a certain time period), and relational anomalies (suspicious links between identities or identity elements).

Fixed Format Inquiry (FFI)

The Identity Alerts add-on service is available for the following primary services:

- Credit Report — Required consumer indicative data depends on the subscriber's setup for input method. Refer to Credit Report on page 52 for details.
- Identity Manager Verification 2.0 — Required consumer indicative data is full name and full address.

Note: Since the Identity Alerts service is only delivered through the Identity Manager Verification 2.0 platform, in addition to being eligible for Credit Report, subscribers must also be eligible for both Identity Alerts (service code: 06502) and the Identity Manager Verification 2.0 add-on (service code: 06682) in order to receive the Identity Alerts result in a Credit Report service response. The Identity Alerts service is also available with the Identity Manager Verification 2.0 standalone service (service code: 06672).

Configuration options include:

- Select up to 30 alert messages to be returned in the Identity Alerts service.
- Assign risk points/weights for the Identity Alerts messages to be evaluated in the Identity Manager Verification 2.0 Verification Summary.

Fixed Format Response (FFR)

The Identity Alerts service returns suspicious identity and fraud alert messages. The following data will be returned for an Identity Alerts message:

- Message Code (MC01): always returned.
- Message Text (MT01): returned only if subscriber is set up to receive message text.

Note: Identity Manager Verification 2.0 subscribers may receive the Verification Summary in which the Identity Alerts result is integrated for improved risk determinations of High Risk, Medium Risk or Low Risk for each transaction. Please contact your TransUnion account representative to learn how to receive the Verification Summary in the Identity Manager Verification 2.0 service response.

The following list shows the segments that may be returned for Identity Alerts in the order of return. Refer to Credit Report on page 52 for more information about results for the Credit Report. Refer to Identity Manager Verification 2.0 on page 121 for more information about results for the Identity Manager Verification 2.0 standalone service.

Segment ID	Segment Name	Maximum Returned
AO01	Add-on Status (Identity Alerts)	1 Per Add-on Service
MC01	Message Code	1 Per Message
MT01	Message Text	1 or More per Message depending on length of Message Text

Identity Alerts FFR Segments Details

The following sections provide details on how Identity Alerts results are returned in the FFR segments.

Rules or explanations for the segments' data fields are provided in the last column in the tables. Fields not described in these tables are not used by Identity Alerts.

AO01 (Add-on Status) Segment

Add-on Status (AO01) Segment — Total length: 17 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Requirement for Identity Alerts**
Service Status	13	2	A/N	Specifies whether the service is available. Possible values are: **02** - Requested service not available **04** - Default service delivered **06** - Requested information cannot be scored or returned because data is suppressed or cannot be evaluated.	**02** - This code will be returned when connection to the data provider's system fails because of a network issue, time-out or data provider's system error. **04** - This code will be returned when the Identity Alerts add-on service is returned successfully. **06** - This code will be returned when the data provider returns an error response indicating a user error. Note: all other values not mentioned above are not applicable for the Identity Alerts service.
Search Status	15	3	A/N	Displays the result of special processing for the add-on service. This field applies only to certain add-ons.	When Service Status = 04, the following codes may be returned: **T01** Search Clear/No Result Returned - This code will be returned when no Identity Alerts message is triggered OR when Identity Alerts messages are triggered but none of them are returned because of de-duping. **T02** Search Result Returned - This code will be returned when Identity Alerts messages are returned.

Add-on Status (AO01) Segment — Total length: 17 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Requirement for Identity Alerts**
					When Service Status = 02, the following codes may be returned: **051** Internal system error returned for desired service - This code will be returned when the data provider returns a “SYSTEM” error response. **052** Unable to connect to data provider - This code will be returned when connection to the data provider fails. **053** Request to data provider timed out - This code will be returned when connection to the data provider is timed out. When Service Status = 06, the following error codes may be returned: **054** Invalid, incomplete, misformatted, or duplicate type of input data to data provider - This code will be returned when the data provider returns a “USER” error response.

MC01 (Message Code) Segment

Message Code (MC01) Segment — Total length: 29 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Requirement for Identity Alerts**
Source Indicator	14	1	A/N	Indicates the source of the message code. Possible values are: **I** - Data received in the inquiry **H** - Data that appears in the Source H database	**I** - This code will be returned when an Identity Alerts message (except for the message code 9010, 9015 or 9020) is returned based on the input data. **H** - This code will be returned when the Identity Alerts message 9010, 9015 or 9020 is returned based on data in the vendor database. Note: all other values not mentioned are not applicable for the Identity Alerts service.
Address Match Flag	15	1	A/N	Indicates which address was used in the matching process. Possible values are: **C** - Current address **P** - Previous address	**C** - This code will be returned when an address related Identity Alerts message is returned. blank - This field will be blank when a non-address related Identity Alerts message is returned.

MT01 (Message Text) Segment

The MT01 segment contains message text. The FFR includes an MT01 segment for each message returned. If the message is longer than 150 characters, multiple MT01 segments are returned to hold the message.

Sample FFR of a Credit Report with Identity Alerts Service Results

A sample FFR containing the Identity Alerts service results is provided below:

```
AO010170650204T02
    MC010291540  IC
```

```
    MT011711540  06711  INPUT CURRENT ADDRESS LINKED TO
UNUSUAL NUMBER OF PHONES IN 2 YEARS
```

Explanation for result:

- The Identity Alerts service (06502) results are returned only when the Identity Manager Verification 2.0 add-on (06682) is delivered.
- The Identity Alerts service returns a message with code 1540 and corresponding message text "Input current address linked to unusual number of phones in 2 years".
- Identity Manager Verification 2.0's Verification Summary returns the Identity Risk Indicator 1 (i.e., high risk), which is partially due to the above mentioned Identity Alerts message.
- Identity Manager Verification 2.0's Verification Summary returns the Key Message "KMSG07 - Address related alert", which is triggered by the above-mentioned Identity Alerts service messages.

Identity Alerts Service Message Codes and Descriptions

The Identity Alerts message codes and text descriptions are presented below.

Code	Description (Message Text)
1520	Input current address linked to unusual number of phones in 1 year
1540	Input current address linked to unusual number of phones in 2 years
4003	Input SSN reported as deceased
4090	Unable to confirm input current address in association with other elements
4091	Unable to confirm input phone in association with other elements
4092	Unable to confirm input name and DOB in association with other elements
4093	Unable to confirm input SSN in association with other elements
4210	Input name and DOB linked to unusual number of phones in 1 year
4235	Input name and DOB linked to unusual number of phones in 2 or more years
4300	Unusual number of recent inquiries using input current address
4305	Unusual number of recent inquiries using input SSN
4310	Unusual number of recent inquiries using input phone
4315	Unusual number of recent inquiries using input name and DOB
4505	Input SSN associated with different name
4556	Input SSN is invalid
5215	Input SSN linked to unusual number of addresses in 1 year
5235	Input SSN linked to unusual number of addresses in 2 years
5250	Input SSN linked to unusual number of names in 1 year
5275	Input SSN linked to unusual number of names in 2 or more years
5290	Input SSN linked to unusual number of phones in 1 year
5315	Input SSN linked to unusual number of phones in 2 or more years

Code	Description (Message Text)
8025	Input phone linked to unusual number of addresses in 1 year
8045	Input phone linked to unusual number of addresses in 2 years
9010	Potential synthetic fraud pattern match
9015	Synthetic fraud pattern match
9020	True name fraud pattern match
9025	Input current address associated with reported fraud
9031	Input SSN associated with reported fraud
9035	Input phone associated with reported fraud
9040	Input name and DOB associated with reported fraud

Identity Manager Verification

Service Code 06680

Identity Manager Verification is a verification tool that helps financial organizations reduce fraud while complying with the increasing number of federal regulations. Identity Manager Verification checks input against multiple databases, analyzes the results, and returns various fraud messages and fraud model scores.

Note: Identity Manager Verification is also available as a standalone service—refer to Standalone Service Descriptions on page 26 for a description. Both standalone and add-on versions of Identity Manager Verification may return the ID Score Model (one of the ID Analytics models) as an add-on.

Note: TransUnion now offers Identity Manager Verification 2.0 (service code: 06682) which returns a risk summary and allows subscribers to define risk thresholds.

Fixed Format Inquiry (FFI)

The Identity Manager Verification add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Identity Manager Verification Processing Rules

This section describes how to use the RA01 (Request Add-on) segment to request Identity Manager Verification for subscribers set up to receive it per their Identity Manager Verification subscription form.

RA01 (Request Add-on) Segment

To request Identity Manager Verification, the service code 06680 must be provided in a Request Add-on Service segment. One of the following processing request options can also be provided:

Y Perform Identity Manager Verification search. This is the default option. Return any of the following segments:

MC01 (Message Code)
DC11 (Deceased Information)

M Perform Identity Manager Verification search. Return Message Text (MT01) segment only.

B Perform Identity Manager Verification search. Return any of the following segments:

MC01 (Message Code)
DC11 (Deceased Information)
MT01 (Message Text)

Note: The message text segment can only be returned if requested in input.

If one of these options is not provided, the system defaults to **Y**.

Identity Manager Verification can be requested on the following standalone services:

- Credit Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Identity Manager Verification in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Identity Manager Verification)	The first AO01 segment returned for Identity Manager Verification indicates the start of the messages portion of the service. It contains a service code of 06680 and one of the following Identity Manager Verification Search Status codes: **F01** - Identity Manager Verification Clear **F02** - Identity Manager Verification Hit **F03** - Identity Manager Verification Unavailable **F04** - Identity Manager Verification System Error **F05** - Identity Manager Verification Input Error
MC01	Message Code	
DC11	Deceased Information	
MT01	Message Text	This segment is returned only if the subscriber is set up to receive it or when requested in the input with the RA01 segment. The default is to return messages in MC01 segments.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Generic Fraud Model)	The second AO01 segment returned for Identity Manager Verification indicates the start of the generic Fraud Model portion of the FFR. It contains a service code of 00R85 and one of the Identity Manager Verification Search Status codes listed above.
SC01	Scoring	
AO01	Add-on Status (ID Score Model)	The third AO01 segment returned for Identity Manager Verification indicates the start of the ID Fraud Model portion of the FFR. It contains a service code of 00662 and one of the Identity Manager Verification Search Status codes listed above.
SC01	Scoring	
TT01	Transaction Tracking	

For a complete list of Identity Manager Verification messages, refer to the description of the Identity Manager Verification standalone service in Standalone Service Descriptions on page 26.

Multi-Source Matching Summary

The Multi-Source Matching Summary delivers match information about the input indicative data against the file data returned through the Identity Manager Verification service. The summary identifies how well the input first and last names, address, and social security number match the same information found in two different source files. For the Identity Manager Verification add-on service, the Multi-Source Matching Summary information is returned in the MC01 segment and/or MT01 segment depending on the subscriber's setup or if being requested in the input.

The summary is returned only if the subscriber is set up to receive it as per the Identity Manager Verification Subscription Form.

Here are the four message codes returned for the Multi-Source Matching Summary:

Text	Code
First Name Match Results	100001
Last Name Match Results	100002
Address Match Results	100003
SSN Match Results	100004

Combined with the threshold information returned in the MT01 segment, the summary returns one of these detailed messages in the MT01 segment:

Message Code	Threshold #	Message Text
100001	A01	First name match results – Source A no match

Message Code	Threshold #	Message Text
100001	A02	First name match results – Source A match
100001	A03	First name match results – Source A partial match
100001	A04	First name match results – Source A not found
100002	A01	Last name match results – Source A no match
100002	A02	Last name match results – Source A match
100002	A03	Last name match results – Source A partial match
100002	A04	Last name match results – Source A not found
100003	A01	Address match results – Source A no match
100003	A02	Address match results – Source A match
100003	A03	Address match results – Source A partial match
100003	A04	Address match results – Source A not found
100004	A01	SSN match results – Source A no match
100004	A02	SSN match results – Source A match
100004	A03	SSN match results – Source A partial match
100004	A04	SSN match results - Source A not found
100004	A05	SSN match results – Source A last four match
100001	C01	First name match results – Source C no match
100001	C02	First name match results – Source C match
100001	C03	First name match results – Source C partial match
100001	C04	First name match results – Source C not found
100002	C01	Last name match results – Source C no match
100002	C02	Last name match results – Source C match
100002	C03	Last name match results - Source C partial match
100002	C04	Last name match results – Source C not found
100003	C01	Address match results – Source C no match
100003	C02	Address match results – Source C match
100003	C03	Address match results – Source C partial match
100003	C04	Address match results – Source C not found
100004	C01	SSN match results – Source C no match
100004	C02	SSN match results – Source C match
100004	C03	SSN match results – Source C partial match
100004	C04	SSN match results – Source C not found
100005	C05	SSN match results – Source C last four match

Identity Manager Verification Alert Messages

For a complete list of Identity Manager Verification messages, refer to the description of the Identity Manager Verification standalone service.

Identity Manager Verification 2.0

Service Code 06682

Identity Manager Verification 2.0 add-on service is a verification tool that helps organizations reduce fraud while complying with the increasing number of federal regulations. Identity Manager Verification 2.0 checks input consumer identity data against multiple databases, analyzes the results, and returns various fraud messages, match results, file data, and fraud model score(s).

Following are the major differences between Identity Manager Verification 2.0 (service codes 06672 and 06682) and Identity Manager Verification (service codes 06670 and 06680):

- Identity Manager Verification 2.0 allows a subscriber to assign a risk point for each fraud message and indicative data matching result to designate what fraud messages to return when triggered. Identity Manager Verification allows only the subscriber designation of what fraud messages to return when triggered.
- Identity Manager Verification 2.0 allows subscribers to define risk thresholds to meet their unique business needs. Identity Manager Verification does not support this feature.
- Identity Manager Verification 2.0 returns a Verification Summary to indicate whether the identity risk is high, medium or low according to the subscriber's previously-set risk definition. If the subscriber is set up to verify against multiple data sources, the Verification Summary also indicates to which data source the input identity information best matches. Identity Manager Verification does not support the Verification Summary feature.
- Identity Manager Verification 2.0 returns more data matching results in the Multi-source Matching Summary than Identity Manager Verification does. For example, Identity Manager Verification 2.0 matches date of birth, middle name, generation suffix, previous address, and phone number whereas Identity Manager Verification does not perform matching for these data sets.
- Besides the above differences, Identity Manager Verification 2.0 **add-on** service returns results significantly different from those of Identity Manager Verification:

  — The Identity Manager Verification 2.0 add-on returns the Multi-source Matching Summary in the dedicated Subject Verification (SV03) segments whereas Identity Manager Verification add-on returns those results as messages (in multiple MC01 segments and/or MT01 segments).
  — The Identity Manager Verification 2.0 add-on returns detailed input data analysis (in ZC01 segment, RE01 segment, ML02 segment and DA01 segment) whereas the Identity Manager Verification add-on returns only fraud messages (in MC01 segments and/or MT01 segments) without the detailed input data analysis.
  — The Identity Manager Verification 2.0 add-on unbundles the ID Score (service code 00662) and the Generic Fraud Model (service code 00R85) and treats them as independent model services whereas the Identity Manager Verification add-on bundles both models as an integral part of the add-on service.

Note: Identity Manager Verification 2.0 is also available as a standalone service. Refer to Standalone Service Descriptions on page 26 (service code: 06672) for more information.

Fixed Format Inquiry (FFI)

The Identity Manager Verification 2.0 add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Identity Manager Verification 2.0 Processing Rules

This section describes how to use the RA01 (Request Add-on) segment to request Identity Manager Verification 2.0 as an add-on.

RA01 (Request Add-on) Segment

To request Identity Manager Verification 2.0, the service code 06682 must be provided in a Request Add-on Service segment. When a subscriber sets up the Identity Manager Verification 2.0 service in the TransUnion system, the subscriber can choose to have fraud messages returned, by default, in codes only, text only, or both codes and text. If the subscriber wants to override the default setup to return messages differently for a particular transaction, one of the following Processing Request options can also be provided in the RA01 segment:

Y Override the subscriber default setup and return message codes only in the following segments:

MC01 Message Code
DC01 Deceased Information

M Override the subscriber default setup and return message text only in the following segment.

MT01 Message Text

B Override the subscriber default setup and return both message codes and text in the following segments:

MC01 Message Code
DC01 Deceased Information
MT01 Message Text

Identity Manager Verification 2.0 (service code: 06682) add-on service can only be requested on the Credit Report standalone service.

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Identity Manager Verification 2.0 in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Identity Manager Verification 2.0)	Identity Manager Verification 2.0 is able to return up to 111 alert messages for a subject's identity information from a specific source (input, TransUnion credit file, or a non-credit data source). All the Identity Manager Verification 2.0 messages will be grouped in the section under the AO01 segment that contains the Service Code **06682**. If no Identity Manager Verification 2.0 message is triggered, the Search Status returns value **F01**. Otherwise, **F02** is returned.
VS01	Verification Summary	The Verification Summary information (VS01 and the following MC01 and MT01 segments) will be returned only if the subscriber is set up for this Identity Manager Verification 2.0 feature. Up to five MC01 segments (and MT01 segment if subscriber is set up to return the Key Messages text) may follow the VS01 segment to reveal the codes (and text) of the Key Messages related to the risk level that is returned in the VS01 segment.
MC01	Message Code (Verification Key Message Code)	
MT01	Message Text (Verification Key Message Text)	
SV03	Subject Verification (Input vs. TU File)	The indicative information matching results will be returned in the SV03 segments only if subscriber is set up for this Identity Manager Verification 2.0 feature. Up to two SV03 segments may be returned if subscriber is set up to verify input data against multiple data sources.
SV03	Subject Verification (Input vs. Non-credit Source File)	
PN02	Phone Number (for input personal phone)	
ZC01	ZIP Code (for input current address ZIP analysis)	
RE01	Region Analysis (for analysis on input current address city, state, ZIP code, and phone)	
ZC01	ZIP Code (for input employment address ZIP analysis)	

Segment ID	Segment Name	Notes
RE01	Region Analysis (for analysis on input employment address city, state, ZIP code, and phone)	
ML02	Mileage (for analysis on distance between input personal and employment locations)	
DA01	Data Analysis (for input Driver's License analysis)	
MC01	Message Code	Depending on the subscriber setup or processing request provided in the service inquiry, the messages will be returned in MC01 segments only (DC01 segment for message 6000 and YI01 segment for message 5505), MT01 segments only, or both MC01 segments (DC01 segment for message 6000 and YI01 segment for message 5505) and MT01 segments.
DC11	Deceased Information (for Message 6000)	
YI01	Year of Issuance (for Message 5505)	
MT01	Message Text	

Identity Manager Verification 2.0 Key Messages and Alert Messages

For a complete list of Identity Manager Verification 2.0 Key Messages and alert messages, refer to the description of the Identity Manager Verification 2.0 standalone service in Standalone Service Descriptions on page 26.

Inquiry Analysis

Service Code 07640

Inquiry Analysis enables the subscriber to view a comprehensive history of inquiries made to a consumer's file within the past 90 days. This add-on service is a collection tool that subscribers use to receive additional address and phone information to help locate and contact debtors.

Fixed Format Inquiry (FFI)

Use the RA01 segment to request Inquiry Analysis in the FFI. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Inquiry Analysis Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Inquiry Analysis.

RA01 (Request Add-on) Segment

To request Inquiry Analysis, the service code 07640 can be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber code.

Inquiry Analysis can currently be requested on the following primary services:

- Credit Report
- Collection Credit Report
- SSN Report
- ID Report (07770)
- CPE 2.0

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Inquiry Analysis in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status	Included in the Add-on Status Segment may be one of the following Inquiry Analysis Search Status codes: **I01** Hit (service delivered) **I02** No Hit (service not delivered) **I03** Not captured **I04** Service suppressed **I05** Error
IN11	Inquiry	
NM11	Name	
NM11	Name (maternal)	
AD11	Address (current)	
AD11	Address (previous)	
PN01	Phone Number	
EM11	Employment	

Lender Score Disclosure

Service Code 06300

Lender Score Disclosure is a regulatory compliance service for lenders who underwrite loans secured by real property for a consumer purpose. To help lenders comply with Section 609 of the FCRA (part of the FACT Act), this service automatically discloses to consumers any TransUnion or Fair Isaac score received from TransUnion during the processing of such a loan.

Fixed Format Inquiry (FFI)

Use the RA01 segment to request Lender Score Disclosure in the FFI. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Lender Score Disclosure Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Lender Score Disclosure.

RA01 (Request Add-on) Segment

To request Lender Score Disclosure, the service code 06300 can be provided in the Request Add-on Service segment.

If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

Lender Score Disclosure can currently be requested on the following primary services:

- Credit Report

These are the TransUnion and Fair Isaac scores for which a Lender Score Disclosure service may be requested:

Service Code	Score Name	Model Builder	Score Ranges
00730	TransUnion Account Management Model 2.0	TransUnion	150 – 950
00R59	TransUnion New Account Model 2.0	TransUnion	150 – 950
00219	TransUnion New Account Model 1.0	TransUnion	150 – 950
00701	TransUnion Auto Risk Model 1.0	TransUnion	300 – 900
00896	TransUnion Bankruptcy Model 1.0	TransUnion	0 – 999

Service Code	Score Name	Model Builder	Score Ranges
00R07	TransUnion Recovery Model 1.0	TransUnion	350 – 850
00P16	TransUnion Recovery Model 2.0	TransUnion	350 – 850
00P17	TransUnion Recovery Bankcard Model	TransUnion	350 – 850
00P18	TransUnion Recovery Auto Model	TransUnion	350 – 850
00P23	TransUnion Recovery Medical Model	TransUnion	350 – 850
00002	FICO® Score 95	Fair Isaac	336 – 843
00008	FICO® Auto Score 95	Fair Isaac	250 – 900
00256	FICO® Bankcard Score 95	Fair Isaac	250 – 900
00016	FICO® Installment Score 95	Fair Isaac	250 – 900
00004	FICO® Personal Finance Score 95	Fair Isaac	250 – 900
00950	FICO® Score 98	Fair Isaac	336 – 843
00990	FICO® Auto Score 98	Fair Isaac	250 – 900
00993	FICO® Bankcard Score 98	Fair Isaac	250 – 900
00991	FICO® Installment Score 98	Fair Isaac	250 – 900
00992	FICO® Personal Finance Score 98	Fair Isaac	250 – 900
00P02	FICO® Score 4	Fair Isaac	336 – 843
00P11	FICO® Bankcard Score 4	Fair Isaac	250 – 900
00P12	FICO® Auto Score 4	Fair Isaac	250 – 900
00P13	FICO® Installment Score 4	Fair Isaac	250 – 900
00P14	FICO® Personal Finance Score 4	Fair Isaac	250 – 900
00227	FICO® NG Score 00	Fair Isaac	150 – 950
00R82	FICO® NG Score 03	Fair Isaac	150 – 950
00601	FICO® Bankruptcy Score 98	Fair Isaac	350 – 900
00X46	FICO® Bankruptcy Score 03	Fair Isaac	350 – 900

Fixed Format Response (FFR)

A request for this service results in a letter mailed directly to the consumer on behalf of the lender. An FFR AO01 segment is returned to indicate whether the Lender Score Disclosure request was successfully processed. The FFR contains the service code (06300) and one of these status indicators:

Note: The letter is mailed to the primary address TransUnion has on file.

01 Requested service delivered
03 Subscriber code not authorized for requested service

OFAC Name Screen

Service Code 06800

OFAC Name Screen is an add-on service that identifies a subject as possibly being involved with individuals and entities that are prohibited by the U.S. Treasury from doing business in or with the United States.

The OFAC Name Screen service indicates a potential hit on the United States Department of Treasury Office of Foreign Asset Control (OFAC) File. Output is delivered in the form of unparsed messages that contain varying information about the individual and watch list: source, entity name, title and type, address, embargoed country with which the subject is affiliated, industry standard identifiers, if applicable, and Social Security number (SSN), date of birth (DOB), and passport number, if available.

Note: OFAC Name Screen can return information even for a no-hit. Be sure your code can handle the possibility of an AO01 segment returned with a no-hit.

Fixed Format Inquiry (FFI)

OFAC Name Screen is available only by default, per the subscriber validation setting.

OFAC Name Screen Processing Rules

OFAC Name Screen can currently be returned on the following primary services:

- Decision Systems
- Credit Report
- Total ID
- Identity Manager Verification
- Identity Manager Verification 2.0
- Compliance Verification
- Compliance Verification 2.0
- ID Report (07770)
- ID Search
- Collection Prioritization Engine (CPE) 2.0

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the OFAC Name Screen service in the order of return:

Segment ID	Segment Name	Current Maximum Returned	Notes
AO01	Add-on Status (OFAC Name Screen)	1 Per Subject	Included in the Add-on Status Segment may be one of the following OFAC Name Screen Search Status codes: O01OFAC Name Screen Clear

Segment ID	Segment Name	Current Maximum Returned	Notes
			O02OFAC Name Screen Potential Hit O03OFAC Name Screen Unavailable
MT01	Message Text	999	

The MT01 segment is returned only for the Potential Hit response. Below is the MT01 segment as it relates to this product:

Message Text (MT01) Segment - Total length: 171 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **MT01**.
Segment Length	5	3	N	Value is **171**.
Message Code	8	6	A/N	Space-filled.
Actual Message Length	14	3	N	Indicates the OFAC Name Screen message length (in number of characters). If more than one segment is required, this value is the sum of the characters in all the segments.
Current Segment Number	17	1	N	Identifies the position (or sequence number) of the current MT01 segment. If the OFAC Name Screen message text requires more than one segment, this value allows the segments to appear in the correct order. For example, if two MT01 segments are returned, the first segment has a value of **1** in this field and the second MT01 segment has a value of **2**.
Total Segment Number	18	1	N	Specifies the total number of MT01 segments returned to hold this OFAC Name Screen message.
Threshold Number	19	3	A/N	Space-filled.
Message Text	22	150	A/N	Contains the OFAC Name Screen message text.

OFAC Name Screen Message Text Labels

Below is the list of text labels for the OFAC Name Screen Message Text returned on an OFAC Potential Hit response.

Important: Text labels listed below are for informational purposes only, and are subject to change based on updates from the United States Treasury. Each text message may not contain all the text labels listed. Text labels have only been inserted to help identify the different types of data returned from OFAC watch lists.

OFAC Name Screen Text Label	Definition
MATCHINGNAME	Displays the name in the OFAC record that matches the name supplied on input by the subscriber.
SOURCE	The source of the OFAC data is either the Treasury Specially Designated Nationals (SDN) list or the Consolidated file. The Consolidated file includes non-SDN lists such as the Palestinian Legislative Council (NS-PLC) List, Part 561 List, Non-SDN Iran Sanctions Act (NS-ISA) List, Foreign Sanctions Evaders (FSE) List, and the Sectoral Sanctions Identifications (SSI) List.
UID	The unique ID assigned by OFAC to identify a specific SDN or non-SDN record, which can be used to locate a unique record in the file.
NAME	Displays the primary name of the individual on the OFAC record. Format: LAST NAME, First Name
TITLE	Displays the title of the individual.
PROGRAMLIST	Displays the type of sanctions program linked with the individual, such as CUBA, IRAN, SYRIA, SDGT, UKRAINE-EO13661, NS-PLC, etc.
IDLIST	Identifies a list of identity documents present for the individual.
IDTYPE	Specifies the type of identity document associated with the individual. Some possible ID Types (this is not a comprehensive list) are: • Driver's License No. • Passport • SSN
IDNUMBER	Displays the identification number of the identity document.
IDCOUNTRY	Displays the country that issued the identity document.
ISSUEDATE	Displays the issue date of the identity document.
EXPIRATIONDATE	Displays the expiration date of the identity document.
AKALIST	Identifies a list of additional names associated with the individual.
TYPE	Displays the type of alias associated with the individual. Possible types are: • a.k.a. = also known as • f.k.a. = formerly known as • n.k.a. = now known as
CATEGORY	Specifies the value of the alias name. Possible values are:

OFAC Name Screen Text Label	Definition
	• strong • weak
AKA	Displays the name of the alias.
ADDRESSLIST	Identifies a list of addresses associated with the individual.
ADDRESS	Precedes the address label returned for the individual. Possible address labels include: • address line 1 • address line 2 • address line 3 • city • state or province • postal code • country
CITIZENSHIPLIST	Identifies a list of countries associated with the individual's citizenship.
COUNTRY	Displays the country that issued the ID. When multiple countries are returned for the citizenship, the primary country will be identified as the (main) country.
DATEOFBIRTHLIST	Identifies a list of date(s) of birth associated with the individual.
DOB	Displays the date of birth from the OFAC list record. When multiple dates are returned for the date of birth, the primary date will be identified as the (main) date.
PLACEOFBIRTHLIST	Identifies the list of place(s) of birth associated with the individual.
POB	Displays the actual place of birth. When multiple places are returned for the place of birth, the primary place will be identified as the (main) place.
REMARKS	Displays the remarks associated with the individual.

Phone Append

Service Code 07030

The re-designed Phone Append service offers three different types of phone searches to deliver one or multiple ten-digit phone numbers from either a telephone company source or the consumer database. The type of phone search performed is based on the options set up in the subscriber file. An additional option is available that suppresses the delivery of wireless phone numbers.

If included in the service request, Phone Append performs the search for all subjects returned for that service. These are the three phone searches available:

- Standard Mode

- Cascade Mode
- Multiple Mode

Standard Mode

The **standard** mode search uses CIS as the only source to deliver a single ten-digit telephone number to Phone Append subscribers. This mode is basically the same as the original version of the service. The standard search does **not** support the Phone Append option of suppressing wireless phones and does not return a phone type or data source in its response.

Cascade Mode

The **cascade** mode search uses multiple data sources to deliver a single ten-digit telephone number to Phone Append subscribers, following this process:

- The first search for a consumer phone number is in the telephone company source.
- If a ten-digit telephone number is not available in the telephone company source database, Phone Append searches the consumer database for the subject's primary telephone number and, if found, returns it to the subscriber.

The cascade search delivers a maximum of one ten-digit telephone number.

Multiple Mode

The **multiple** mode search uses multiple data sources to deliver **one or more** ten-digit telephone numbers to Phone Append subscribers, following this process:

- The first search for the consumer phone number is in both the telephone company source and the consumer database.
- The search delivers one ten-digit phone number from each source, if available, to the subscriber.

The multiple search returns a maximum of two ten-digit telephone numbers. Based on data availability, the multiple search may return only one ten-digit telephone number. If multiple phone numbers are returned, the first number returned is from the telephone company source.

Suppressing Wireless Phone Numbers

A subscriber who uses a **cascade** or **multiple** mode search can also select the wireless phone number suppression option. This option returns a search status that indicates a phone number was found but it was a wireless number and is suppressed. No phone number is delivered.

Fixed Format Inquiry (FFI)

Use the RA01 segment to request Phone Append in the FFI. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Phone Append Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Phone Append.

RA01 (Request Add-on) Segment

To request Phone Append, the service code 07030 can be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

Phone Append can currently be requested on the following primary services:

- Credit Report
- Employment Credit Report
- SSN Report
- Collection Credit Report
- Model Report
- ID Search
- ID Report (07770)
- ID Report (07450)
- ID Report with Score
- Individual Monitoring Report
- CPE 2.0

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Phone Append in the order returned. For detailed information regarding each of these segments, see FFI Segments on page 417.

Standard or Cascading Mode Phone Append FFR Segments

Segment ID	Segment Name	Maximum Returned	Notes
AO01	Add-on Status (Phone Append)	1 per Subject	For a Phone Append search, the AO01 segment returns one of the following codes in the Search Status field: **P01** Phone number found in telephone company source. **P02** Phone number found but unpublished. **P03** Phone number found on the consumer file. **P04** No phone number is returned. **P05** Telephone company-sourced data not available. Phone number found on the consumer file. **P06** Service not available. **P07** Phone number found in multiple sources. **P08** Phone number found wireless but suppressed.

Segment ID	Segment Name	Maximum Returned	Notes
PN01	Phone Number	1 Per Subject	

Multiple Mode Phone Append FFR Segments

A request for Phone Append that uses the **multiple** mode search option allows the return of two PN01 segments as shown below.

Segment ID	Segment Name	Maximum Returned
AO01	Add-on Status (Phone Append)	1 per Subject
PN01	Phone Number	2 Per Subject

Prefill Vehicle

The Prefill Vehicle add-on services provide typical vehicle application information, such as the following: VIN, Model Year, Make, Model, Body Style, State Registered, Plate Type, Branded Title, Lease Indicator, Lienholder, and Vehicle Registration Names.

Prefill Vehicle VIN (07922)

See Insurance Prefill for FFI information.

The following list shows the possible segments that may be returned for Prefill Vehicle VIN in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	
PH01	Service Header (Insurance Prefill - 07920)	
SH01	Subject Header (1st Subject)	
NM11	Name (Input Echo)	
AD11/UA11	Address (Input Current Echo)	
AD11/UA11	Address (Input Previous Echo)	
PI11	Personal Information (Input Echo)	
PN01	Phone Number (Input Echo)	

Segment ID	Segment Name	Notes
AO01	Add-on Status (Vehicle - 07922)	Repeat for each Subscriber Input Vehicle
VH01	Vehicle Information (Input Vehicle Echo)	Repeat for each Subscriber Input Vehicle
VH01	Vehicle Information (Found Vehicle)	Repeat for each Subscriber Input Vehicle
AO01	Add-on Status (VHS Service Only – return VHS Model Service status)	Repeat for each Subscriber Input Vehicle
SC01	Scoring (VHS Service Only – return VHS score, Factors, and Score Card)	Repeat for each Subscriber Input Vehicle
AO01	Add-on Status (VHS Service Only – return Score Group add-on 07952 status)	Repeat for each Subscriber Input Vehicle
MI01	Miscellaneous Statement (VHS Service Only – return Score Group)	Repeat for each Subscriber Input Vehicle
AO01	Add-on Status (VHS Service Only – return Passing through CARFAX® Raw Data add-on service 07953 status)	Repeat for each Subscriber Input Vehicle
TX01	Text Statement (VHS Service Only – return CARFAX® Raw Data)	Repeat for each Subscriber Input Vehicle
SH01	Subject Header (2-10 Subjects)	
NM11	Name (Input Echo)	
AD11/UA11	Address (Input Current Echo)	
AD11/UA11	Address (Input Previous Echo)	
PI11	Personal Information (Input Echo)	
PN01	Phone Number (Input Echo)	
END1	End	

Prefill Vehicle HH (07923)

See Insurance Prefill for FFI information.

The following list shows the possible segments that may be returned for Prefill Vehicle HH (Household) in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	

Segment ID	Segment Name	Notes
PH01	Service Header (Insurance Prefill - 07920)	
SH01	Subject Header (1st Subject)	
NM11	Name (Input Echo)	
AD11/UA11	Address (Input Current Echo)	
AD11/UA11	Address (Input Previous Echo)	
PI11	Personal Information (Input Echo)	
PN01	Phone Number (Input Echo)	
AO01	Add-on Status (Vehicle - 07923)	
VH01	Vehicle Information (Found Vehicle)	Repeat for each found vehicle.
NM11	Name (Vehicle Owner, Lien Holder, Lessor, or Lessee)	Repeat for each found vehicle.
SH01	Subject Header (2-10 Subjects)	
NM11	Name (Input Echo)	
AD11/UA11	Address (Input Current Echo)	
AD11/UA11	Address (Input Previous Echo)	
PI11	Personal Information (Input Echo)	
PN01	Phone Number (Input Echo)	
END1	End	

Passenger Vehicle and Truck Codes

Passenger Vehicle Codes					
AM	Ambulance	**P4**	2 Passenger Low speed	**2P**	Pillard Hardtop 2 Dr.
CB	Cab & Chassis (Luv)	**RD**	Roadster	**2T**	Hardtop 2 Dr.
CP	Coupe	**SB**	Sport Hatchback	**2W**	Wagon 2 Dr.
CV	Convertible	**RD**	Roadster	**3D**	Runabout 3 Dr.
C4	Coupe 4 Dr.	**SB**	Sport Hatchback	**3P**	Coupe 3 Dr.
HB	Hatchback *	**SC**	Sport Coupe	**4D**	Sedan 4 Dr.
HR	Hearse	**SD**	Sedan *	**4H**	Hatchback 4 Dr.
HT	Hardtop *	**SV**	Sport Van	**4L**	Liftback 5 Dr.
IN	Incomplete Passenger	**SW**	Station Wagon		
LB	Liftback	**UT**	Utility **	**4P**	Pillard Hardtop 4 Dr.

Passenger Vehicle Codes					
LM	Limousine	**WW**	Wide Wheel Wagon	**4T**	Hardtop 4 Dr.
NB	Notchback	**2D**	Sedan 2 Dr.	**4W**	Wagon 4 Dr.
PK	Pickup **	**2F**	Formal Hardtop 2 Dr.	**5D**	Sedan 5 Dr.
PN	Panel **	**2H**	Hatchback 2 Dr.		
P2	2 Passenger Low speed	**2L**	Liftback 3 Dr.		

* Used only when number of doors in known.

** To code trucks commonly registered as passengers.

Truck Codes			
AC	Auto Carrier	**MY**	Motorized Cutaway
AR	Armored Truck	**PC**	Club Cab PickUp
BU	Bus	**PD**	Parcel Delivery
CB	Chassis and Cab	**PK**	Pickup
CC	Conventional Cab	**PM**	Pickup with Camper mounted on bed
CG	Cargo Van	**PN**	Panel
CH	Crew Chassis	**PS**	Super Cab Pickup
CL	Club Chassis	**RD**	Roadster (Jeep, Jeep Commando)
CM	Concrete or Transit Mixer	**SN**	Step Van
CR	Crane	**SP**	Sport Pickup
CS	Super Cab / Chassis Pickup	**ST**	Stake or Rack
CU	Custom Pickup	**SV**	Sports Van
CV	Convertible (Jeep Commando, Suzuki Samurai, Dodge Dakota)	**SW**	Station Wagon (Jeep Wagoneer, Dodge Sportsman A100, Toyota Landcruiser)
CW	Crew Pickup	**S1**	One Seat
CY	Cargo Cutaway	**S2**	Two Seat
DP	Dump	**TB**	Tilt Cab
DS	Tractor Truck (diesel)	**TL**	Tilt Tandem
EC	Extended Cargo Van	**TM**	Tandem
ES	Extended Sport Van	**TN**	Tank
EV	Ext Van	**TR**	Tractor Truck (Gasoline)
EW	Extended Window Van	**UT**	Utility (Blazer, Jimmy, Scout, etc.)
FB	Flat-bed or Platform	**VC**	Van Camper

Truck Codes			
FC	Forward Control	**VD**	Display Van
FT	Fire Truck	**VN**	Van
GG	Garbage or Refuse	**VT**	Vanette (including Metro and Handy Van)
GL	Gliders	**VW**	Window Van
GN	Grain	**WK**	Tow Truck Wrecker
HO	Hopper	**WW**	Wide Wheel Wagon
IC	Incomplete Chassis	**XT**	Travelall
IE	Incomplete Ext Van	**YY**	Cutaway
LG	Logger	**2W**	2 Dr. Wagon / Sport Utility
LL	Suburban & Carry All	**3B**	3 Dr. Extended Cab / Chassis
LM	Limousine	**3C**	3 Dr. Extended Cab Pickup
MH	Motorized Home	**4B**	4 Dr. Extended Cab / Chassis
MP	Multi-purpose	**4C**	4 Dr. Extended Cab Pickup
MV	Maxi Van	**4W**	4 Dr. Wagon / Sport Utility
MW	Maxi Wagon	**8V**	8 Passenger Sport Van

Small Business Identification

Service Code 07711

The Small Business Identification add-on service optionally delivers a set of predefined packages of small business attributes for up to three small businesses associated with the subject of the inquiry. Additionally, this service allows subscribers to apply basic filtering options to choose the types of businesses returned.

Service Detail	Description
FCRA Permissable Purpose	Not Required. Small Business Identification information is not sourced from TransUnion's consumer reporting database and is not to be used for credit eligibility or any other FCRA permissible purpose.
Subscriber Configuration Options	• Option to receive Small Business indicator only • Option to receive Small Business CORE and PREMIUM packages, or Small Business CORE, Premium, and Other packages

Service Detail	Description
	• Option to receive one to three small business records • Options to filter small businesses to return • Option to apply Telco updates to Business Phone and Address
Possible Filter Options	• Select Based on Minimum Confidence Score • Select or Reject Based on Primary SIC or NAICS • Select Based on Number of Years Established • Select Closed Businesses • Select Based on Total Number of Employees • Select Based on Business Total Revenue • Reject by Number of Months Since Last Business Update • Reject by Match Type • Reject by Corporate Entity Type • Reject by Number of Months since Last Executive Update • Reject by Contact Title Group

Fixed Format Inquiry (FFI)

To request the Small Business Identification add-on service, the service code 07711 must be provided in a Request add-on Service (RA01) segment. If an RA01 segment is not provided, the system defaults to the current subscriber code settings.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

Small Business Identification Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with SSN Analysis.

RA01 (Request Add-on) Segment

To request Small Business Identification, the service code 07711 must be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

Small Business Identification can currently be requested on the following primary services:

- Credit Report
- Model Report

Fixed Format Response (FFR)

The list below shows the possible segments that may be returned for the Small Business Identification add-on service when the result is a Hit and Small Business Data Package Options are selected in the order returned.

Note: When the "Return Small Business Indicator Only" option is selected or a No-Hit or No-Match occurs, only the Add-on Status segment with the search result indicator is returned.

Segment ID	Segment Name	Maximum Returned	Notes
AO01	Add-on Status	1 Per Service	
BR01	Business Record	1 Per Business	
PN01	Phone Number	1 Per Business	
AR01	Attribute	1 Per Attribute	
EM11	Employment	1 Per Business	
NM11	Name	I Per Contact	

Small Business Attribute IDs

List of Small Business Attribute IDs.

Attribute ID	Attribute Name	Description	Package Name
SB000001	Small Business Indicator	Indicates whether or not the business meets the SBA criteria for small business. Possible values are: **Y** Does meet criteria **Blank** Does not meet criteria	PREMIUM PLUS
SB000002	Woman Ownership Indicator	Indicates whether a woman owns the business. Possible values are: **Y** Yes **Blank** No	PREMIUM PLUS
SB000003	Minority Ownership Indicator	Specifies the category of minority ownership of the business. Possible values are: **A** Asian owned **H** Hispanic owned **B** Black owned **I** Indian owned **Blank** Unknown	PREMIUM PLUS

Attribute ID	Attribute Name	Description	Package Name
SB000016	Company Total Wallet Size	Sum of Company Cash Equivalents and Company Short Term Debt. Represented in whole dollars. For example: 004160613000 = $4,160,613,000.	ACCOUNTS/ LENDING
SB000017	Company Total Transaction Accounts	Dollar amount of total transaction accounts for the entire business. Represented in whole dollars. For example: 000000459992 = $459,992	ACCOUNTS
SB000018	One Bank Only Probability Percentage	Indicates the probability of this entity utilizing one bank only (9.9999999). For example: 0.6337816 or 0.9327718	ACCOUNTS
SB000019	One Financial Institution Probability Percentage	Indicates the probability of this entity utilizing one financial institution (9.9999999). For example: 0.4113311 or 0.8296314	ACCOUNTS
SB000020	Savings Account Probability Percentage	Indicates the probability of this entity having a savings account (9.9999999). For example: 0.1242926 or 0.0968679	ACCOUNTS
SB000021	Transaction Account Probability Percentage	Indicates the probability of this entity having transaction accounts (9.9999999). For example: 0.7388489 or 0.6607361	ACCOUNTS
SB000022	Online Banking Probability Percentage	Indicates the probability of this entity utilizing on-line banking (9.9999999). For example: 0.3787236 or 0.1662592	ACCOUNTS/ TREASURY
SB000023	Brokerage Account Probability Percentage	Indicates the probability of this entity having a brokerage account (9.9999999). For example: 0.0019129 or 0.0095146	INVESTMENT
SB000024	CD Accounts Probability Percentage	Indicates the probability of this entity having CDs (9.9999999). For example: 0.0559977 or 0.0245439	INVESTMENT
SB000025	Money Market Accounts Probability Percentage	Indicates the probability of this entity having Money Markets account (9.9999999). For example: 0.0114914 or 0.0086819	INVESTMENT
SB000026	401K Probability Percentage	Indicates the probability of this entity having a 401K (9.9999999). For examples: 0.0118267 or 0.3007029	INVESTMENT
SB000027	Investment Account Probability Percentage	Indicates the probability of this entity having investment accounts	INVESTMENT

Attribute ID	Attribute Name	Description	Package Name
		(9.9999999). For example: 0.1265481 or 0.8347735	
SB000028	Auto Loan Probability Percentage	Indicates the probability of this entity having an auto loan (9.9999999).	LENDING
SB000029	Equipment Leases Probability Percentage	Indicates the probability of this entity having equipment leases (9.9999999). For example: 0.4250917 or 0.0198489	LENDING
SB000030	Line of Credit Probability Percentage	Indicates the probability of this entity having a line of credit (9.9999999). For example: 0.2408653 or 0.0924892	LENDING
SB000031	Long Term Debt Probability Percentage	Indicates the probability of this entity having long term debt (9.9999999). For example: 0.2374805 or 0.1495829	LENDING
SB000032	Commercial Loan Probability Percentage	Indicates the probability of this entity having a commercial loan (9.9999999). For example: 0.1998596 or 0.2094781	LENDING
SB000033	Commercial Mortgages Probability Percentage	Indicates the probability of this entity having commercial mortgages (9.9999999). For example: 0.2654784 or 0.9353892	LENDING
SB000034	Short Term Debt Probability Percentage	Indicates the probability of this entity having short term debt (9.9999999). For example: 0.3171189 or 0.0320464	LENDING
SB000035	Sweep Account Probability Percentage	Indicates the probability of this entity having a sweep account (9.9999999). For example: 0.0338104 or 0.0188708	TREASURY
SB000036	Cash Management Account Probability Percentage	Indicates the probability of this entity having a cash management account (9.9999999). For example: 0.9696846 or 0.0532515	TREASURY
SB000037	International Accounts Probability Percentage	Indicates the probability of this entity having international accounts (i.e., letters of credit) (9.9999999). For example: 0.0214342 or 0.5052087	TREASURY
SB000038	Credit Card Accounts Probability Percentage	Indicates the probability of this entity having a credit card (9.9999999). For example: 0.2863527 or 0.8734525	CARD

SSN Analysis

Service Code 07215

SSN Analysis is an add-on service that is available on the Credit Report. It compares the input Social Security Number (SSN) to the file SSN and returns a digit-by-digit match pattern.

Note: If the consumer's SSN is not present in either input or file, the SSN Analysis service will not perform.

Fixed Format Inquiry (FFI)

SSN Analysis add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Add-on Service	Optional

SSN Analysis Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with SSN Analysis.

RA01 (Request Add-on) Segment

To request SSN Analysis, the service code 07215 must be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

SSN Analysis can currently be requested on the following primary services:

- Credit Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for SSN Analysis in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name
AO01	Add-on Status (SSN Analysis)
SV01	Subject Verification

Vehicle History Score Group

Service Code 07952

Vehicle History Score Group is an add-on service that is available on the Vehicle History Score Report. It returns a subscriber-defined indicator associated with a group (range) of Vehicle History Score. For example, if a subscriber designates the indicator "H" for the Vehicle History Score in the range of 420 - 503, the Vehicle History Score Group add-on will return the indicator "H" to the subscriber who is eligible for the add-on service when the Vehicle History Score is 475 in a transaction. Subscribers can use the Score Group as a market/consumer segmentation tool and apply appropriate pricing strategy in their insurance quoting/underwriting process based on the Score Group result.

Note: Subscriber must be eligible for the Vehicle History Score in order to receive the Vehicle History Score Group result.

Fixed Format Inquiry (FFI)

Vehicle History Score Group is available only by default, per the subscriber validation setting in the TransUnion system.

Vehicle History Score Group Data Processing Rules

Vehicle History Score Group is currently available on the following primary service:

- Vehicle History Score Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Vehicle History Score Group in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Vehicle History Score Group)	
MI01	Miscellaneous Statement	The single-byte Score Group indicator is returned in the MI01 segment's Information field.

Models

Various Service Codes

Models are online scoring systems that analyze information about an individual to derive a numeric score that is predictive of certain behavior. A model is an add-on to a primary service such as the Credit Report.

> **Note:** The Model service codes that are available for use in TU4.1 are listed later in this section. Combination numbers cannot be used to request multiple score models.

Fixed Format Inquiry (FFI)

Use the RA01 segment to request a score model in the FFI. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on	1 Per Add-on Service	Optional

Model Processing Rules

This section describes how to use the RA01 (Request Add-on) segment to request a model.

RA01 (Request Add-on) Segment

The subscriber can use any of the following three methods to trigger a model request for a standalone service:

- The subscriber can request one or more models by sending a Request Add-on (RA01) segment for each standalone service in the inquiry (FFI). The subscriber sends one RA01 segment for each model desired.

If an RA01 segment is received and the service code is valid and authorized for the subscriber, then the requested model is created and delivered and no default is used. The presence of at least one valid and authorized model request in an RA01 segment overrides the subscriber's default. No more than 20 model requests (RA01 segments) are accepted for a single standalone service.

- The subscriber can have an assigned default algorithm that is returned for each service request. The subscriber does not send a model request in the inquiry.
- The default algorithm is assigned in the subscriber code and therefore the subscriber has an assigned default algorithm combination and the inquiry contains only invalid or unauthorized models, the default is delivered. This happens only if **none** of the inquiry's RA01 segments (with a Service Type of A) is submitted with a valid or authorized service code.

Overriding the Default Request

If the subscriber has been assigned a default algorithm combination but no model is desired for the service requested, then one RA01 segment (with a Service Type of A) can be provided with a 00000 service code. This overrides the default and no model is created or delivered.

Note: There are exceptions to request specific models that are hosted by third-party service providers. Such models (and service codes) include:

- Generic Fraud Model (00R85)
- L2C Model (00337)
- IDA models:
  - ID Score 8.0 (00668)
  - Credit Optics Scores (00N34, 00666, 00667)
  - Collections Optics Scores (00N35, 00N36, 00663)
  - Collections Optics Plus Scores (00N37, 00N38, 00N39, 00N40, 00674, 00675, 00676, 00677)

Special setup is needed to be eligible for these models, and, dependent upon the subscriber setup, it may not be necessary to include an RA01 segment in the FFI to receive these models.

Fixed Format Response (FFR)

The following lists show the segments that may be returned for models in the order of return. The lists vary dependent upon whether the request is for a score model; model characteristics; both score and characteristics; or Income Estimator. For detailed information regarding each of these segments, see FFR Segments on page 467.

The following segments are returned for a model when only a score is delivered:

Segment ID	Segment Name
AO01	Add-on Status
SC01	Scoring

The following segments are returned for a custom model when only the model characteristics are delivered:

Segment ID	Segment Name
AO01	Add-on Status
CH01	Characteristic

The following segments are returned for a custom model when both a score and the model characteristics are delivered:

Segment ID	Segment Name
AO01	Add-on Status
SC01	Scoring
CH01	Characteristic

The following segments are returned for the Income Estimator 2.0:

Segment ID	Segment Name
AO01	Add-on Status
TC01	Income Estimator Score

The following segments are returned for the ID Analytics models (ID Score, Credit Optics Scores, Collections Optics Scores, and Credit Optics Plus Scores):

Segment ID	Segment Name	Notes
AO01	Add-on Status	
SC01	Scoring	
TT01	Transaction Tracking	
TX01	Text Statement	The TX01 segment is returned for Credit Optics and Credit Optics Plus Scores.

The following segments are returned for the L2C Model:

Segment ID	Segment Name
AO01	Add-on Status
SC01	Scoring
TX01	Text Statement

Sample FFI/FFR With Models Requested and Returned

Following is an example of an inquiry that uses the first described method (sending RA01 segments in the FFI) to request three different model services. The right side of the table shows how the models are returned with a Credit Report for one individual.

Segment ID	Segment Name (FFI)		Segment ID	Segment Name (FFR)
TU4I	Transaction Control		TU4R	Transaction Control
SH01	Subject Header		CD01	Customer Data
NM11	Name		PH01	Service Header
NM11	Name (Also Reported As)		SH01	Subject Header
PI11	Personal Information		CI01	Consumer Identifier
ID01	Identification		NM11	Name
MD01	Model Data – Attribute #1		NM11	Name (Also Reported As)
MD01	Model Data – Attribute #2		PI11	Personal Information
AD11/ UA11	Address		TA01	ID Mismatch Alert [was Trans Alert]
PN01	Phone Number		AM01	Address Analysis
EM11	Employment		AD11/UA11	Address (current and multiple previous)
AD11/ UA11	Address		PN01	Phone Number
PN01	Phone Number		EM11	Employment
RP01	Request Service (Credit)		AD11	Address (employment)
OR01	Optional Request		SM11	Credit Summary
AI01	Additional Information		SD01	Credit Summary Description
OD01	Output Delivery		PR11	Public Record
RA01	Request Add-on (FICO® Score)		CL11	Collection Account
RA01	Request Add-on (Income Estimator)		TR11	Account
RA01	Request Add-on (Model X1)		AT11	Additional Account
RA01	Request Add-on (Model X2)		TM11	Trade MOP Totals
MD01	Application Data		MI01	Miscellaneous Statement
END1	End		CS11	Consumer Statement (file)
			IN11	Inquiry
			OB01/OB02	Owning Bureau Identification
			AO01	Add-on Status (Phone Append)

Segment ID	Segment Name (FFI)		Segment ID	Segment Name (FFR)
			PN01	Phone Number
			AO01	Add-on Status (Creditor Contact Information)
			LK11	Creditor Contact Information [was LOOK]
			SA11	Subscriber Address
			PN01	Phone Number
			AO01	Add-on Status (High Risk Fraud Alert)
			QH01	Inquiry History
			MC01	Message Code
			DC11	Deceased Information
			YI01	Year of Issuance
			MT01	Message Text
			AO01	Add-on Status (Model)
			SC01	Scoring
			AO01	Add-on Status (Geo Code)
			GC01	Geo Code
			AD11/UA11	Current Address
			AO01	Add-on Status (Geo Code)
			GC01	Geo Code
			FA11/UF11	Future Address
			AO01	Add-on Status (OFAC Name Screen)
			MT01	Message Text
			AO01	Add-on Status (Inquiry Analysis)
			IN11	Inquiry
			NM11	Name
			NM11	Name (maternal)
			AD11	Address (current)
			AD11	Address (previous)
			PN01	Phone Number
			EM11	Employment

Segment ID	Segment Name (FFI)		Segment ID	Segment Name (FFR)
			AO01	Add-on Status (Identity Manager Verification)
			MC01	Message Code
			DC11	Deceased Information
			YI01	Year of Issuance
			MT01	Message Text
			AO01	Add-on Status (Model X)
			CH01	Characteristic
			CH01	Characteristic
			CH01	Characteristic
			CH01	Characteristic
			CH01	Characteristic
			CH01	Characteristic
			CH01	Characteristic
			CH01	Characteristic
			END1	End

Using Multi-model Cascade

Multi-model Cascade is an online service that initiates one or more models or characteristics based on the output of another model. Subscribers can choose Generic or Custom Multi-model Cascade:

- **Generic Multi-model Cascade** — Allows subscribers to choose from any combination of online models currently available at TransUnion. Subscribers can select a currently available generic link service or can identify a new combination of models to link. Generic Multi-model Cascades are available for any subscriber to use but they cannot be customized.
- **Custom Multi-model Cascade** — Allows subscribers to choose from any combination of online models and/or characteristics and to incorporate custom thresholds. All Custom Multi-model Cascades require programming by TransUnion and are available for use only by that subscriber.

Testing TransUnion Links

Subscribers can send an inquiry with the service code 00Y02 to test Multi-model Cascade. The request pulls a TransUnion New Account Model score; if the score is 600 or above, a TransUnion Auto Model score is also pulled.

Multi-model Cascade is available as an add-on to these services:

- Credit Report
- Collection Credit Report
- Model Report

Using Characteristics Models

The following add-on service models allow subscribers to receive preprogrammed industry-specific characteristics with the credit report.

The subscriber selects a characteristic model with the assistance of a TransUnion sales representative. The sales representative completes the Credit Characteristics Request form, which is used to update the subscriber's code to show the addition of the Credit Characteristics model. There are several variations of credit characteristics add-ons from which to choose:

Name of Characteristic Set	Service Code	Type
Credit	00R14	Credit
Bankcard	00Q38	Collections
Auto	00N48	Collections
Student Loan	00N47	Collections
Mortgage	00N49	Collections
Standard	00N05	Credit

Fixed Format Inquiry (FFI)

Use the RA01 (Request Add-on) segment to request a characteristic model. In the RA01 segment set these field values:

In this RA01 Field	Set this value
Add-on Service Code	**00R14** for the Credit Characteristics add-on or use one of the service codes in the table above.
Processing Request	Leave blank
Service Type	A

Note: The subscriber does not need to include the RA01 segment for Credit Characteristics if this model is the default in the subscriber settings.

Credit Characteristics Processing Rules

Before calling the characteristic model, three checks are performed. If any one of the following checked items is found, an error message is returned:

Check Performed For	Returns This Error Message if Found
Unauthorized Request	*** CREDIT CHARACTERISTICS: NOT SCORED: UNAUTHORIZED REQUEST***
Invalid Score Request	***MODEL REQUEST 00999: INVALID SCORE REQUEST***
Suppressed File	***CREDIT CHARACTERISTICS: NOT SCORED***

If any one of the above conditions is found, the AO01 segment is returned alone. The CH01 (Characteristic) segment is **not** returned. No further processing is performed.

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for a characteristic model in the order of return. The table may vary dependent upon the primary service's requirements. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name
TU4R	Transaction Control
PH01	Service Header
SH01	Subject Header
NM11	Name
PI11	Personal Information
TA01	ID Mismatch Alert
AD11/UA11	Address
PN01	Phone Number
EM11	Employment
AD11/UA11	Address
PN01	Phone Number
SM11	Credit Summary
SD01	Credit Summary Description
PR11	Public Record
CL11	Collection
TR11	Account
AT11	Additional Account
TM11	Trade MOP Totals
MI01	Miscellaneous Statement
CS11	Consumer Statement
IN11	Inquiry

Segment ID	Segment Name
TX01	Text Statement
OB01/OB02	Owning Bureau
AO01	Add-on Status (Credit Characteristics)
CH01	Characteristic (up to 180 segments may be returned)
END1	End

Model Service Codes

Following are the Model service codes.

New Model Name	Old Model Name	Service Codes
Account Opening Fraud Score	N/A	**00W09**
Contact Score	N/A	**00321**
CreditVision® Account Management	N/A	**00V64**
CreditVision® Auto Score	N/A	**00V80**
CreditVision® Bankruptcy Score	N/A	**00V82**
CreditVision® Debt-to-Income Estimator	N/A	**00U29**
CreditVision® Income Estimator	N/A	**00W16**
CreditVision® New Account Score	N/A	**00W05**
CreditVision® Premium Algorithms	N/A	**00H85-91, 00V24, 00V53, 00W14**
DELPHI (redeveloped -1997)	N/A	**00501**
EDGE 1	N/A	**00X01**
EDGE 2	N/A	**00X02**
Energy	GEM	**00241**
FACETS	N/A	**00138**
FDIC Subprime Definitions	N/A	**00H63**
FICO® Bankruptcy Score 03	HORIZON 2003	**00X46**
FICO® Bankruptcy Score 98	HORIZON	**00601**
FICO® Insurance Score DF/2.0	Dwelling Fire ASSIST (2.0)	**00889**
FICO® Insurance Score H1/2.0	Home Owners 1 ASSIST (2.0)	**00875**
FICO® Insurance Score H2/2.0	Home Owners 2 ASSIST (2.0)	**00876**

New Model Name	Old Model Name	Service Codes
FICO® Insurance Score H3/2.0	Home Owners 3 ASSIST (2.0)	**00877**
FICO® Insurance Score H4/2.0	Home Owners 4 ASSIST (2.0)	**00878**
FICO® Insurance Score H6/2.0	Home Owners 6 ASSIST (2.0)	**00879**
FICO® Insurance Score NS/2.0	NS Auto Assist 2.0	**00850**
FICO® Insurance Score PG/2.0	PR GR Auto Assist 2.0	**00872**
FICO® Insurance Score PM/2.0	PR ML Auto Assist 2.0	**00871**
FICO® Insurance Score SG/2.0	Standard Auto ASSIST with Greater than Minimum Limits	**00863**
FICO® Insurance Score SG88/2	SG88 Auto Assist 2.0	**00870**
FICO® Insurance Score SM/2.0	ST ML Auto Assist 2.0	**00853**
FICO® Revenue Score	RPM (Revenue Projection Model)	**00133**
FICO® Score 9	N/A	**00W18**
FICO® Score 8	N/A	**00Q88**
FICO® Auto Score 8	N/A	**00N20**
FICO® Bankcard Score 8	N/A	**00N21**
FICO® Mortgage Score 8	N/A	**00N92**
FICO® Score 4	N/A	**00P02**
FICO® Auto Score 4	N/A	**00P12**
FICO® Bankcard Score 4	N/A	**00P11**
FICO® Personal Finance Score 4	N/A	**00P14**
FICO® Installment Score 4	N/A	**00P13**
FICO® Score 98	EMPIRICA	**00950**
FICO® Auto Score 98	EMPIRICA AU	**00990**
FICO® Bankcard Score 98	EMPIRICA BC	**00993**
FICO® Installment Score 98	EMPIRICA IL	**00991**
FICO® Personal Finance Score 98	EMPIRICA PF	**00992**
FICO® Score 95	EMPIRICA 95	**00002**
FICO® Auto Score 95	EMPIRICA AU 95	**00008**
FICO® Bankcard Score 95	EMPIRICA BC 95	**00256**
FICO® Installment Score 95	EMPIRICA IL 95	**00016**
FICO® Personal Finance Score 95	EMPIRICA PF 95	**00004**
FICO® NG Score 00	PRECISION	**00227**
FICO® NG Score 03	PRECISION	**00R82**
Fraud Model I	Fraud Model	**00401**

New Model Name	Old Model Name	Service Codes
Fraud Model II	N/A	**00356**
ID Analytics Collections Optics Early Stage Score	N/A	**00N35**
ID Analytics Collections Optics Installment Loan Score	N/A	**00663**
ID Analytics Collections Optics Late Stage Score	N/A	**00N36**
ID Analytics Credit Optics Plus Score Auto	N/A	**00N40**
ID Analytics Credit Optics Plus Score Bankcard	N/A	**00N38**
ID Analytics Credit Optics Plus Score Generic	N/A	**00N37**
ID Analytics Credit Optics Plus Score Wireless	N/A	**00N39**
ID Analytics Credit Optics Score	N/A	**00N34**
ID Analytics Credit Optics Score Bankcard 2.1	N/A	**00665**
ID Analytics Credit Optics Score Bankcard 2.2	N/A	**00666**
ID Analytics Credit Optics Score Bankcard 4.2	N/A	**00667**
ID Analytics Credit Optics Score Retail Card 2.0	N/A	**00664**
ID Analytics ID Score	N/A	**00662**
ID Analytics ID Score 8.0	N/A	**00668**
L2C Model	N/A	**00337**
L2C Model 2	N/A	**00338**
L2C Model 3	N/A	**00339**
L2C Model 4	N/A	**00340**
Life Insurance Persistency	N/A	**00R97**
Minimum/Maximum for FICO® Score 95	N/A	**00Y18**
Minimum/Maximum for FICO® Score 98	N/A	**00Y17**
Minimum/Maximum for FICO® Score 4	N/A	**00Y15**
Minimum/Maximum for FICO® Score 8	N/A	**00Y13**
Minimum/Maximum for FICO® Auto Score 4	N/A	**00Y16**
Minimum/Maximum for FICO® Auto Score 8	N/A	**00Y14**

New Model Name	Old Model Name	Service Codes
Minimum/Maximum for VantageScore® 1.0	N/A	**00Y19**
Minimum/Maximum for VantageScore® 2.0	N/A	**00Y20**
Minimum/Maximum for VantageScore® 3.0	N/A	**00Y38**
Minimum/Maximum for CreditVision® Account Management	N/A	**00Y44**
Minimum/Maximum for CreditVision® Auto	N/A	**00Y42**
Minimum/Maximum for CreditVision® Bankruptcy	N/A	**00Y46**
Minimum/Maximum for CreditVision® New Account Score	N/A	**00Y48**
Multi-model Cascade	TransUnion Links (FICO® Score 98/ NA1)	**00C01**
New DELPHI	N/A	**00032**
Score Percentile Ranking for FICO® Auto Score 8	N/A	**00XB3**
Score Percentile Ranking for FICO® Auto Score 4	N/A	**00XB5**
Score Percentile Ranking for FICO® Score 8	N/A	**00XB2**
Score Percentile Ranking for FICO® Score 4	N/A	**00XB4**
Score Percentile Ranking for FICO® Score 98	N/A	**00XB6**
Score Percentile Ranking for FICO® Score 95	N/A	**00XB7**
Score Percentile Ranking for VantageScore® 1.0	N/A	**00XB8**
Score Percentile Ranking for VantageScore® 2.0	N/A	**00Y21**
Score Percentile Ranking for VantageScore® 3.0	N/A	**00Y39**
Score Percentile Ranking for CreditVision® Account Management	N/A	**00Y43**
Score Percentile Ranking for CreditVision® Auto	N/A	**00Y41**
Score Percentile Ranking for CreditVision® Bankruptcy	N/A	**00Y47**
Score Percentile Ranking for CreditVision® New Account Score	N/A	**00Y49**
TransUnion Ability to Pay Data Set	N/A	**00N74**

New Model Name	Old Model Name	Service Codes
TransUnion Account Management Model 2.0	TransRisk-AM (Account Manager)	**00730**
TransUnion Account Management Model 3.0	N/A	**00Q72**
TransUnion Auto Model 1.0	TransRisk Auto	**00701**
TransUnion Bankruptcy Model 1.0	N/A	**00896**
TransUnion Broadband Model	N/A	**00P31**
TransUnion Collections Industry Characteristics Auto	N/A	**00N48**
TransUnion Collections Industry Characteristics Bankcard	N/A	**00Q38**
TransUnion Collections Industry Characteristics Mortgage	N/A	**00N49**
TransUnion Collections Industry Characteristics Student Loan	N/A	**00N47**
TransUnion Contact Score	N/A	**00321**
TransUnion Credit Characteristics	TransUnion Data Connect	**00R14**
TransUnion Debt Management Model	N/A	**00R80**
TransUnion Debt to Income Estimator 3.0	N/A	**00X99**
TransUnion Income Estimator 2.0	TIE	**00064**
TransUnion Income Estimator 3.0	N/A	**00N03**
TransUnion Insurance Risk Score Auto/Prop	N/A	**00R99**
TransUnion Insurance Risk Score	N/A	**00R75**
TransUnion Medical Recovery Scores 3.0	N/A	**Various**
TransUnion New Account Model 1.0	TransRisk New Account	**00219**
TransUnion New Account Model 2.0	N/A	**00R59**
TransUnion New Account Model 3.0	N/A	**00Q87**
TransUnion Recovery Auto Model	N/A	**00P18**
TransUnion Recovery Bankcard Model	N/A	**00P17**
TransUnion Recovery Medical Model	N/A	**00P23**
TransUnion Recovery Model 1.0	TransRecovery	**00R07**
TransUnion Recovery Model 2.0	N/A	**00P16**
TransUnion Recovery Model 3.0	N/A	**Various**
TransUnion Standard Characteristics	N/A	**00N05**
TransUnion Supplemental Recovery Score	N/A	**00N54**
TransUnion Telecom Model	Telescope	**00336**

New Model Name	Old Model Name	Service Codes
TransUnion Wireless Model 1.0	Spectrum	**00315**
TransUnion Wireless Model 3.0	N/A	**00P15**
VantageScore® 1.0	N/A	**00P94**
VantageScore® 2.0	N/A	**00N94**
VantageScore® 3.0	N/A	**00V60**
VantageScore® 3.0 with Positive Factor Codes	N/A	**00W40**
VantageScore® Authorized User	N/A	**00N31**
Vehicle History Score	N/A	**00940** (If you have a custom Vehicle History Score installed in the TransUnion system, you should use the code assigned to your custom Vehicle History Score instead of the generic service code 00940.)
VHS for Financial Services, Standard	N/A	**00610**
VHS for Financial Services, Premium	N/A	**00611**

Account Opening Fraud Score

Account Opening Fraud Score is a fraud model which allows organizations to detect third-party fraud at time of application. This new fraud score uses highly predictive credit and non-credit characteristics to calculate a three-digit numerical score with up to four score descriptors.

The Account Opening Fraud Score model can currently be requested on the following primary services:

- Credit Report
- Identity Manager Verification 2.0

To receive the new Account Opening Fraud Score add-on service, subscribers can either be set up to:

- Receive the new service by default with existing Identity Manager Verification 2.0 standalone service or Credit Report via the Identity Manager Verification 2.0 add-on service.
- Explicitly request the new service with existing Identity Manager Verification 2.0 standalone service or Credit Report via the Identity Manager Verification 2.0 add-on service. Refer to below options.

Fixed Format Inquiry (FFI)

The Account Opening Fraud Score add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Model	Conditionally Required

Account Opening Fraud Score Processing Rules

This section describes how to use the RA01 (Request Add-on) segment to request Account Opening Fraud Score as an add-on.

RA01 (Request Add-on) Segment

To request Account Opening Fraud Score, the service code 00W09 must be provided in a Request Add-on Service segment.

Fixed Format Response (FFR) with Identity Manager Verification 2.0 Standalone Service

The following list shows the possible segments that may be returned for Account Opening Fraud Score in the order returned with Identity Manager Verification 2.0 standalone service. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Account Opening Fraud Score)	
SC01	Scoring	
CP01	Compliance	
CS01	Consumer Statement	

When available, this service will return bankruptcy, disputed accounts, consumer closed accounts and consumer statements when the Account Opening Fraud Score is returned with the Identity Manager Verification 2.0 standalone.

Fixed Format Response (FFR) with Credit Report via Identity Manager Verification 2.0 Add-on Service

The table below shows the segments that the Account Opening Fraud Score add-on service will return with the Credit Report service via Identity Manager Verification 2.0. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
AO01	Add-on Status (Account Opening Fraud Score)	
SC01	Scoring	

For Account Opening Fraud Score with Credit Report via Identity Manager Verification 2.0 add-on service, only a consumer statement can be returned as part of the existing Credit Report service.

Special Scores

Score range is 000–999: the higher the score, the less likely a fraud has occurred. Special scores are defined below:

Special Score	Score Descriptor Code	Score Descriptor Text
000	020	SSN Reported As Deceased
001	021	No Consumer File Found
002	022	Suppressed, Restricted Or Minor File
003	023	Consumer Statement On File
004	024	Active Duty Alert On File
005	025	Initial Fraud Alert On File
006	026	Extended Fraud Alert On File

Score Descriptor Codes

Score Descriptor Code	Score Descriptor Text
001	Address Discrepancy
002	SSN Not Found
003	SSN Discrepancy
004	SSN Not Provided
005	No bankcard accounts
006	Lengthy bankcard experience increases likelihood of fraud

Score Descriptor Code	Score Descriptor Text
007	Not enough debt experience
008	Few derogatory items increase likelihood of fraud
009	Invalid phone number
010	Phone to zip code discrepancy
011	Not enough debt experience
012	Lack of delinquency increases likelihood of fraud
013	Lack of collections increases likelihood of fraud
014	Too many recent inquiries
015	City to zip code discrepancy
016	Not enough debt experience
017	Few recent accounts increase likelihood of fraud
018	Low account utilization increases likelihood of fraud
019	Too few bankcard accounts
020	SSN Reported As Deceased
021	No Consumer File Found
022	Suppressed, Restricted, Or Minor File
023	Consumer Statement On File
024	Active Duty Alert On File
025	Initial Fraud Alert On File
026	Extended Fraud Alert On File

Minimum/Maximum Values

Service name

Minimum/Maximum Values

Service Code: Several

The Minimum/Maximum (Min/Max) Values add-on enables financial institutions to produce the credit score disclosure exception notice required by the FACT Act's Risk-based Pricing Rule.

The Min/Max Values are only available for certain score models. To receive this add-on, subscribers must be eligible for at least one of the following score models:

- CreditVision® Account Management Score (service code: 00V64)
- CreditVision® Auto Score (service code: 00V80)
- CreditVision® Bankruptcy Score (service code: 00V82)

- CreditVision® New Account Score (service code: 00W05)
- FICO® Score 95 (service code: 00002)
- FICO® Score 98 (service code: 00950)
- FICO® Score 4 (service code: 00P02)
- FICO® Auto Score 4 (service code: 00P12)
- FICO® Score 8 (service code: 00Q88)
- FICO® Auto Score 8 (service code: 00N20)
- FICO® NG Score 00 (service code: 00227)
- VantageScore® 1.0 (service code: 00P94)
- VantageScore® 2.0 (service code: 00N94)
- VantageScore® 3.0 (service code: 00V60)

The Min/Max Values add-on can currently be returned with the following primary services:

- Credit Report
- Model Report

Fixed Format Inquiry (FFI)

If your subscriber code is not configured to receive the Min/Max Values and its corresponding score model by default, you must include the following in the FFI for the Credit Report:

- An RA01 segment to request the Min/Max Values add-on.
- An RA01 segment to request its corresponding score model along with a Service Type = A.

If your subscriber code is configured to receive the Min/Max Values add-on and its corresponding score model by default, do not include an RA01 segment in the FFI for the Credit Report.

Note: CreditVision® New Account Min/Max Values add-on is not available by default.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per Min/Max Service	Optional
RA01	Request Add-on Service	1 Per Corresponding score model	Required if RA01 for Min/Max is included.

Min/Max Values Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with Min/Max Values.

RA01 (Request Add-on) Segment

To request Min/Max Values in an FFI, the request must include **two** RA01 segments, one for Min/Max Values and one for the corresponding score model. If both RA01 segments are not provided, the system will not return the Min/Max Values service. Refer to the table below for a list of the Min/Max Values services, their service codes, and the corresponding score models. The Minimum/Maximum Values add-on service usually includes the Score Percentile Ranking (SPR) as well as the minimum and maximum scores associated with a particular model.

Minimum/Maximum Values

Minimum/Maximum Service Code	Associated Model Service Name	Associated Model Service Code
00Y13	FICO® Score 8	00Q88
00Y14	FICO® Auto Score 8	00N20
00Y15	FICO® Score 4	00P02
00Y16	FICO® Auto Score 4	00P12
00Y17	FICO® Score 98	00950
00Y18	FICO® Score 95	00002
00Y29	FICO® NG Score 00	00227
00Y19	VantageScore® 1.0	00P94
00Y20	VantageScore® 2.0	00N94
00Y38	VantageScore® 3.0	00V60
00Y41	CreditVision® Auto	00V80
00Y44	CreditVision® Account Management	00V64
00Y46	CreditVision® Bankruptcy	00V82
00Y48	CreditVision® New Account	00W05

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for Min/Max Values in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name
AO01	Add-on Status
SC01	Scoring
CH01	Characteristic
CH01	Characteristic
CH01	Characteristic

If the Min/Max Values service is invoked successfully, the result is returned in three Characteristic Segments, CH01. The system returns the following data in the Credit Report response:

- An AO01 segment containing the following data:

— One of the Min/Max Values service codes (see table above)
— One of the following Service Status indicators:

- **01** Requested service delivered
- **05** Invalid score request — score was calculated, but the Score Percentile Ranking service encountered error
- **06** Requested information cannot be scored or returned because data is suppressed or cannot be evaluated. Score was not calculated for this reason; therefore, Score Percentile Ranking could not be delivered.

- For each eligible score returned in the SC01 segment, three different attributes are returned in three separate CH01 segments:

  — Score Percentile Ranking, when available
  — Score Minimum Value
  — Score Maximum Value

Models Supported (Service Code)	SPR Service Code	SPR Attribute ID	Min/Max Values Service Code	Minimum Attribute ID	Maximum Attribute ID
FICO Score 95 (00002)	00XB7	SPRFI95	00Y18	MINFI95	MAXFI95
FICO Score 98 (00950)	00XB6	SPRFI98	00Y17	MINFI98	MAXFI98
FICO Score 4 (00P02)	00XB4	SPRFI04	00Y15	MINFI04	MAXFI04
FICO Score 8 (00Q88)	00XB2	SPRFI08	00Y13	MINFI08	MAXFI08
FICO Auto Score 4 (00P12)	00XB5	SPRFI04A	00Y16	MINFI04A	MAXFI04A
FICO Auto Score 8 (00N20)	00XB3	SPRFI08A	00Y14	MINFI08A	MAXFI08A
FICO NG Score 00 (00227)	n/a	n/a	00Y29	MINFING	MAXFING
VantageScore 1.0 (00P94)	00XB8	SPRVNTG	00Y19	MINVNTG	MAXVNTG
VantageScore 2.0 (00N94)	00Y21	SPRVTG2	00Y20	MINVTG2	MAXVTG2
VantageScore 3.0 (00V60)	00Y39	SPRVTG3	00Y38	MINVTG3	MAXVTG3
CreditVision Account Management (00V64)	00Y43	SPRCVAM	00Y44	MINSCORE	MAXSCORE
CreditVision Auto (00V80)	00Y41	SPRAUTO	00Y42	MINAUTO	MAXAUTO

Models Supported (Service Code)	SPR Service Code	SPR Attribute ID	Min/Max Values Service Code	Minimum Attribute ID	Maximum Attribute ID
CreditVision Bankruptcy (00V82)	00Y47	SPRCVBKR	00Y46	MINSCORE	MAXSCORE
CreditVision New Account Score (00W05)	00Y49	CPRCVNA	00Y48	MINSCORE	MAXSCORE

- When the score cannot be calculated because the subject is deceased or has insufficient credit, an **SC01** segment is used in place of the CH01 segment and follows the AO01 segment. The SC01, when returned, contains the following data:
  - Service Code (see table on previous page)
  - Score = *blanks*
  - One of these Scoring Indicators:
    - 2 (subject deceased)
    - 3 (subject has insufficient credit)

Score Percentile Ranking

Service Code: Several

The Score Percentile Ranking (SPR) add-on enables financial institutions to produce the credit score disclosure exception notice required by the FACT Act's Risk-based Pricing Rule.

To receive this add-on, subscribers must be:

- Set up for the model and this new attribute in the TransUnion system.
- Eligible for the Credit Report.
- Eligible for **at least one** of the following score models:
  - CreditVision® Account Management Score (service code: 00V64)
  - CreditVision® Auto Score (service code: 00V80)
  - CreditVision® Bankruptcy Score (service code: 00V82)
  - CreditVision® New Account Score (service code: 00W05)
  - FICO® Score 95 (service code: 00002)
  - FICO® Score 98 (service code: 00950)
  - FICO® Score 4 (service code: 00P02)
  - FICO® Auto Score 4 (service code: 00P12)
  - FICO® Score 8 (service code: 00Q88)
  - FICO® Auto Score 8 (service code: 00N20)
  - VantageScore® 1.0 (service code: 00P94)
  - VantageScore® 2.0 (service code: 00N94)
  - VantageScore® 3.0 (service code: 00V60)

Score Percentile Ranking can currently be returned with the following primary services:

- Credit Report

Fixed Format Inquiry (FFI)

The SPR add-on is available either by default or by request using the RA01 segment. Below is more information about the RA01 segment.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
RA01	Request Add-on Service	1 Per SPR Service	Optional
RA01	Request Add-on Service	1 Per Corresponding score model	Required if RA01 for SPR is included.

Score Percentile Ranking (SPR) Processing Rules

This section describes how to use the RA01 (Request Add-on) segment with SPR.

Important: If you are configured to receive the SPR (and its corresponding score model) by default, do **not** include an RA01 segment in your FFI for Credit Report.

Note: The CreditVision® New Account SPR add-on is not available by default.

RA01 (Request Add-on) Segment

To request SPR in an FFI, the request must include **two** RA01 segments, one for SPR and one for the corresponding score model. If both RA01 segments are not provided, the system will not return the SPR service. Refer to the table below for a list of the SPR services, their service codes, and the corresponding score models.

SPR Service Code	Associated Model Service Code	Associated Model Service Name
00XB2	00Q88	FICO® Score 8
00XB3	00N20	FICO® Auto Score 8
00XB4	00P02	FICO® Score 4
00XB5	00P12	FICO® Auto Score 4
00XB6	00950	FICO® Score 98
00XB7	00002	FICO® Score 95
00XB8	00P94	VantageScore® 1.0
00Y21	00N94	VantageScore® 2.0
00Y39	00V60	VantageScore® 3.0
00Y41	00V80	CreditVision® Auto
00Y43	00V64	CreditVision® Account Management
00Y47	00V82	CreditVision® Bankruptcy
00Y49	00W05	CreditVision® New Account

The Score Percentile Ranking returns the percentile associated with the credit score that is returned by the score model and indicates the percentage of the population above which the consumer's score ranks. The percentile will populate the **[x]** position in this text statement returned on the model forms:

"Your score ranks higher than **[x]** percent of the U.S. consumers."

- When Credit Report inquiry processing results in a "hit," and at least one of the applicable score models return a credit score, the Score Percentile Ranking is returned — one for each of the applicable score models included in the request that returned a credit score.
- When the Credit Report inquiry processing results in a "no hit," the score model is not returned and, therefore, the Score Percentile Ranking is not returned.
- When a credit score cannot be calculated, the score model output is not a credit score and, therefore, the Score Percentile Ranking is not returned; however, the response will contain an indication that it could not be calculated.
- When a credit score is calculated but the Score Percentile Ranking cannot be determined for system or unexpected issues, the Score Percentile Ranking is not returned; however, the response will contain an indication that it was not available.

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for SPR in the order returned. For detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name
AO01	Add-on Status (SPR)
SC01	Scoring
CH01	Characteristic

If the Score Percentile Ranking is invoked successfully, the attribute result is returned in the Characteristic Segment, CH01. The system returns the following data in the Credit Report response:

- An AO01 segment containing the following data:
  - One of the SPR service codes (see table above)
  - One of the following Service Status indicators:
    - **01** Requested service delivered
    - **05** Invalid score request — score was calculated, but the Score Percentile Ranking service encountered error
    - **06** Requested information cannot be scored or returned because data is suppressed or cannot be evaluated. Score was not calculated for this reason; therefore, Score Percentile Ranking could not be delivered.
- A **CH01** segment, following the AO01 segment, containing the following data:
  - Service Code (see table on previous page)
  - One of these characteristic IDs:

Models Supported (Service Code)	SPR Service Code	SPR Attribute ID
FICO Score 95 (00002)	00XB7	SPRFI95
FICO Score 98 (00950)	00XB6	SPRFI98
FICO Score 4 (00P02)	00XB4	SPRFI04
FICO Score 8 (00Q88)	00XB2	SPRFI08
FICO Auto Score 4 (00P12)	00XB5	SPRFI04A
FICO Auto Score 8 (00N20)	00XB3	SPRFI08A
VantageScore 1.0 (00P94)	00XB8	SPRVNTG
VantageScore 2.0 (00N94)	00Y21	SPRVTG2
VantageScore 3.0 (00V60)	00Y39	SPRVTG3
CreditVision Account Management (00V64)	00Y43	SPRCVAM
CreditVision Auto (00V80)	00Y41	SPRAUTO
CreditVision Bankruptcy (00V82)	00Y47	SPRCVBKR
CreditVision New Account Score (00W05)	00Y49	CPRCVNA

  - Characteristic Value, a 3-byte percentile (001 – 100; left justified and space-filled)
- When the score cannot be calculated because the subject is deceased or has insufficient credit, an **SC01** segment is returned and follows the AO01 segment. No CH01 is returned. The SC01, when returned, contains the following data:

  - Service Code (see table on previous page)
  - Score = *spaces*
  - One of these Scoring Indicators:

    - 2 (subject deceased)
    - 3 (subject has insufficient credit)

TransUnion Contact Score

Service Code 00321

The Contact Score is a model service that returns a score associated with the contact phone number in a contact record returned by TransUnion Contact Identity services (i.e., Contact Verification 03150, Contact Verification Plus 03151, Contact Locator standalone 03152, or Contact Locator add-on 03159 or 03160) to indicate the confidence level that the subject of the record can be reached at that phone number.

Contact Score is available only by default, per the subscriber validation setting on the following primary services:

- Contact Verification

- Contact Verification Plus
- Contact Locator
- Credit Report
- Collection Prioritization Engine
- Collection Prioritization Engine 2.0

Note: To receive the Contact Score on Credit Report, CPE or CPE 2.0, a subscriber must be eligible for both the Contact Score and the Contact Locator add-on service (service code 03159 or 03160).

Fixed Format Inquiry (FFI)

The required input data for Contact Score will be the same as the standalone service on which Contact Score is returned. Refer to the standalone service descriptions for Contact Identity services, Credit Report, CPE and CPE 2.0 for details.

Because the Contact Score service will be delivered by default only, the subscriber does not need to explicitly request the Contact Score in a service request for Contact Identity services, Credit Report, CPE, or CPE 2.0.

Fixed Format Response (FFR)

The Contact Score model returns the following data:

- **Score**: the greater the score (from 0 to 100), the higher the confidence level that the subject associated with the contact phone number can be reached at the phone number.
- **Scoring Indicator Flag "3"**: indicates that the contact phone number is not scored because of insufficient data.

Return Contact Score for Contact Identity Standalone Services

The Contact Score will be returned in the SC01 segment right after the PN01 segment that returns the contact phone number of a listing record. The table below lists the FFR segments, in the order they are returned, of a Contact Identity standalone service (i.e., Contact Verification 03150, Contact Verification Plus 03151, or Contact Locator standalone 03152) with the Contact Score. The shaded segment represents the Contact Score data.

Segment ID	Segment Name	Current Maximum Returned	Notes
TU4R	Transaction Control	1 Per Transaction	
PH04	Product Header	1 Per Product	
SH03	Subject Header	1 Per Subject	
PN01	Phone Number (input de-dupe phone number that was hit in de-duping process)	1 per de-duping phone that hits in de-duping process 15 Phones Per Transaction	
CR01	Contact Result	1 Per Listing	15 Records Per Transaction

Segment ID	Segment Name	Current Maximum Returned	Notes
CR02	Additional Contact Results	1 Per Listing	
NM11	Name (Primary, Residential, Business/ Government or Calling Party Name	1 Per Listing	
PI11	Personal Information (echo input SSN)	1 Per Subject	
AD11/UA11	Address (parsed or unparsed)	1 Per Listing	
EF01	Extended Fields – returned only to users who have selected this option.	1 Per Listing	
PN01	Phone (contact phone from DB)	1 Per Listing	
SC01	Scoring (Contact Score)	1 Per Contact Phone	
END1	End	1 Per Transaction	

Return Contact Score with Contact Locator Add-on for Credit Report, CPE, or CPE 2.0

The Contact Score must be bundled with the Contact Locator add-on service (either the full version 03159 or the partial version 03160) when the score is returned for Credit Report, CPE, or CPE 2.0. The Contact Score will be returned in the SC01 segment right after the PN01 segment that returns the contact phone number of a listing record. The following tables list the FFR segments, in the order they are returned, of a Contact Locator add-on service and the Contact Score. The shaded segment represents the Contact Score data. Refer to #unique_259 for more information about the Contact Locator add-on service.

Table 3: Contact Locator Add-on — Full Version

Segment ID	Segment Name	Current Maximum Returned	
AO01	Add-on Status (**Contact Locator Add-on - Full**)	1 Per Contact Locator Add-on Service	15 Records Per Contact Locator Add-on
CR01	Contact Result	1 Per Listing Record	
CR02	Additional Contact Results	1 Per Listing Record	
NM11	Name (Primary, Residential, Business/Government or Calling Party Name	1 Per Listing Record	
AD11/UA11	Address	1 Per Listing Record	

Segment ID	Segment Name	Current Maximum Returned	
EF01	Extended Fields	1 Per Listing Record	
PN01	Phone Number (Contact Phone from DB)	1 Per Listing Record	
SC01	Scoring (Contact Score)	1 Per Contact Phone	

Table 4: Contact Locator Add-on — Partial Version

Segment ID	Segment Name	Current Maximum Returned	
AO01	Add-on Status (**Contact Locator Add-on - Partial**)	1 Per Contact Locator Add-on Service	15 Records Per Contact Locator Add-on
PN01	Phone Number (Contact Phone from DB)	1 Per Listing Record	
SC01	Scoring (Contact Score)	1 Per Contact Phone	

SC01 (Scoring) Segment

One SC01 segment will be used for each Contact Score returned. The following table describes the rules used by the Contact Score service. SC01 fields not described in this table are not used by Contact Score.

Scoring (SC01) Segment — Total length: 34 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes for Contact Score**
Score	14	5	A/N	Displays the results of the scoring process. If the file is not scored, this field will be blank.	Displays the score (0 – 100) when a contact phone number can be scored. This field will be blank when a contact phone number cannot be scored because of insufficient data. When this field is blank, the Scoring Indicator Flag field (displacement 19) will return the value “3.”

Sample of FFR for a Contact Identity Standalone Service with Contact Score

A sample of the FFR for the Contact Locator standalone service with Contact Score is presented below based on the following assumptions:

- Subscriber is eligible for the Contact Locator standalone service and the Contact Score add-on service.
- Subscriber provides the following information: name = Michael Brown; address = 7506 Old Chapel Dr., Bowie, MD 20715.

```
TU4R062011 CONT LOC            0622Z 0123456720120723164817
PH0401803152003003
SH030101H
CR01026001RSC 01020050625P
    NM01070F8BROWN                MIKE
    AD01105F107506    OLD CHAPEL         DR    BOWIE
MD20715-6010
        EF0106100206238.992363   -76.767944
0884097
    PN01027F1   3013522418
    SC0103400321 95
CR01026002RSC 01120070315P
    NM01070F8BROWN                M
    AD01105F107506    OLD CHAPEL         DR    BOWIE
MD20715-6010
        EF0106100206238.992363   -76.767944
0884097
    PN01027F1   3013525735
    SC0103400321 3
CR01026003BGP 01020090805P
    NM01070F5CARLSON
PLUMBING
    AD01105F507506    OLD CHAPEL         DR    BOWIE
MD20715-6010
        EF0106100206238.992363   -76.767944
0884097
    PN01027F5   3013527037
    SC0103400321 20
ENDS010014
```

Explanation of the result:

- The Contact Locator standalone service returns three records, each with a contact phone number.
- The Contact Score "95" associated with the first contact phone number, 301-352-2418, indicates that there is a high probability of reaching the listed subject, Mike Brown, if the phone number 301-352-2418 is dialed.
- The blank Contact Score and Scoring Indicator Flag "3" associated with the second contact phone number, 301-352-5735, indicates that there is insufficient data to calculate the score for the listed subject, Mike M.
- The Contact Score "20" associated with the third contact phone number, 301-352-7037, indicates that there is a lower probability to reach the listed entity, Carlson Plumbing, if the phone number 301-352-7037 is dialed.

The remainder of this section lists additional model details with message and score factor codes for the following models:

- CreditVision® Models
- CreditVision® Premium Algorithms
- DELPHI
- EDGE
- Energy Model
- FACETS
- FICO® Insurance Score
- FICO® Score 98
- FICO® Score 4
- FICO® Score 8
- FICO® Score 9
- FICO® Revenue Score
- FICO® Bankruptcy Score 98
- FICO® NG Score
- IDA Models
- L2C Model
- Life Insurance Persistency
- New DELPHI
- TransUnion Telecom Model
- Supplemental Data Recovery
- TransUnion Income Estimator 3.0 and TransUnion Debt-to-Income Estimator 3.0
- TransUnion Account Management 2.0 and 3.0
- TransUnion Auto
- TransUnion Bankruptcy 1.0
- TransUnion Broadband
- TransUnion Contact Score
- TransUnion Debt Management
- TransUnion New Account, versions 1.0, 2.0, and 3.0
- TransUnion Wireless Model 3
- TransUnion Wireless Model 2
- TransUnion Wireless Model
- VantageScore® 1.0
- VantageScore® 2.0
- VantageScore® 3.0
- VantageScore® 3.0 with Positive Factor Codes
- VantageScore® Authorized User
- Vehicle History Score
- VHS for Financial Services

CreditVision® Models and Factor Codes

CreditVision® Score Models

Model Name	Description	Service Code	Score Range	Factor Codes
CreditVision® Account Management Score	Delinquency (90+ days) on existing accounts within 12 months	00V64	300–850 Higher score indicates a lower risk	Up to 4 factor codes returned

Model Name	Description	Service Code	Score Range	Factor Codes
CreditVision® Auto Score	Delinquency (60+ days) on auto borrowers within 24 months	00V80	300–850 Higher score indicates a lower risk	Up to 4 factor codes returned
CreditVision® Bankruptcy Score	Rank orders the likelihood of a consumer filing for bankruptcy within 12 months of scoring	00V82	300–850 Higher score indicates a lower likelihood of bankruptcy	Up to 4 factor codes returned **Note:** A value of 'BK' in the scorecard indicates that the consumer had a bankruptcy filing at the time of scoring.
CreditVision® Debt-to-Income Estimator	Calculates an individual's debt-to-income ratio using credit information and the estimated income from CreditVision® Income Estimator	00U29	0 to 999	No factor codes returned.
CreditVision® Income Estimator	Uses current, individual-level credit characteristics to calculate an estimated income	00W16	0 to 999 with letter code corresponding to the Income Range (A-L)	No factor codes returned.
CreditVision® New Account Score	The score leverages new insights from TransUnion CreditVision® data including payment ratios, duration of balances, directional changes in balances, and shifts in utilization levels—data not normally included in traditional models.	00W05	300–850 Higher score indicates a lower risk	Up to 4 factor codes returned

CreditVision® Model Factor Codes

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
000	000	000	000	No adverse factors
001		001	001	Available credit on bankcard account is too low
			005	Not enough bank installment debt experience
006	006	006	006	Bankcard account balances are too high in proportion to credit limits
		010	010	Too many delinquencies
			011	Installment account balances too high in proportion to credit limits
		013	013	Revolving account balances are too high in proportion to credit limits
015	015	015	015	Number of satisfactory accounts is too low in proportion to total number of accounts
016			016	Too few satisfactory accounts
	017		017	Length of time oldest bank revolving account has been established is too short
020		020	020	Length of time revolving accounts have been established is too short
022	022	022	022	Too many inquiries
023	023	023	023	Months since most recent delinquency is too short
024	024	024	024	Too many serious delinquencies
		025	025	Months since most recent serious delinquency is too short
026		026	026	Number of delinquent accounts is too high in proportion to total number of accounts
029	029	029	029	Retail account balances are too high in proportion to credit limits

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
030	030		030	Not enough retail debt experience
031	031	031	031	Revolving account balances are too high in proportion to credit limits
032	032	032	032	Not enough revolving debt experience
035	035	035	035	Length of time accounts have been established is too short
036				Length of time most recent account has been established is too short
037	037	037	037	Too few bankcard accounts
	040			Too few premium bankcard accounts
043	043	043	043	Too few open revolving accounts
048	048	048	048	Too few active mortgage accounts
050		050	050	Too many accounts with a balance
	053	053	053	Too many derogatory accounts or public records
		054	054	Too many finance installment accounts
060		060	060	Too many recent mortgage delinquencies
061			061	Too many recently opened accounts
066	066	066	066	Too many serious derogatory items
068				Total account balances, excluding mortgages, is too high
	069	069	069	Not enough debt experience
			070	Length of time since most recent bankcard account has been established is too short
		071	071	Too many bankcard accounts with balances

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
072				Average balance of bankcard accounts is too high
073	073	073	073	Not enough mortgage debt experience
074				Too few satisfactory revolving accounts
076	076	076	076	Total amount past due is too high
079	079	079	079	Too few bank revolving accounts
080		080	080	Too many accounts with a balance currently past due
081		081	081	Length of time since most recent derogatory public record is too short
082	082			Total balance of retail accounts is too high
		083	083	Total balance of revolving accounts is too high
084	084			Not enough installment debt experience
086			086	Too many mortgage delinquencies
088		088	088	Length of time since most recent mortgage account delinquency is too short
			089	Length of time retail accounts have been established is too short
		093	093	Length of time since oldest mortgage account has been established is too short
	097	097	097	Bank revolving account balances are too high in proportion to credit limits
099		099	099	Too many revolving accounts with balances too high in proportion to credit limits
		101	101	Total balance of finance installment accounts is too high

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
			102	Length of time since most recent inquiry is too short
103	103	103	103	Not enough available credit
105	105	105	105	Too few revolving accounts
108				Length of time since most recent installment delinquency is too short
111	111	111	111	Not enough bankcard debt experience
117		117	117	Length of time since most seriously delinquent account has been established is too short
	118			Finance account balances are too high in proportion to credit limits
119		119	119	Total balance of bankcard accounts is too high
124			124	Too few installment accounts
125	125		125	Length of time since installment accounts have been established is too short
129	129		129	Not enough auto debt experience
131	131		131	Length of time since most recent auto delinquency is too short
132	132	132	132	Too few open accounts
	135	135	135	Too many finance or installment accounts
		136	136	Too many revolving accounts
137			137	Total account balances are too high in proportion to credit limits
138	138		138	Not enough available credit on active or open bankcard accounts
			139	Insufficient prepayment activity on installment accounts over the last year
140				Not enough available installment credit

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
141	141	141	141	Too few accounts recently updated
142	142	142	142	Not enough balance decreases on active non-mortgage accounts
143		143	143	Not enough balance decreases on mortgage accounts
144	144	144	144	Change of indebtedness on non-mortgage accounts
145	145	145	145	Total balances are too high in proportion to credit limits on mature mortgage accounts
146			146	Recency of a balance overlimit on a bankcard account
147				Ratio of payment to minimum obligation on installment accounts
148	148	148	148	Ratio of payment to minimum obligation on revolving accounts
149			149	Change of indebtedness on revolving accounts
150	150	150		Insufficient credit activity on revolving accounts
151		151	151	Ratio of payment to minimum obligation on bankcard accounts
152	152	152	152	Insufficient credit activity on bankcard accounts
			154	Insufficient payment activity over the last year
155	155	155	155	Recency of max aggregate bankcard balance over the last year
			156	Too many recent revolving payment activities
			157	Too few recent transactor payment activities
158	158		158	Too few open retail accounts
	159			Auto account balances are too high in proportion to credit limit
	160			Too few open auto accounts

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
	161			Too many recently opened revolving accounts
	162			Too few open premium bankcard accounts
	163		163	Too many recent instances where bankcard balances exceed limits
164	164	164	164	Too few non-mortgage accounts
	165			Too many months with a bankcard credit limit change over the last year
	166	166	166	Too many bankcard balance shifts in recent months
167	167	167	167	Too high max aggregate bankcard utilization over the last quarter
	168			Average balance of auto accounts is too high
	169		169	Presence of non-conventional terms on most recent auto account
	170			Recent revolving behavior on bankcard
			171	Too few open non-mortgage accounts
	172			Too many months with a non-mortgage account balance increase over the last year
173				Not enough bank revolving debt experience
174	174	174	174	Too few open bankcard accounts
175	175	175	175	Length of time since oldest bankcard account has been established is too short
176			176	Too few open installment accounts
			178	Too few satisfactory retail accounts
		179	179	Too many recently opened finance installment accounts

CreditVision® Account Management Score 00V64	CreditVision® Auto Score 00V80	CreditVision® Bankruptcy Score 00V82	CreditVision® New Account Score 00W05	Description
		180	180	Too many consecutive occurrences of bankcard past due amounts
		181	181	High recent balance range relative to previous balance range
		182	182	Monthly obligations are too high
		183	183	Total balance of bank revolving accounts is too high
		184	184	Length of time most recent bank revolving account has been established is too short
			185	Increase of total bankcard balance to payment ratio over the last year compared to the prior year
			186	Bank installment account balances are too high in proportion to credit limits
			187	Too few open bank installment accounts
			188	Too few active bankcard accounts
			189	Ratio of payment to minimum obligation on accounts

CreditVision® Premium Algorithms

Various Service Codes

The CreditVision® Premium Algorithms help assess consumer performance across multiple time horizons and identify key consumer behavior patterns (e.g. use of revolving credit, balance build, loyalty, and product preference). They have been designed for use in risk management, marketing, and collections applications.

The algorithms are packaged into sets by application:

CreditVision® Algorithm Set	Service Code	Description	Total Algorithms in Set
General	00H85	Includes counter algorithms (e.g., number of bankcards)	6
Aggregate	00H86	Identifies aggregate behaviors over various time periods	203
Trade-to-Consumer	00H87	Identifies aggregate trade behavior shifts over various time periods	23
Balance Magnitude	00H88	Measures the degree of balance change over the past 24 months	2
Revolver	00H89	Identifies revolver behavior in retail or bank cards over time	33
Wallet Share	00H90	Determines month-over-month shifts and other time-lags in select bankcard balances as a percent of total bankcard debt	10
Payment	00H91	Evaluates how consumers manage monthly obligations over time	11
Aggregate (without payment data)	00V24	Identifies aggregate behaviors over various time periods	155
Spend	00V53	Provides multi-dimensional views into consumer credit card spending behavior	37
Collections	00W14	Helps assess a consumer's ability to repay outstanding debt by identifying key consumer behavior patterns across multiple time horizons (time periods)	22

Each set of algorithms will be returned under a unique Service Code. All Characteristic IDs listed will be returned within each Service Code.

Fixed Format Inquiry (FFI)

The Premium Algorithm add-on services are delivered by subscriber default settings or upon request using the Request Add-on (RA01) segment in the FFI for the following standalone services:

- Credit Report
- Collection Prioritization Engine 1.0
- Collection Prioritization Engine 2.0
- Model Report

Fixed Format Response (FFR)

Each Premium Algorithm Service Code will be preceded by an AO01 (add-on) segment and is returned in the CH01 (characteristic) segment of the response:

- **Characteristic ID** — Displays the CreditVision® Algorithm ID

- **Characteristic Value** — Returns the CreditVision® Algorithm value:
  - Numeric data is right justified with leading zeroes
  - Ratios return two-digit values, right justified with leading zeroes
  - Character data is left justified with trailing blanks
  - For applicable special values, the (-) sign will appear in the first space

DELPHI (1997 Redevelopment) Message Codes

DELPHI is the third generation of this bankruptcy model.

DELPHI Factor Code	Description
000	No adverse factor
001	Too few accounts paid as agreed
002	Too many delinquent accounts
003	Too many derogatory accounts
004	Delinquency date too recent
005	Past due balances
006	Revolving credit utilization too high
007	Insufficient credit history
008	Insufficient length of credit history
009	Too many new accounts
010	Too many active revolving accounts
011	Insufficient recent revolving credit history
012	Too many bank revolving accounts
013	Too many recently active bank revolving accounts
014	Bank revolving credit utilization too high
015	Insufficient credit history on bank revolving accounts
016	Too many accounts
017	Excessive amount on derogatory public record items
018	Insufficient satisfactory history on mortgage loans
019	Too many delinquent mortgage loans
020	Insufficient satisfactory history on retail accounts
021	Retail revolving credit utilization too high
022	Too many credit checks and active accounts and credit utilization too high
023	Too many finance accounts
024	Too many new finance accounts

DELPHI Factor Code	Description
025	Too many collections or derogatory public record items
026	Bankruptcy
027	Too many new bank revolving accounts
028	Too many recent finance credit checks
029	Too many recent credit checks
030	Too recent collection or derogatory public record item
031	Too many accounts with recent balances
032	Excessive amount owed
033	Too many recent auto credit checks
034	Too many recent retail credit checks
035	Too many retail accounts
036	Too many active retail accounts
037	Too many delinquent installment loans
038	Too many new installment loans
039	Insufficient credit history on mortgage loans
040	Too many mortgage loans
041	No recent non-mortgage balances
042	No recent bank revolving accounts
043	No recent retail accounts

EDGE Score Factor Codes

EDGE is a TransUnion generic model developed to predict the probability of a bank card account becoming 90 or more days past due in a 24-month period. Primary use of this model is for new account and prescreening application processing. A higher score indicates a better credit risk.

The EDGE model is always preceded by a FICO® Bankcard Score 98 or 95. Execution of the EDGE risk model depends upon the processing results of the FICO® Bankcard Score model. The EDGE model only processes accounts that have the following:

- A FICO® Bankcard Score 98 or 95, score between 550 and 670
- At least four revolving accounts
- At least one bankcard account

EDGE Factor Code	Description
01	Length of time open for revolving accounts too low

EDGE Factor Code	Description
02	Length of time open for delinquent accounts too low
03	Time weighted balance on revolving accounts too high
04	Time weighted credit usage on open, revolving accounts too high
05	Time weighted credit usage on open accounts too high
06	Time weighted available credit on revolving accounts too high
07	Average length of time since opened for bankcard accounts to low
08	Average length of time since opened for revolving accounts too low
09	Too many revolving accounts with delinquency over the past 6 months
10	Outstanding balance on bankcards too high
11	Balance weighted length of time open for accounts too recent
12	Balance weighted credit usage on open revolving accounts too high
13	Balance weighted balance-to-limit ratio too high
14	Balance weighted balance-to-limit ratio on revolving accounts too high
16	Outstanding balance on open revolving accounts too high
17	Outstanding balance on revolving accounts too high
18	Past bankruptcy
19	Balance-to-limit ratio on open revolving accounts too high
20	Balance on recent delinquent bankcard accounts too high
21	Balance on recent delinquent real estate accounts too high
22	Balance on currently delinquent open accounts too high
24	Too few open accounts
25	Revolving accounts with recent delinquency too high
26	Revolving accounts with delinquency too high
27	Delinquent accounts too recent
28	Delinquent revolving accounts too recent
30	Time in months since most recent high delinquency too short
31	Too many inquiries
33	Percent of revolving accounts presently delinquent too high
34	Percent of bankcard accounts presently delinquent too high
37	Too many closed revolving accounts
38	Too many accounts presently delinquent
39	Too many open revolving accounts
40	Too few paid accounts
41	Too many secured credit accounts

EDGE Factor Code	Description
42	Worst status on an account too recent
43	Worst status on a revolving account too recent
44	Too many bankcard accounts
45	Too many open revolving accounts with high balance-to-limit ratio
46	Too many open bank card accounts with high balance-to-limit ratio
49	Too few accounts presently current
50	Too many accounts delinquent or derogatory
51	Too many delinquent retail accounts
53	Too many bankcard accounts delinquent or derogatory
56	Too many derogatory accounts
58	Too many recent inquiries
60	Too many loan finance accounts
61	Too many real estate accounts delinquent or derogatory
65	Too many accounts opened in the past 24 months
67	Too many bankcards opened recently
68	Too many bankcards opened within the past 24 months
69	Too many installment loans opened within the past 24 months
70	Too many bankcards opened within the past 36 months
74	Too many retail accounts
75	Too many revolving accounts
78	Too many accounts
79	Worst status on recently opened accounts too high
80	Worst status on revolving accounts open within the past 24 months too high
81	Present delinquency status on open account
82	Present delinquency on a T & E card
83	Present delinquency on open bankcard account
84	Present delinquency on revolving account
85	Worst delinquency on a bankcard too high
86	Too many accounts with delinquent or derogatory status
87	Worst status on a account too high
89	Too many revolving accounts with high outstanding balance
90	Delinquency status on real estate accounts
91	Too few revolving accounts
92	Too few bankcard accounts

EDGE Factor Code	Description
94	Too many revolving accounts with delinquency over the past 24 months
95	High delinquency or derogatory on previous bankcard
97	Recent delinquency on a revolving account
98	Delinquency on a revolving account within the past six months
99	Number of delinquent accounts too high

Energy Model Score Factor Codes

The Energy Model predicts the likelihood that an energy account will become 60 or more days delinquent over the next 12 months. A high score indicates low risk, a low score indicates high risk.

Energy Factor Code	Description
00	No adverse factors
01	Proportion of satisfactory accounts to total accounts is too low
02	Delinquency
03	Serious delinquency, derogatory public record, or collection
04	Recent delinquency
05	Recent serious delinquency, derogatory public record, or collection
06	Too many new accounts with a balance
07	Too many new accounts
08	Insufficient length of credit history
09	Too many active accounts
10	Limited credit available
11	Insufficient number of satisfactory revolving accounts
12	Insufficient length of revolving credit history
13	Lack of revolving accounts or lack of recent revolving credit history
14	Proportion of revolving balances to revolving high credit limits is too high
15	Lack of bank revolving accounts or lack of recent bank revolving credit history
16	Bank revolving utilization ratio is too high
17	Insufficient number of satisfactory bank revolving accounts
18	Insufficient number of bank revolving accounts with high credit limits
19	Excessive amount owed on bank revolving accounts

Energy Factor Code	Description
20	Limited bank revolving credit available
21	Insufficient number of satisfactory retail revolving accounts
22	Lack of retail revolving accounts
23	Too many personal finance installment accounts
24	Insufficient number of satisfactory mortgage accounts
25	Lack of accounts
26	Too many accounts where revolving utilization is too high

FACETS Score Factor Codes

FACETS returns up to 4 of 13 possible adverse action codes and their associated descriptions on credit reports and batch output. FACETS segment 12 is the only segment that does not require adverse actions. FACETS returns up to four adverse action factors in the order of severity. The following table shows the FACETS adverse action codes and their associated descriptions.

FACETS Factor Code	Description
001	Recent delinquency
002	High credit utilization on bankcard accounts
003	Low bank revolving credit limit
004	Too many recent credit checks
005	Insufficient credit history
006	Too many recently opened personal finance accounts
007	Too many recently opened bankcard accounts
008	Too many active bankcard accounts
009	Too many recently opened retail accounts
010	High balance on installment accounts
011	Too many oil and national accounts
012	Too few active bankcard accounts
013	High credit utilization on retail accounts

FICO® Insurance Score Message Codes

FICO® Insurance Score models were developed to determine insurance risk based on credit history.

FICO® Insurance Score Code	Description
001	Favorable amount owed on accounts (+)
002	No recent delinquency (+)
003	Favorable number of bank or national revolving/open accounts (+)
004	Favorable number of accounts with outstanding balances (+)
005	Favorable number of finance accounts (+)
006	Favorable number of recent credit checks (+)
007	Favorable number of new accounts (+)
008	Proportion of revolving balances to revolving credit limits is favorable (+)
009	Favorable amount owed on revolving accounts (+)
010	Favorable length of revolving credit history (+)
011	No past delinquency or favorable length of time since last delinquency (+)
012	Favorable length of credit history (+)
013	No current or past delinquencies (+)
014	Favorable time since last derogatory public record or collection (+)
015	Minimal or no past due balances (+)
016	Favorable payment history (+)
017	Absence of collection accounts (+)
018	Favorable number of revolving accounts with balances (+)
019	Favorable time since last credit check (+)
020	Favorable time since most recent account established (+)
021	Favorable number of installment loan accounts (+)
022	Favorable number of installment loan accounts with outstanding balances (+)
023	Favorable time since most recent installment loan established (+)
024	Favorable number of accounts with large high credit amounts (+)
025	Proportion of loan balances to installment loan amounts is favorable (+)
026	Favorable number of real estate accounts (+)
027	Favorable number of new or existing finance company accounts (+)
028	No delinquency ever on installment loans (+)

FICO® Insurance Score Code	Description
029	Favorable percentage of open revolving accounts to all other accounts (+)
030	Favorable number of accounts (+)
031	No delinquency on open revolving accounts (+)
032	Favorable length of time since most recent finance company account opened (+)
033	Favorable number of accounts (+)
034	Favorable time since most recent retail account opened or none present (+)
035	No finance company accounts or no recently active finance company accounts (+)
036	Favorable number of recently active accounts (+)
037	Favorable number of revolving or open accounts (+)
038	Favorable number of adverse public records (+)
040	Favorable time since last collection (+)
041	Favorable time since last adverse public record (+)
051	Excessive or unknown amount owed on accounts (-)
052	Recent delinquency (-)
053	Unfavorable number of bank or national revolving/open accounts (-)
054	Too many accounts with balances (-)
055	Too many finance company accounts (-)
056	Too many recent credit checks (-)
057	Too many new accounts (-)
058	Proportion of revolving balances to revolving credit limits is too high or there are no revolving credit accounts (-). For Nevada only, replaced by 92 and 93.
059	Excessive amount owed on revolving accounts (-)
060	Insufficient length of revolving credit history (-)
061	Delinquency date too recent (or date unknown) (-). For Nevada only, replaced by 95 and 63.
062	Insufficient length of credit history (-)
063	Delinquency (-). For Nevada responses only, indicates presence of delinquency and replaces Date Unknown.
064	Recent derogatory public record or collection (-)
065	Past due balances (-)
066	Delinquency, derogatory public record or collection (-)
067	Presence of collection accounts (-)
068	Too many revolving accounts with balances (-)

FICO® Insurance Score Code	Description
069	Date of last credit check too recent or unknown (-)
070	Insufficient time since most recent account established (-)
071	Unfavorable number of installment loan accounts (-)
072	Too many installment loan accounts with outstanding balances (-)
073	Insufficient time since most recent installment loan established (-)
074	Too many accounts with high credit amounts (-)
075	Proportion of loan balances to installment loan amounts is too high (-)
076	Unfavorable number of real estate accounts(-)
077	Too many new or existing finance company accounts (-)
078	Prior installment loan delinquency or no installment loans present (-)
079	Unfavorable percentage of open revolving accounts to all other accounts (-)
080	Presence of delinquency, public record or collection (-)
081	Delinquency on open revolving accounts (-)
082	Finance company account opened recently (-)
083	Unfavorable number of accounts (-)
084	Unfavorable length of time since most recent retail account opened (-)
085	Too many recent active finance company accounts (-)
086	Unfavorable number of recently active accounts (-)
087	Unfavorable number of revolving or open accounts (-). For Nevada only, replaced by 92 and 94.
088	Unfavorable number of adverse public records (-)
090	Recent collection (-)
091	Recent adverse public record (-)
092	Lack of recent revolving account information (-). Returned for Nevada responses only.
093	Proportion of revolving balances to revolving credit limits is too high (-). Returned for Nevada responses only.
094	Too many revolving/open accounts (-). Returned for Nevada responses only.
095	Delinquency date too recent (-). Returned for Nevada responses only.

FICO® Score, Revenue Score, and Bankruptcy Score Message Codes

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
Amount owed on accounts too high	01	01	01	01	01	01		01
Level of delinquency on accounts	02	02	02	02	02	02		02
Proportion of loan balances to loan amounts is too high	03	03	03	03	03	03		03
Lack of recent installment loan information	04	04	04	04	04	04		04
Too many accounts with balances	05	05	05	05	05	05		05
Too many consumer finance company accounts	06	06	06	06	06	06		06
Account payment history is too new to rate	07	07	07	07	07	07		07
Too many inquiries last 12 months	08	08	08	08	08	08		08
Too many accounts recently opened	09	09	09	09	09	09		09

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
Proportion of balances to credit limits on bank/ national revolving or other revolving accounts is too high	10	10	10	10	10	10		10
Amount owed on revolving accounts is too high	11	11	11	11	11	11		11
Length of time revolving accounts have been established	12	12	12	12	12	12		12
Time since delinquency is too recent or unknown	13	13	13	13	13	13		13
Length of time accounts have been established	14	14	14	14	14	14		14
Lack of recent bank/ national revolving information	15	15	15	15	15	15		15
Lack of recent revolving account information	16	16	16	16	16	16		16
No recent non-mortgage balance information	17	17	17	17	17	17		17

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
Number of accounts with delinquency	18	18	18	18	18	18		18
Date of last inquiry too recent *For future use*	19	19	19	19	19	19		19
Time since derogatory public record or collection is too short	20	20	20	20	20	20		20
Amount past due on accounts	21	21	21	21	21	21		21
Serious delinquency , derogatory public record or collection filed *For future use*		22T	22T	22T	22T	22T		
Number of bank or national revolving accounts with balances								23
No recent revolving balances	24	24	24	24	24	24		24
Length of time installment loans have been established			25					25
Number of bank/				26		26		26

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
national revolving or other revolving accounts								
Too few accounts currently paid as agreed	27	27	27	27	27	27		27
Number of established accounts	28	28	28	28	28	28		28
No recent bank/ national revolving balances	29	29	29	29	29	29		29
Time since most recent account opening is too short	30	30	30	30	30	30		
Amount owed on delinquent accounts			31	31		31		31
Payments due on accounts								36
Length of time open installment loans have been established			36					
Serious delinquency , and public record or collection filled	38	38	38	38	38	38		38
Serious delinquency	39	39	39	39	39	39		39

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
Derogatory public record or collection filed	40	40	40	40	40	40		40
No recent retail balances *For future use*	41	41						
Length of time since most recent consumer finance company accounts established *For future use*	42	42						
Lack of recent retail account information *For future use*	50	50					50	50
Number of active retail accounts							51	51
Number of active bank revolving or national revolving accounts							52	52
Lack of recent consumer finance account information							53	
Amount paid down on open mortgage			53					

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
loans is too low								
Number of recently opened consumer finance company accounts							54	54
Number of accounts with delinquency							55	
Amount paid down on open mortgage loans is too low			55					
Amount owed on retail accounts *For future use*	56	56					56	
Time since most recent retail account established							57	57
Length of time accounts have been established							58	
Proportion of balances to loan amounts on mortgage loans is too high			58					
Lack of recent bank revolving							59	

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
account information								
Lack of recent revolving HELOC information			59					
No recent bank revolving or national revolving balances							60	
Proportion of balances to credit limits on bank revolving or other revolving accounts							61	
Lack of recent installment loan information			32				62	
Proportion of balances to credit limits on revolving HELOC accounts is too high			62					
Proportion of loan balances to loan amounts							63	
Lack of recent revolving account information							64	

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
Proportion of revolving HELOC balances to total revolving balances is too high			64					
No recent revolving balances							65	
Length of time bank/ national revolving accounts have been established			65					
Amount owed on bank revolving or national revolving accounts							66	66
Amount of bankcard credit extended							67	
Length of time open mortgage loans have been established			67					
Monthly payment due on accounts							68	
Amount owed on revolving accounts							69	69
Level of delinquency on accounts							70	

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
Amount owed on mortgage loans is too high			70					
Lack of prior revenue based on payment pattern history							71	
Number of open installment loans								74
Too many recently opened installment accounts			71					
Proportion of balances to loan amounts on auto accounts is too high			77					
Length of time reported mortgage accounts have been established			78					
Lack of recent reported mortgage loan information			79					
Too many recently opened bank revolving or national								80

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
revolving accounts								
Frequency of delinquency			81					81
No mortgage loans reported								82
Proportion of revolving balances to total balances is too high								83
Too few active accounts			85					85
Time since most recent revolving account established								86
Amount of credit available on revolving accounts								87
Number of revolving accounts with balances higher than limits								88
Too many mortgage loans with balances			96					
Lack of recent auto loan information			97	97		97		
Length of time	98							

Description	FICO® Score 9	FICO® Score 8	FICO® Mortgage Score 8	FICO® Score 8, Industries	FICO® Score 4	FICO® Score 4, Industries	FICO® Revenue Score	FICO® Bankruptcy Score
consumer finance company loans have been established *For future use*								
Lack of recent consumer finance company account information				99		99		99

Model Alert message occurs when a credit file contains one or more of the following: previous bankruptcy, derogatory public record, collection activity, or an account rating of seven or higher.

Model Not Scored: Insufficient Credit message occurs when a credit file does not contain an account opened for at least six months and account updated within the last six months.

Model Not Scored: Deceased message occurs when the subject's Social Security Number matches the Social Security Administration's deceased Social Security Number file, or is reported as deceased by a credit grantor.

FACTOR 22T is only returned with: FICO® Score 95 or FICO® Score 95 Industry Scores.

FICO® Score, FICO® Revenue Score, and FICO® Bankruptcy Score are Fair Isaac products.

FICO® NG Score Factor Codes

The FICO® NG Score model predicts the likelihood of a subscriber, applicant or prospect becoming delinquent (90+) within 24 months. A high score indicates low risk, a low score indicates high risk.

FICO® NG Score Factor Code	Description
A0	Account payment history is too new to rate
A1	Accounts last reported in delinquent status
A2	Amount of credit available on revolving accounts
A3	Amount owed on accounts is too high

FICO® NG Score Factor Code	Description
A4	Amount owed on bank/national revolving accounts
A5	Amount owed on collections filed
A6	Amount owed on delinquent accounts
A7	Amount owed on recently opened accounts is too high
A8	Amount owed on recently opened bank/national revolving accounts is too high
A9	Amount owed on recently opened consumer finance company accounts is too high
B0	Amount owed on recently opened retail accounts is too high
B1	Amount owed on recently opened revolving accounts is too high
B2	Amount owed on recently opened sales finance company accounts is too high
B3	Amount owed on retail accounts
B4	Amount owed on revolving accounts
B5	Amount owed on revolving accounts is too high
B6	Amount past due on accounts
D0	Bankruptcy filing reported
D1	Date of last inquiry too recent
D2	Delinquency on accounts
D3	Delinquency on recently opened accounts
D4	Derogatory public record or collection filed
D5	Frequency of delinquency
D6	Level of delinquency on accounts
D7	Serious delinquency
D8	Serious delinquency, and public record or collection filed
D9	Serious delinquency, derogatory public record, or collection filed
F0	Insufficient installment payment history
F1	Lack of recently established credit accounts
F2	Lack of recently established revolving accounts
F3	Lack of recent auto finance loan information
F4	Lack of recent auto loan information
F5	Lack of recent bank/national revolving information
F6	Lack of recent consumer finance company account information
F7	Lack of recent installment loan information
F8	Lack of recent reported mortgage loan information

FICO® NG Score Factor Code	Description
F9	Lack of recent non-mortgage installment loan info
G0	Lack of recent retail account information
G1	Lack of recent revolving account information
G2	No mortgage loans reported
G3	No recent bank/national revolving balances
G4	No recent non-mortgage balance information
G5	No recent retail balances
G6	No recent revolving balances
J0	Length of time accounts have been established
J1	Length of time auto accounts have been established
J2	Length of time bank/national revolving accounts have been established
J3	Length of time consumer finance company loans have been established
J4	Length of time installment loans have been established
J5	Length of time reported mortgage accounts have been established
J6	Length of time open installment loans have been established
J7	Length of time retail accounts have been established
J8	Length of time revolving accounts have been established
J9	Length of time since account activity is too long
K0	Time since delinquency is too recent or unknown
K1	Time since derogatory public record or collection is too short
K2	Time since most recent account opening is too short
K3	Time since most recent auto account opening is too short
K4	Time since most recent bank/national revolving account opening is too short
K5	Time since most recent consumer finance company account opening is too short
K6	Time since most recent installment loan account opening is too short
K7	Time since most recent retail account established
K8	Time since most recent revolving account established
M0	Number of accounts currently in delinquent status
M1	Number of accounts with delinquency
M2	Number of accounts with recent delinquency
M3	Number of active bank/national revolving accounts
M4	Number of active retail accounts

FICO® NG Score Factor Code	Description
M5	Number of adverse/derog public records
M6	Number of bank/national revolving accounts with balances
M7	Number of bank/national revolving accounts
M8	Number of bank/national revolving or other revolving accounts
M9	Number of collections filed
N0	Number of finance company accounts relative to length of finance history
N1	Number of consumer finance company inquiries
N2	Number of established accounts
N3	Number of open installment loans
N4	Number of recently opened consumer finance company accounts
N5	Number of retail accounts
N6	Number of retail accounts with balances
N7	Number of revolving accounts
N8	Number of revolving accounts with balances higher than limits
P0	Proportion of balance to limit on auto accounts is too high
P1	Proportion of balance to limit on delinquent accounts is too high
P2	Proportion of balance to limit on consumer finance company accounts is too high
P3	Proportion of balance to limit on retail accounts is too high
P5	Ratio of balances to limits on bank/national rev or other rev accounts too high
P6	Proportion of balances to credit limits on revolving accounts is too high
P8	Proportion of balances to loan amounts on mortgage loans is too high
P9	Proportion of loan balances to loan amounts is too high
Q0	Proportion of revolving balances to total balances is too high
Q1	Proportion of balances to limits on bank/national revolving accounts too high
R0	Too few accounts currently paid as agreed
R1	Too few accounts with balances
R2	Too few accounts with recent payment information
R3	Too few active accounts
R4	Too few bank/national revolving accounts
R5	Too few bank/national revolving accounts with recent payment information

FICO® NG Score Factor Code	Description
R6	Too few consumer finance company accounts with recent payment information
R7	Too few installment accounts
R8	Too few retail accounts
R9	Too few retail accounts with recent payment information
S0	Too few revolving accounts
S1	Too few revolving accounts with recent payment information
T0	Too many accounts recently opened
T1	Too many accounts with balances
T2	Too many bank/national revolving accounts
T3	Too many consumer finance company accounts
T4	Too many installment accounts
T5	Too many inquiries last 12 months
T6	Too many recently active accounts
T7	Too many recently active auto accounts
T8	Too many recently active bank/national revolving accounts
T9	Too many recently active consumer finance company accounts
U0	Too many recently active installment loan accounts
U1	Too many recently active retail accounts
U4	Too many recently opened accounts with balances
U5	Too many recently opened bank/national revolving accounts
U6	Too many recently opened consumer finance company accounts
U7	Too many recently opened installment accounts
U8	Too many recently opened retail accounts with balances
U9	Too many recently opened revolving accounts
V0	Too many recently opened revolving accounts with balances
V2	Too many retail accounts
V3	Too many revolving accounts
V4	Too many recently opened bank/national revolving accounts with balances
X0	Payments due on accounts

FICO® NG Score Model Not Scored: Insufficient Credit message occurs when a credit file does not contain an account opened for at least six months or an account Updated within the last six months.

FICO® NG Score Model Not Scored: Deceased message occurs when the subject's Social Security Number matches the Social Security Administration's deceased Social Security Number file.

ID Analytics (IDA) Models and Factor Codes

The IDA model service offers a suite of models that can be delivered with some TransUnion standalone services. The following table summarizes these IDA models.

Model Name	Service Code	Score Range	Factor Codes
ID Score 8.0	00668	0–999	Up to 3 factor codes returned
Credit Optics Score	00N34, 00666, 00667	0–999	Up to 4 factor codes returned
Collections Optics Early Stage Score	00N35	1–9990 = deceased	No factor codes returned
Collections Optics Installment Loan	00663	1–9990 = deceased	No factor codes returned
Collections Optics Late Stage Score	00N36	1–9990 = deceased	No factor codes returned
Credit Optics Plus General	00N37, 00674	000–999	4 factor codes and an Inquiry Alert flag are returned **Note:** The new Credit Optics Plus scores (00674 through 00677) are the same as these existing ones with the score range reversed, meaning high score equals low risk.
Credit Optics Plus Bankcard	00N38, 00675	000–999	
Credit Optics Plus Wireless	00N39, 00676	000–999	
Credit Optics Plus Auto	00N40, 00677	000–999	

- For the Collections Optics Late Stage Score model, a higher score indicates a **lower** risk; for the other three IDA models, a higher score reflects a **higher** risk.
- For the Credit Optics Scores (00N34, 00666, 00667) and the Credit Optics Plus scores (00N37–00N40, 00674–00677):
  - Permissible purpose is required to receive this score
  - Contact information for ID Analytics, Inc., will be returned for consumer disputes
- An IDA Model Transaction Number will be returned for all transactions.
- You can request only one Credit Optics Plus model per transaction. If multiple Credit Optics Plus models are requested in the same transaction, only the first model is returned.
- The Credit Optics Plus models return an Inquiry Alert flag (displacement 20 in the Scoring (SC01) segment), which indicates whether inquiries affected the credit score:

— A blank flag indicates inquiries did **not** affect the score
— A flag of **I** indicates inquiries **did** affect the score

The IDA models are available — individually or in any combination — as add-ons to the following TransUnion standalone services:

Service Name	Service Code
TransUnion Credit Report	07000
CPE 2.0	07025
IDA Model Report	06100

IDA models are available as add-ons to CPE 1.0/1.1. Refer to FFI Segments on page 417 for more information about this online batch process.

ID Score 8.0 (service code 00668) is available as an integral part of the Identity Manager Verification (service code 06670 and 06680). ID Score is unbundled from the Identity Manager Verification 2.0 add-on (service code 06682) and treated as a regular model for Identity Manager Verification 2.0 standalone (service code 06672).

Fixed Format Inquiry (FFI)

The IDA model add-on is available either by default or by request using the RA01 segment in a request for an eligible standalone service.

Segment ID	Segment Name	Maximum Accepted	Required/Optional
RA01	Request Add-on Service	1 Per IDA Model	Required if the subscriber: • Does not specify default IDA models when setting up the service. • Wants to cancel the default IDA model settings. • Wants to override the default cascading setting with a new set of subscriber cascading criteria (applicable only if the subscriber has set up cascading criteria for IDA models as a Credit Report add-on).

Note: Subscribers may need to provide a separate RA01 segment for each IDA model they are eligible for and want to receive in the transaction.

IDA Models Service Processing Rules

Return Default IDA models

If the subscriber specifies which IDA models to receive by default when first setting up the IDA model service, the subscriber's future requests do not need to explicitly include the models. The

system returns the designated IDA models when other criteria (such as the cascading criteria when the IDA models are add-on to Credit Report) are satisfied.

Cancel Default IDA models (only for add-ons to Credit Report or CPE)

If the subscriber has set up default delivery of IDA models but does not want to receive IDA models for a particular Credit Report, the subscriber can cancel the default setting for this transaction by providing an RA01 segment For example: RA01**0XIDA**A

> **Note:** The subscriber may have set up multiple IDA models to be delivered by default. To cancel all the default models, it is sufficient to provide **only one** RA01 segment that contains the Add-on Service Code **0XIDA**.

Cascading Feature for IDA Model Add-on to Credit Report

Subscribers who create default settings for the return of IDA models can also specify that the models are invoked only when certain credit characteristics are satisfied. For example, a subscriber may elect to receive the Credit Optics Score only when the VantageScore® is in a specific range. Cascading is available **only** for IDA models returned with a Credit Report.

Overriding Custom Cascading Criteria

If a subscriber defines cascading criteria for IDA models but wants to apply a **different** set of predefined criteria to a particular transaction, there is an override available. The subscriber can override the default criteria settings by providing one RA01 segment with the following data:

RA01 Field Name	Content to Include
Segment Type	RA01
Add-on Service Code	An IDA model code for **any** of the IDA models that are subject to the cascading criteria.
Processing Request	The two-byte code (**01 – 99**) for the set of predefined custom credit characteristics that the subscriber wants to use for this transaction only.
Service Type	A

> **Note:** Even though the subscriber may have multiple IDA models eligible for cascading evaluation, the transaction override requires only **one** RA01 segment with the model code for **any one** of the eligible models.

Sample Override Scenario

Subscriber Setup: A subscriber is set up so that by default the ID Score and Credit Optics Score are returned as add-ons to Credit Report only when the VantageScore® is above 450.

Subscriber Wants to Override: For a particular transaction, the subscriber wants to override the default cascading criteria by requesting that the two IDA models are returned only if the number of accounts in the credit file is less than five. This new criterion is already defined in the TransUnion system with the 2-byte custom characteristic code **02**.

How Subscriber Overrides: To override the default cascading criteria, the subscriber needs to send the following RA01 segment in the Credit Report FFI: RA0100N34**02**A. (00N34 is the service code for Credit Optics Score; subscriber could also have used 00668 for ID Score.)

Fixed Format Response (FFR)

The following list shows the possible segments, in the order returned, that may be returned for an IDA model (in an eligible standalone service FFR). For more detailed information regarding each of these segments, see FFI Segments on page 417.

Segment ID	Segment Name	Maximum Returned
AO01	Add-on Status	One Per IDA Model
SC01	Scoring	One Per IDA Model
TT01	Transaction Tracking (to return IDA Model Transaction Number)	One Per IDA Model
TX01	Text Statement (to return Contact information for consumer to dispute Credit Optics Score)	One Per Credit Optics Score that returns a non-blank score

Note: The IDA models (both standalone and add-on to Credit Report or CPE) are not available in print image output.

IDA Models Factor Codes

The following table displays the factor codes and descriptions for the ID Score (service code: 00662) and Credit Optics Score (service code: 00N34):

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
000			Credit Inactive
006	006		CONSUMER — Opt Out on File
099			NETWORK — CA-Insufficient Data
		180	EVENT — Application received through known risky channel
		230	EVENT — SSN Invalid
		231	EVENT — SSN Out of Range
232		232	EVENT — SSN reported as Deceased
		233	EVENT — SSN issued before DOB
	237	237	EVENT — SSN issue year suspicious
	238	238	NETWORK — SSN associated with risk

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
		500	NETWORK — SSN associated with suspected or confirmed fraud
	501	501	NETWORK — SSN linked to multiple names
		502	NETWORK — SSN linked to risky addresses
	503	503	NETWORK — SSN linked to unusual number of addresses
	504	504	NETWORK — SSN linked to unusual number of home phone numbers
		505	NETWORK — Unusual number of applications combining SSN with other identity elements
	506	506	NETWORK — Unusual number of historic applications using SSN
	507	507	NETWORK — Unusual number of recent applications using SSN
	509	509	NETWORK — Combination of SSN with other identity elements is generally associated with risk
		520	NETWORK — Address associated with suspected or confirmed fraud
		521	NETWORK — Address is in a known high-risk area
	522	522	NETWORK — Address linked to multiple phone numbers
	523	523	NETWORK — Address linked to risky SSNs
	524	524	NETWORK — Address type is generally associated with high risk
	525	525	NETWORK — Combination of address with other identity elements is generally associated with risk
	526	526	NETWORK — Unusual number of historic applications using address
	527	527	NETWORK — Unusual number of recent applications using address
		530	EVENT — Address is in a known high-risk area
	534		NETWORK — Combination of identity elements and the State on the application is generally associated with risk
	540	540	NETWORK — Combination of name and date of birth with other identity elements is generally associated with risk
		542	NETWORK — Combination of name and home phone number is linked to unusual number of SSNs
		543	NETWORK — Combination of name with other identity elements is associated with similar SSN

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
	544	544	NETWORK — Name and date of birth linked to multiple phone numbers
	545	545	NETWORK — Unusual number of historic applications using name and date of birth
	546	546	NETWORK — Unusual number of recent applications using name and date of birth
	560	560	NETWORK — Combination of home phone number with other identity elements is generally associated with risk
		561	NETWORK — Home phone number associated with suspected or confirmed fraud
		562	NETWORK — Phone number is in a known high-risk area
	563	563	NETWORK — Phone number mismatch with ZIP code
		564	NETWORK — Phone number type is generally associated with high risk
		566	NETWORK — Home phone number linked to unusual number of addresses
	567	567	NETWORK — Unusual number of historic applications using home phone number
	568	568	NETWORK — Unusual number of recent applications using home phone number
		569	NETWORK — Unable to confirm home phone number in association with other identity elements
	570		NETWORK — Multiple applications using this phone with different, unconfirmed SSNs
		580	NETWORK — Combination of elements of the email address generally associated with high risk
		581	NETWORK — Unusual number of historic applications using email address
		583	NETWORK — email address linked to unusual number of addresses
		584	NETWORK — email address linked to unusual number of phone numbers
		585	NETWORK — email address linked to unusual number of names
	591	591	NETWORK — Historic usage patterns of identity elements are generally associated with high risk
		620	NETWORK — Unusual number of historic applications using IP address

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
		621	NETWORK — Unusual number of recent applications using IP address
		622	NETWORK — IP address linked to unusual number of names
		623	NETWORK — IP address linked to unusual number of phone numbers
		624	NETWORK — IP address linked to unusual number of addresses
		625	NETWORK — IP address linked to unusual number of SSNs
		626	NETWORK — IP address mismatch with phone number
		627	NETWORK — IP address mismatch with ZIP code
		628	NETWORK — Internet connection characteristics generally associated with high risk
		701	EVENT — Name match with OFAC List
702			Inquiries did not adversely impact score
703			Inquiries did adversely impact score
710			Number of inquiries
711			Number of inquiries in last 12 months
712			Number of inquiries in last 4 months
713			Number of bankcard inquiries
714			Number of bankcard inquiries in last 4 months
715			Number of bankcard inquiries in last 12 months
716			Number of utility inquiries
717			Number of utility inquiries in last 4 months
718			Number of utility inquiries in last 12 months
720			Discrepancies in historical identity information
721			Insufficient history
722			Lack of history at this address
723			Lack of history at this address and phone
724			Lack of history at this phone
730			Number of address changes
731			Cannot confirm address
732			Short current length of residence

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
733			Distance between historical addresses
734			Historically short length of residence
735			Distance between address and phone number
736			Number of phone changes
737			Invalid SSN
740			Auto account balances are too high in proportion to credit limits
741			Available credit on bankcard accounts is too low
742			Average balance of installment accounts is too high
743			Bank revolving account balances are too high in proportion to credit limits
744			Bankcard account balances are too high in proportion to credit limits
745			Collection amount is too high
746			Collection amounts ever owed are too high
747			Length of time accounts have been established is too short
748			Length of time oldest bank revolving account has been established is too short
749			Length of time premium bankcard accounts have been established is too short
750			Length of time since most recent bankcard account has been established is too short
751			Length of time since most recent delinquency is too short
752			Length of time since most recent inquiry is too short
753			Length of time since oldest mortgage account has been established is too short
754			Months since most recent delinquency
755			Mortgage account balances are too high in proportion to credit limits
756			Non-auto account balances are too high in proportion to credit limits
757			Not enough auto debt experience
758			Not enough available credit
759			Not enough bankcard debt experience
760			Not enough debt experience

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
761			Number of delinquent accounts is too high in proportion to total number of accounts
762			Retail account balances are too high in proportion to credit limits
763			Revolving account balances are too high in proportion to credit limits
764			Too few bankcard accounts
765			Too few installment accounts
766			Too few mortgage accounts
767			Too few non-installment accounts
768			Too few open accounts
769			Too few premium bankcard accounts
770			Too few revolving accounts
771			Too few satisfactory accounts
772			Too few satisfactory revolving accounts
773			Too few specialty retail accounts
774			Too many accounts with a balance currently past due
775			Too many accounts with balances too high in proportion to credit limits
776			Too many bankcard accounts with balances too high in proportion to credit limits
777			Too many delinquencies
778			Too many derogatory accounts or public records
779			Too many inquiries
780			Too many non-installment accounts with balances too high in proportion to credit limits
781			Too many recent collection inquiries
782			Too many recent inquiries
783			Too many recently opened accounts
784			Too many recently opened bankcard accounts
785			Too many revolving accounts with balances too high in proportion to credit limits
786			Too many serious delinquencies
787			Too many serious derogatory items

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
788			Total account balances excluding mortgages are too high in proportion to credit limits
789			Total account balances excluding mortgages is too high
790			Total amount past due is too high
791			Total balance of bankcard accounts is too high
792			Total balance of delinquencies is too high
793			Total balance of revolving accounts is too high
		904	NETWORK — Historic usage patterns of SSN are generally associated with low risk
		905	NETWORK — Combination of SSN with other identity elements is generally associated with low risk
		906	EVENT — No SSN violations found
		920	NETWORK — Historic usage patterns of address are generally associated with low risk
		921	NETWORK — Combination of address with other identity elements is generally associated with low risk
		922	EVENT — Address is in a known low-risk area
		923	NETWORK — Address is in a known low-risk area
		941	NETWORK — Historic usage patterns of name and date of birth are generally associated with low risk
		942	NETWORK — Combination of name and date of birth with other identity elements is generally associated with low risk
		950	NETWORK — Historic usage patterns of IP address are generally associated with low risk
		951	NETWORK — IP address and ZIP code match
		952	NETWORK — IP address and phone number match
		953	NETWORK — Internet connection characteristics generally associated with low risk
		960	NETWORK — Historic usage patterns of home phone number are generally associated with low risk
		961	NETWORK — Area code and ZIP code match
		962	NETWORK — Combination of home phone number with other identity elements is generally associated with low risk
		980	NETWORK — Combination of elements of the email address generally associated with low risk

IDA Models Factor Codes			
Credit Optics Plus Score	Credit Optics Score	ID Score	Description
		981	NETWORK — Historic usage patterns of email address are generally associated with low risk
		982	NETWORK — Combination of email address with other identity elements is generally associated with low risk
		990	NETWORK — Identity elements generally associated with low risk
		991	NETWORK — Application received through low risk channel
		992	NETWORK — Historic usage patterns of identity elements are generally associated with low risk

Supplemental Recovery Model

Supplemental Recovery Model (00N54) is available for the Collection Prioritization Engine (CPE 1.0/1.1 or 2.0). The model returns a score, if other conditions are satisfied, that is calculated based on the ZIP Code of the subject's file or input current address. To receive the Supplemental Recovery model with CPE, subscriber must be eligible for and request at least one of the following recovery models in a CPE service inquiry:

Model Name	Service Code
Recovery Model 1.0	00R07
Recovery Model 2.0	00P16
Recovery Bankcard	06P17
Auto Recovery	06P18
Medical Recovery	00P23

Fixed Format Inquiry (FFI)

Because the Supplemental Recovery model can be delivered only by default setup (providing other conditions are also satisfied), the subscriber cannot request it by including an RA01 segment.

> **Note:** If a subscriber request does try to request the Supplemental Recovery model with an RA01 segment in a CPE FFI, the FFR returns an AO01 segment with the service code (00N54) and a Service Status of **05** (Invalid score request).

Supplemental Recovery Model Processing Rules

The Supplemental Recovery model returns a score associated with the ZIP code of either the file or input current address:

Result of CPE Inquiry	Result of recovery model(s) included in inquiry	Score returned based on ZIP code of:
Hit	At least one model returns: **File not scored because subject does not have sufficient credit**	Current address in file
No-hit	At least one model would have been returned if CPE result had been a hit	Input address if one was provided or if enough input was provided to derive a ZIP code

Note: If the CPE 1.0/1.1 service inquiry returns a no-hit but the input does not provide the ZIP code or enough information for the application to derive a ZIP code for a current address, the system returns the message **Requirement not met** for the Supplemental Recovery model in the output.

Fixed Format Response (FFR)

The following list shows the possible segments, in the order returned, that may be returned for a Supplemental Recovery model in a CPE 2.0 FFR (see the Online Batch Getting Started Guide on how the model result is returned for CPE 1.0/1.1). For more detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Maximum Returned
AO01	Add-on Status	One Per Supplemental Recovery Model
SC01	Scoring	One Per Supplemental Recovery Model

Note:

- In case that the Supplemental analysis does not yield a Supplemental Recovery model score for a ZIP code, the system returns a national average Supplemental Recovery model score.
- The Supplemental Recovery model does not return factor codes.

L2C Model and Factor Codes

The L2C Model is a risk model for consumers with limited or no credit history. The model predicts the likelihood of an applicant, prospect, or existing account holder becoming 90+ days delinquent within 12 to 18 months.

Depending on the subscriber's settings, up to four L2C models may be returned, each with a separate service code.

L2C Model Report is provided in two versions with the only difference being the adverse action factor codes returned for these two versions. The same existing TransUnion L2C service codes, segments, and elements are used for both the current and Generation 2 versions of the L2C Models.

- **Standard L2C Model Report** - See the list of available factor codes.
- **Generation 2 L2C Model Report** - There are different adverse action factor codes for this version only. These codes will only be returned to subscribers who are configured in the TransUnion system for the Generation 2 version of L2C Models based on their TransUnion subscriber settings.

Fixed Format Inquiry (FFI)

The L2C Model service is available by subscriber default settings only. However there is a way to override the subscriber's service default settings in the FFI.

Segment ID	Segment Name	Current Maximum Accepted	Required/Optional
RA01	Request Add-on Service	1 Per Add-on Service	Required only to override subscriber default settings.

L2C Model Service Processing Rules

This section describes how to use the RA01 (Request Add-on) segment to override a subscriber's default settings for L2C Model.

RA01 (Request Add-on) Segment

To override the subscriber defaults for the L2C Model service, the service code 00337 must be provided in the Request Add-on Service segment. If an RA01 Segment is not provided, the system defaults to the setting in the subscriber validation file.

There are two ways to override the subscriber default settings as follows:

- To **cancel** the subscriber L2C Model default settings on a specific request - submit a Request Add On (RA01) segment with the service code **00337** in the Add-on Service Code field with a Service Type '**A**' and provide zeros in the Processing Request field in the inquiry transaction. When the Processing Request = '**00**', the L2C Model service is not invoked. Example:

```
RA010033700A
```

- To **override** the subscriber L2C Model service default settings with a custom characteristic code on a specific request – submit a Request Add On (RA01) segment with the service code **00337** in the Add-on Service Code field with a Service Type '**A**' and provide a **valid 2-byte custom characteristic code** in the Processing Request field in the inquiry transaction. When the Processing Request field contains a valid custom characteristic code, the L2C Model service is invoked when the Credit Report result satisfies the criteria specified to trigger the service. Example:

```
RA010033701A
```

L2C Model can currently be requested on the following primary services:

- Credit Report
- L2C Model Report

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the L2C Model in the order returned. Up to four models—each with its own service code—may be returned. For more detailed information regarding each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name
AO01	Add-on Status (L2C Model 00337)
SC01	Scoring (L2C Score & up to three Factor Codes)
TX01	Text Statement (L2C Model Dispute Contact Info)
AO01	Add-on Status (L2C Model 00338)
SC01	Scoring (L2C Score & up to three Factor Codes)
TX01	Text Statement (L2C Model Dispute Contact Info)
AO01	Add-on Status (L2C Model 00339)
SC01	Scoring (L2C Score & up to three Factor Codes)
TX01	Text Statement (L2C Model Dispute Contact Info)
AO01	Add-on Status (L2C Model 00340)
SC01	Scoring (L2C Score & up to three Factor Codes)
TX01	Text Statement (L2C Model Dispute Contact Info)

Use the FFR segment information below to understand how this model is returned in an FFR.

AO01 Segment

In response to a request for L2C, the table below shows what to expect in the AO01 segment fields:

AO01 Field Name	Content Returned for an L2C Request
Service Code	00337/ 00338 / 00339 / 00340 For the first through fourth models returned, respectively
Service Status	The Service Status field returns one of these values: **02** Requested service not available. **03** Subscriber not authorized for requested service. **04** Default service delivered. **05** Invalid score request. **06** Requested information cannot be scored or returned because data is suppressed or cannot be evaluated. **07** Invalid processing request. **08** Default service canceled.

AO01 Field Name	Content Returned for an L2C Request
	09 Processing request cannot be evaluated.
Search Status	The Search Status field returns a status result or an error code. **Status Results** **L01** L2C model is processed successfully. **L02** L2C model is not processed due to insufficient input. *blanks* If the field contains blanks, the L2C model did not process because one these conditions is true: • Subject is deceased. • Subject's credit file is suppressed, frozen, in dispute per state law, or belongs to a minor. • The condition to return the L2C model is not satisfied. • A subscriber ineligible for the L2C model explicitly requests the model in a Credit Report inquiry (for example, the FFI includes an RA01 segment with 00337 service code). **Error Codes** If the value in the Service Status field is **02** (service not available), the Search Status field value may be one of these error codes: **001** The transaction was abnormally terminated due to a system error. **043** Invalid response from service server. **050** Invalid or no response for desired service. **053** Request to data provider timed out. **055** Invalid request to service server. **090** The service requested is not available at this time. **091** Internal system error. **099** Undefined system error.

SC01 Segment

Look for these results in the scoring segment returned for an L2C request:

SC01 Field Name	Content Returned for an L2C Request
Score	Returns the L2C model score.
Scoring Indicator Flag	For L2C, one of these values is returned: **02** File not scored because subject is deceased. **05** Requirements not met.

SC01 Field Name	Content Returned for an L2C Request
Factors	Up to four factor codes are returned.

TX01 Segment

Look for these results in the text statement segment returned for an L2C request:

TX01 Field Name	Content Returned for an L2C Request
Content Type	Blanks are returned in the Content Type field..
Statement Text	If a score is returned, the Statement Text field returns this text: TO DISPUTE L2C SCORE, PLEASE CALL: 866-268-7156, OR WRITE TO: L2C, INC., P.O. BOX 550089, ATLANTA, FA 30355

Standard L2C Model Score Range and Factor Codes

Note: Customers may have their own unique Reason/Factor Code requirements.

The L2C Model score range is:

0 Indicates a special condition in which the score was not calculated. The standard scoring segment may contain one of these codes to explain why the score was not calculated:

L2C Model Factor Code	Description
AGE	Applicant age is under 18
DUP	Applicant has too many recent applications
FRN	Applicant address is outside the US
IDD	Insufficient decisionable data available
INF	Applicant’s identity cannot be verified

1-999 Normal score range that returns up to three of the factor codes listed below. A higher score indicates a lower risk of delinquency.

L2C Model Factor Code	Description
B1	Banking history unacceptable
C1	Insufficient credit experience
C2	Delinquent credit obligations
C3	Number of recent inquiries on credit report

L2C Model Factor Code	Description
COL	Credit report has collection accounts in conjunction with thin credit history
DLQ	Credit and/or debit history is delinquent
IDD	Insufficient decisionable data available
J1	Mismanagement of obligations
LC0	Credit history is delinquent
LC1	Credit report has no accounts
LC2	Credit history is severely delinquent
LC3	Credit history is too recent
LC4	High risk financial behavior flag
LC5	Credit report has no open accounts
LC6	High risk financial behavior flag
LC7	External data negative score
NHT	Applicant has no credit report

Generation 2 L2C Model Score Range and Factor Codes

Note: Subscribers may have their own unique Reason/Factor Code requirements.

The L2C Model score range is:

0: Indicates a special condition in which the score was not calculated. The standard scoring segment may contain the following code to explain why the score was not calculated:

Generation 2 L2C Model Factor Code	Description
AZ	No record found

1-999: Normal score range that returns up to three of the factor codes listed below. A higher score indicates a lower risk of delinquency.

Generation 2 L2C Model Factor Code	Description
AA	Insufficient positive club and subscription information found
AC	Insufficient residential information found
AD	Insufficient positive checking account information found
AE	Insufficient information found on identification database
AY	Limited credit history found

Generation 2 L2C Model Factor Code	Description
BC	Presence of bankruptcy filing
CA	Club and subscription bill charge-off
CB	Credit account charge-off
CD	Checking account closed for cause
EA	Club and subscription payment delinquency
ED	Checks returned for insufficient funds
GB	High interest rate loan application
GD	Checking account opening inquiry
GF	Online payday loan application
HC	Limited time at residence
KE	Frequent address changes
LE	Time on identification database
ME	Deceased record on identification database
OA	No negative factors
PC	High mortgage debt
QC	Variable mortgage payment rate
UA	Club and subscription payment rate
VA	Club and subscription purchase commitment not met

Life Insurance Persistency Score Factor Codes

TransUnion Life Insurance Persistency predicts the likelihood of retention of a life insurance policy. A higher score indicates a high inclination for retention of the policy; a lower score indicates a low inclination for retention of the policy.

TransUnion Life Ins Persistency Factor Code	Description
11	Average age of accounts is too short
12	Percent of accounts with a delinquency is too high
13	Age of oldest installment account is too short
14	Too many non-auto inquiries in the past six months
15	Total high credit/credit limit too low
16	Too many non-medical collections in the past 36 months

TransUnion Life Ins Persistency Factor Code	Description
17	Too few revolving accounts
18	Percent utilization on revolving accounts is too high
19	Too many public records
20	Too many delinquent accounts
21	Too many charge-off accounts
22	Too many accounts recently 60+ or more delinquent
23	Percent utilization of installment accounts too high
24	Percent utilization of retail accounts too high
25	Recent non-finance account delinquency
26	Recent installment account delinquency
27	Age of oldest bankcard account is too short
28	Too many personal finance inquiries
29	Retail credit limit too low
30	Percent utilization of bankcard accounts too high
31	Recent bank revolving account opened
32	Recent bank revolving account delinquent
33	Too many department store accounts opened in past 24 months
34	Too many accounts recently 30+ or more delinquent

New DELPHI Score Factor Codes

New DELPHI is the enhanced version of TransUnion's first bankruptcy model.

New DELPHI Factor Code	Description
000	No adverse factor.
001	Insufficient number of satisfactory accounts
002	Delinquency
003	Serious delinquency, derogatory public record, or collection
004	Delinquency date too recent
005	Past due balances
006	Near total credit limits, or lacks credit accounts or lacks recent credit activity

New DELPHI Factor Code	Description
007	Insufficient time since most recent account established
008	Insufficient length of credit history
009	Too many new accounts
010	Too many recent active accounts
011	Too many active accounts
012	Insufficient satisfactory history on revolving accounts
013	Too many recent revolving accounts or lacks revolving accounts
014	Bankcard — near credit limits or lacks credit accounts or lacks recent credit activity
015	Insufficient length of installment accounts, or lacks installment accounts
016	Too many accounts
017	Near check credit limits
018	Insufficient satisfactory history for mortgage accounts or lacks mortgage accounts
019	Delinquency on mortgage accounts or lacks mortgage accounts
020	Insufficient satisfactory history on retail revolving accounts
021	Near retail credit limit or lacks retail credit accounts or lacks recent retail credit activity
022	Travel and entertainment – near revolving credit limit or lacks revolving accounts
023	Too many consumer finance accounts
024	Too many recent consumer finance accounts
025	Serious delinquency, derogatory public record or collection with a balance
026	Bankruptcy
027	Too many recent bank or travel and entertainment credit checks
028	Too many recent consumer finance credit checks
029	Too many recent credit checks

TransUnion Account Management Models Factor Codes

TransUnion Account Management is a risk model that was developed to predict the likelihood of an existing account becoming delinquent at a 90-day or worse level within a 24-month period of time.

TransUnion Acct Mgmt Factor Codes		Description
Version 2.0	Version 3.0	
00		No Adverse Factor
01	**01**	Available credit on bankcard accounts is too low
02	**02**	Average balance of retail accounts is too high
03		Average balance of specialty retail accounts is too high
04		Total balance of specialty retail accounts is too high
05		Not enough bank installment debt experience
06	**06**	Bankcard account balances are too high in proportion to credit limits
07		Collection amounts ever owed are too high
08		Collection amounts and delinquencies are too high
09		Derogatory public record amounts are too high
10	**10**	Too many delinquencies
11		Installment account balances too high in proportion to credit limits
12		Length of time most recent installment account has been established is too short
13		Length of time finance accounts have been established is too short
14		Length of time most recent specialty retail account has been established is too short
15	**15**	Number of satisfactory accounts is too low in proportion to total number of accounts
16	**16**	Too few satisfactory accounts
17	**17**	Length of time oldest bank revolving account has been established is too short
18		Length of time travel and entertainment accounts have been established is too short
19		Length of time premium bankcard account has been established is too short
20		Length of time revolving accounts have been established is too short
21		Months since most recent bankcard delinquency is too short
22	**22**	Too many inquiries
23	**23**	Months since most recent delinquency
24	**24**	Too many serious delinquencies

TransUnion Acct Mgmt Factor Codes		Description
Version 2.0	Version 3.0	
25		Months since most recent serious delinquency is too short
26	**26**	Number of delinquent accounts is too high in proportion to total number of accounts
27		Number of installment accounts is too high in proportion to total number of accounts
28		Personal finance account balances are too high in proportion to credit limits
29		Retail account balances are too high in proportion to credit limits
30		Not enough retail debt experience
31	**31**	Revolving account balances are too high in proportion to credit limits
32	**32**	Not enough revolving debt experience
33		Revolving department store and clothing account balances are too high in proportion to credit limits
34		Too few accounts opened since last serious delinquency
35	**35**	Length of time accounts have been established is too short
36		Length of time most recent account has been established is too short
37	**37**	Too few bankcard accounts
38	**38**	Too few mortgage accounts
39		Not enough debt experience on open revolving bank accounts
40	**40**	Too few premium bankcard accounts
41		Too few recently opened bank installment accounts
42		Too few retail accounts
43	**43**	Too few open revolving accounts
44		Too few satisfactory department store accounts
45		Too few satisfactory finance accounts
46	**46**	Too few satisfactory mortgage accounts
47		Too few specialty retail accounts
48		Too few active mortgage accounts
49	**49**	Too many accounts
50	**50**	Too many accounts with a balance

TransUnion Acct Mgmt Factor Codes		Description
Version 2.0	Version 3.0	
51		Too many bank installment accounts
52	**52**	Too many bankcard accounts
53	**53**	Too many derogatory accounts or public records
54	**54**	Too many finance installment accounts
55	**55**	Too many installment accounts
56	**56**	Too many non-installment accounts close to limit
57		Too many travel and entertainment accounts
58	**58**	Too many personal finance accounts
59	**59**	Too many recent inquiries
60		Too many recent mortgage delinquencies
61	**61**	Too many recently opened accounts
62		Too many recently opened bankcard accounts
63	**63**	Too many recently opened personal finance accounts
64		Too many recently opened retail accounts
65		Too many retail accounts with balances
66	**66**	Too many serious derogatory items
67		Too many unsatisfactory revolving accounts in proportion to total number of accounts
68	**68**	Total account balances excluding mortgages are too high
69	**69**	Not enough debt experience
70		Length of time since most recent bankcard account has been established is too short
71	**71**	Too many bankcard accounts with balances
72	**72**	Average balance of bankcard accounts is too high
73	**73**	Not enough mortgage debt experience
74		Too few satisfactory revolving accounts
75		Too many recently opened installment accounts
76		Total amount past due is too high
77		Too many active bankcard accounts
78	**78**	Too many recent collection inquiries
79		Too few bank revolving accounts
80		Too many accounts with a balance currently past due

TransUnion Acct Mgmt Factor Codes		Description
Version 2.0	Version 3.0	
81		Length of time since most recent derogatory public record is too short
82	**82**	Total balance of retail accounts is too high
83		Total balance of revolving accounts is too high
84		Not enough installment debt experience
85		Total balance of personal finance accounts is too high
86		Too many mortgage delinquencies
87	**87**	Too many active accounts with a balance
88		Length of time since most recent mortgage account delinquency is too short
89		Length of time retail accounts have been established is too short
90		Length of time since most recent bank inquiry is too short
91		Too few satisfactory specialty retail accounts
92		Length of time since most recent retail account delinquency is too short
93		Length of time since oldest mortgage account has been established is too short
94		Too few bank installment accounts
95		Total amount past due or collection amount is too high
96		Average balance of revolving accounts is too high
	99	Too many revolving accounts with balances too high in proportion to credit limits

TransUnion Auto Model Adverse Action Codes

TransUnion Auto is a risk model that was developed to predict risk on prime and non-prime, including sub-prime, auto loans.

TransUnion Auto Factor Code	Description
00	No Adverse Factor
01	Months since most recent bank installment delinquency
02	Months since most recent mortgage delinquency

TransUnion Auto Factor Code	Description
03	Months since most recent repossession
04	Months since most recent serious personal finance delinquency
05	Number of recent derogatory public record items with a balance
06	Past due amounts on auto accounts
07	Personal finance revolving account balances too high in proportion to credit limits
08	Too few open national accounts
09	Too many current delinquencies
10	Too many delinquencies
11	Too many new accounts with balances
12	Too many personal finance installment account delinquencies
13	Too many recent auto account delinquencies
14	Too many recent inquiries
15	Too many unsatisfactory accounts in proportion to all accounts
16	Too few satisfactory accounts
17	Length of time bank revolving accounts have been established is too short
19	Too many derogatory public record items
20	Retail or sales finance revolving account balances too high in proportion to credit limits
21	Too many auto account delinquencies
22	Too many inquiries
23	Too many personal finance installment account serious delinquencies
24	Too many serious delinquencies
25	Account balances too high in proportion to credit limits
26	Length of time national accounts have been established is too short
27	Too many recent delinquencies
28	Too many personal finance account delinquencies
29	Too many current serious delinquencies
30	Too few open accounts
31	Months since most recent charge-off
32	Outstanding balance(s) on recent public record items
33	Bank revolving account balances too high in proportion to credit limits
34	Length of time personal finance installment accounts have been established is too short

TransUnion Auto Factor Code	Description
35	Length of time accounts have been established is too short
36	Length of time most recent account has been established is too short
37	Mortgage credit limits are too low
38	Length of time auto accounts have been established is too short

TransUnion Bankruptcy 1.0 Factor Codes

TransUnion Bankruptcy 1.0 is a risk model that was developed to predict the likelihood of a consumer filing bankruptcy in the next 12 months.

TransUnion Bankruptcy 1.0 Factor Code	Description
00	No Adverse Factor
01	Available credit on bankcard accounts is too low
06	Bankcard account balances are too high in proportion to credit limits
07	Collection amounts ever owed are too high
08	Collection amounts and delinquencies are too high
10	Too many delinquencies
15	Number of satisfactory accounts is too low in proportion to total number of accounts
16	Too few satisfactory accounts
17	Length of time oldest bank revolving account has been established is too short
22	Too many inquiries
23	Months since most recent delinquency
24	Too many serious delinquencies
29	Retail account balances are too high in proportion to credit limits
31	Revolving account balances are too high in proportion to credit limits
34	Too few accounts opened since last serious delinquency
35	Length of time accounts have been established is too short
37	Too few bankcard accounts
38	Too few mortgage accounts
40	Too few premium bankcard accounts
42	Too few retail accounts

TransUnion Bankruptcy 1.0 Factor Code	Description
46	Too few satisfactory mortgage accounts
49	Too many accounts
50	Too many accounts with a balance
53	Too many derogatory accounts or public records
58	Too many personal finance accounts
59	Too many recent inquiries
61	Too many recently opened accounts
66	Too many serious derogatory items
68	Total account balances excluding mortgages is too high
69	Not enough debt experience
71	Too many bankcard accounts with balances
72	Average balance of bankcard accounts is too high
73	Not enough mortgage debt experience
75	Too many recently opened installment accounts
76	Total amount past due is too high
79	Too few bank revolving accounts
80	Too many accounts with a balance currently past due
82	Total balance of retail accounts is too high
86	Too many mortgage delinquencies
88	Length of time since most recent mortgage account delinquency is too short
97	Average balance of department store accounts is too high
98	Length of time since most recent bank revolving account has been established is too short
99	Too many revolving accounts with balances too high in proportion to credit limits
100	Too many retail accounts with balances too high in proportion to credit limits
101	Too many recent retail or sales finance inquiries
102	Too many recent personal finance inquiries
103	Too few satisfactory bankcard accounts
104	Too few recently opened premium bankcard accounts
105	Too few revolving accounts
106	Too many bank revolving accounts with balances too high in proportion to credit limits
107	Too many personal finance accounts with balances too high in proportion to credit limits

TransUnion Bankruptcy 1.0 Factor Code	Description
108	Too many revolving accounts with balances too high in proportion to credit limits
109	Too many recently opened revolving accounts
110	Total balance of bank revolving accounts is too high
111	Department store account balances are too high in proportion to credit limits
112	Account balances are too high in proportion to credit limits
113	Too many personal finance inquiries
114	Too few recently verified accounts
115	Too many collections
116	Too many open accounts with balances too high in proportion to credit limits
117	Too many personal finance accounts with a balance
118	Other finance account balances are too high in proportion to credit limits
119	Total balance of bankcard accounts is too high
120	Too few recently opened department store accounts
121	Too few satisfactory premium bankcard accounts
122	Too few satisfactory bankcard accounts in proportion to total number of bankcard accounts
123	Too few satisfactory retail accounts in proportion to total number of retail accounts
124	Too few installment accounts
125	Length of time since installment accounts have been established is too short
126	Length of time since most recent finance delinquency is too short
127	Length of time since most recent finance installment account has been established is too short
128	Too many auto accounts
129	Not enough auto debt experience
130	Maximum amount on auto accounts is too low
131	Length of time since most recent auto delinquency is too short
132	Too few open accounts
133	Maximum balance of department store accounts is too high
134	Too many retail accounts
135	Too many finance or installment accounts
136	Too many revolving accounts

TransUnion Broadband Factor Codes

The TransUnion Broadband model predicts the likelihood of prospects, applicants, or existing cable subscribers becoming 90 days or more delinquent on their cable/broadband accounts within a 12-month period.

TransUnion Broadband Factor Code	Description
00	No Adverse Factor
01	Available credit on bankcard accounts is too low
05	Not enough bank installment debt experience
07	Collection amounts ever owed are too high
10	Too many delinquencies
16	Too few satisfactory accounts
22	Too many inquiries
23	Too few months since most recent delinquency
24	Too many serious delinquencies
29	Retail account balances are too high in proportion to credit limits
30	Not enough retail debt experience
31	Revolving account balances are too high in proportion to credit limits
32	Not enough revolving debt experience
35	Length of time accounts have been established is too short
50	Too many accounts with a balance
53	Too many derogatory accounts or public records
60	Too many recent mortgage delinquencies
66	Too many serious derogatory items
68	Total account balances excluding mortgages is too high
73	Not enough mortgage debt experience
78	Too many recent collection inquiries

TransUnion Characteristic Sets

Credit Characteristics (00R14)

The following table shows the possible characteristics that Credit Characteristics can return.

	Characteristic	Group	Description	Length	Decimal	Default
Group A – Credit Experience						
1	AT01	A	Number of accounts	3	0	Zero
2	AT07	A	Number of accounts opened in past 12 months	3	0	Zero
3	AT09	A	Number of accounts opened in past 24 months	3	0	Zero
4	AT20	A	Months since oldest account opened	3	0	Blank
5	AT21	A	Months since most recent account opened	3	0	Blank
6	AT29	A	Number of accounts with current balance > 0	3	0	Zero
7	BC01	A	Number of bankcard accounts	3	0	Zero
8	BC02	A	Number of currently active bankcard accounts	3	0	Zero
9	BC07	A	Number of bankcard accounts opened in past 12 months	3	0	Zero
10	BC09	A	Number of bankcard accounts opened in past 24 months	3	0	Zero
11	BC20	A	Months since oldest bankcard account opened	3	0	Blank

	Characteristic	Group	Description	Length	Decimal	Default
12	BC21	A	Months since most recent bankcard account opened	3	0	Blank
13	BC29	A	Number of bankcard accounts with current balance > 0	3	0	Zero
14	BI01	A	Number of bank installment accounts	3	0	Zero
15	BI07	A	Number of bank installment accounts opened in past 12 months	3	0	Zero
16	BI09	A	Number of bank installment accounts opened in past 24 months	3	0	Zero
17	BI20	A	Months since oldest bank installment account opened	3	0	Blank
18	FI01	A	Number of finance installment accounts	3	0	Zero
19	FI07	A	Number of finance installment accounts opened in past 12 months	3	0	Zero
20	FI09	A	Number of finance installment accounts opened in past 24 months	3	0	Zero
21	G103	A	Months since most recent activity	3	0	Blank
22	G104	A	Months on file	4	0	Blank
23	IN01	A	Number of installment accounts	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
24	IN02	A	Number of currently active installment accounts	3	0	Zero
25	IN07	A	Number of installment accounts opened in past 12 months	3	0	Zero
26	IN09	A	Number of installment accounts opened in past 24 months	3	0	Zero
27	IN20	A	Months since oldest installment account opened	3	0	Blank
28	IN21	A	Months since most recent installment accounts opened	3	0	Blank
29	IN29	A	Number of installment accounts with balance > 0	3	0	Zero
30	MT01	A	Number of mortgage accounts	3	0	Zero
31	MT02	A	Number of currently active mortgage accounts	3	0	Zero
32	MT07	A	Number of mortgage accounts opened in past 12 months	3	0	Zero
33	MT09	A	Number of mortgage accounts opened in past 24 months	3	0	Zero
34	MT20	A	Months since oldest mortgage account opened	3	0	Blank
35	MT21	A	Months since most recent mortgage account opened	3	0	Blank

	Characteristic	Group	Description	Length	Decimal	Default
36	MT29	A	Number of mortgage accounts with current balance greater than 0	3	0	Zero
37	PF01	A	Number of personal finance accounts	3	0	Zero
38	PF02	A	Number of currently active personal finance accounts	3	0	Zero
39	PF07	A	Number of personal finance accounts opened in past 12 months	3	0	Zero
40	PF09	A	Number of personal finance accounts opened in past 24 months	3	0	Zero
41	PF20	A	Months since oldest personal finance account opened	3	0	Blank
42	PF21	A	Months since most recent personal finance account opened	3	0	Blank
43	PF29	A	Number of personal finance accounts with balance > 0	3	0	Zero
44	RE01	A	Number of revolving accounts	3	0	Zero
45	RE02	A	Number of currently active revolving accounts	3	0	Zero
46	RE07	A	Number of revolving accounts opened in past 12 months	3	0	Zero
47	RE09	A	Number of revolving accounts opened in past 24 months	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
48	RE20	A	Months since oldest revolving account opened	3	0	Blank
49	RE21	A	Months since most recent revolving account opened	3	0	Blank
50	RE29	A	Number of revolving accounts with balance > 0	3	0	Zero
51	RT01	A	Number of retail accounts	3	0	Zero
52	RT02	A	Number of currently active retail accounts	3	0	Zero
53	RT07	A	Number of retail accounts opened in past 12 months	3	0	Zero
54	RT09	A	Number of retail accounts opened in past 24 months	3	0	Zero
55	RT20	A	Months since oldest retail account opened	3	0	Blank
56	RT21	A	Months since most recent retail account opened	3	0	Blank
57	RT29	A	Number of retail accounts with current balance > 0	3	0	Zero
58	S011	A	Number of open accounts	3	0	Zero
59	S012	A	Number of open revolving accounts	3	0	Zero
Group B – # of Accounts Since Delinquency						
60	CT11	B	Number of accounts opened since the last maximum delinquency of 60 days past due	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
61	CT13	B	Number of accounts opened since the last charge off	3	0	Zero
62	CT17	B	Number of accounts with a maximum delinquency of 60 days past due since opening a new account (within the last 12 months)	3	0	Zero
63	CT18	B	Number of accounts with a maximum delinquency of 90 days plus past due since opening a new account (within the last 12 months)	3	0	Zero
64	CT19	B	Number of accounts Charged Off since opening a new account (within the last 12 months)	3	0	Zero
Group C – Delinquency						
65	AT03	C	Number of satisfactory accounts	3	0	Zero
66	AT36	C	Months since most recent delinquency	3	0	Blank
67	BC03	C	Number of satisfactory bankcard accounts	3	0	Zero
68	BC36	C	Months since most recent bankcard delinquency	3	0	Blank
69	BI03	C	Number of satisfactory bank	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
			installment accounts			
70	CH0F	C	Number of charge-offs within 12 months	2	0	Zero
71	COAM	C	Highest collection amount owed in 12 months	7	0	Zero
72	COIQ	C	Number of collection inquiries	2	0	Zero
73	COLL	C	Number of collections in 12 months	2	0	Zero
74	CXMD	C	Number of collections in 12 months excluding medical collections	2	0	Zero
75	FI03	C	Number of satisfactory finance installment accounts	3	0	Zero
76	G001	C	Number of 30 day ratings	3	0	Zero
77	G002	C	Number of 60 day ratings	3	0	Zero
78	G003	C	Number of 90 day ratings	3	0	Zero
79	G004	C	Number of 120 day ratings	3	0	Zero
80	G006	C	Number of 30 and 60 day ratings	3	0	Zero
81	G007	C	Number of 30 day or worse ratings	3	0	Zero
82	G008	C	Number of 60 day or worse ratings	3	0	Zero
83	G009	C	Number of 90 day or worse ratings	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
84	G016	C	Number of accounts with maximum delinquency 02 in last 3 months	3	0	Zero
85	G017	C	Number of accounts with maximum delinquency 02 in last 6 months	3	0	Zero
86	G018	C	Number of accounts with maximum delinquency 02 in last 12 months	3	0	Zero
87	G020	C	Number of accounts with maximum delinquency 02 in last 24 months	3	0	Zero
88	G021	C	Number of accounts with maximum delinquency 03 in last 3 months	3	0	Zero
89	G022	C	Number of accounts with maximum delinquency 03 in last 6 months	3	0	Zero
90	G023	C	Number of accounts with maximum delinquency 03 in last 12 months	3	0	Zero
91	G025	C	Number of accounts with maximum delinquency 03 in last 24 months	3	0	Zero
92	G026	C	Number of accounts with maximum delinquency 04 in last 3 months	3	0	Zero
93	G027	C	Number of accounts with maximum	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
			delinquency 04 in last 6 months			
94	G028	C	Number of accounts with maximum delinquency 04 in last 12 months	3	0	Zero
95	G030	C	Number of accounts with maximum delinquency 04 in last 24 months	3	0	Zero
96	G041	C	Number of accounts ever 30 or more days past due	3	0	Zero
97	G042	C	Number of accounts ever 60 or more days past due	3	0	Zero
98	G043	C	Number of accounts ever 90 or more days past due	3	0	Zero
99	G044	C	Number of accounts ever 120 or more days past due	3	0	Zero
100	G051	C	Percent of accounts never delinquent	3	0	Blank
101	G057	C	Number of accounts 30 or more days past due in last 3 months	3	0	Zero
102	G058	C	Number of accounts 30 or more days past due in last 6 months	3	0	Zero
103	G059	C	Number of accounts 30 or more days past due in last 12 months	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
104	G061	C	Number of accounts 30 or more days past due in last 24 months	3	0	Zero
105	G062	C	Number of accounts 60 or more days past due in last 3 months	3	0	Zero
106	G063	C	Number of accounts 60 or more days past due in last 6 months	3	0	Zero
107	G064	C	Number of accounts 60 or more days past due in last 12 months	3	0	Zero
108	G066	C	Number of accounts 60 or more days past due in last 24 months	3	0	Zero
109	G067	C	Number of accounts 90 or more days past due in last 3 months	3	0	Zero
110	G068	C	Number of accounts 90 or more days past due in last 6 months	3	0	Zero
111	G069	C	Number of accounts 90 or more days past due in last 12 months	3	0	Zero
112	G071	C	Number of accounts 90 or more days past due in last 24 months	3	0	Zero
113	G082	C	Number of accounts currently past	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
			due (updated in past 2 months)			
114	G083	C	Number of accounts currently 30 days past due (updated in past 2 months)	3	0	Zero
115	G084	C	Number of accounts currently 60 days past due (updated in past 2 months)	3	0	Zero
116	G085	C	Number of accounts currently 90 days past due (updated in past 2 months)	3	0	Zero
117	G086	C	Number of accounts currently 120 days past due (updated in past 2 months)	3	0	Zero
118	G091	C	Total amount now past due	7	0	Zero
119	G093	C	Number of derogatory public records	3	0	Zero
120	G094	C	Number of public record bankruptcies	3	0	Zero
121	G095	C	Months since most recent derogatory public record	3	0	Blank
122	MT03	C	Number of satisfactory mortgage accounts	3	0	Zero
123	MT36	C	Months since most recent mortgage account delinquency	3	0	Blank
124	PF03	C	Number of satisfactory personal finance accounts	3	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
125	PF36	C	Months since most recent personal finance delinquency	3	0	Blank
126	RE03	C	Number of satisfactory revolving accounts	3	0	Zero
127	RE36	C	Months since most recent revolving delinquency	3	0	Blank
128	RT03	C	Number of satisfactory retail accounts	3	0	Zero
129	RT36	C	Months since most recent retail delinquency	3	0	Blank
130	S059	C	Number of public record and account line derogatory items greater than $100	3	0	Zero
131	S061	C	Months since most recent 60-day or worse rating	3	0	Blank
132	S062	C	Months since most recent 90-day or worse rating	3	0	Blank
133	S063	C	Total public record amounts	7	0	Zero
134	S064	C	Total collection amounts ever owed	7	0	Zero
135	S065	C	Number of tax liens	3	0	Zero
Group D – High Credit/Credit Limit						
136	AT28	D	Total high credit/ credit limit	7	0	Blank
137	BC28	D	Total bankcard high credit/credit limit	7	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
138	IN28	D	Total installment high credit/credit limit	7	0	Zero
139	MT28	D	Total mortgage high credit/credit limit	7	0	Zero
140	PF28	D	Total personal finance high credit/credit limit	7	0	Zero
141	RE28	D	Total revolving high credit/credit limit	7	0	Zero
142	RT28	D	Total retail high credit/credit limit	7	0	Zero
143	S040	D	Highest retail high credit/credit limit	7	0	Zero
Group E – Balance of Accounts						
144	AT33	E	Total current balance of all accounts	7	0	Zero
145	AT35	E	Average current balance of all accounts	7	0	Blank
146	AT99	E	Total current balance of all accounts, excluding mortgage	7	0	Blank
147	BC32	E	Maximum balance owed on all bankcard accounts	7	0	Zero
148	BC33	E	Total balance of all bankcard accounts	7	0	Zero
149	BC35	E	Average current balance of all bankcard accounts	7	0	Blank
150	FI32	E	Maximum balance owed on all finance installment accounts	7	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
151	IN33	E	Total current balance of all installment accounts	7	0	Zero
152	IN35	E	Average balance of all installment accounts	7	0	Blank
153	MT32	E	Maximum current balance owed on all mortgage accounts	7	0	Zero
154	MT33	E	Total current balance of all mortgage accounts	7	0	Zero
155	MT35	E	Average current balance of mortgage accounts	7	0	Blank
156	PF32	E	Maximum balance owed on all personal finance accounts	7	0	Zero
157	PF33	E	Total current balance of all personal finance accounts	7	0	Zero
158	PF35	E	Average balance of all personal finance accounts	7	0	Blank
159	RE32	E	Maximum current balance owed on all revolving accounts	7	0	Zero
160	RE33	E	Total current balance of all revolving accounts	7	0	Zero
161	RE35	E	Average current balance of all revolving accounts	7	0	Blank
162	RT32	E	Maximum balance owed on all retail accounts	7	0	Zero

	Characteristic	Group	Description	Length	Decimal	Default
163	RT33	E	Total current balance of all retail accounts	7	0	Zero
164	RT35	E	Average current balance of all retail accounts	7	0	Blank
165	S043	E	Number of non installment accounts > 50% of limit	3	0	Zero
166	S046	E	Percent of active accounts with current balance > 0	5	1	Blank
Group F – Utilization of Accounts						
167	AT34	F	Ratio of total current balance to high credit/credit limit for all accounts	5	1	Blank
168	BC30	F	Percentage of all bankcard accounts > 50% of limit	5	1	Blank
169	BC31	F	Percentage of all bankcard accounts > 75% of limit	5	1	Blank
170	BC34	F	Ratio of total current balance to high credit/credit limit for all bankcard accounts	5	1	Blank
171	BC98	F	Total open to buy on revolving bankcards	7	0	Blank
172	BR34	F	Ratio of total balance to high credit/credit limit for all bank revolving accounts	5	1	Blank
173	IN34	F	Ratio of total current balance to high credit/credit limit for all	5	1	Blank

	Characteristic	Group	Description	Length	Decimal	Default
			installment accounts			
174	MT34	F	Ratio of current balance to high credit/credit limit on mortgage accounts	5	1	Blank
175	PF34	F	Ratio of total current balance to high credit/credit limit for all personal finance accounts	5	1	Blank
176	RE34	F	Ratio of total current balance to high credit/credit limit for all revolving accounts	5	1	Blank
177	RT34	F	Ratio of total current balance to high credit/credit limit for all retail accounts	5	1	Blank
Group G – Inquiry						
178	G096	G	Number of inquiries	3	0	Zero
179	G098	G	Number or inquiries in last 6 months	3	0	Zero
180	G102	G	Months since most recent inquiry	3	0	Blank

Using Credit Characteristics for the Collections Industry

TransUnion has developed four sets of credit characteristics to target specific segments of the collections industry. Each set of characteristics is returned under a unique service code, and all Characteristic IDs listed will be returned within each Service Code. The collections industry characteristics are available as add-ons to these standalone services:

- Credit Report
- Collection Credit Report
- CPE (1.0 and 2.0)
- Model Report
- ID Report with Score

The characteristics are returned in the CH01 segment of the FFR but are not available in the service's print image. The following tables show the possible characteristics that Credit Characteristics can return.

Table 5: TransUnion Bankcard Characteristic (00Q38)

Characteristic ID	Description	Length	Format	Default Value
BC98COLL	Total open to buy on revolving bankcards (excludes retail and gas cards)	7	Zero	Blank

Table 6: TransUnion Auto Characteristics (00N48)

Characteristic ID	Description	Length	Format	Default Value
CC01	Number of paid auto trades updated in the past 6 months	3	Integer	0
CC02	Number of paid auto trades updated in the past 12 months	3	Integer	0
CC03	Number of open and current auto trades updated in the past 6 months	3	Integer	0
CC04	Number of open and current auto trades updated in the past 12 months	3	Integer	0
CC05	Number of open auto trades updated in the past 3 months	3	Integer	0
CC06	Number of auto trades opened in the past 6 months	3	Integer	0
CC07	Number of auto trades opened in the past 12 months	3	Integer	0
CC08	Total balance of open and current auto trades updated in the past 6 months	9	Integer	0
CC09	Months since most recent auto trade closed	3	Integer	999
CC10	Months since most recent auto trade closed derog	3	Integer	999
CC11	Months since most recent future paid date for an auto loan	4	Integer	999
CC12	Monthly payment for most recent future paid date trade	9	Integer	0

Characteristic ID	Description	Length	Format	Default Value
CC13	Aggregate payments of open auto loans	9	Integer	0
CC14	Total original balance of open auto trades updated in the past 12 months	9	Integer	0

Table 7: TransUnion Student Loan Characteristics (00N47)

Characteristic ID	Description	Length	Format	Default Value
CC15	Number of open and current student loan trades updated in the past 3 months	3	Integer	0
CC16	Number of open student loan trades updated in the past 3 months	3	Integer	0
CC17	Total balance of open and current student loan trades updated in the past 3 months	9	Integer	0
CC18	Total balance of open student loan trades updated in the past 3 months	9	Integer	0

Table 8: TransUnion Mortgage Characteristics (00N49)

Characteristic ID	Description	Length	Format	Default Value
CC19	Total credit line available of open home equity line trades updated in the past 12 months	9	Integer	0
CC20	Total monthly payments on all open trades	9	Integer	0
CC21	Number of open and current mortgage trades updated in the past 3 months	3	Integer	0
CC22	Number of mortgage trades currently 30 days past due	3	Integer	0
CC23	Number of mortgage trades currently 60 days past due	3	Integer	0

Characteristic ID	Description	Length	Format	Default Value
CC24	Number of mortgage trades currently 90 days past due	3	Integer	0
CC25	Number of currently 120+DPD mortgage trades	3	Integer	0
CC26	Number of foreclosure mortgage trades in the past 12 months	3	Integer	0
CC27	Number of other asset trades in the past 6 months	3	Integer	0

Using Standard Characteristics

Standard characteristics are returned to subscribers who use the service code 00N05 in the RA01 segment. The response includes all characteristics within the standard characteristics set, which are listed in the following table.

Table 9: TransUnion Standard Characteristics (00N05)

Standard Characteristic	Description	Length	Decimal	Default
AT01	Number of trades	3	0	Zero
AT03	Number of satisfactory open trades	3	0	Zero
AT05	Number of trades opened in past 3 months	3	0	Zero
AT06	Number of trades opened in past 6 months	3	0	Zero
AT07	Number of trades opened in past 12 months	3	0	Zero
AT08	Number of trades opened in past 18 months	3	0	Zero
AT09	Number of trades opened in past 24 months	3	0	Zero
AT10	Number of open trades, verified in past 3 months	3	0	Zero
AT11	Number of open trades, verified in past 6 months	3	0	Zero
AT12	Number of open trades, verified in past 12 months	3	0	Zero
AT13	Number of open trades, verified in past 18 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
AT14	Number of open trades, verified in past 24 months	3	0	Zero
AT20	Months since oldest trade opened	3	0	Blank
AT21	Months since most recent trade opened	3	0	Blank
AT23	Number of trades satisfactory open trades 3 months or older	3	0	Zero
AT24	Number of trades satisfactory open trades 6 months or older	3	0	Zero
AT25	Number of trades satisfactory open trades 12 months or older	3	0	Zero
AT26	Number of trades satisfactory open trades 18 months or older	3	0	Zero
AT27	Number of trades satisfactory open trades 24 months or older	3	0	Zero
AT28	Total high credit/credit limit of open trades updated in the past 12 months	7	0	Zero
AT29	Number of open trades with balance > 0 updated in the past 12 months	3	0	Zero
AT33	Total balance of open trades updated in the past 12 months	7	0	Zero
AT34	Ratio of total balance to HC/CL for open trades updated in the past 12 months	5	1	Blank
AT35	Average balance of open trades updated in the past 12 months	7	0	Blank
AT36	Months since most recent delinquency	3	0	Blank
AT99	Total balance of open trades, excluding mortgage updated in the past 12 months	7	0	Zero
BC01	Number of bankcard trades	3	0	Zero
BC02	Number of currently active and open bankcard trades updated in the past 3 months	3	0	Zero
BC03	Number of satisfactory open bankcard trades	3	0	Zero
BC05	Number of bankcard trades opened in past 3 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
BC06	Number of bankcard trades opened in past 6 months	3	0	Zero
BC07	Number of bankcard trades opened in past 12 months	3	0	Zero
BC08	Number of bankcard trades opened in past 18 months	3	0	Zero
BC09	Number of bankcard trades opened in past 24 months	3	0	Zero
BC10	Number of open bankcard trades, verified in past 3 months	3	0	Zero
BC11	Number of open bankcard trades, verified in past 6 months	3	0	Zero
BC12	Number of open bankcard trades, verified in past 12 months	3	0	Zero
BC13	Number of open bankcard trades, verified in past 18 months	3	0	Zero
BC14	Number of open bankcard trades, verified in past 24 months	3	0	Zero
BC21	Months since most recent bankcard trade opened	3	0	Blank
BC29	Number of open bankcard trades with balance > 0 updated in the past 12 months	3	0	Zero
BC30	Percentage of open bankcard trades > 50% of limit updated in the past 12 months	5	1	Blank
BC31	Percentage of open bankcard trades > 75% of limit updated in the past 12 months	5	1	Blank
BC34	Ratio of total balance of HC/CL for open bankcard trades updated in the past 12 months	5	1	Blank
BC35	Average balance of open bankcard trades updated in the past 12 months	7	0	Blank
BC36	Months since most recent bankcard delinquency	3	0	Blank
BC98	Total open to buy on open revolving bankcards (aggregate	7	0	Blank

Standard Characteristic	Description	Length	Decimal	Default
	limits minus balances) updated in the past 12 months			
BI01	Number of bank installment trades	3	0	Zero
BI03	Number of satisfactory open bank installment trades	3	0	Zero
BI05	Number of bank installment trades opened in past 3 months	3	0	Zero
BI06	Number of bank installment trades opened in past 6 months	3	0	Zero
BI07	Number of bank installment trades opened in past 12 months	3	0	Zero
BI08	Number of bank installment trades opened in past 18 months	3	0	Zero
BI09	Number of bank installment trades opened in past 24 months	3	0	Zero
BI20	Months since oldest bank installment trade opened	3	0	Blank
BI28	Total open bank installment high credit/credit limit updated in the past 12 months	7	0	Zero
BR03	Number of satisfactory open bank revolving trades	3	0	Zero
BR20	Months since oldest bank revolving trade opened	3	0	Blank
BR28	Total open bank revolving high credit/credit limit updated in the past 12 months	7	0	Zero
BR33	Total balance of open bank revolving trades updated in the past 12 months	7	0	Zero
DS02	Number of currently active and open department store trades updated in the past 3 months	3	0	Zero
DS03	Number of satisfactory open department store trades	3	0	Zero
DS04	Number of department store trades to new to rate (MOP 00)	3	0	Zero
DS05	Number of department store trades opened in past 3 months	3	0	Zero
DS06	Number of department store trades opened in past 6 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
DS07	Number of department store trades opened in past 12 months	3	0	Zero
DS08	Number of department store trades opened in past 18 months	3	0	Zero
DS09	Number of department store trades opened in past 24 months	3	0	Zero
DS10	Number of open department store trades, verified in past 3 months	3	0	Zero
DS11	Number of open department store trades, verified in past 6 months	3	0	Zero
DS12	Number of open department store trades, verified in past 12 months	3	0	Zero
DS13	Number of open department store trades, verified in past 18 months	3	0	Zero
DS14	Number of open department store trades, verified in past 24 months	3	0	Zero
DS21	Months since most recent department store trade opened	3	0	Blank
DS33	Total balance of open department store trades updated in the past 12 months	7	0	Zero
DS35	Average balance of open department store trades updated in the past 12 months	7	0	Blank
FI01	Number of finance installment trades	3	0	Zero
FI03	Number of satisfactory open finance installment trades	3	0	Zero
FI05	Number of finance installment trades opened in past 3 months	3	0	Zero
FI06	Number of finance installment trades opened in past 6 months	3	0	Zero
FI07	Number of finance installment trades opened in past 12 months	3	0	Zero
FI08	Number of finance installment trades opened in past 18 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
FI09	Number of finance installment trades opened in past 24 months	3	0	Zero
FR03	Number of satisfactory open finance revolving trade	3	0	Zero
FR33	Total balance of open finance revolving trades updated in the past 12 months	7	0	Zero
FR35	Average balance of open finance revolving trades updated in the past 12 months	7	0	Blank
G001	Number of 30 day ratings in payment pattern	3	0	Zero
G002	Number of 60 day ratings in payment pattern	3	0	Zero
G003	Number of 90 day ratings in payment pattern	3	0	Zero
G004	Number of 120 day ratings in payment pattern	3	0	Zero
G005	Number of 150 day ratings in payment pattern	3	0	Zero
G006	Number of 30 and 60 day ratings in payment pattern	3	0	Zero
G007	Number of 30 day or worse ratings in payment pattern	3	0	Zero
G008	Number of 60 day or worse ratings in payment pattern	3	0	Zero
G009	Number of 90 day or worse ratings in payment pattern	3	0	Zero
G016	Number of trades with maximum delinquency 02 in last 3 months (current MOP and payment pattern only)	3	0	Zero
G017	Number of trades with maximum delinquency 02 in last 6 months (current MOP and payment pattern only)	3	0	Zero
G018	Number of trades with maximum delinquency 02 in last 12 months (current MOP and payment pattern only)	3	0	Zero
G019	Number of trades with maximum delinquency 02 in last	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
	18 months (current MOP and payment pattern only)			
G020	Number of trades with maximum delinquency 02 in last 24 months (current MOP and payment pattern only)	3	0	Zero
G021	Number of trades with maximum delinquency 03 in last 3 months (current MOP and payment pattern only)	3	0	Zero
G022	Number of trades with maximum delinquency 03 in last 6 months (current MOP and payment pattern only)	3	0	Zero
G023	Number of trades with current MOP maximum delinquency 03 in last 12 months or payment pattern history MOP maximum 03 in past 6 months (current MOP and payment pattern only)	3	0	Zero
G024	Number of trades with maximum delinquency 03 in last 18 months (current MOP and payment pattern only)	3	0	Zero
G025	Number of trades with maximum delinquency 03 in last 24 months (current MOP and payment pattern only)	3	0	Zero
G026	Number of trades with maximum delinquency 04 in last 3 months (current MOP and payment pattern only)	3	0	Zero
G027	Number of trades with maximum delinquency 04 in last 6 months (current MOP and payment pattern only)	3	0	Zero
G028	Number of trades with maximum delinquency 04 in last 12 months (current MOP and payment pattern only)	3	0	Zero
G029	Number of trades with maximum delinquency 04 in last 18 months (current MOP and payment pattern only)	3	0	Zero
G030	Number of trades with maximum delinquency 04 in last	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
	24 months (current MOP and payment pattern only)			
G041	Number of trades ever 30 or more days past due	3	0	Zero
G042	Number of trades ever 60 or more days past due	3	0	Zero
G043	Number of trades ever 90 or more days past due	3	0	Zero
G044	Number of trades ever 120 or more days past due	3	0	Zero
G045	Number of trades ever 150 or more days past due	3	0	Zero
G046	Number of trades never 30 or more days past due	3	0	Zero
G047	Number of trades never 60 or more days past due	3	0	Zero
G048	Number of trades never 90 or more days past due	3	0	Zero
G049	Number of trades never 120 or more days past due	3	0	Zero
G050	Number of trades never 150 or more days past due	3	0	Zero
G051	Percent of trades never delinquent	5	1	Blank
G057	Number of trades 30 or more days past due in last 3 months (current MOP and payment pattern only)	3	0	Zero
G058	Number of trades 30 or more days past due in last 6 months (current MOP and payment pattern only)	3	0	Zero
G059	Number of trades 30 or more days past due in last 12 months (current MOP and payment pattern only)	3	0	Zero
G060	Number of trades 30 or more days past due in last 18 months (current MOP and payment pattern only)	3	0	Zero
G061	Number of trades 30 or more days past due in last 24 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
	(current MOP and payment pattern only)			
G062	Number of trades 60 or more days past due in last 3 months (current MOP and payment pattern only)	3	0	Zero
G063	Number of trades 60 or more days past due in last 6 months (current MOP and payment pattern only)	3	0	Zero
G064	Number of trades 60 or more days past due in last 12 months (current MOP and payment pattern only)	3	0	Zero
G065	Number of trades 60 or more days past due in last 18 months (current MOP and payment pattern only)	3	0	Zero
G066	Number of trades 60 or more days past due in last 24 months (current MOP and payment pattern only)	3	0	Zero
G067	Number of trades 90 or more days past due in last 3 months (current MOP and payment pattern only)	3	0	Zero
G068	Number of trades 90 or more days past due in last 6 months (current MOP and payment pattern only)	3	0	Zero
G069	Number of trades 90 or more days past due in last 12 months (current MOP and payment pattern only)	3	0	Zero
G070	Number of trades 90 or more days past due in last 18 months (current MOP and payment pattern only)	3	0	Zero
G071	Number of trades 90 or more days past due in last 24 months (current MOP and payment pattern only)	3	0	Zero
G082	Number of trades currently past due balances within past 2 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
G083	Number of trades currently 30 days past due within past 2 months	3	0	Zero
G084	Number of trades currently 60 days past due within past 2 months	3	0	Zero
G085	Number of trades currently 90 days past due within past 2 months	3	0	Zero
G086	Number of trades currently 120 days past due within past 2 months	3	0	Zero
G087	Number of trades currently 150 days past due within past 2 months	3	0	Zero
G088	Number of trades currently delinquent less than 120 days within past 2 months	3	0	Zero
G089	Highest delinquency ever on a trade	3	0	Blank
G091	Total amount now past due updated in the past 12 months	7	0	Zero
G093	Number of derogatory public records	3	0	Zero
G094	Number of public record bankruptcies	3	0	Zero
G095	Months since most recent adverse or derogatory public record	3	0	Blank
G096	Number of inquiries	3	0	Zero
G098	Number or inquiries in last 6 months	3	0	Zero
G102	Months since most recent inquiry	3	0	Blank
G103	Months since most recent activity	3	0	Blank
G104	Months on file	4	0	Blank
IN03	Number of satisfactory open installment trades	3	0	Zero
IN05	Number of installment trades opened in past 3 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
IN06	Number of installment trades opened in past 6 months	3	0	Zero
IN07	Number of installment trades opened in past 12 months	3	0	Zero
IN08	Number of installment trades opened in past 18 months	3	0	Zero
IN09	Number of installment trades opened in past 24 months	3	0	Zero
IN10	Number of open installment trades, verified in past 3 months	3	0	Zero
IN11	Number of open installment trades, verified in past 6 months	3	0	Zero
IN12	Number of open installment trades, verified in past 12 months	3	0	Zero
IN13	Number of open installment trades, verified in past 18 months	3	0	Zero
IN14	Number of open installment trades, verified in past 24 months	3	0	Zero
IN21	Months since most recent installment trades opened	3	0	Blank
IN28	Total open installment high credit/credit limit updated in the past 12 months	7	0	Zero
IN33	Total balance of open installment trades updated in the past 12 months	7	0	Zero
IN34	Ratio of total balance to HC/CL for open installment trades updated in the past 12 months	5	1	Blank
MT01	Number of mortgage trades	3	0	Zero
MT02	Number of active and open mortgage trades updated in the past 3 months	3	0	Zero
MT03	Number of satisfactory open mortgage trades	3	0	Zero
MT04	Number of mortgage trades too new to rate	3	0	Zero
MT20	Months since oldest mortgage trade opened	3	0	Blank

Standard Characteristic	Description	Length	Decimal	Default
MT21	Month since most recent mortgage trade opened	3	0	Blank
MT22	Months since most recent open mortgage trade updated	3	0	Blank
MT28	Total open mortgage high credit/ credit limit updated in the past 12 months	7	0	Zero
MT29	Number of open mortgage trades with balance greater than 0 updated in the past 12 months	3	0	Zero
MT32	Maximum balance owed on open mortgage trades updated in the past 12 months	7	0	Zero
MT33	Total balance of open mortgage trades updated in the past 12 months	7	0	Zero
MT34	Ratio balance to high credit on open mortgage trades updated in the past 12 months	5	1	Blank
MT35	Average balance of open mortgage trades updated in the past 12 months	7	0	Blank
MT36	Months since most recent mortgage trade delinquent	3	0	Blank
MT41	Number of 30 days or worse mortgage trades ratings	3	0	Zero
MT42	Number of 60 days or worse mortgage trades ratings	3	0	Zero
MT43	Number of 90 days or worse mortgage trades ratings	3	0	Zero
MT44	Number of 120 days or worse mortgage trades ratings	3	0	Zero
MT45	Number of derogatory ratings for mortgage trades	3	0	Zero
MT46	Number of mortgage trade delinquencies in 6 months of payment pattern	3	0	Zero
MT47	Number of mortgage trade delinquencies in 12 months of payment pattern	3	0	Zero
MT48	Number of mortgage trade delinquencies in 24 months of payment pattern	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
MT49	Any mortgage trade currently past due	1	0	Zero
MT50	Any mortgage trade currently 30 days past due	1	0	Zero
MT51	Any mortgage trade currently 60 days past due	1	0	Zero
MT52	Any mortgage trade currently 90 days past due	1	0	Zero
MT53	Any mortgage trade currently 120 days past due	1	0	Zero
MT54	Any mortgage trade currently 150 days past due	1	0	Zero
MT55	Highest delinquency ever on any mortgage trade	3	0	Blank
MT56	Highest amount ever on mortgage trade delinquency	7	0	Zero
MT57	Total amount now past due on open mortgage trades updated in the past 12 months	7	0	Zero
OF01	Number of other finance trades	3	0	Zero
OF03	Number of satisfactory open other finance trades	3	0	Zero
OF20	Months since oldest other finance trades opened	3	0	Blank
OF28	Total open other finance high credit/credit limit updated in the past 12 months	7	0	Zero
OF29	Number of open other finance trades with balance > 0 updated in the past 12 months	3	0	Zero
OF33	Total balance of open other finance trades updated in the past 12 months	7	0	Zero
OF36	Months since most recent other finance delinquency	3	0	Blank
ON01	Number of oil and national trades	3	0	Zero
ON03	Number of satisfactory open oil and national trades	3	0	Zero
ON20	Months since oldest oil and national trade opened	3	0	Blank

Standard Characteristic	Description	Length	Decimal	Default
ON33	Total balance of open oil and national trades updated in the past 12 months	7	0	Zero
ON34	Ratio of total balance to HC/CL for open oil and national trades updated in the past 12 months	5	1	Blank
PB03	Number of satisfactory open premium bankcard trades	3	0	Zero
PB05	Number of premium bankcard trades opened in past 3 months	3	0	Zero
PB06	Number of premium bankcard trades opened in past 6 months	3	0	Zero
PB07	Number of premium bankcard trades opened in past 12 months	3	0	Zero
PB08	Number of premium bankcard trades opened in past 18 months	3	0	Zero
PB09	Number of premium bankcard trades opened in past 24 months	3	0	Zero
PB10	Number of open premium bankcard trades, verified in past 3 months	3	0	Zero
PB11	Number of open premium bankcard trades, verified in past 6 months	3	0	Zero
PB12	Number of open premium bankcard trades, verified in past 12 months	3	0	Zero
PB13	Number of open premium bankcard trades, verified in past 18 months	3	0	Zero
PB14	Number of open premium bankcard trades, verified in past 24 months	3	0	Zero
PB20	Months since oldest premium bankcard trade opened	3	0	Blank
PB21	Months since most recent premium bankcard trade opened	3	0	Blank
PB33	Total balance of open premium bankcard trades updated in the past 12 months	7	0	Zero
PB35	Average balance of open premium bankcard trades updated in the past 12 months	7	0	Blank

Standard Characteristic	Description	Length	Decimal	Default
PF02	Number of currently active and open personal finance trades updated in the past 3 months	3	0	Zero
PF03	Number of satisfactory open personal finance trades	3	0	Zero
PF05	Number of personal finance trades opened in past 3 months	3	0	Zero
PF06	Number of personal finance trades opened in past 6 months	3	0	Zero
PF07	Number of personal finance trades opened in past 12 months	3	0	Zero
PF08	Number of personal finance trades opened in past 18 months	3	0	Zero
PF09	Number of personal finance trades opened in past 24 months	3	0	Zero
PF33	Total balance of open personal finance trades updated in the past 12 months	7	0	Zero
PF34	Ratio of total balance to HC/CL for open personal finance trades updated in the past 12 months	5	1	Blank
RE03	Number of satisfactory open revolving trades	3	0	Zero
RE10	Number of open revolving trades, verified in past 3 months	3	0	Zero
RE11	Number of open revolving trades, verified in past 6 months	3	0	Zero
RE12	Number of open revolving trades, verified in past 12 months	3	0	Zero
RE13	Number of open revolving trades, verified in past 18 months	3	0	Zero
RE14	Number of open revolving trades, verified in past 24 months	3	0	Zero
RE20	Months since oldest revolving trade opened	3	0	Blank
RE28	Total open revolving high credit/ credit limit updated in the past 12 months	7	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
RE32	Maximum balance owed on open revolving trades updated in the past 12 months	7	0	Zero
RE33	Total balance of open revolving trades updated in the past 12 months	7	0	Zero
RE34	Ratio of total balance to HC/CL for open revolving trades updated in the past 12 months	5	1	Blank
RE35	Average balance of open revolving trades updated in the past 12 months	7	0	Blank
RT01	Number of retail trades	3	0	Zero
RT03	Number of satisfactory open retail trades	3	0	Zero
RT05	Number of retail trades opened in past 3 months	3	0	Zero
RT06	Number of retail trades opened in past 6 months	3	0	Zero
RT07	Number of retail trades opened in past 12 months	3	0	Zero
RT08	Number of retail trades opened in past 18 months	3	0	Zero
RT09	Number of retail trades opened in past 24 months	3	0	Zero
RT10	Number of open retail trades, verified in past 3 months	3	0	Zero
RT11	Number of open retail trades, verified in past 6 months	3	0	Zero
RT12	Number of open retail trades, verified in past 12 months	3	0	Zero
RT13	Number of open retail trades, verified in past 18 months	3	0	Zero
RT14	Number of open retail trades, verified in past 24 months	3	0	Zero
RT20	Months since oldest retail trade opened	3	0	Blank
RT21	Months since most recent retail trade opened	3	0	Blank
RT28	Total open retail high credit/ credit limit updated in the past 12 months	7	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
RT29	Number of open retail trades with balance > 0 updated in the past 12 months	3	0	Zero
RT33	Total balance of open retail trades updated in the past 12 months	7	0	Zero
RT34	Ratio of total balance to HC/CL for open retail trades updated in the past 12 months	5	1	Blank
RT35	Average balance of open retail trades updated in the past 12 months	7	0	Blank
RT36	Months since most recent retail delinquency	3	0	Blank
S002	Birthdate (YYMM or E-YY)	4	0	Blank
S004	Average number of months trades on file	3	0	Blank
S008	Number of open finance trades verified in past 12 months	3	0	Zero
S009	Number of bank, finance, personal or national revolving credit trades	3	0	Zero
S010	Number of satisfactory open bank, finance, personal or national revolving credit card trade lines without derogatory remark code	3	0	Zero
S011	Number of open trades	3	0	Zero
S012	Number of open revolving trades	3	0	Zero
S014	Number of open finance company installment trade lines	3	0	Zero
S015	Number of open, revolving bank trades with HC/CL >= $5000, updated past 12 months	3	0	Zero
S018	Number of finance trades opened in past 12 months	3	0	Zero
S019	Number of open personal finance installment trades updated in the past 12 months	3	0	Zero
S020	Number of open revolving personal finance trades updated in the past 12 months	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
S027	Months since most recent finance trade opened	3	0	Blank
S040	Highest open retail credit limit updated in the past 12 months	7	0	Zero
S043	Number of open non-installment trades > 50% of limit updated in the past 12 months	3	0	Zero
S046	Percent of active and open trades with balance > 0 updated in the past 12 months	5	1	Blank
S054	Number of different subscribers	3	0	Zero
S055	Number of unique account numbers	3	0	Zero
S059	Number of public record and trade line derogatory items (GT $100)	3	0	Zero
S060	Number of trades with high MOP	3	0	Zero
S061	Months since most recent 60+ day rating	3	0	Blank
S062	Months since most recent 90+ day rating	3	0	Blank
S063	Total public record amounts within 12 months	7	0	Zero
S064	Total collection amounts ever owed	7	0	Zero
S065	Number of tax liens	3	0	Zero
S066	Number of disputed trades	3	0	Zero
S078	Ratio of total balance to HC/CL for open personal finance revolving trades updated in the past 12 months	5	1	Blank
S079	Ratio of total balance to HC/CL for open revolving department store and clothing trades updated in the past 12 months	5	1	Blank
S0Y2	Birthdate (CCYYMM)	6	0	Blank
S114	Number of inquiries reported in past 6 months, excluding auto & real estate	3	0	Zero
S115	Number of personal finance inquiries	3	0	Zero

Standard Characteristic	Description	Length	Decimal	Default
UR03	Number of satisfactory open upscale retail trades	3	0	Zero
UR05	Number of upscale retail trades opened in past 3 months	3	0	Zero
UR06	Number of upscale retail trades opened in past 6 months	3	0	Zero
UR07	Number of upscale retail trades opened in past 12 months	3	0	Zero
UR08	Number of upscale retail trades opened in past 18 months	3	0	Zero
UR09	Number of upscale retail trades opened in past 24 months	3	0	Zero
UR10	Number of open upscale retail trades, verified in past 3 months	3	0	Zero
UR11	Number of open upscale retail trades, verified in past 6 months	3	0	Zero
UR12	Number of open upscale retail trades, verified in past 12 months	3	0	Zero
UR13	Number of open upscale retail trades, verified in past 18 months	3	0	Zero
UR14	Number of open upscale retail trades, verified in past 24 months	3	0	Zero
UR20	Months since oldest upscale retail trade opened	3	0	Blank
UR21	Months since most recent upscale retail trade opened	3	0	Blank
UR28	Total open upscale retail high credit/credit limit updated in the past 12 months	7	0	Zero
UR33	Total balance of open upscale retail trades updated in the past 12 months	7	0	Zero
UR35	Average balance of open upscale retail trades updated in the past 12 months	7	0	Blank

TransUnion Debt Management Factor Codes

The TransUnion Debt Management model enables credit-counseling agencies to use an industry-tested methodology to salvage high-risk consumers.

TransUnion Debt Mgmt Factor Code	Description
000	No adverse factor
001	Number of accounts that are or were 90 days or more delinquent in the last 6 months
002	Ratio of disposable income to monthly net income
003	Number of collection inquiries in the last three months
004	Income
005	Number of accounts on the Debt Management Plan (DMP)
006	Number of accounts that were 30 and 60 days delinquent in the last 6 months
007	Total past due amount for accounts updated in the past 12 months
008	Revolving account utilization
009	Number of accounts opened in the past 24 months
010	Number of charge-offs
011	Number of bankcard inquiries in the last 6 months
012	Revolving account utilization
013	Length of credit history
014	Collection agency activity

TransUnion Income Estimator 3.0 and Debt-to-Income Estimator 3.0

The TransUnion Income Estimator 3.0 and TransUnion Debt-to-Income Estimator 3.0 models are returned a little differently than other models.

TransUnion Income Estimator 3.0

TransUnion Income Estimator 3.0 uses current, individual-level credit characteristics to calculate an individual's estimated income as opposed to more dated or aggregated data (for example, Census or other demographic survey data). The model can be used to improve segmentation and targeting of credit offers, assess portfolio risk trends, and enhance collection prioritization strategies. Permissible purpose is required. No adverse action codes are returned in this model.

The product code/algorithm number for TransUnion Income Estimator 3.0 will be 00N03. The product code/algorithm number for TransUnion Income Estimator 2.0 remains 00064.

Score Range	0 to 999
Development Sample	Developed using a large sample of consumer incomes, which allows the model to be more predictive over a wider range of incomes: • Nationwide sample of mortgage application data, approximately 1.5 million records • Development sample period: February 2006 through March 2007
Model Design	• Specific characteristics used in the model are proprietary. • Segmentation scheme consisting of three scorecards separates individuals based on credit behavior, resulting in a more robust and versatile solution. • Model contains predictive elements for different income ranges — for example, an individual with a predicted income of $50K has different characteristics than an individual with $100K. • Mean income and state distributions were validated against U.S. Census statistics and the TransUnion consumer database to verify distribution of development sample.
Availability	As an add-on to: • Standard Credit Report • Collection Credit Report • Model Report (only on the new Form 2000) • ID Report with Score • Collection Prioritization Engine • Portfolio Valuation
Minimum Scoring Criteria	• At least one account (not restricted to any specific account type) • At least one account verified in the last 12 months • At least one account with a credit limit greater than $0 • Cannot be deceased
Output Options	Multiple output options provide flexibility: • Raw income estimate rounded to the nearest thousand • Estimated income range • Online output to standard TU4.0/TU4.1 Scoring and Characteristic Segments • Online Batch (OLB)

Income Estimator 3.0 Output

Income Estimator 3.0			Notes
Segment ID	**Segment Name**	**Information Returned**	
AO01	Add-on Status		

Income Estimator 3.0			Notes
Segment ID	**Segment Name**	**Information Returned**	
SC01	Scoring	Calculated income estimate score (truncated to the nearest thousand)	
CH01	Characteristic	Lower range of income estimate	
CH01	Characteristic	Upper Range of income estimate	
CH01	Characteristic	Three-digit calculated income estimate score (truncated to the nearest thousand), space, one-digit letter code corresponding to the estimated income range	

Print Image (English display):
`M O D E L  P R O F I L E`
`*** INCOME ESTIMATOR 3.0 SCORE +57 : ***`			

How FFR Segments are Returned for Income Estimator 3.0

Add-on Status (AO01) Segment Total Length: 17 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is AO01.
Segment Length	5	3	Value is 017.
Service Code	8	5	Displays the algorithm ID of the input or of the returned score.
Service Status	13	2	Specifies whether the service is available. Possible values are: **01** Requested service delivered. **02** Requested service not available. **03** Subscriber code not authorized for requested service. **04** Default service delivered. **05** Invalid score request. **06** Requested information cannot be scored or returned because data is suppressed or cannot be evaluated.
Search Status	15	3	Displays the result of special processing for the add-on service. This field applies only to certain add-ons.

Scoring (SC01) Segment Total Length: 34 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is SC01.
Segment Length	5	3	Value is 034.
Service Code	8	5	Displays the algorithm ID of the input or of the returned score.
Sign	13	1	Contains a plus sign (+) or a minus sign (-) to indicate whether the score is positive or negative. A score of zero is always positive.
Score	14	5	Displays the results of the scoring process. If the file is not scored, this field will be blank.
Scoring Indicator Flag	19	1	Displays the reason a file could not be scored. Possible values are: • 2 File not scored because subject is deceased. • 3 File not scored because subject does not have sufficient credit.
Score Derog and Inquiry Alert Flag	20	1	No derogatory or inquiry information returned.
First Factor	21	3	No factors returned.
Second Factor	24	3	No factors returned.
Third Factor	27	3	No factors returned.
Fourth Factor	30	3	No factors returned.
Score Card Indicator	33	2	No scorecard indicator returned.

Three CH01 segments are returned as shown below and on the next page:

Characteristic (CH01) Segment Total Length: 30 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is CH01.
Segment Length	5	3	Value is 030.
Service Code	8	5	Displays the algorithm ID associated with the characteristic.
Characteristic ID	13	8	Displays the model characteristic — lower end of the estimated income range. Example value: LOW END

Characteristic (CH01) Segment Total Length: 30 bytes			
Field	**Displacement**	**Length**	**Description**
Characteristic Value	21	10	Identifies the characteristic value. Example value: 0000050000

Characteristic (CH01) Segment Total Length: 30 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is CH01.
Segment Length	5	3	Value is 030.
Service Code	8	5	Displays the algorithm ID associated with the characteristic.
Characteristic ID	13	8	Displays the model characteristic — higher end of the estimated income range. Example value: HIGH END
Characteristic Value	21	10	Identifies the characteristic value. Example value: 0000059999

Characteristic (CH01) Segment Total Length: 30 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is CH01.
Segment Length	5	3	Value is 030.
Service Code	8	5	Displays the algorithm ID associated with the characteristic.
Characteristic ID	13	8	Displays the model characteristic — income estimate score. Example value: SCORE
Characteristic Value	21	10	Identifies the characteristic value — displays the three-digit estimated income truncated to the nearest thousand plus the letter code corresponding to the Income Range. Letter codes have the following possible values: A $0 – $29,999 B $30,000 – $49,999

Characteristic (CH01) Segment Total Length: 30 bytes			
Field	**Displacement**	**Length**	**Description**
			C $50,000 – $59,999 D $60,000 – $69,999 E $70,000 – $79,999 F $80,000 – $89,999 G $90,000 – $99,999 H $100,000 – $124,999 I $125,000+ Example value for $57,000 is: 057 C

TransUnion Debt-to-Income Estimator 3.0

TransUnion Debt-to-Income Estimator 3.0 calculates an individual's debt-to-income ratio using credit information and the estimated income from Income Estimator 3.0. The model can provide insight into an individual's capacity to pay and his or her overall debt burden. Permissible purpose is required. No adverse action codes are returned with this model.

The product code/algorithm number for TransUnion Debt-to-Income Estimator 3.0 will be 00X99. TransUnion Debt-to-Income Estimator 2.0 will continue to be returned under product code/algorithm 00064.

Score Range	0 to 999
Development Sample	Developed using a large sample of consumer incomes, which allows the model to be more predictive over a wider range of incomes: • Nationwide sample of mortgage application data, approximately 1.5 million records • Development sample period: February 2006 through March 2007
Model Design	• Uses the output from the Income Estimator model to calculate a consumer's monthly income • Income Estimator output divided by 12 for monthly income estimate • Sums the total monthly debt using information in the consumer's credit file including mortgage, installment, and revolving accounts
Availability	As an add-on to: • Standard Credit Report • Collection Credit Report • Model Report (only on the new Form 2000) • ID Report with Score • Collection Prioritization Engine • Portfolio Valuation

Minimum Scoring Criteria	• At least one account (not restricted to any specific account type) • At least one account verified in the last 12 months • At least one account with a credit limit greater than $0 • At least one account open and updated in the last six months • Cannot be deceased
Output Options	Multiple output options provide flexibility: • Raw debt-to-income ratio • Online output to standard TU4.0/TU4.1 Scoring and Characteristic Segments • Online Batch (OLB)

Debt-to-Income Estimator 3.0 Output

Debt-to-Income Estimator 3.0			Notes
Segment ID	**Segment Name**	**Information Returned**	
AO01	Add-on Status		
SC01	Scoring	Three-digit debt-to-income ratio	
CH01	Characteristic	Three-digit debt-to-income ratio (same information as in SC01 segment, giving subscribers the option to receive raw score in the CH01 segment instead)	

Print Image (English display):
 	
`M O D E L  P R O F I L E`
 	
`*** DEBTINCOME EST 3.0 SCORE +33 : ***`
			For a typical score, four factor codes follow the colon after the score. No factors or reason codes are associated with this model, so the fields are blank.

How FFR Segments are Returned for Debt-to-Income Estimator 3.0

Add-on Status (AO01) Segment Total Length: 17 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is AO01.
Segment Length	5	3	Value is 017.
Service Code	8	5	Displays the code for the requested add-on service.
Service Status	13	2	Specifies whether the service is available. Possible values are:

Add-on Status (AO01) Segment Total Length: 17 bytes			
Field	**Displacement**	**Length**	**Description**
			01 Requested service delivered. **02** Requested service not available. **03** Subscriber code not authorized for requested service. **04** Default service delivered. **05** Invalid score request. **06** Requested information cannot be scored or returned because data is suppressed or cannot be evaluated.
Search Status	15	3	Displays the result of special processing for the add-on service. This field applies only to certain add-ons.

Scoring (SC01) Segment Total Length: 34 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is SC01.
Segment Length	5	3	Value is 034.
Service Code	8	5	Displays the algorithm ID of the input or of the returned score.
Sign	13	1	Contains a plus sign (+) or a minus sign (-) to indicate whether the score is positive or negative. A score of zero is always positive.
Score	14	5	Displays the results of the scoring process. If the file is not scored, this field will be blank.
Scoring Indicator Flag	19	1	Displays the reason a file could not be scored. Possible values are: **2** File not scored because subject is deceased. **3** File not scored because subject does not have sufficient credit.
Score Derog and Inquiry Alert Flag	20	1	No derogatory or inquiry information returned.
First Factor	21	3	No factors returned.
Second Factor	24	3	No factors returned.
Third Factor	27	3	No factors returned.
Fourth Factor	30	3	No factors returned.

Scoring (SC01) Segment Total Length: 34 bytes			
Field	**Displacement**	**Length**	**Description**
Score Card Indicator	33	2	No scorecard indicator returned.

Characteristic (CH01) Segment Total Length: 30 bytes			
Field	**Displacement**	**Length**	**Description**
Segment Type	1	4	Value is **CH01**.
Segment Length	5	3	Value is **030**.
Service Code	8	5	Displays the algorithm ID associated with the characteristic.
Characteristic ID	13	8	Displays the model characteristic. Example value: DBINCOME
Characteristic Value	21	10	Identifies the characteristic value. Example value: 0000000033

TransUnion Medical Recovery Scores 3.0

TransUnion Medical Recovery Scores 3.0 includes three Medical Propensity Scores and three Medical Yield Scores. The Propensity Scores help predict the likelihood of collecting $100 or more in the subsequent six months, while the Yield Scores help rank order consumers based on the expected amount collected.

Within each of the two model types, subscribers can select one of three versions listed below:

- A traditional score, calculated on credit bureau data
- A "Plus" score, calculated on a combination of credit bureau data plus three customer-provided data elements
- A No-Hit score, calculated on customer-provided data

> **Note:** Subscribers will typically not select the No-Hit version of the scores, but may receive this product version on output as part of the scores' cascading logic.

TransUnion Medical Recovery Scores 3.0 is comprised of the following services:

- TransUnion Medical Propensity Score — 00H74
- TransUnion Medical Propensity Plus Score — 00H75
- TransUnion Medical Propensity No Hit Score — 00H76
- TransUnion Medical Yield Score — 00H71
- TransUnion Medical Yield Plus Score — 00H72

- TransUnion Medical Yield No-Hit Score — 00H73

For more information about the Recovery 3.0 model suite, refer to TransUnion Recovery 3.0 Models on page 393.

To be eligible for TransUnion Medical Recovery Scores 3.0, you must be set up for it in the TransUnion system. You must also be eligible for at least one of the following standalone services:

- Credit Report (07000)
- Collection Prioritization Engine 1.0 (07000)
- Collection Prioritization Engine 2.0 (07025)
- Collection Credit Report (07700)
- Model Report (08000)
- ID Report with Score (07750)

Fixed Format Inquiry (FFI)

TransUnion Medical Recovery Scores 3.0 has the following permissible purpose code requirements:

- If the input subscriber code has a Kind of Business (KOB) code of "Y," and if the subscriber is the end user, then no code is required in the request.
- For all other subscribers, certification of permissible purpose is required for each input request. TransUnion Recovery Scores are available when one of the two following permissible purpose codes is entered at the time of the request. The value should be entered into the End Use Type Code field, displacements 25–26, of the End User Segment (EU01).

  — **CL** — collection of an account
  — **AR** — potential investor, servicer, or insurer of account

  > **Note:** For the Recovery Scores, the **AR** permissible purpose code should only be used by debt buyers when evaluating a portfolio prior to purchase.

TransUnion Medical Recovery Scores 3.0 has special input requirements for the "Plus" and No-Hit scores:

- The "Plus" and No-Hit versions of the scores require the inclusion of up to five customer-provided data elements. These are provided to TransUnion in the Model Data segment (MD01). Information about the Model Attribute IDs (displacement 10–17) and Model Attribute Values (displacement 18–37) is below.
- Requirements for the input data fields are listed below. Note that the requirements for inclusion of these fields vary depending on which Medical Recovery Model(s) are used.

Medical Input Data Values

Field	Model Attribute ID	Medical Prop. Plus	Medical Prop. No Hit	Medical Yield Plus	Medical Yield No Hit	Format and Length	Model Attribute Value
Charge Off Date	CHGOFFDT	YES	YES	YES	NO	Character (8)	Date the account was originally charged off at the creditor institution.

Field	Model Attribute ID	Medical Prop. Plus	Medical Prop. No Hit	Medical Yield Plus	Medical Yield No Hit	Format and Length	Model Attribute Value
							Format: YYYYMMDD
Collection Stage	COLSTAGE	NO	YES	YES	NO	Character (1)	How long the account is on the collection agency books. **1** primary (typically months 1-6) **2** secondary (typically months 7-12) **3** tertiary (typically months 13-18) **4** all others (typically longer than 18 months)
Industry Type	INDTYP	NO	NO	NO	NO	Character (1)	**1** bankcard / retail card **2** auto **3** installment **4** medical / healthcare **5** utility **6** telecom **7** DDA **8** student loan **9** others
Placed for Legal Collection	LEGELREV	NO	NO	NO	NO	Character (1)	Has account been placed for legal collection? **Y** Yes **N** No
Type of Paper	PAPERTYP	YES	YES	YES	YES	Character (1)	Type of paper. **1** contingency **2** purchased
Placement Balance	PLACEBAL	YES	YES	YES	YES	Numeric (12)	The balance when the account was

Field	Model Attribute ID	Medical Prop. Plus	Medical Prop. No Hit	Medical Yield Plus	Medical Yield No Hit	Format and Length	Model Attribute Value
							placed with the collection agency. Format: Includes two decimal places. Example: xxxxxxxxxx.xx
Placement Date	PLACEDTE	YES	YES	YES	YES	Character (8)	Date the account was placed for collections with the agency. Format: YYYYMMDD

Fixed Format Response (FFR)

The system will return the following data in the standalone service response:

- An AO01 segment containing the following data:
  - Service Code = product code
  - Service Status = 04 ("Default service delivered")
- An SC01 segment, following the AO01 segment, containing:
  - The relevant Service Code
  - Either a Score or "Scoring Indicator Flag" that would provide a reason why a score was not returned

TransUnion New Account Models Factor Codes

The TransUnion New Account model predicts the likelihood of a new account becoming delinquent in 90 plus days or more, within 24 months, based on the applicant's aggregated credit report at the time of the application.

TransUnion New Acct Factor Code			Description
Version 1.0	Version 2.0	Version 3.0	
000	**000**	**000**	No factor
001	**001**		Available credit on bankcard accounts is too low
002	**002**	**002**	Average balance of retail accounts is too high
003			Average balance of specialty retail accounts is too high

TransUnion New Acct Factor Code			Description
Version 1.0	Version 2.0	Version 3.0	
005			Not enough bank installment debt experience
006	**006**	**006**	Bankcard account balances are too high in proportion to credit limits
007	**007**	**007**	Collection amounts ever owed are too high
	008	**008**	Collection, public record, or delinquency amounts or amount past due is too high
	009		Too many months since recent activity
010	**010**	**010**	Too many delinquencies
011	**011**	**011**	Installment account balances too high in proportion to credit limits
	012		Average age of bank revolving accounts is too short
013	**013**		Length of time finance accounts have been established is too short
014			Length of time most recent specialty retail account has been established is too short
	015	**015**	Number of satisfactory accounts is too low in proportion to total number of accounts
016	**016**	**016**	Too few satisfactory accounts
017	**017**	**017**	Length of time oldest bank revolving account has been established is too short
	018	**018**	Too many collection accounts
	019	**019**	Length of time most recent collection has been established is too short
020		**020**	Length of time revolving accounts have been established is too short
	021	**021**	Total account balances are too high in proportion to credit limits
022	**022**	**022**	Too many inquiries
023	**023**	**023**	Number of months since most recent delinquency
024	**024**	**024**	Too many serious delinquencies
	025	**025**	Length of time since oldest bankcard has been established is too short
026	**026**	**026**	Number of delinquent accounts is too high in proportion to total number of accounts
	027	**027**	Mortgage account balances are too high in proportion to credit limits
028	**028**	**028**	Personal finance account balances are too high in proportion to credit limits

TransUnion New Acct Factor Code			Description
Version 1.0	Version 2.0	Version 3.0	
029	**029**	**029**	Retail account balances are too high in proportion to credit limits
030			Not enough retail debt experience
031	**031**	**031**	Revolving account balances are too high in proportion to credit limits
	032	**032**	Not enough revolving debt experience
033			Revolving department store and clothing account balances are too high in proportion to credit limits
035	**035**	**035**	Length of time accounts have been established is too short
	036		Not enough Finance debt experience
037	**037**	**037**	Too few bankcard accounts
038	**038**	**038**	Too few mortgage accounts
	039	**039**	Too few active accounts
	040	**040**	Too few premium bankcard accounts
	041		Length of time most recent revolving account has been established is too short
042		**042**	Too few retail accounts
043	**043**	**043**	Too few open revolving accounts
047			Too few specialty retail accounts
	050	**050**	Too many accounts with a balance
	052		Too many bankcard accounts
053	**053**	**053**	Too many derogatory accounts or public records
054		**054**	Too many finance installment accounts
	056	**056**	Too many accounts close to limit
	058		Too many personal finance accounts
059	**059**	**059**	Too many recent inquiries
060			Too many recent mortgage delinquencies
061	**061**	**061**	Too many recently opened accounts
064			Too many recently opened retail accounts
		066	Bankruptcy
068		**068**	Total account balances excluding mortgages is too high
	069	**069**	Not enough debt experience
070	**70**	**070**	Length of time since most recent bankcard account has been established is too short

TransUnion New Acct Factor Code			Description
Version 1.0	Version 2.0	Version 3.0	
071		**071**	Too many bankcard accounts with balances
072		**072**	Average balance of bankcard accounts is too high
073	**073**	**073**	Not enough mortgage debt experience
074	**074**	**074**	Too few satisfactory revolving accounts
075	**074**	**075**	Too many recently opened installment accounts
076	**076**		Total amount past due is too high
077			Too many active bankcard accounts
078	**078**		Too many recent collection inquiries
079	**079**	**079**	Too few bank revolving accounts
080	**080**		Too many accounts with a balance currently past due
081	**081**	**081**	Length of time since most recent derogatory public record or collection item is too short
082	**082**		Total balance of retail accounts is too high
083	**083**	**083**	Total balance of revolving accounts is too high
084	**084**	**084**	Not enough installment debt experience
085	**085**		Total balance of personal finance accounts is too high
086	**086**	**086**	Too many mortgage delinquencies
087			Too many active accounts with a balance
088		**088**	Length of time since most recent mortgage account delinquency is too short
089			Length of time retail accounts have been established is too short
090	**090**	**090**	Length of time since most recent bank inquiry is too short
091		**091**	Too few satisfactory specialty retail accounts
092		**092**	Length of time since most recent retail account delinquency is too short
093			Length of time since oldest mortgage account has been established is too short
094	**094**		Too few bank installment accounts
095		**095**	Total amount past due or collection amount is too high
096		**096**	Average balance of revolving accounts is too high
	097	**097**	Bank revolving account balances are too high in proportion to credit limits
	098		Finance revolving account balances are too high in proportion to credit limits

TransUnion New Acct Factor Code			Description
Version 1.0	Version 2.0	Version 3.0	
	099	**099**	Too many revolving accounts with balances too high in proportion to credit limits
		103	Not enough available credit
		105	Too few revolving accounts
		108	Length of time since most recent installment delinquency is too short
		111	Not enough bankcard debt experience
		118	Finance account balances are too high in proportion to credit limits
		119	Total balance of bankcard accounts is too high
		120	Total balance of delinquencies is too high
		124	Too few installment accounts
		126	Length of time since most recent finance delinquency is too short
		132	Too few open accounts
		135	Too many finance or installment accounts

TransUnion Recovery 3.0 Models

TransUnion offers 18 models within the Recovery 3.0 model suite. The information provided below is a summary of all 18 models.

Model Type	All Industry Models	Bankcard Models	Medical Models
Propensity	00H09	00H42	00H74
Propensity Plus	00Y03	00U18	00H75
Propensity No Hit	00H10	00H43	00H76
Yield	00H11	00U23	00H71
Yield Plus	00Y04	00U19	00H72
Yield No Hit	00H12	00H45	00H73

For more information on the Medical Models, refer to TransUnion Medical Recovery Scores 3.0 on page 386.

Input Data Values

There are seven input data fields used in the All Industry models, while only three of the fields are used within the Bankcard models. Formatting rules are below.

The use of input data fields in the All Industry Recovery Models and in the Bankcard Recovery Models applies to all four of the models within that suite:

- Propensity Plus
- Propensity No Hit
- Yield Plus
- Yield No Hit

Field	Model Attribute ID	All Industry Models	BC Models	Format and Length	Model Attribute Value
Charge Off Date	CHGOFFDT	YES	YES	Character (8)	Date the account was originally charged off at the creditor institution. Format: YYYYMMDD
Collection Stage	COLSTAGE	YES	NO	Character (1)	How long the account is on the collection agency books. **1** primary (typically months 1-6) **2** secondary (typically months 7-12) **3** tertiary (typically months 13-18) **4** all others (typically longer than 18 months)
Industry Type	INDTYP	YES	NO	Character (1)	**1** bankcard / retail card **2** auto **3** installment **4** medical / healthcare **5** utility **6** telecom **7** DDA **8** student loan **9** others
Placed for Legal Collection	LEGELREV	YES	NO	Character (1)	Has account been placed for legal collection? **Y** Yes **N** No
Type of Paper	PAPERTYP	YES	NO	Character (1)	Type of paper.

Field	Model Attribute ID	All Industry Models	BC Models	Format and Length	Model Attribute Value
					1 contingency **2** purchased
Placement Balance	PLACEBAL	YES	YES	Numeric (12)	The balance when the account was placed with the collection agency. Format: Includes two decimal places. Example: xxxxxxxxxx.xx
Placement Date	PLACEDTE	YES	YES	Character (8)	Date the account was placed for collections with the agency. Format: YYYYMMDD

TransUnion Telecom Model Score Factor Codes

The Telecom Model predicts the likelihood that a telecommunication account will become 120+ days delinquent within 12 months. A high score indicates low risk; a low score indicates high risk.

Telecom Factor Code	Description
00	No adverse factors
01	Insufficient number of accounts
02	Delinquency
03	Serious delinquency, derogatory, public record, or collection
04	Recent delinquency
05	Recent serious delinquency, derogatory, public record, or collection
06	Too many high dollar charge-offs
07	Too many new accounts
08	Too many new accounts with a balance
09	Too many currently past due accounts
10	Insufficient number of satisfactory accounts
11	Insufficient number of accounts with high credit limit/high credits
12	Limited credit available

Telecom Factor Code	Description
13	Lack of accounts with a zero balance
14	Insufficient length of credit history
15	Insufficient number of bank revolving accounts
16	Too many active bank revolving accounts
17	Insufficient length of bank revolving credit history
18	Too many bank revolving accounts with low credit limits
19	Insufficient bank revolving accounts with high credit limits
20	Lack of accounts or recent credit history for bank revolving accounts
21	Bank revolving utilization ratio is too high
22	Insufficient number of travel and entertainment accounts
23	Insufficient number of installment accounts with high loan amounts
24	Too many new retail revolving accounts with a balance
25	Too many new personal finance non-installment accounts with a balance
26	Too many personal finance installment accounts
27	Too many new personal finance installment accounts
28	Insufficient number of satisfactory mortgage accounts
29	Insufficient number of revolving accounts
30	Too many new revolving accounts with a balance
31	Insufficient number of active revolving accounts
32	Too many currently past due revolving accounts
33	Lack of revolving accounts or lack of recent revolving credit history
34	Revolving utilization ratio is too high
35	Limited revolving credit available
36	Too many revolving accounts with high utilization
37	Lack of revolving accounts with a zero balance
38	Insufficient length of revolving credit history
39	Too many inquiries in the past year
40	Proportion of satisfactory accounts to total accounts is too low

TransUnion Wireless Model 3.0 Score Factor Codes

Wireless Model 3.0 is the most recently updated version of the Wireless Model. It is a more effective tool for wireless companies to use in predicting the likelihood that a cellular account will become 60 days or more past due within six months.

Wireless Model 3.0 Factor Code	Description
000	No adverse factors
001	Insufficient length of credit history
002	Insufficient number of satisfactory accounts
006	Proportion of revolving balances to revolving high credit limits is too high
007	Too many recent credit checks
008	Serious delinquency, derogatory public record, or collection
009	Delinquency
013	Insufficient number of accounts
016	Limited bank revolving credit available
017	Lack of revolving accounts or lack of recent revolving credit activity
021	Too many new accounts with a balance
023	Too many personal finance installment accounts
025	Too many bank revolving accounts where utilization is too high
033	Proportion of satisfactory accounts to total accounts is too low
036	Lack of or insufficient number of $0 balance accounts
037	Recent delinquency, derogatory public record, or collection
038	Insufficient number of bank revolving accounts
039	Too many small installment accounts
040	Too many personal finance accounts

Wireless Model Alert — This flag occurs when a credit file contains one or more of the following: previous bankruptcy, derogatory public records, collection account activity, or an account rating of 7 or higher.

Wireless Model not scored: deceased — This indicator occurs when the subject's Social Security number matches the Social Security Administration's deceased Social Security number file.

Wireless Model not scored: insufficient credit — This indicator occurs when a credit file does not contain an account updated within the last 12 months.

TransUnion Wireless 2 Model Score Factor Codes

Wireless 2 Model is an updated version of the Wireless Model.

Wireless Model 2 Factor Code	Description
00	No adverse factors
01	Insufficient length of credit history
03	Recent delinquency
04	Too many new accounts
07	Too many recent credit checks
08	Serious delinquency, derogatory public record, or collection
09	Delinquency
10	Insufficient accounts or lack of recent activity for bank revolving accounts
12	Past due balances
13	Insufficient number of accounts
14	Insufficient bank revolving history or lack of bank revolving accounts
18	Bank revolving utilization ratio is too high
19	Retail revolving utilization ratio is too high
20	Recent serious delinquency, derogatory public record, or collection
21	Too many new accounts with a balance
22	Insufficient number of bank revolving accounts with large credit limit
23	Too many personal finance installment accounts
24	Insufficient number of satisfactory mortgage accounts
25	Too many bank revolving accounts where utilization is too high
26	Lack of retail revolving accounts or lack of recent retail revolving activity
27	Too many retail accounts
28	Insufficient retail revolving history or lack of retail revolving accounts
29	Insufficient number of active accounts
30	Insufficient number of large installment accounts
31	Lack of personal finance revolving accounts
32	Lack of or insufficient number of $0 balance personal finance revolving accounts
33	Proportion of satisfactory accounts to total accounts is too low
34	Limited credit available

Wireless Model 2 Factor Code	Description
35	Too many active accounts

Wireless Model Alert — This flag occurs when a credit file contains one or more of the following: previous bankruptcy, derogatory public records, collection account activity, or an account rating of 7 or higher.

Wireless Model not scored: deceased — This indicator occurs when the subject's Social Security number matches the Social Security Administration's deceased Social Security number file.

Wireless Model not scored: insufficient credit — This indicator occurs when a credit file does not contain an account updated within the last 12 months.

TransUnion Wireless Model Score Factor Codes

Wireless Model is a model developed to predict the likelihood that a cellular account will become 60 days or more past due within six months.

Wireless Model Code	Descriptions
000	No adverse factor
001	Insufficient length of credit history
002	Insufficient number of satisfactory accounts
003	Recent delinquency
004	Too many new accounts
005	Limited revolving credit available
006	Proportion of revolving balances to revolving high credit limits is too high
007	Too many recent credit checks
008	Serious delinquency, derogatory public record, or collection
009	Delinquency
010	Insufficient number of bankcard accounts or lack of recent bankcard credit activity
011	Too many active personal finance accounts
012	Past due balances
013	Insufficient number of accounts
014	Insufficient length of bank revolving history or lack of bank revolving accounts
015	Too many oil or national accounts
016	Limited bank revolving credit available

Wireless Model Code	Descriptions
017	Lack of revolving accounts or lack of recent revolving credit activity
018	Proportion of bankcard balances to bankcard high credit limits is too high
019	Proportion of retail revolving balances to retail revolving high credit limits is too high

Wireless Model Alert — This flag occurs when a credit file contains one or more of the following: previous bankruptcy, derogatory public records, collection account activity, or an account rating of 7 or higher.

Wireless Model not scored: deceased — This indicator occurs when the subject's Social Security number matches the Social Security Administration's deceased Social Security number file.

Wireless Model not scored: insufficient credit — This indicator occurs when a credit file does not contain an account updated within the last 12 months.

VantageScore® Factor Codes

VantageScore® credit risk models are built using a synchronized development data sample provided by all three Credit Reporting Agencies.

Note: The score factor codes are returned under the alphanumeric (A/N) rule of left-justified and blank-filled so a factor of 09 is returned as "**09** " (09 followed by a blank).

Returning Exclusion Scores

For special conditions, a VantageScore® exclusion score is returned. Here are the conditions that invoke exclusion scores and the scoring values returned by VantageScore® for each condition:

Special Condition	SC01 Score Value Returned	SC01 Scoring Indicator Flag Value Returned
Subject is deceased	1---- (1 followed by four blanks)	2
Subject has insufficient credit	2---- (2 followed by four blanks)	3
Subject has no activity	3---- (3 followed by four blanks)	3

VantageScore® (1.0, 2.0, and Authorized User) Factor Codes

VantageScore® Factor Code	Description
00	No usable accounts

VantageScore® Factor Code	Description
01	No open accounts
02	No accounts with valid credit amount
03	No recently reported accounts
04	No presently rated accounts
05	No rated accounts
06	No open, rated accounts
07	No recently opened, rated accounts
08	No accounts with a valid open date
09	No open accounts with a balance
10	No usable installment accounts
11	No open installment accounts
12	No installment accounts with valid credit amount
16	No open, rated installment accounts
17	No recently opened, rated installment accounts
20	No usable revolving accounts
21	No open revolving accounts
22	No revolving accounts with a valid credit amount
28	No revolving accounts with a valid open date
30	No usable bankcard accounts
31	No open bankcard accounts
32	No bankcard accounts with a valid credit amount
33	No recently reported bankcard accounts
35	No rated bankcard accounts
36	No open, rated bankcard accounts
40	No usable auto accounts
45	No rated auto accounts
46	No open, rated auto accounts
50	No usable real estate accounts
51	No open real estate accounts
52	No real estate accounts with valid credit amount
55	No rated real estate accounts
60	No usable retail revolving accounts
61	No open retail revolving accounts

VantageScore® Factor Code	Description
62	No retail revolving accounts with a valid credit amount
90	Too few accounts
91	Presence of a bankruptcy
1A	No recently rated installment accounts
2A	No recently rated revolving accounts
2B	No recently opened revolving accounts
3A	No recently rated bankcard accounts
4A	No recently rated auto accounts
5A	No recently rated real estate accounts
AA	Too few auto accounts consistently paid on time
AB	Too few auto accounts with no severe delinquency
AC	Too many auto accounts with severe delinquency/derog status
AD	Worst status on auto accounts is delinquent/derog
AE	Worst status in recent months on auto accounts is delinquent/derog
AF	Worst present status on open auto accounts is delinquent
AG	Newest delinquency/derog status on auto accounts is too recent
BA	Too many recently opened bankcard accounts
BB	Too many open bankcard accounts
BC	Too many open bankcard accounts, open for at least six months
BD	Too many open bankcard accounts with a balance
BE	Too many open bankcard accounts with a high balance
BF	Too many bankcard accounts with high utilization
BG	Too few open bankcard accounts, open for at least six months
BH	Too few bankcard accounts consistently paid on time
BJ	Too many bankcard accounts with delinquency/derog status in recent months
BK	Worst status on bankcard accounts is delinquent/derog
BL	Worst status in recent months on bankcard accounts is delinquent/derog
BM	Worst present status on open bankcard accounts is delinquent
BN	Sum of balances on bankcard accounts is too high
BP	Available credit on open bankcard accounts is too low
BQ	Average credit amount on open bankcard accounts is too low
BR	Maximum credit amount on open bankcard accounts is too low
BS	Open bankcard account balance/credit amount ratio is too high

VantageScore® Factor Code	Description
BT	Too high proportion of bankcard accounts were opened recently
BU	Too high proportion of bankcard accounts recently delinquency/derog
BV	Too high proportion of balances from open bankcard accounts
BW	Too high proportion of bankcard accounts have high utilization
CA	Too many collection agency accounts with an amount greater than $250
CB	Too many unpaid collection agency accounts
CC	Too many collection agency accounts
CD	Too many recent collection agency accounts
CE	Presence of a collection agency account
CF	The sum of balances on collection agency accounts is too high
CG	Time since youngest collection agency account opened is too recent
CH	Too high proportion of collection agency accounts were opened recently
CJ	Too high proportion of collection agency accounts are unpaid
DA	Too many open retail revolving accounts with a balance
DB	Too many retail revolving accounts with high utilization
DC	Too few retail accounts with no severe delinquencies
DD	Sum of balances on open retail revolving accounts is too high
DE	Open retail revolving account balance/credit amount ratio is too high
FA	Too many finance company accounts
FB	Too many open finance company accounts
IA	Too many recently opened installment accounts
IB	Presence of presently delinquent/derog installment accounts
IC	Presence of severe delinquency/derog status on an installment account
ID	Worst status on installment accounts is delinquent/derog
IE	Worst status in recent months on installment accounts is delinquent/derog
IF	Worst status on recently opened installment accounts is delinquent/derog
IG	Worst present status on open installment accounts is delinquent
IH	Sum of balances on delinquent/derog installment accounts is too high
IJ	Sum of credit amounts on open installment accounts is too low
IK	Average credit amount on open installment accounts is too low
IL	Amount paid down on open installment accounts is too low
IM	Newest delinquency/derog status on installment accounts is too recent
IN	Open installment account balance/credit amount ratio is too high

VantageScore® Factor Code	Description
IP	Too high proportion of balances from open non-installment accounts
MA	Too few open real estate accounts
MB	Too few real estate accounts with no severe delinquencies
MC	Worst status in recent months on real estate accounts is delinquent/derog
MD	Worst present status on open real estate accounts is delinquent
ME	Average credit amount on open real estate accounts is too low
MF	Amount paid down on open real estate accounts is too low
MG	Too low proportion of accounts are real estate accounts
PA	Too many public record judgments/tax liens
PB	Too many recent public record judgments/tax liens
PC	Too many unsatisfied public record judgments/tax liens
PD	Too many public record bankruptcy filings
PE	Newest public record judgment/tax lien is too recent
PF	Presence of public record judgment/tax lien since bankruptcy filing
PG	Too high proportion of public record judgments/tax liens are unsatisfied
Q0	Number of inquiries was also a factor, but effect was not significant
QA	Too many recent inquiries
QB	Too many inquiries
RA	Too many open revolving accounts
RB	Too few revolving accounts with a high credit amount
RC	Too many revolving accounts with high utilization
RD	Presence of presently delinquent/derog revolving accounts
RE	Too many revolving accounts with delinquency/derog status
RF	Worst status of any revolving account is delinquent/derog
RG	Worst status in recent months on revolving accounts is delinquent/derog
RH	Worst status on recently opened revolving accounts is delinquent/derog
RJ	Sum of balances on revolving accounts is too high
RK	Average balance on open revolving accounts is too high
RL	Available credit on open revolving accounts is too low
RM	Sum of balances on delinquent/derog revolving accounts is too high
RN	Average credit amount on open revolving accounts is too low
RP	Time since oldest revolving account opened is too recent
RQ	Time since youngest revolving account opened is too recent

VantageScore® Factor Code	Description
RR	Average time since revolving accounts opened is too recent
RS	Newest delinquency/derog status on revolving accounts is too recent
RT	Open revolving account balance/credit amount ratio is too high
RU	Recently opened revolving account balance/credit amount ratio is too high
RV	Too high proportion of revolving account delinquencies/derogs are recent
RW	Too high proportion of recently opened accounts are revolving accounts
RX	Too high proportion of balances from open revolving accounts
RY	Too high proportion of revolving accounts have high utilization
T0	Too high proportion of account delinquencies/derogs are recent
T1	Too low proportion of accounts paid on time in recent months
T2	Too low proportion of accounts with no recent severe delinquency
T3	Too high proportion of accounts recently delinquency/derog
TA	Too many recently opened accounts
TB	Too few recently reported accounts presently current
TC	Too many recently reported accounts presently delinquent/derog
TD	Too few accounts paid on time in recent months
TE	Presence of presently delinquent/derog accounts
TF	Too many open accounts presently delinquent
TG	Too many recently opened accounts with delinquency/derog status
TH	Too many accounts with a bankrupt status
TJ	Too many accounts with delinquency/derog status in recent months
TK	Worst status on accounts is delinquent/derog
TL	Worst status on recently opened accounts is delinquent/derog
TM	Worst present status on open accounts is delinquent
TN	Worst present status on recently opened, open accounts is delinquent
TP	Worst present performance on accounts is delinquent/derog
TQ	Open account balance/credit amount ratio is too high
TR	Sum of balances on delinquent/derog accounts is too high
TS	Time since oldest account opened is too recent
TT	Time since youngest account opened is too recent
TU	Average time since accounts opened is too recent
TV	Newest delinquency/derog status on accounts is too recent
TW	Presence of delinquency/derog status since bankruptcy filing

VantageScore® Factor Code	Description
TX	Ratio of accounts consistently paid on time to all accounts is too low
TY	Too high proportion of accounts are in delinquency/derog status
TZ	Too high proportion of accounts were opened recently
--	No adverse action applied

VantageScore® 3.0 Factor Codes

VantageScore® 3.0 and VantageScore® 3.0 with Positive Factor Codes reduce the number of factor codes and simplifies the factor code statements.

The following table applies to both VantageScore® 3.0 (00V60) and VantageScore® 3.0 with Positive Factor Codes (00W40).

VantageScore® 3.0 Adverse Action Factor Code	Adverse Action Description
04	The balances on your accounts are too high compared to loan amounts
05	Too many of the delinquencies on your accounts are recent
06	You have too many accounts that were opened recently
07	You have too many delinquent or derogatory accounts
08	You have either very few loans or too many loans with recent delinquencies
09	The worst payment status on your accounts is delinquent or derogatory
10	You have either very few loans or too many loans with delinquencies
11	The total of your delinquent or derogatory account balances is too high
12	The date that you opened your oldest account is too recent
13	Your most recently opened account is too new
14	Lack of sufficient credit history
15	Newest delinquent or derogatory payment status on your accounts is too recent
16	The total of all balances on your open accounts is too high
17	Balances on previously delinquent accounts are too high compared to loan amounts
18	Total of balances on accounts never late is too high compared to loan amounts
21	No open accounts in your credit file
22	No recently reported account information
23	Lack of sufficient relevant account information

VantageScore® 3.0 Adverse Action Factor Code	Adverse Action Description
29	Too many of your open bankcard or revolving accounts have a balance
30	Too few of your bankcard or other revolving accounts have high limits
31	Too many bankcard or other revolving accounts were opened recently
32	Balances on bankcard or revolving accounts too high compared to credit limits
33	Your worst bankcard or revolving account status is delinquent or derogatory
34	Total of all balances on bankcard or revolving accounts is too high
35	Your highest bankcard or revolving account balance is too high
36	Your largest credit limit on open bankcard or revolving accounts is too low
39	Available credit on your open bankcard or revolving accounts is too low
40	The date you opened your oldest bankcard or revolving account is too recent
42	The date you opened your newest bankcard or revolving account is too recent
43	Lack of sufficient credit history on bankcard or revolving accounts
44	Too many bankcard or revolving accounts with delinquent or derogatory status
45	Total balances too high on delinquent/derogatory bankcard or revolving accounts
47	No open bankcard or revolving accounts in your credit file
48	No bankcard or revolving recently reported account information
49	Lack of sufficient relevant bankcard or revolving account information
53	The worst status on your real estate accounts is delinquent or derogatory
54	The amount of balance paid down on your open real estate accounts is too low
55	Open real estate account balances are too high compared to their loan amounts
57	Too many real estate accounts with delinquent or derogatory payment status
58	The total of all balances on your open real estate accounts is too high
61	No open real estate accounts in your credit file
62	No recently reported real estate account information
63	Lack of sufficient relevant real estate account information
64	No open first mortgage accounts in your credit file
65	Lack of sufficient relevant first mortgage account information
66	Your open auto account balances are too high compared to their loan amounts
68	No open auto accounts in your credit file
69	Lack of sufficient relevant auto account information
71	You have either very few installment loans or too many with delinquencies

VantageScore® 3.0 Adverse Action Factor Code	Adverse Action Description
72	Too many installment accounts with a delinquent or derogatory payment status
73	The worst status on your installment accounts is delinquent or derogatory
74	The balance amount paid down on your open installment accounts is too low
75	The installment account that you opened most recently is too new
76	You have insufficient credit history on installment loans
77	Newest delinquent or derogatory status on installment accounts is too recent
78	Balances on installment accounts are too high compared to their loan amounts
79	Too many of the delinquencies on your installment accounts are recent
81	No open installment accounts in your credit file
83	Lack of sufficient relevant installment account information
84	The number of inquiries was also a factor, but effect was not significant
85	You have too many inquiries on your credit report
86	Your credit report contains too many derogatory public records
87	Your credit report contains too many unsatisfied public records
88	One or more derogatory public records in your credit file is too recent
90	Too few discharged bankruptcies
93	The worst status on your student loan accounts is delinquent or derogatory
94	The balance amount paid down on your open student loan accounts is too low
95	You have too many collection agency accounts that are unpaid
96	The total you owe on collection agency accounts is high
97	You have too few credit accounts
98	There is a bankruptcy on your credit report

The following table applies to only VantageScore® with Positive Factors Codes (00W40).

VantageScore® 3.0 Positive Factor Code	Positive Factor Code Description
P04	The balances on your accounts are not too high compared to loan limits
P05	There are no or only a few recent delinquencies on your accounts
P06	You have few or no accounts that were opened recently

VantageScore® 3.0 Positive Factor Code	Positive Factor Code Description
P07	You have either no or few delinquent or derogatory accounts
P08	One or more of your accounts were paid on time in recent months
P09	None of your accounts have a severe delinquency or a derogatory status
P10	One or more of your accounts have been paid on time
P11	You have few or no accounts with delinquent or derogatory balances
P12	The date that you opened your oldest account is not too recent
P13	Your most recently opened account is not too new
P14	Your credit file contains enough information about your use of credit
P15	None of your accounts have a recent delinquency or a derogatory status
P16	The total of all balances on your open accounts is not too high
P17	Balances on prior delinquent accounts not too high compared to loan amts
P18	Total of balances on accts never late not too high compared to loan amts
P21	No open accounts in your credit file
P22	No recently reported account information
P23	Lack of sufficient relevant account information
P29	Few or none of your open bankcard or revolving accounts has a balance
P30	One or more of your bankcard or revolving accounts has a high limit
P31	Few or none of your bankcard or revolving accounts was opened recently
P32	Balances on bankcard or revolving accts not too high compared to credit limits
P33	No severe delinquency/derogatory status on bankcard or revolving accts
P34	Total of all balances on bankcard or revolving accounts is not too high
P35	Your highest bankcard or revolving account balance is not too high
P36	Largest credit limit on open bankcard or revolving accts is not too low
P39	Available credit on open bankcard or revolving accounts is not too low
P40	Date your oldest bankcard or revolving account opened is not too recent
P42	Date your newest bankcard or revolving account opened is not too recent
P43	Credit file has enough history on your use of bankcard/revolving accts
P44	Few or no bankcard or revolving accts with delinquent/derogatory status
P45	Few or no bankcard/revolving accts with delinquent /derogatory balances
P47	No open bankcard or revolving accounts in your credit file
P48	No bankcard or revolving recently reported account information
P49	Lack of sufficient relevant bankcard or revolving account information

VantageScore® 3.0 Positive Factor Code	Positive Factor Code Description
P50	No open retail revolving accounts in your credit file
P52	No open home equity loans in your credit file
P53	No real estate accounts with severe delinquency or derogatory status
P54	Amount of balance paid down on open real estate accounts is not too low
P55	Open real estate account balances not too high compared to loan amounts
P56	<This code is not currently being used>
P57	Few or no real estate accts with delinquent or derogatory payment status
P58	The total of all balances on open real estate accounts is not too high
P59	<This code is not currently being used>
P61	No open real estate accounts in your credit file
P62	No recently reported real estate account information
P63	Lack of sufficient relevant real estate account information
P64	No open first mortgage accounts in your credit file
P65	Lack of sufficient relevant first mortgage account information
P66	Balances on open auto accounts are not too high compared to loan amounts
P68	No open auto accounts in your credit file
P69	Lack of sufficient relevant auto account information
P70	No open personal installment loans in your credit file
P71	One or more of your installment accounts has been paid on time
P72	Few or no installment accts with delinquent or derogatory payment status
P73	No installment accounts with a severe delinquency or derogatory status
P74	Amount of balance paid down on open installment accounts is not too low
P75	Your most recently opened installment account is not too new
P76	Your credit file has enough history on your use of installment loans
P77	Newest delinquent /derogatory status on installment accts not too recent
P78	Installment account balances not too high compared to loan amounts
P79	You have few or no recent delinquencies on your installment accounts
P81	No open installment accounts in your credit file
P82	<This code is not currently being used>
P83	Lack of sufficient relevant installment account information
P85	You have few or no inquiries on your credit report
P86	You have few or no derogatory public records on your credit report

VantageScore® 3.0 Positive Factor Code	Positive Factor Code Description
P87	You have few or no unsatisfied public records on your credit report
P88	You have no recent derogatory public records on your credit report
P90	You have one or more discharged bankruptcies
P92	No open student loan accounts in your credit file
P93	No student loan accounts with a severe delinquency or derogatory status
P94	Amount of balance paid down on open student loan accounts is not too low
P95	You have few or no unpaid collection agency accounts
P96	You have few or no collection agency account balances
P98	There is no bankruptcy on your credit report

Vehicle History Score

By using a vehicle's CARFAX® vehicle history data, the Vehicle History Score predicts the likelihood and severity for future auto insurance losses for a particular vehicle. The higher the score, the less likely an insurance loss will occur for the vehicle.

Note: The range of the Vehicle History Score is 0 - 999 in which the 998 and 999 are special scores defined as below:

- 998 = VIN is hit but file vehicle description data (year, make and model) are incomplete for calculating an accurate score
- 999 = VIN is hit but file lacks of scoring required data

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the Vehicle History Score model service in the order of return:

Segment ID	Segment Name	Notes
AO01	Add-on Status (Vehicle History Score)	Included in the Add-on Status segment may be one of the following Vehicle History Score search status codes depending on the service status: • when Service Status = 04 (i.e., when Vehicle History Score model service is processed and delivered successfully):

Segment ID	Segment Name	Notes
		V01 Input VIN is *not a duplicate* and Vehicle History Score is calculated using *freshly pulled* CARFAX data. **V02** Input VIN is *a duplicate* and Vehicle History Score is re-calculated using *archived* CARFAX data. **V03** Input VIN is *a duplicate* and Vehicle History Score is re-calculated using *freshly pulled* CARFAX data. • when Service Status = 02 (i.e., when Vehicle History Score model service experiences a system problem) or when Service Status = 10 (i.e., when subscriber provides an invalid State Code of the garage address): *blank*
SC01	Scoring	The single-byte Score Group indicator is returned in the MI01 segment's Information field.

VIN Prefill

Service Code 07954

VIN Prefill is an enhancement to the existing Vehicle History Score service. The VIN Prefill service is a solution providing an option for subscribers to request Vehicle History Score service when the VIN number is not provided or is incomplete.

Fixed Format Inquiry (FFI)

The system defaults to the subscriber's eligibility settings in the subscriber validation file. The VIN Prefill service cannot be requested in an RA01 segment in the FFI.

The segments below are additional segments specifically for the VIN Prefill service. In addition, the following conditions will apply for the VIN Prefill service:

- Vehicle Information, Name, and Address segments must be provided as a group for each vehicle. This group sequence can be requested up to ten times in the FFI.

For detailed information regarding each of these segments, see FFI Segments.

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
VH01	Vehicle Information	1 Per Transaction	Required
VH01	Vehicle Information	9 Per Transaction	Optional

Segment ID	Segment Name	Current Maximum Accepted	Required/ Optional
NM11	Name	1 Per Transaction	Required
NM11	Name	9 Per Transaction	Optional
AD11	Address	1 Per Transaction	Required
AD11	Address	9 Per Transaction	Optional

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned specifically for the VIN Prefill service. For detailed information regarding this segment, see FFR Segments on page 467.

Segment ID	Segment Name	Brief Explanation of Usage
AO01	Add-on Status (VIN Prefill Status)	Included in the Add-on Status segment may be one of the following VIN Prefill status codes depending on the service status: • When Service Status = 02 (i.e., when the system experiences a problem and the VIN Prefill service cannot be processed successfully): **052** Unable to connect to data provider **053** Request to data provider timed out • When Service Status = 04 (i.e., when the system returns the VIN Prefill service successfully): **P01** VIN Hit **P02** VIN Hit but not used due to no match for individual **P03** VIN No-Hit • When Service Status = 06 (i.e., when the system returns the VIN Prefill service unsuccessfully due to input information):

Segment ID	Segment Name	Brief Explanation of Usage
		050 Invalid or no response for desired service **091** Internal System Error **101** FFI segment contains an invalid segment ID **401** Surname missing or invalid **403** First name missing or invalid **411** Current address house number missing or invalid **413** Current address street name missing or invalid **415** Current address city name missing or invalid **417** Current address state code missing or invalid **419** Current address ZIP code missing or invalid **444** Multiple matches found due to address apartment number missing **445** Multiple matches found due to address apartment number invalid **446** Address state is restricted **450** Name did not match address **452** State or Street Address is missing or invalid **462** Vehicle Model Year missing or invalid

Segment ID	Segment Name	Brief Explanation of Usage
		463 Vehicle Make missing or invalid **478** Insufficient Input

VHS for Financial Services

VHS for Financial Services is available in standard (service code 00610) and premium (service code 00611) and is designed to help auto lenders predict the likelihood of a credit loss, based on vehicle-related information contained in a vehicle's CARFAX® vehicle history file.

The score range is 0–999: the higher the score, the less likely credit loss will occur for the vehicle. Other special scores include:

- 0 = Presence of a branded title
- 1 = Lemon branded title (00611 only)
- 2 = Odometer branded title (00611 only)
- 3 = Loss branded title (00611 only)
- 4 = Other branded title (00611 only)
- 5 = Insufficient data for scoring
- 6 = New vehicle indicator

Fixed Format Response (FFR)

The following list shows the possible segments that may be returned for the VHS for Financial Services in the order of return. For detailed information on each of these segments, see FFR Segments on page 467.

Segment ID	Segment Name	Notes
TU4R	Transaction Control	
CD01	Customer Data	Used to echo back the data provided in FFI CD01 for TUNA transaction.
ID02	Miscellaneous Identification	Used to echo back the Quote ID provided in FFI or to return the TransUnion generated Transaction Tracking Number if Quote ID is not provided in input.
PH01	Service Header	
TX01	Text Statement	Used to return the VHS score statement. Multiple TX01 segments are returned if the text statement is too long to be contained in one segment.

Segment ID	Segment Name	Notes
VH01	Vehicle Information	Used to echo back input VIN and as a delimiter to group processing result pertaining to a VIN when subscriber provides multiple VINs in input.
MI01	Miscellaneous Statement	Used to return no-hit message if a VIN is no-hit.
ERRC or ERRT	Error Code or Error Text	Used to return error code or error code & description if a VIN cannot be processed because of error.
VH01	Vehicle Information	Used to return vehicle description data (VIN, Year, Make and Model) in file when a VIN is hit or to return suggested vehicle description data (VIN, Year, Make and Model) when a VIN is invalid and CARFAX is able to suggest a possible vehicle.
AO01	Add-on Status	Used to return the VHS for Financial Services model service status.
SC01	Scoring	Used to return the Vehicle History Score, Scoring Factors, and Score Card.
END1	End	

FFI Segments

This section contains descriptions of the TU4.1 FFI segments. The segments appear in alphabetic order. Below is a list of all the segments, including segment length, in a concise and complete table.

For the segments and segment order required for specific TransUnion service requests, refer to Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178 For examples of how to create joint inquiries, refer to Getting Started on page 2.

Note: Quick access to TransUnion technical support information is available online at https://techservices.transunion.com.

Segment ID	Segment Name	Segment Length (bytes)
AD11	Address	139
AF01	Access File	22
AI01	Additional Information	15
CC11	Credit Card	72
CD01	Customer Data	38
CI01	Consumer Identifier	16
DB01	Decision Systems Customer Branch	56
DI01	Decision Systems Custom Information	30
EM11	Employment	114
END1	Transaction Ending	9
EU01	End Usage	26
FA11	Future Address (see AD11 segment description)	139
ID01	Identification	54
ID02	Miscellaneous Identification	291
IP01	Input Parameters	15
LK01	Creditor Contact Search Request	20
LS01	Locator Service	19
MD01	Model Data	37
MD03	Model Data	300
NM11	Name	119
OD01	Output Delivery	64
OR01	Optional Request	9
PI11	Personal Information	24

Segment ID	Segment Name	Segment Length (bytes)
PN01	Phone Number	21
RA01	Request Add-on Service	12
RP01	Request Service	15
RP02	Request Service	33
RP03	Request Service	18
RS11	Reporting Subscriber	44
SH01	Subject Header	5
TT01	Transaction Tracking	30
TU4I	Transaction Control	52
UA11	Unparsed Address	119
UF11	Future Unparsed Address	119
VH01	Vehicle Information	100
VN01	Vendor Information	41

The remainder of this section displays layouts of the FFI segments. Information in the segment layouts includes:

Field	Identifies the segment field.
Displacement	Identifies the segment column where this field begins.
Length	Identifies the maximum number of characters the field value can have.
Type	Identifies the data type to use in this field. These are the possible data types: **A:** For alphabetic data. Data in alphabetic fields is left-justified and the remainder of the field is filled with blanks. **N:** For numeric data. Data in numeric fields is right-justified and left-filled with zeroes. **A/N:** For alphanumeric data. Data in alphanumeric fields is left-justified and the remainder of the field is filled with blanks except for currency amounts and for the member code and subscriber password fields of the TU4I segment. Currency values are right-justified and preceded by zeroes, just as numeric data is, unless the field contains no data. A currency field with no data is blank-filled to distinguish between amounts of zero and amounts not reported. Values in the TU4I member code and subscriber password fields are right-justified and have leading zeroes.
Description	Describes the purpose of the field, whether the field is required, possible field values, and contains special notes about field usage. **Values described in this field are the only ones that can currently be sent. We**

	reserve the right to add new values and, if we do so, will make every effort to notify you.

Segment Requirements

All segments have a fixed length and a specific segment ID. If any segment in a transaction has an incorrect length or ID, the transaction is terminated and an error message is returned to the submitter.

Transaction Requirements

Every transaction must have a transaction control segment (TU4I) and a transaction end segment (END1). If either of these segments is missing, transaction processing stops and an error response record (TU4E) is returned.

Use UPPER CASE for FFI Data

All FFI data, except for User Reference data, must be in UPPER CASE format.

Codes for TransUnion Services

The table below lists the codes for the TransUnion standalone services, add-on services, and models that are available in TU4.1.

Standalone Services

New Service Name	Old Service Name	Service Code
Account Reporting Review	GLANCE	08890
Collection Credit Report	FACT	07700
Collection Prioritization Engine (CPE) 2.0	N/A	07025
Compliance Verification 1.0	N/A	06790
Compliance Verification 2.0	N/A	06792
Contact Locator (Contact Identity Services)	N/A	03152
Contact Verification (Contact Identity Services)	N/A	03150
Contact Verification Plus (Contact Identity Services)	N/A	03151
Credit Report	Credit Report	07000
Creditor Contact Search	LOOK UP	07600

New Service Name	Old Service Name	Service Code
Employment Credit Report	PEER	06000
Fraud Detect / Fraud ID-Tect	Fraud Detect / Fraud ID-Tect	06600
Government Report	GAD	07003
High Risk Fraud Search	Hawkeye	06510
ID Report	IDSearchplus	07770
ID Report	ReTRACEplus	07450
ID Report with Score	ScoreSearch	07750
ID Search	IDSearch	07760
ID Search	ReTRACE	07400
IDA Model Report	N/A	06100
Identity Manager Verification	Fraud Management Platform	06670
Identity Manager Verification 2.0	N/A	06672
Individual Monitoring Report Delete	WATCH Delete	07112
Individual Monitoring Report Satisfaction	WATCH Satisfaction	07113
Individual Monitoring Report Set	WATCH Set	07111
Instant Credit Risk Screen	ACQUIRE Express	09910
Instant Deposit Screen	ACQUIRE Connect	09930
Instant Prescreen	ACQUIRE Select	09900
Instant Review	ACQUIRE Review	09920
Insurance Prefill	N/A	07920
L2C Model Report	N/A	06200
Model Report	Score Report	08000
Reverse Phone Append	Reverse Phone Append	07040
Small Business Identification	N/A	07710
SSN Report	TRACEplus	07300
SSN Search	TRACE	07200
Total ID	Total ID	06710

Add-on Services

New Service Name	Old Service Name	Service Code
ARM Alert	N/A	07013
Authorized User Alert	N/A	07014

New Service Name	Old Service Name	Service Code
Auto Summary	N/A	07070
CARFAX Raw Data	N/A	07953
Contact Locator, Full Version	N/A	03159
Contact Locator, Partial Version	N/A	03160
CreditVision® Account History	N/A	07225
CreditVision® Address History	N/A	07220
Credit Summary	N/A	07007
Creditor Contact Information	LOOK	07500
Device Verification Service	N/A	00655
FDCPA Case Search	N/A	07460
Geo Code	Geo Code	07011
High Risk Fraud Alert	HAWK	06500
ID Mismatch Alert	Trans Alert	06400
Identity Alerts	N/A	06502
Identity Manager Verification	Fraud Management Platform	06680
Identity Manager Verification 2.0	N/A	06682
Inquiry Analysis	Inquiry Analysis	07640
Lender Score Disclosure	N/A	06300
OFAC Name Screen	OFAC Advisor	06800
Phone Append	Phone Append	07030
Prefill Vehicle VIN	N/A	07922
Prefill Vehicle HH	N/A	07923
Small Business Identification	N/A	07711
SSN Analysis	N/A	07215
Vehicle History Score Group	N/A	07952
VIN Prefill	N/A	07954
Models	Score Models	Various

Models in Alphabetical Order

New Model Name	Old Model Name	Model No.
Contact Score	N/A	00321

New Model Name	Old Model Name	Model No.
CreditVision® Account Management Score	N/A	00V64
CreditVision® Auto Score	N/A	00V80
CreditVision® Bankruptcy Score	N/A	00V82
CreditVision® Debt-to-Income Estimator	N/A	00U29
CreditVision® Income Estimator	N/A	00W16
CreditVision® New Account Score	N/A	00W05
CreditVision® Premium Algorithms	N/A	Various
DELPHI (redeveloped -1997)	N/A	00501
EDGE 1	N/A	00X01
EDGE 2	N/A	00X02
Energy	GEM	00241
FACETS	N/A	00138
FDIC Subprime Definitions	N/A	00H63
FICO® Bankruptcy Score 03	HORIZON 2003	00X46
FICO® Bankruptcy Score 98	HORIZON	00601
FICO® Insurance Score DF/1.0	Dwelling Fire ASSIST (1.0)	00935
FICO® Insurance Score DF/2.0	Dwelling Fire ASSIST (2.0)	00889
FICO® Insurance Score H1/1.0	Home Owners 1 ASSIST (1.0)	00906
FICO® Insurance Score H1/2.0	Home Owners 1 ASSIST (2.0)	00875
FICO® Insurance Score H2/1.0	Home Owners 2 ASSIST (1.0)	00913
FICO® Insurance Score H2/2.0	Home Owners 2 ASSIST (2.0)	00876
FICO® Insurance Score H3/1.0	Home Owners 3 ASSIST (1.0)	00919
FICO® Insurance Score H3/2.0	Home Owners 3 ASSIST (2.0)	00877
FICO® Insurance Score H4/1.0	Home Owners 4 ASSIST (1.0)	00924
FICO® Insurance Score H4/2.0	Home Owners 4 ASSIST (2.0)	00878
FICO® Insurance Score H6/1.0	Home Owners 6 ASSIST (1.0)	00930
FICO® Insurance Score H6/2.0	Home Owners 6 ASSIST (2.0)	00879
FICO® Insurance Score NS/1.0	Non Standard Auto ASSIST	00820
FICO® Insurance Score NS/2.0	NS Auto Assist 2.0	00850
FICO® Insurance Score PG/1.0	Preferred Auto ASSIST	00980
FICO® Insurance Score PG/2.0	PR GR Auto Assist 2.0	00872
FICO® Insurance Score PG1	Old Preferred Minimal Auto ASSIST	00900
FICO® Insurance Score PM/1	Old Preferred Auto ASSIST	00882

New Model Name	Old Model Name	Model No.
FICO® Insurance Score PM/1.0	Preferred Minimal Auto ASSIST	00979
FICO® Insurance Score PM/2.0	PR ML Auto Assist 2.0	00871
FICO® Insurance Score SG/1	Old Standard Minimal Auto ASSIST	00864
FICO® Insurance Score SG/1.0	Standard Auto ASSIST	00978
FICO® Insurance Score SG/2.0	Standard Auto ASSIST with Greater than Minimum Limits	00863
FICO® Insurance Score SG88/2	SG88 Auto Assist 2.0	00870
FICO® Insurance Score SM/1	Old Standard Auto ASSIST	00842
FICO® Insurance Score SM/1.0	Standard Minimal Auto ASSIST	00977
FICO® Insurance Score SM/2.0	ST ML Auto Assist 2.0	00853
FICO® Revenue Score	RPM (Revenue Projection Model)	00133
FICO® Score 9	N/A	00W18
FICO® Score 8	N/A	00Q88
FICO® Auto Score 8	N/A	00N20
FICO® Bankcard Score 8	N/A	00N21
FICO® Mortgage Score 8	N/A	00N92
FICO® Score 4	N/A	00P02
FICO® Auto Score 4	N/A	00P12
FICO® Bankcard Score 4	N/A	00P11
FICO® Personal Finance Score 4	N/A	00P14
FICO® Installment Score 4	N/A	00P13
FICO® Score 98	EMPIRICA	00950
FICO® Auto Score 98	EMPIRICA AU	00990
FICO® Bankcard Score 98	EMPIRICA BC	00993
FICO® Installment Score 98	EMPIRICA IL	00991
FICO® Personal Finance Score 98	EMPIRICA PF	00992
FICO® Score 95	EMPIRICA 95	00002
FICO® Auto Score 95	EMPIRICA AU 95	00008
FICO® Bankcard Score 95	EMPIRICA BC 95	00256
FICO® Installment Score 95	EMPIRICA IL 95	00016
FICO® Personal Finance Score 95	EMPIRICA PF 95	00004
FICO® NG Score 00	PRECISION	00227
FICO® NG Score 03	PRECISION	00R82
Fraud Model I	Fraud Model	00401

New Model Name	Old Model Name	Model No.
Fraud Model II	N/A	00356
ID Analytics Collections Optics Early Stage Score	N/A	00N35
ID Analytics Collections Optics Installment Loan Score	N/A	00663
ID Analytics Collections Optics Late Stage Score	N/A	00N36
ID Analytics Credit Optics Plus Score Auto	N/A	00N40
ID Analytics Credit Optics Plus Score Bankcard	N/A	00N38
ID Analytics Credit Optics Plus Score Generic	N/A	00N37
ID Analytics Credit Optics Plus Score Wireless	N/A	00N39
ID Analytics Credit Optics Score	N/A	00N34
ID Analytics Credit Optics Score Bankcard 2.1	N/A	00665
ID Analytics Credit Optics Score Retail Card 2.0	N/A	00664
ID Analytics ID Score	N/A	00662
L2C Model	N/A	00337
L2C Model 2	N/A	00338
L2C Model 3	N/A	00339
L2C Model 4	N/A	00340
Life Insurance Persistency	N/A	00R97
Minimum/Maximum for FICO® Score 95	N/A	00Y18
Minimum/Maximum for FICO® Score 98	N/A	00Y17
Minimum/Maximum for FICO® Score 4	N/A	00Y15
Minimum/Maximum for FICO® Score 8	N/A	00Y13
Minimum/Maximum for FICO® Auto Score 4	N/A	00Y16
Minimum/Maximum for FICO® Auto Score 8	N/A	00Y14
Minimum/Maximum for VantageScore® 1.0	N/A	00Y19

New Model Name	Old Model Name	Model No.
Minimum/Maximum for VantageScore® 2.0	N/A	00Y20
Minimum/Maximum for VantageScore® 3.0	N/A	00Y38
Minimum/Maximum for CreditVision® Account Management	N/A	00Y44
Minimum/Maximum for CreditVision® Auto	N/A	00Y42
Minimum/Maximum for CreditVision® Bankruptcy	N/A	00Y46
Minimum/Maximum for CreditVision® New Account Score	N/A	00Y48
Multi-model Cascade	TransUnion Links (FICO® Score 98/ NA1)	00C01
New DELPHI	N/A	00032
REWARD	N/A	00300
Score Percentile Ranking for FICO® Auto Score 8	N/A	00XB3
Score Percentile Ranking for FICO® Auto Score 4	N/A	00XB5
Score Percentile Ranking for FICO® Score 8	N/A	00XB2
Score Percentile Ranking for FICO® Score 4	N/A	00XB4
Score Percentile Ranking for FICO® Score 98	N/A	00XB6
Score Percentile Ranking for FICO® Score 95	N/A	00XB7
Score Percentile Ranking for VantageScore® 1.0	N/A	00XB8
Score Percentile Ranking for VantageScore® 2.0	N/A	00Y21
Score Percentile Ranking for VantageScore® 3.0	N/A	00Y39
Score Percentile Ranking for CreditVision® Account Management	N/A	00Y43
Score Percentile Ranking for CreditVision® Auto	N/A	00Y41
Score Percentile Ranking for CreditVision® Bankruptcy	N/A	00Y47

New Model Name	Old Model Name	Model No.
Score Percentile Ranking for CreditVision® New Account Score	N/A	00Y49
TransUnion Ability to Pay Data Set	N/A	00N74
TransUnion Account Management Model 2.0	TransRisk-AM (Account Manager)	00730
TransUnion Account Management Model 3.0	N/A	00Q72
TransUnion Auto Model 1.0	TransRisk Auto	00701
TransUnion Bankruptcy Model 1.0	N/A	00896
TransUnion Broadband Model	N/A	00P31
TransUnion Collections Industry Characteristics Auto	N/A	00N48
TransUnion Collections Industry Characteristics Bankcard	N/A	00Q38
TransUnion Collections Industry Characteristics Mortgage	N/A	00N49
TransUnion Collections Industry Characteristics Student Loan	N/A	00N47
TransUnion Credit Characteristics	TransUnion Data Connect	00R14
TransUnion Debt Management Model	N/A	00R80
TransUnion Debt to Income Estimator 3.0	N/A	00X99
TransUnion Income Estimator 2.0	TIE	00064
TransUnion Income Estimator 3.0	N/A	00N03
TransUnion Insurance Risk Score Auto/ Prop	N/A	00R99
TransUnion Insurance Risk Score	N/A	00R75
TransUnion New Account Model 1.0	TransRisk New Account	00219
TransUnion New Account Model 2.0	N/A	00R59
TransUnion New Account Model 3.0	N/A	00Q87
TransUnion Recovery Auto Model	N/A	00P18
TransUnion Recovery Bankcard Model	N/A	00P17
TransUnion Recovery Medical Model	N/A	00P23
TransUnion Recovery Model 1.0	TransRecovery	00R07
TransUnion Recovery Model 2.0	N/A	00P16
TransUnion Standard Characteristics	N/A	00N05

New Model Name	Old Model Name	Model No.
TransUnion Supplemental Recovery Score	N/A	00N54
TransUnion Telecom Model	Telescope	00336
TransUnion Wireless Model 1.0	Spectrum	00315
TransUnion Wireless Model 2.0	Spectrum 2002	00R13
TransUnion Wireless Model 3.0	N/A	00P15
VantageScore® 1.0	N/A	00P94
VantageScore® 2.0	N/A	00N94
VantageScore® 3.0	N/A	00V60
VantageScore® 3.0 with Positive Factor Codes	N/A	00W40
VantageScore® Authorized User	N/A	00N31
Vehicle History Score	N/A	00940
VHS for Financial Services, Standard	N/A	00610
VHS for Financial Services, Premium	N/A	00611

Models in Numerical Order

Model No.	New Model Name	Old Model Name
00002	FICO® Score 95	EMPIRICA 95
00004	FICO® Personal Finance Score 95	EMPIRICA PF 95
00008	FICO® Auto Score 95	EMPIRICA AU 95
00016	FICO® Personal Finance Score 95	EMPIRICA IL 95
00032	New DELPHI	N/A
00064	TransUnion Income Estimator 2.0	TIE
00133	FICO® Revenue Score	RPM (Revenue Projection Model)
00138	FACETS	N/A
00219	TransUnion New Account Model 1.0	TransRisk New Account
00227	FICO® NG Score 00	PRECISION
00241	Energy	GEM
00256	FICO® Bankcard Score 95	EMPIRICA BC 95
00300	REWARD	N/A
00315	TransUnion Wireless Model 1.0	Spectrum
00321	Contact Score	N/A

Model No.	New Model Name	Old Model Name
00336	TransUnion Telecom Model	Telescope
00337	L2C Model	N/A
00338	L2C Model 2	N/A
00339	L2C Model 3	N/A
00340	L2C Model 4	N/A
00356	Fraud Model II	N/A
00401	Fraud Model I	Fraud Model
00501	DELPHI (redeveloped -1997)	N/A
00601	FICO® Bankruptcy Score 98	HORIZON
00610	VHS for Financial Services, Standard	N/A
00611	VHS for Financial Services, Premium	N/A
00662	ID Analytics ID Score	N/A
00663	ID Analytics Collections Optics Installment Loan Score	N/A
00664	ID Analytics Credit Optics Score Retail Card 2.0	N/A
00665	ID Analytics Credit Optics Score Bankcard 2.1	N/A
00701	TransUnion Auto Model 1.0	TransRisk Auto
00730	TransUnion Account Management Model 2.0	TransRisk-AM (Account Manager)
00820	FICO® Insurance Score NS/1.0	Non Standard Auto ASSIST
00842	FICO® Insurance Score SM/1	Old Standard Auto ASSIST
00850	FICO® Insurance Score NS/2.0	NS Auto Assist 2.0
00853	FICO® Insurance Score SM/2.0	ST ML Auto Assist 2.0
00863	FICO® Insurance Score SG/2.0	Standard Auto ASSIST with Greater than Minimum Limits
00864	FICO® Insurance Score SG/1	Old Standard Minimal Auto ASSIST
00870	FICO® Insurance Score SG88/2	SG88 Auto Assist 2.0
00871	FICO® Insurance Score PM/2.0	PR ML Auto Assist 2.0
00872	FICO® Insurance Score PG/2.0	PR GR Auto Assist 2.0
00875	FICO® Insurance Score H1/2.0	Home Owners 1 ASSIST (2.0)
00876	FICO® Insurance Score H2/2.0	Home Owners 2 ASSIST (2.0)
00877	FICO® Insurance Score H3/2.0	Home Owners 3 ASSIST (2.0)
00878	FICO® Insurance Score H4/2.0	Home Owners 4 ASSIST (2.0)
00879	FICO® Insurance Score H6/2.0	Home Owners 6 ASSIST (2.0)

Model No.	New Model Name	Old Model Name
00882	FICO® Insurance Score PM/1	Old Preferred Auto ASSIST
00889	FICO® Insurance Score DF/2.0	Dwelling Fire ASSIST (2.0)
00896	TransUnion Bankruptcy Model 1.0	N/A
00900	FICO® Insurance Score PG1	Old Preferred Minimal Auto ASSIST
00906	FICO® Insurance Score H1/1.0	Home Owners 1 ASSIST (1.0)
00913	FICO® Insurance Score H2/1.0	Home Owners 2 ASSIST (1.0)
00919	FICO® Insurance Score H3/1.0	Home Owners 3 ASSIST (1.0)
00924	FICO® Insurance Score H4/1.0	Home Owners 4 ASSIST (1.0)
00930	FICO® Insurance Score H6/1.0	Home Owners 6 ASSIST (1.0)
00935	FICO® Insurance Score DF/1.0	Dwelling Fire ASSIST (1.0)
00940	Vehicle History Score	N/A
00950	FICO® Score 98	EMPIRICA
00977	FICO® Insurance Score SM/1.0	Standard Minimal Auto ASSIST
00978	FICO® Insurance Score SG/1.0	Standard Auto ASSIST
00979	FICO® Insurance Score PM/1.0	Preferred Minimal Auto ASSIST
00980	FICO® Insurance Score PG/1.0	Preferred Auto ASSIST
00990	FICO® Auto Score 98	EMPIRICA AU
00991	FICO® Installment Score 98	EMPIRICA IL
00992	FICO® Personal Finance Score 98	EMPIRICA PF
00993	FICO® Bankcard Score 98	EMPIRICA BC
00C01	Multi-model Cascade	TransUnion Links (FICO® Score 98/ NA1)
00H63	FDIC Subprime Definitions	N/A
00H85	CreditVision® Premium Algorithms General	N/A
00H86	CreditVision® Premium Algorithms Aggregate	N/A
00H87	CreditVision® Premium Algorithms Trade-to-Consumer	N/A
00H88	CreditVision® Premium Algorithms Balance Magnitude	N/A
00H89	CreditVision® Premium Algorithms Revolver	N/A
00H90	CreditVision® Premium Algorithms Wallet Share	N/A
00H91	CreditVision® Premium Algorithms Payment	N/A

Model No.	New Model Name	Old Model Name
00N03	TransUnion Income Estimator 3.0	N/A
00N05	TransUnion Standard Characteristics	N/A
00N20	FICO® Auto Score 8	N/A
00N21	FICO® Bankcard Score 8	N/A
00N31	VantageScore® Authorized User	N/A
00N34	ID Analytics Credit Optics Score	N/A
00N35	ID Analytics Collections Optics Early Stage Score	N/A
00N36	ID Analytics Collections Optics Late Stage Score	N/A
00N37	ID Analytics Credit Optics Plus Score Generic	N/A
00N38	ID Analytics Credit Optics Plus Score Bankcard	N/A
00N39	ID Analytics Credit Optics Plus Score Wireless	N/A
00N40	ID Analytics Credit Optics Plus Score Auto	N/A
00N47	TransUnion Collections Industry Characteristics Student Loan	N/A
00N48	TransUnion Collections Industry Characteristics Auto	N/A
00N49	TransUnion Collections Industry Characteristics Mortgage	N/A
00N54	TransUnion Supplemental Recovery Score	N/A
00N74	TransUnion Ability to Pay Data Set	N/A
00N92	FICO® Mortgage Score 8	N/A
00N94	VantageScore® 2.0	N/A
00P02	FICO® Score 4	N/A
00P11	FICO® Bankcard Score 4	N/A
00P12	FICO® Auto Score 4	N/A
00P13	FICO® Installment Score 4	N/A
00P14	FICO® Personal Finance Score 4	N/A
00P15	TransUnion Wireless Model 3.0	N/A
00P16	TransUnion Recovery Model 2.0	N/A
00P17	TransUnion Recovery Bankcard Model	N/A

Model No.	New Model Name	Old Model Name
00P18	TransUnion Recovery Auto Model	N/A
00P23	TransUnion Recovery Medical Model	N/A
00P31	TransUnion Broadband Model	N/A
00P94	VantageScore® 1.0	N/A
00Q38	TransUnion Collections Industry Characteristics Bankcard	N/A
00Q72	TransUnion Account Management Model 3.0	N/A
00Q87	TransUnion New Account Model 3.0	N/A
00Q88	FICO® Score 8	N/A
00R07	TransUnion Recovery Model 1.0	TransRecovery
00R13	TransUnion Wireless Model 2.0	Spectrum 2002
00R14	TransUnion Credit Characteristics	TransUnion Data Connect
00R59	TransUnion New Account Model 2.0	N/A
00R75	TransUnion Insurance Risk Score	N/A
00R80	TransUnion Debt Management Model	N/A
00R82	FICO® NG Score 03	PRECISION
00R97	Life Insurance Persistency	N/A
00R99	TransUnion Insurance Risk Score Auto/ Prop	N/A
00U29	CreditVision® Debt-to-Income Estimator	N/A
00V24	CreditVision® Premium Algorithms Aggregate (without payment data)	N/A
00V53	CreditVision® Premium Algorithms Spend	N/A
00V60	VantageScore® 3.0	N/A
00V64	CreditVision® Account Management Score	N/A
00V80	CreditVision® Auto Score	N/A
00V82	CreditVision® Bankruptcy Score	N/A
00W05	CreditVision® New Account Score	N/A
00W16	CreditVision® Income Estimator	N/A
00W18	FICO® Score 9	N/A
00W40	VantageScore® 3.0 with Positive Factor Codes	N/A
00X01	EDGE 1	N/A

Model No.	New Model Name	Old Model Name
00X02	EDGE 2	N/A
00X46	FICO® Bankruptcy Score 03	HORIZON 2003
00X99	TransUnion Debt to Income Estimator 3.0	N/A
00XB2	Score Percentile Ranking for FICO® Score 8	N/A
00XB3	Score Percentile Ranking for FICO® Auto Score 8	N/A
00XB4	Score Percentile Ranking for FICO® Score 4	N/A
00XB5	Score Percentile Ranking for FICO® Auto Score 4	N/A
00XB6	Score Percentile Ranking for FICO® Score 98	N/A
00XB7	Score Percentile Ranking for FICO® Score 95	N/A
00XB8	Score Percentile Ranking for VantageScore® 1.0	N/A
00Y13	Minimum/Maximum for FICO® Score 8	N/A
00Y14	Minimum/Maximum for FICO® Auto Score 8	N/A
00Y15	Minimum/Maximum for FICO® Score 4	N/A
00Y16	Minimum/Maximum for FICO® Auto Score 4	N/A
00Y17	Minimum/Maximum for FICO® Score 98	N/A
00Y18	Minimum/Maximum for FICO® Score 95	N/A
00Y19	Minimum/Maximum for VantageScore® 1.0	N/A
00Y20	Minimum/Maximum for VantageScore® 2.0	N/A
00Y21	Score Percentile Ranking for VantageScore® 2.0	N/A
00Y38	Minimum/Maximum for VantageScore® 3.0	N/A
00Y39	Score Percentile Ranking for VantageScore® 3.0	N/A
00Y41	Score Percentile Ranking for CreditVision® Auto	N/A

Model No.	New Model Name	Old Model Name
00Y42	Minimum/Maximum for CreditVision® Auto	N/A
00Y43	Score Percentile Ranking for CreditVision® Account Management	N/A
00Y44	Minimum/Maximum for CreditVision® Account Management	N/A
00Y46	Minimum/Maximum for CreditVision® Bankruptcy	N/A
00Y47	Score Percentile Ranking for CreditVision® Bankruptcy	N/A
00Y48	Minimum/Maximum for CreditVision® New Account Score	N/A
00Y49	Score Percentile Ranking for CreditVision® New Account Score	N/A

AD11 — Address Segment

The AD11 segment provides a parsed address for the subject or employer. If two addresses are sent, the order in which they are sent is important because TU4.1 assumes the addresses are positional. That is, the first AD11 segment is assumed to be the current address and the second AD11 segment is assumed to be the previous address.

If the address is personal, it must follow the subject header segment (SH01). If the address is an employer's, it must follow the employment segment (EM11).

Note: Unparsed input addresses should be sent in the UA11 segment.

Address (AD11) Segment – Total Length: 139 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AD11** unless the subscriber is sending a future address. The future address segment type is **FA11**. *Required field*.
Address Type	5	1	A/N	Indicates the type of address being sent. Possible values are: **0** Conventional address **1** Post office box **2** Rural route

Address (AD11) Segment – Total Length: 139 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				3 Highway contract **4** General delivery **5** Firm address **8** Postmaster **9** Not determined
Address Number	6	10	A/N	Identifies the subject's or post office box number. This field currently accepts only 6 characters. *Required field.*
Predirectional	16	2	A	Specifies the street directional (N, S, E, W, NE, SE, NW, SW) if there is one. TU4.1 ignores any other value in this field.
Street Name	18	28	A/N	Specifies the street name or the rural route or the post office box text in the address. Special characters and fractions are edited out. . Refer to Appendix A: Name, Address, and Phone Codes on page 626 for sample addresses. Refer to Appendix E: Puerto Rico Name and Address Logic on page 679 for Puerto Rico/ Hispanic address conventions.
Postdirectional	46	2	A	Specifies a street directional (N, S, E, W, NE, SE, NW, SW) that appears after a street name if there is one. TU4.1 ignores any other value in this field.
Street Type	48	4	A	Specifies the type of street. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid street types. TU4.1 ignores an invalid value in this field.
Unit Type	52	4	A	Identifies the type of unit number that follows. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid unit type codes. TU4.1 ignores an invalid value in this field.
Unit Number	56	10	A/N	Specifies a unit number. Special characters, blanks, and fractions are edited out.
City Name	66	28	A	Specifies the name of the city in the address. This value must be at least 3 characters long. Embedded special characters or numbers are edited out. Required field.

Address (AD11) Segment – Total Length: 139 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
State Code	94	2	A	Specifies the code for the subject's state. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid state codes. Required field.
ZIP Code	96	5	A/N	Specifies the subject's ZIP Code. This field is left-justified.
ZIP Extension Code	101	4	A/N	Specifies the subject's ZIP Extension Code. This field is left justified.
Urbanization Name	105	30	A/N	Specifies the name of a condominium for Puerto Rico addresses.
Length of Residence	135	4	A/N	Specifies in years and months the length of the subject's residence at the address identified in this segment. The format for this value is YYMM. For example, a residence length of 4 years and 3 months is added as 0403. If this an employment address, this field does not apply.
Housing Status	139	1	A/N	Specifies whether the subject owns or rents the residence at this address. Valid values are: **O** Own **R** Rent **B** Other

AF01 — Access File Segment

The AF01 segment contains an access code that enables a subscriber to access a consumer's credit file that is inaccessible without permission. The credit grantor obtains the access code from the consumer.

Place this segment immediately after the SH01 segment in the FFI.

Access File (AF01) Segment - Total Length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AF01**. *Required field.*
Access Code	5	8	A/N	Indicates the security code required for access to a consumer's frozen credit file.

Access File (AF01) Segment - Total Length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Provided by the consumer. The 8-byte code will always begin with **TU**.
Filler	13	10	A/N	

AI01 — Additional Information Segment

The AI01 segment specifies an account loan type and amount used for credit services. If the account type in this segment is invalid, the segment is ignored.

Additional Information (AI01) Segment – Total Length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AI01**. *Required field*.
Account Type	5	2	A	Specifies a code that identifies the Account type. For a list of valid Account type codes, refer to Appendix C: Account Codes on page 666, "Account Codes."
Loan Amount	7	9	A/N	Specifies the amount of the loan. The amount appears in whole dollar amount (for example, an amount of $160,000 is specified as 000160000).

CC11 — Credit Card Segment

The CC11 segment lists the company name, account number, and expiration date for a credit card account.

Credit Card (CC11) Segment –Total Length: 72 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CC01**. *Required field*.
Company Name	5	30	A/N	Specifies the name of the company that issued the card.
Credit Card Account Number	35	30	A/N	Lists the account number that appears on the credit card. *Required field.*

Credit Card (CC11) Segment –Total Length: 72 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Expiration Date	65	8	A/N	Specifies the credit card's expiration date in CCYYMMDD format.

CD01 — Customer Data Segment

The CD01 segment contains subscriber information not found in the subscriber code. Subscribers can use this segment in service requests to further identify their subscriber.

Place this segment immediately before the SH01 segment. If the FFI contains no VN01 or EU01 segments, the CD01 segment immediately follows the TU4I segment.

Customer Data (CD01) Segment – Total Length: 38 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CD01**. *Required field*.
Customer Identifier Qualifier	5	2	A/N	Identifies the type of information provided in the Customer Identifier field. Valid values are: **5** - Subscriber's Internal User ID **6** - Service Requestor *Required field.*
Customer Identifier	7	20	A/N	*Required field.*
Reserved for Internal Use	27	4	A/N	
Filler	31	8	A/N	

CI01 — Consumer Identifier Segment

The CI01 segment contains the unique identifier that is assigned to the consumer file on the consumer information database.

Consumer Identifier (CI01) Segment – Total Length: 16 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CI01**. *Required field*.
Consumer Identifier	5	12	A/N	Displays the unique identifier that is assigned to the consumer file on the credit database.

DB01 — Decision Systems Customer Branch Segment

The DB01 segment includes information that helps to identify Decision Systems subscribers. If this segment is provided in the FFI, it is also returned in the FFR.

Decision Systems Customer Branch (DB01) Segment – Total Length: 56 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DB01**. *Required field*.
Branch	5	10	A/N	Identifies the branch of the requesting subscriber.
Branch Type	15	2	A/N	For future use.
Client Use 1	17	20	A/N	Provides additional information specific to the subscriber.
Client Use 2	37	20	A/N	Provides additional information specific to the subscriber.

DI01 — Decision Systems Custom Information Segment

The DI01 segment provides additional information from Decision Systems subscribers. If this segment is included in the FFI, it is also returned in the FFR.

Decision Systems Custom Information (DI01) Segment – Total Length: 30 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DI01**. *Required field*.

Decision Systems Custom Information (DI01) Segment – Total Length: 30 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Input Type	5	2	A/N	Consists of two positions that help identify the type of custom input. Valid values for position 1 are: **S:** Short **L:** Long Valid values for position 2 are: **1-8:** Short **1-4:** Long
Custom Input	7	24	A/N	For custom use. Positions 1-10 are used if Input Type is Short; positions 1-24 are used if Input Type is Long.

EM11 — Employment Segment

The EM11 segment identifies the subject's employer and employment statistics such as date hired and income. The inquiry transaction can include only one EM11 segment per subject.

Employment (EM11) Segment – Total Length: 114 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **EM11**. *Required field*.
Employer Name	5	50	A/N	Identifies the name of the employer. *Required field.*
Occupation	55	30	A/N	Identifies the subject's occupation.
Start Employment Date	85	8	A/N	Identifies the date the subject's employment started with this employer. Valid format is CCYYMMDD. The use of any other format causes TU4.1 to ignore this field.
End Employment Date	93	8	A/N	Identifies the date the subject's employment ended with this employer. Valid format is CCYYMMDD. The use of any other format causes TU4.1 to ignore this field.
Income	101	9	A/N	Identifies the subject's amount of income. Valid format is whole dollars for all amounts except for hourly pay, for which a

Employment (EM11) Segment – Total Length: 114 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				dollars and cents format is used. For example, an income of $15.50 an hour is entered as 000001550.
Pay Basis	110	1	A	Lists the subject's pay schedule. Valid values are: **B** Bimonthly (every other month) **D** Daily **H** Hourly **M** Monthly **S** Semimonthly (twice a month) **W** Weekly
Length of Employment	111	4	A/N	Specifies the number of years and months subject has worked for this employer. Valid format is YYMM. For example, an employment of three and a half years is listed as 0306.

END1 — Transaction Ending Segment

The END1 segment indicates the end of the current inquiry transaction. This segment is required for every transaction.

End (END1) Segment – Total Length: 9 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **END1**. *Required field.*
Total Number of Segments	5	5	N	Specifies the total number of segments contained in this transaction, including TU4I and END1.

EU01 — End Usage Segment

This segment is required if a request for a permissible purpose service is submitted by one of the following subscribers for any services that need an end use type code:

- Insurance company subscribers
- Individual certification subscribers
- Brokers for insurance company subscribers
- Resellers. Resellers must also identify their subscribers in the End User field if the Reseller inquiry does not include a member code that identifies their subscriber.

These are the TransUnion services that require a use type code to be included in the code request element:

- Credit Report
- Collection Credit Report
- Collection Prioritization Engine 2.0 (CPE)
- Government Report
- ID Report
- Instant Prescreen
- Instant Credit Risk Screen
- Instant Review
- Instant Deposit Screen
- Employment Credit Report
- ID Report
- Model Report
- ID Report with Score
- SSN Report
- Individual Monitoring Report – Set
- IDA Model Report (Permissible purpose certification is required only when the IDA Model Report returns IDA Credit Optics Score)

The EU01 segment, if required, must immediately follow the TU4I segment. Only one EU01 segment is permitted for each transaction.

The table below shows the field descriptions for the EU01 segment.

End Usage (EU01) Segment – Total Length: 26 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **EU01.** *Required field*.
User Name	5	20	A/N	Identifies the end user of the service being requested by the reseller. Required field for broker only if inquiry member code does **not** identify broker's customer.
End Use Type Code	25	2	A	Indicates the permissible purpose for obtaining and/or use of the report. *Required field*. Refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646 for a list of valid codes.

FA11 — Future Address Segment

The FA11 segment is used by Geo Code. The fields and field attributes are identical to those of the AD11 segment except that the Segment Type is FA11.

Address (FA11) Segment – Total Length: 139 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **FA11**. *Required field.*
Address Type	5	1	A/N	Possible values are: **0** Conventional address **1** Post office box **2** Rural route **3** Highway contract **4** General delivery **5** Firm address **8** Postmaster **9** Not determined
Address Number	6	10	A/N	Identifies the subject's or post office box number. This field currently accepts only 6 characters. *Required field.*
Predirectional	16	2	A	Specifies the street directional (N, S, E, W, NE, SE, NW, SW) if there is one. TU4.1 ignores any other value in this field.
Street Name	18	28	A/N	Specifies the street name or the rural route or the post office box text in the address. Special characters and fractions are edited out. . Refer to Appendix A: Name, Address, and Phone Codes on page 626 for sample addresses. Refer to Appendix E: Puerto Rico Name and Address Logic on page 679 for Puerto Rico/ Hispanic address conventions.
Postdirectional	46	2	A	Specifies a street directional (N, S, E, W, NE, SE, NW, SW) that appears after a street name if there is one. TU4.1 ignores any other value in this field.
Street Type	48	4	A	Specifies the type of street. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid street types. TU4.1 ignores an invalid value in this field.

Address (FA11) Segment – Total Length: 139 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Unit Type	52	4	A	Identifies the type of unit number that follows. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid unit type codes. TU4.1 ignores an invalid value in this field.
Unit Number	56	10	A/N	Specifies a unit number. Special characters, blanks, and fractions are edited out.
City Name	66	28	A	Specifies the name of the city in the address. This value must be at least 3 characters long. Embedded special characters or numbers are edited out. Required field.
StateCode	94	2	A	Specifies the code for the subject's state. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid state codes. Required field.
ZIP Code	96	5	A/N	Specifies the subject's ZIP Code. This field is left-justified. .
ZIP Extension Code	101	4	A/N	Specifies the subject's ZIP Extension Code. This field is left justified.
Urbanization Name	105	30	A/N	Specifies the name of a condominium for Puerto Rico addresses.
Length of Residence	135	4	A/N	Specifies in years and months the length of the subject's residence at the address identified in this segment. The format for this value is YYMM. For example, a residence length of 4 years and 3 months is added as 0403. If this an employment address, this field does not apply.
Housing Status	139	1	A/N	Specifies whether the subject owns or rents the residence at this address. Valid values are: **O** Own **R** Rent **B** Other

ID01 — Identification Segment

The ID01 segment describes the driver's license, state ID, or tax ID number of the subject of the inquiry transaction.

Identification (ID01) Segment – Total Length: 54 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ID01**. *Required field*.
ID Type	5	2	A/N	Specifies the type of ID that this segment identifies. Valid values are: **01** Driver's License **02** State ID (currently not used) **03** Tax ID (currently not used) **04** Underwriting State **05** Lookback Dates
ID Number or Value	7	30	A/N	Lists the contents of the ID, such as a driver's license number or a tax identification number. *Required field.*
State of Issuance	37	2	A	Identifies the state that issued the ID. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid state codes. *Required field*.
Date of Issue	39	8	A/N	Specifies the date the ID was issued. The date format is CCYYMMDD.
Expiration Date	47	8	A/N	Specifies the date the ID expires. The date format is CCYYMMDD.

ID02 — Miscellaneous Identification Segment

The ID02 segment provides certain identification information used by some services.

Identification (ID02) Segment – Total Length: 291 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ID02**. *Required field.*
ID Type	5	2	A/N	Specifies the type of ID that this segment identifies. Valid values are: **01** Transaction Tracking ID **02** Quote ID **03** Partner ID **04** Program ID **05** Dealer ID

Identification (ID02) Segment – Total Length: 291 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				10 Vendor Access/User ID **99** Other Type of ID *Required field.*
ID Number or Value	7	255	A/N	Lists the contents of the ID, such as an insurance Quote ID or a vendor User ID. *Required field.*
Password	262	30	A/N	Additional access code associated with some type of ID, such as vendor User ID, for some applications.

IP01 — Input Parameters Segment

The IP01 segment specifies subscriber input parameters for use with the CPE service.

Note: This service/segment is for batch use only.

Input Parameters (IP01) Segment – Total Length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **IP01**. *Required field.*
Parameter	5	2	A/N	Describes the parameter identified for this transaction. Valid values are: **01** Level 1 **02** Level 2 **03** Level 3
Amount	7	9	A/N	Specifies the amount of the item in whole dollar amount. For example, an amount of $5000 is specified as: 000050000

LK01 — Creditor Contact Search UP Request Segment

The LK01 segment identifies the subscriber for whom Creditor Contact Search information is requested.

Creditor Contact Search Request (LK01) Segment – Total Length: 20 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **LK01**. *Required field*.
Segment Indicator	5	2	A	Specifies the type of FFR segment for which the transaction sender wants identifying information. Valid values are: **PR:** Public record **TR:** Trade Account **IN:** Inquiry **CL:** Collection Account *Required field.*
Bureau Market	7	2	N	Specifies the bureau market of the subscriber code being decoded. *Required and only applicable if the Segment Indicator type is IN (inquiry)*.
Bureau Submarket	9	2	A/N	Specifies the bureau submarket of the subscriber code being decoded. *Required and only applicable if the Segment Indicator type is IN (inquiry)*.
Industry Code	11	2	A/N	Specifies the industry code of the subscriber code to be disclosed. *Required field*.
Member Code	13	8	A/N	Specifies the member code to be decoded. *Required field*.

MD01 — Model Data Segment

The MD01 segment identifies and specifies the value of a single model attribute for a subject. A maximum of fifty (50) MD01 segments can be provided for each subject in the transaction.

Model Data (MD01) Segment – Total Length: 37 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **MD01**. *Required field*.

Model Data (MD01) Segment – Total Length: 37 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Service Code	5	5	A/N	Identifies the score model for which the data element will be used. *Required field.*
Model Attribute ID	10	8	A/N	Identifies the model attribute transmitted in this segment. *Required field*. If the value is missing or not valid for the model, then a default is used.
Model Attribute Value	18	20	A/N	Specifies the actual value for this attribute. Valid values are dependent upon the attribute id. *Required field.* If the value is missing or not valid for the attribute, then a default is used.

Note: Data in alphanumeric fields is left-justified and the remainder of the field is filled with blanks. Valid attribute IDs, values, and other rules will be defined for each score model.

MD03 — Model Data Segment

The MD03 segment identifies and specifies the values that may be used by some model services.

Model Data (MD03) Segment – Total Length: 300 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **MD03**. *Required field*.
Service Code	5	5	A/N	Identifies the score model for which the data element will be used. *Required field.*
Model Attribute ID	10	30	A/N	Identifies the model attribute transmitted in this segment. *Required field.* If the value is missing or invalid for the model, the model attribute value in this segment will not be transmitted to the model.
Model Attribute Value	40	255	A/N	Specifies the actual value for this attribute. Valid values are dependent upon the attribute id.

Model Data (MD03) Segment – Total Length: 300 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Required field. If the value is missing or not valid for the attribute, then a default is used.
Filler	295	6	A/N	*For future use.*

Note: Valid attribute IDs, values, and other rules will be defined for each score model.

NM11 — Name Segment

The NM11 segment identifies the name—primary, business, or alias (also known as)—of the subject. The inquiry transaction must include this segment if the requested service's input requires a name. Refer to Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178 to determine whether the requested service requires this segment.

Name (NM11) Segment – Total Length: 119 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **NM11**. *Required field.*
Name Type	5	1	A/N	Specifies the type of name identified in this segment. Valid values are: **1** - Primary Name **3** - Alias Name **5** - Business or government name (for use with CIS services only) *Required field.*
Business or Government Name	6	114	A	Specifies the name of a business or government entity. This field is required if the Name Type value is **5** and is included instead of the remaining fields.
Last Name	6	32	A	Specifies the last name of this subject. Embedded blanks, special characters, and numeric values are edited out. *Required field if the Name Type value is 1 (primary name)..* **Note**: You can send a one-character vowel as the last name **only if** you are also sending an SSN.

Name (NM11) Segment – Total Length: 119 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
First Name	38	20	A	Specifies the first name of this subject. Embedded blanks, special characters, and numeric values are edited out. *Required field if the Name Type value is 1 (primary name).*
Middle Name	58	20	A	Specifies the middle name or initial of this subject. Embedded blanks, special characters, and numeric values are edited out.
Prefix	78	4	A/N	Specifies the name prefix for this subject. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of prefix codes.
Salutation Code	82	3	A/N	Specifies the salutation suffix (MD, DDS, and so on) for this subject. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of codes.
Generation Code	85	3	A/N	Specifies the generation suffix (JR, SR, IV, and so on) for this subject. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of these codes.
Secondary Name	88	32	A	Specifies the secondary name of this subject. *Required* to specify a Puerto Rico maternal surname.

OD01 — Output Delivery Segment

By default, the results of a TU4.1 inquiry are returned as an FFR in the standard (electronic response) distribution method. If a TU4.1 inquiry contains a valid OD01 segment, the default is ignored and whatever value is sent in this segment determines the output results.

To receive results in printed form or through a different distribution method (such as electronic mailbox), the inquiry must include an OD01 segment to specify that output type or method. To receive both an FFR and a printed form, the inquiry must include two OD01 segments, one for each output type. The inquiry can include one OD01 segment for each type of output requested for each service.

Note: You do not need to include an OD01 segment unless you want an output format other than the default FFR and standard/electronic response.

Output Delivery (OD01) Segment – Total Length: 64 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **OD01**. *Required field*.
Type of Output Requested	5	2	A/N	Specifies the type of output requested. Valid values are: **01** - FFR **02** - Printed form The default is 01. Note that if the subscriber wants both a printed form and an FFR, the inquiry must contain two OD01 segments, one for each output type. *Required field*.
Form Type	7	2	A/N	Identifies the type of form to use if output is printed. Valid values are: **01** - Continuous with headers **02** - Cut sheet with headers **03** - Cut sheet without headers **04** - Not applicable The default is 01 for printed forms or 04 for FFRs. *Required field*.
Distribution Method	9	3	A/N	Identifies the method by which the transaction results are delivered. Valid values are: **001** - Standard (electronic response) *Required field.*
Filler	12	1	A	
Filler	13	50	A/N	
Filler	63	2	A/N	

OR01 — Optional Request Segment

The OR01 segment requests the return of additional service data such as owning bureau information, error or edit text segments, or trade MOP totals.

Optional Request (OR01) Segment – Total Length: 9 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **OR01**. *Required field.*
Owning Bureau Identification of Credit File	5	1	A	Specifies that the returned record identify the owning bureau. This is an option only for credit products. Valid values are: **Y:** Return owning bureau information without the adverse action URL (OB01 segment) on all subjects **W:** Return owning bureau information with the adverse action URL (OB02 segment) on all subjects **N:** Do not return owning bureau information The default is **N**.
Error Text Segment Request	6	1	A	Specifies how error messages are displayed to users. Valid values are: **B:** Return error code (ERRC segment) **T:** Return the error text and error code in the same segment (ERRT segment) The default is to return only the error code.
Edit Response Segment Requested	7	1	A	Determines whether an edit segment is returned in the FFR. Valid values are: **Y:** Return an edit segment **N:** Do not return an edit segment The default is N.
Trade MOP Totals Segment Requested	8	1	A	Specifies whether the Trade MOP totals (TM11) segment is returned in the FFR. Valid values are: **Y:** Return the Trade MOP totals segment **N:** Do not return the Trade MOP totals segment The default is N.
Filler	9	1	A	

PI11 — Personal Information Segment

The PI11 segment identifies the subject's Social Security number and date of birth or age. Only one PI01 segment can be included for a subject. If more than one PI11 segment per subject is received, the inquiry transaction terminates and the submitter receives an error code.

Personal Information (PI11) Segment – Total Length: 24 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **PI11**. *Required field*.	
Social Security Number	5	9	N	Identifies the Social Security number of the transaction subject. Do not include embedded dashes or blanks. This field is required for certain services. Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178 specify whether a service request requires this field. TU4.1 ignores this field if the format is invalid. If the subscriber requests an edit segment, the reason TU4.1 ignored the field is explained there.	This field should be filled with spaces (blanks) if there is no input.
Date of Birth	14	8	A/N	Specifies the subject's date of birth. The DOB format is CCYYMMDD.	This field should be filled with spaces (blanks) if there is no input.
Age	22	3	N	Specifies the subject's age in years.	

PN01 — Phone Number Segment

The PN01 segment lists the subject's phone number and identifies the type of phone (telephone, fax, pager, and so on).

Phone (PN01) Segment – Total Length: 21 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **PN01**. *Required field.*	
Phone Type	5	2	A/N	Identifies the type of phone number provided. Valid values are: **01** - Telephone (voice, standard) **02** - Fax **03** - Cellular **04** - Pager **05** - Toll-free **06** - Mobile/PCs **07** - Non-geographic **08** - Special services **09** - Undefined **10** - New **11** - Pay phone **21** - De-duplicate	
Area Code	7	3	N	Specifies the area code of the phone number. *Required field.*	This field should be filled with spaces (blanks) if there is no input.
Telephone Number	10	7	N	Specifies the phone number, which should have no embedded dashes. *Required field.*	This field should be filled with spaces (blanks) if there is no input.
Extension	17	5	N	Specifies a phone extension.	This field should be filled with spaces (blanks) if there is no input.

RA01 — Request Add on Service Segment

The RA01 segment is used to request an add-on service with a service request. If no RA01 segment is provided for an add-on, TU4.1 defaults to the options defined in the subscriber file.

Request Add-on Service (RA01) Segment – Total Length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RA01**. *Required field*.
Add-on Service Code	5	5	A/N	Specifies a code that identifies add-on services to include in this transaction. The add-on service codes are listed in Add-on Service Descriptions on page 178. *Required field.*
Processing Request	10	2	A/N	Requests special processing for certain services. The service descriptions in Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178 describe how to use this field for the services that require it. If this field is not used, default to subscriber code validation option.
Service Type	12	1	A	Specifies whether the requested add-on service is a model. Valid values are: **A** Model **P** All other services The default is P, indicating the requested add-on service is **not** a model.

RP01 — Request Service Segment

The RP01 segments specify which standalone TransUnion services the inquiry is requesting. Each RP01 segment specifies one service. The inquiry must contain at least 1 RP01 segment.

If a service is requested in an inquiry that includes multiple subjects, the service is returned for both subjects if all required subject data is included and if the service allows joint processing.

Request Service (RP01) Segment – Total length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RP01**. *Required field.*
Service Code	5	5	A/N	Identifies the service requested. Refer to the table at the beginning of this section for a list of service codes.

Request Service (RP01) Segment – Total length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Required field. If the service code is accurate but the subscriber is not signed up for the service, TransUnion returns an error code. TransUnion also returns an error code if the service code is missing or invalid.
Bundle Default Indicator	10	1	A/N	Specifies that TU4.1 default to the subscriber's predefined settings unless a different value is submitted in this transaction. Valid values are: **Y** - Default to the subscriber's bundle for this service **N** - Do not default to the subscriber's bundle The default is **N**. For future use.
Specialty Code	11	2	A/N	Identifies inquiries that need special processing. *For internal use only*.
Processing Request	13	2	A/N	Specifies processing options to use for the requested service. The options available for each service are described in Standalone Service Descriptions on page 26. The default for this field is the subscriber validation file option.
Equal Credit Opportunity Act Designator	15	1	A	Identifies the inquiry type. The subscriber should provide this value for services that require permissible purpose. The service descriptions in Standalone Service Descriptions on page 26 specify which services require permissible purpose. Valid values are: **I** - Individual **C** - Contractually liable **A** - Authorized or spouse user **P** - Participating This field defaults to **I** if one subject is provided or **P** if 2 subjects are provided.

RP02 — Request Service Segment Decision Systems

The RP02 segment specifies which standalone TransUnion service the inquiry is requesting and the subscriber information to use for that inquiry. RP02 segments immediately follow an RP01 segment requesting a Decision Systems Bundled Service.

Request Service (RP02) Segment – Total length:33 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RP02**. *Required field*.
Service Code	5	5	A/N	Identifies the service requested. Refer to the table at the beginning of this section for a list of service codes. *Required field.* If the service code is accurate but the subscriber is not signed up for the service, TransUnion returns an error code. TransUnion also returns an error code if the service code is missing or invalid.
Bundle Default Indicator	10	1	A/N	Specifies that TU4.1 default to the subscriber's predefined settings unless a different value is submitted in this transaction. Valid values are: **Y** - Default to the subscriber's bundle for this service **N** - Do not default to the subscriber's bundle The default is **N**. *For future use.*
Specialty Code	11	2	A/N	Identifies inquiries that need special processing. *For internal use only*.
Processing Request	13	2	A/N	Specifies processing options to use for the requested service. The options available for each service are listed in Standalone Service Descriptions on page 26. The default for this field is the subscriber validation file option.
Inquiry Type	15	1	A	Identifies the inquiry type. The subscriber should provide this value for services that require permissible purpose. The service descriptions in Standalone Service Descriptions on page 26 specify which services require permissible purpose. Valid values are:

Request Service (RP02) Segment – Total length:33 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				I - Individual **C** - Contractually liable **A** - Authorized or spouse user **P** - Participating This field defaults to I if one subject is provided or P if 2 subjects are provided.
Bureau Market	16	2	N	Refer to the local bureau for this code. *Required field.*
Bureau Submarket	18	2	A/N	Refer to the local bureau for this code. *Required field.*
Industry Code	20	2	A/N	Identifies the subscriber's type of business. If the industry code is one character, place it in the left position followed by a space. Refer to the local bureau for the correct industry code. *Required field.*
Member Code	22	8	A/N	Identifies the subscriber's member code. Refer to the local bureau for this code. *Add leading zeroes to right-justify the code. Required field.*
Subscriber Password	30	4	A/N	Identifies the subscriber's password. Refer to the local bureau for the password. *Add leading zeroes to right-justify the code. Required field.*

RP03 — Request Service Segment (Insurance Service)

The RP03 segment specifies which TransUnion standalone service the inquiry is requesting and other information to be used in the processing. The RP03 segment is used mainly for some TransUnion insurance services.

Request Service (RP03) Segment – Total length:18 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RP03**. *Required field*.
Service Code	5	5	A/N	Identifies the service requested. Refer to the table at the beginning of this section for a list of service codes.

Request Service (RP03) Segment – Total length:18 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Required field. If the service code is accurate but the subscriber is not signed up for the service, TransUnion returns an error code. TransUnion also returns an error code if the service code is missing or invalid.
Bundle Default Indicator	10	1	A/N	Specifies that TU4.1 default to the subscriber's predefined settings unless a different value is submitted in this transaction. Valid values are: **Y** - Default to the subscriber's bundle for this service **N** - Do not default to the subscriber's bundle The default is **N**. *For future use.*
Specialty Code	11	2	A/N	Identifies inquiries that need special processing. *For internal use only*.
Processing Request	13	2	A/N	Specifies processing options to use for the requested service. The options available for each service are listed in Standalone Service Descriptions on page 26. The default for this field is the subscriber validation file option. *For internal use only*.
Transaction Type	15	1	A	Identifies the type of transaction. *Required field for RVP.* Valid values are: **I** - Initial or intermediate quote/policy *(used for batch transactions)* **C** - Final transaction for a quote/policy **X** - Indicates that the transaction is aborted *(for future use)*
Inquiry Source	16	1	A/N	Identifies the source of the Inquiry. *For internal use only.*
Bureau Submarket	18	2	A/N	Refer to the local bureau for this code. *Required field.*
Channel Identifier	17	1	A/N	Assigned by the subscriber. Identifies where the transaction originated in the subscriber's system. Used in reports and extracts. Valid values are: **M** - Mail

Request Service (RP03) Segment – Total length:18 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				T - Telephone **W** - Web/Internet **P** - Point-of-Sale **A** - Agent **C** - Call Center
Environment Data Source	18	1	A/N	Specifies the data source requested for the processing environment. Valid values are: **E** - External third-party test database **I** - Internal file data

RS11 — Reporting Subscriber Segment

The RS11 segment is optional and identifies the reporting base code of the subscriber. To search for a reporting subscriber code or a specific account, include an RS01 segment in the FFI that contains the reporting subscriber base code, base and suffix codes, and/or account number. This segment currently is used only by Account Reporting Review.

Reporting Subscriber (RS11) Segment – Total Length: 44 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RS11**. *Required field*.
Industry Code	5	2	A/N	Specifies the industry code of the reporting subscriber.
Member Code	7	8	A/N	Specifies the member code of the reporting subscriber. The first four characters of this field are required if this data is included.
Account Number	15	30	A/N	Specifies the number of the account that is the subject of this inquiry.

SH01 — Subject Header Segment

The SH01 segment signifies the beginning of information specific to one subject. That information is contained in the segments (Name, Address, and so on) following the SH01 segment. If the inquiry transaction contains a second SH01 segment, the segments before the second SH01 apply to the first subject and the segments after the second SH01 describe a second subject.

Most inquiries must include at least one SH01 segment and can include two. A few services, such as Creditor Contact Search, do not require this segment.

Subject Header (SH01) Segment – Total Length: 5 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH01**. *Required field.*
Subject Identifier	5	1	N	Indicates to which subject the following information applies. Valid values are: **1** First subject **2** Second subject *Required field.*

TT01 — Transaction Tracking Segment

The TT01 segment contains a transaction control number that is generated by the subscriber's system. Subscribers who want to track their transactions may provide this number for some services.

Transaction Tracking (TT01) Segment – Total Length: 30 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TT01**. *Required field.*
Transaction Number	5	26	A/N	Contains the transaction control number generated by the subscriber's system.

TU4I — Transaction Control Segment

Every inquiry transaction must begin with a TU4I segment. If this segment is missing, inquiry processing stops and an error response is returned. This segment contains transaction control information such as subscriber code, user reference number, market/submarket, and so on. Each inquiry transaction can have only one TU4I segment.

> **Note:** The bureau that assigns the subscriber code and password also provides the bureau market, bureau submarket, and industry code values. Bureaus sometimes use the term subscriber code, which consists of the subscriber's industry code followed by the member code. In the subscriber code F12345, for example, F is the industry code and 12345 is the member code.

The setting in the Version Switch field determines which version of TU40 processes the subscriber's requests.

Transaction Control (TU4I) Segment – Total length: 52 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TU4I**. *Required field*.
Version Switch	5	1	N	Defines the TU40 record version. Valid values are: **0** Version 0 **1** Version 1 *Required field.* **Note:** If you send a Version 0 FFI with this switch set to 1, you will receive a Version 1 FFR.
Special Routing Indicator	6	1	N	Routes the transaction to the test region. Valid values are: **0** None (production region) **1** Standard test region The current value for this field, and the field default, is **0**.
Country Code	7	1	A/N	Accommodates Canadian access. Valid values are: **1** United States **2** Canada The default is **1**. *Required field.* **Note:** Refer to the Canadian version of the TransUnion Automated Inquiry User Manual for special Canadian segments, table definitions, and so on.
Language Indicator	8	1	N	Defines the language used for print image reports and error message text: **1** English **2** Spanish **3** French (Canada only) The default is **1**. *Required field*.
User Reference Number	9	24	A/N	Associates an FFI with an FFR. This field is returned on your output.

Transaction Control (TU4I) Segment – Total length: 52 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Bureau Market	33	2	N	Refer to the local bureau for this code. *Required field*.
Bureau Submarket	35	2	A/N	Refer to the local bureau for this code. *Required field.*
Industry Code	37	2	A/N	Identifies the subscriber's type of business. If the industry code is one character, place it in the left position followed by a space. Refer to the local bureau for the correct industry code. *Required field.*
Member Code	39	8	A/N	Identifies the subscriber's member code. Refer to the local bureau for this code. **Add leading zeroes to right-justify the code.** *Required field.* **Note:** Do not repeat the Industry Code within the Member Code field.
Subscriber Password	47	4	A/N	Identifies the subscriber's password. Refer to the local bureau for the password. **Add leading zeroes to right-justify the code.** *Required field*.
Contractual Indicator	51	1	N	Identifies whether or not the subjects provided in the transaction have a contractual relationship. Valid values are: **1** One subject only or two subjects with no contractual relationship **2** Two subjects with contractual relationship The default is **1**.
Point of Sale Indicator	52	1	A	Identifies whether the inquiry is a point-of-sale transaction and, if so, what subject selection processing should be applied to the transaction. Valid values are: **Y** The inquiry is a point-of-sale transaction and requires special subject selection processing for all input or returned files with a California address. **C** The inquiry is a point-of-sale transaction and requires special subject selection processing for all files regardless of address. **N** The inquiry is not a point-of-sale transaction.

Transaction Control (TU4I) Segment – Total length: 52 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				The default is the value specified in the subscriber option file.

UA11 — Unparsed Address Segment

The UA11 segment provides an *unparsed* address for the subject, employer, or requested service. If multiple addresses are sent, the order in which they are sent is important because TU4.1 assumes the *addresses are positional*. That is, the first UA11 segment is assumed to be the current address, the second UA11 segment is assumed to be the previous address, and so on.

If the address is personal, it must follow the subject header segment (SH01). If the address is an employer's, it must follow the employment segment (EM11).

Unparsed Address (UA11) Segment – Total Length: 119 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **UA11**. *Required field*.
Address Type	5	1	A/N	Indicates the type of address being sent. Possible values are: **0** Conventional address **1** Post office box **2** Rural route **3** Highway contract **4** General delivery **5** Firm address **8** Postmaster **9** Not determined
Unparsed Address Line 1	6	70	A/N	Specifies the first line of the subject's address, unparsed. *Required field*
City Name	76	28	A	Specifies the name of the city in the address. This value must be at least 3 characters long. Embedded special characters or numbers are edited out. *Required field.*
State Code	104	2	A/N	Specifies the code for the subject's state. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid state codes. *Required Field*

Unparsed Address (UA11) Segment – Total Length: 119 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
ZIP Code	106	5	A/N	Specifies the subject's ZIP Code. This field is left-justified.
ZIP Extension Code	111	4	A/N	Specifies the subject's ZIP Extension Code. This field is left-justified.
Length of Residence	115	4	A/N	Specifies in years and months the length of the subject's residence at the address identified in this segment. The format for this value is YYMM. For example, a residence length of 4 years and 3 months is added as 0403. If this is an employment address, this field does not apply.
Housing Status	119	1	A/N	Specifies whether the subject owns or rents the residence at this address. Valid values are: **O** Own **R** Rent **B** Board

UF11 — Future Unparsed Address Segment

The UF11 segment is used by Geo Code. The fields are field attributes are identified to those of the UA11 segment except that the Segment Type is **UF11**

Unparsed Address (UF11) Segment – Total Length: 119 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **UF11**. *Required field*.
Address Type	5	1	A/N	Indicates the type of address being sent. Possible values are: **0** Conventional address **1** Post office box **2** Rural route **3** Highway contract **4** General delivery **5** Firm address **8** Postmaster **9** Not determined
Unparsed Address Line 1	6	70	A/N	Specifies the first line of the subject's address, unparsed. *Required field*

Unparsed Address (UF11) Segment – Total Length: 119 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
City Name	76	28	A	Specifies the name of the city in the address. This value must be at least 3 characters long. Embedded special characters or numbers are edited out. *Required field.*
State Code	104	2	A/N	Specifies the code for the subject's state. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid state codes. *Required Field*
ZIP Code	106	5	A/N	Specifies the subject's ZIP Code. This field is left-justified.
ZIP Extension Code	111	4	A/N	Specifies the subject's ZIP Extension Code. This field is left-justified.
Length of Residence	115	4	A/N	Specifies in years and months the length of the subject's residence at the address identified in this segment. The format for this value is YYMM. For example, a residence length of 4 years and 3 months is added as 0403. If this is an employment address, this field does not apply.
Housing Status	119	1	A/N	Specifies whether the subject owns or rents the residence at this address. Valid values are: **O** Own **R** Rent **B** Board

VH01 — Vehicle Information Segment

The VH01 segment allows subscriber to provide vehicle information used in some services.

Vehicle Information (VH01) Segment – Total Length: 100 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **VH01**. *Required field*.
Vehicle Identification Number	5	17	A/N	Specifies the unique serial number used by the automotive industry to identify individual motor vehicles for which the information applies.

Vehicle Information (VH01) Segment – Total Length: 100 Bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Year	22	4	A/N	Specifies the model year of the vehicle. The date format is CCYY.
Make	26	16	A/N	Specifies the brand of the vehicle in free form text.
Model	42	35	A/N	Specifies the style of the vehicle in free form text.
Filler	77	2	A/N	*For future use.*
State Registered	79	2	A	Specifies the code of the state where the vehicle is registered.
Filler	81	20	A/N	*For future use.*

VN01 — Vendor Information Segment

The VN01 segment helps TransUnion to collect statistics about the software our subscribers are using and to investigate problems. Place this segment immediately after the TU4I segment or, if one is included, the EU01 segment.

This segment is **required** for vendors.

Vendor Information (VN01) Segment – Total Length: 41 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **VN01**. *Required field*.
Vendor Name	5	20	A/N	Specifies the name of the vendor that supplies software that works with TransUnion FFIs.
Vendor ID	25	10	A/N	Specifies a unique vendor identifier that is assigned by TransUnion.
Vendor Release Number	35	7	A/N	Specifies the release number of the vendor's software product.

FFR Segments

This section contains descriptions of the TU4.1 FFR segments. The segments appear in alphabetic order. Below is a list of all the segments and segment length in a concise and complete table.

These segments are not all returned for any one service. For the segments and segment order returned for specific TransUnion services, refer to Standalone Service Descriptions on page 26 and Add-on Service Descriptions on page 178. For examples of FFRs returned for joint inquiries, refer to Getting Started on page 2.

Note: Quick access to TransUnion technical support information is available online at https://techservices.transunion.com.

Segment ID	Segment Name	Segment Length (bytes)
AD11	Address	150
AD02	Extended Address	127
AH11	Account History	77
AM01	Address Analysis	22
AO01	Add-on Status	17
AS01	Auto Loan Summary	40
AT11	Additional Trade Account	95
CA01	Credit Availability Summary	17
CC11	Credit Card	47
CD01	Customer Data	41
CH01	Characteristic	30
CI01	Consumer Identifier	19
CL11	Collection	213
CL13	Account Reporting Review Collection Account	230
CORR	CORR	45
CO01	County Information	65
CP11	Compliance	80
CR01	Contact Result	26
CR02	Additional Contact Result	22
CS11	Consumer Statement	269
DA01	Data Analysis	22
DB01	Decision Systems Customer Branch	59
DC11	Deceased Information	167

Segment ID	Segment Name	Segment Length (bytes)
DI01	Decision Systems Custom Information	33
DR01	Decision Systems Response	193
ED01	Edit	61
EF01	Extended Fields	61
EM11	Employment	130
END1	Transaction Ending	12
ERRC	Error Code	11
ERRT	Error Text	90
FA11	Future Address (see AD11 description)	150
FI01	Collection Credit Report Special Indicators	23
FT01	Collection Credit Report	84
GC01	Geo Code	54
ID01	Identification	49
ID02	Miscellaneous Identification	265
IN11	Inquiry	xx
IN12	Collection Credit Report Inquiry	84
LK11	Creditor Contact Information	54
LS01	Locator Service	14
MC01	Message Code	29
MI01	Miscellaneous Statement	77
ML01	Mileage	26
ML02	Mileage	40
MT01	Message Text	171
NM11	Name	123
NU01	Number Of	12
OB01	Owning Bureau Identification	148
OB02	Owning Bureau Identification	198
PD01	Property Data	100
PH01	Service Header	12
PH02	Service Header	15
PH03	Service Header	15
PH04	Service Header	18
PI11	Personal Information	25
PN01	Phone Number	27

Segment ID	Segment Name	Segment Length (bytes)
PN02	Phone Number	45
PP11	Extended Payment Pattern	97
PR11	Public Record	216
PS01	Points Summary	127
PS02	Points Summary	142
QH01	Inquiry History	21
RE01	Region Analysis	20
RR01	Record Reported History	21
SA11	Subscriber Address	106
SC01	Scoring	34
SD01	Credit Summary Description	56
SH01	Subject Header	27
SH02	Special Projects Subject Header	12
SH03	Subject Header	10
SH04	Subject Header	28
SH05	Subject Header	13
SH06	Subject Header	14
SM11	Credit Summary	44
SV01	Subject Verification	67
SV02	Subject Verification	31
SV03	Subject Verification	47
TA01	ID Mismatch Alert	12
TC01	Income Estimator Score	30
TM11	Trade MOP Totals	46
TR11	Trade Account	332
TR12	Individual Monitoring Report Trade Account	122
TR13	Account Reporting Review Trade Account	387
TT01	Transaction Tracking	33
TU4E	Error Control	62
TU4R	Transaction Control	62
TX01	Text Statement	172
UA11	Unparsed Address	130
UF11	Unparsed Future Address (see UA11 description)	130

Segment ID	Segment Name	Segment Length (bytes)
VH01	Vehicle Information	184
VS01	Verification Summary	33
WS01	Individual Monitoring Report Satisfaction	10
YI01	Year of Issuance	36
ZC01	ZIP Code	22

The remainder of this section displays layouts of the TU4.1 FFR segments. Information in the segment layouts includes:

Field name	Describes the field value.
Displacement	Identifies the segment column where this field begins.
Length	Identifies the maximum number of characters the field can have.
Type	Identifies the type of character used for the field value. Possible character types are: • **A** for alphabetic data. Data in alphabetic fields is left-justified and the remainder of the field is filled with blanks. • **N** for numeric data. Data in numeric fields is right-justified and left-filled with zeroes. • **A/N** for alphanumeric data. Data in A/N fields is left-justified and the remainder of the field is filled with blanks except for currency amounts and certain occurrences of the member code. Currency values are right-justified and preceded by zeroes, unless the field contains no data. A currency field with no data is blank-filled to distinguish between a zero amount and an amount not reported. The member code in the CL11, IN11, LK11, PR11, and TR11 segments is right-justified with leading zeroes. In all other segments, it is returned left-justified and blank-filled.
Description	Describes the purpose of the field, possible field values, and contains special notes about field usage. Values described in the field are the only ones that can currently be returned. We reserve the right to add new values and, if we do so, will make every effort to notify you.

Note: The format for all date fields is CCYYMMDD. If there is no day present on the database, a value of 01 is returned in the day field.

AD11—Address Segment

The AD11 segment displays the subject's or employer's parsed address. An AD11 segment that contains the employment address is returned after the EM11 segment. If multiple addresses are

returned, the first AD11 segment is the current address, the second AD11 segment is the previous address, and so on.

Unparsed addresses, when available, are returned in the UA11 segment.

Address (AD11) Segment — Total Length: 150 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **AD11** unless the address is a future address. The segment type for a future address is **FA01**.	
Segment Length	5	3	N	Value is **150**.	
Source Indicator	8	1	A	Indicates the source of the address information. Possible values are: **I** - Data received in the inquiry **F** - Data that appears on the TransUnion credit database **M** - Data that appears on database that best matches input **A** - Data that appears on the RPA database **D** - Data that appears on vendor database **C** - Data that appears on the TransUnion non-credit database **Q** - Data that appears on consumer inquiry **E** - Data that appears on vendor's aggregated database	For services where the telephone information is the main focus (Contact Locator, Contact Verification, Contact Verification Plus, and Phone Append) the **F** value indicates telephone company-sourced information; the **C** value indicates TransUnion credit database-sourced information.
Address Qualifier	9	1	A/N	Indicates whether the returned address is personal or employment. Possible values are: **1** - Personal **2** - Employment **5** - Business **6** - Both Residential and Business Address or not known	

Address (AD11) Segment — Total Length: 150 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				P - Previous personal address (previous addresses are positional: the most recent previous address always precedes the second most recent). This value is returned only for Total ID or Compliance Verification	
Address Classification Code	10	1	A/N	Indicates the classification of the address per the United States Post Office. Possible values are: **1** - U.S. basic **2** - Overseas military **3** - Territory or protectorate **4** - Other **Blank** - Not known	
Standardized Flag	11	1	A/N	Indicates whether the address is standardized or not. Possible values are: **Y** - Address is standardized **N** - Address is not standardized or is partially standardized **Blank** - Not known	
Address Type	12	1	A/N	Indicates the address classification. Possible values are: **0** - Conventional street address **1** - Post office box **2** - Rural route / highway contract **4** - General delivery **5** - Firm address **8** - Postmaster / military **9** - Not determined **H** - Multi-dwelling residential or office building **Blank** - Address type not known	Currently returned only for Contact Identity Services. For other services, ignore any data returned in this field unless otherwise announced.

Address (AD11) Segment — Total Length: 150 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Address Number	13	10	A/N	Identifies the subject's house number in a street address.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 6 to 10. Special characters may also be returned. Example: 123½ Main St., 123-4 Main St.
Predirectional	23	2	A	Specifies the street directional (N, S, E, W, NE, SE, NW, SW) in a street address.	
Street Name	25	28	A/N	Specifies the subject's street name or rural route or post office box text in a street address.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 27 to 28.
Postdirectional	53	2	A	Specifies a street directional (N, S, E, W, NE, SE, NW, SW) that appears after a street name.	This data element is returned to subscribers receiving the Enriched Credit Report.
Street Type Code	55	4	A	Specifies the primary type of street in a street address.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 2 to 4.
Unit Type	59	4	A	Identifies the type of unit number that follows. Refer to	

Address (AD11) Segment — Total Length: 150 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid unit type codes.	
Unit Number	63	10	A/N	Specifies an apartment or unit number in a street address.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 5 to 10.
City Name	73	28	A	Specifies the name of the subject's city.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 27 to 28.
State Code	101	2	A	Specifies the two-digit state code of the subject's state.	
ZIP Code	103	5	A/N	Specifies the subject's ZIP Code. This field is left justified.	For subscribers receiving the Enriched Credit Report, the ZIP code may be returned for Employer Address.
ZIP Extension Code	108	4	A/N	Specifies the subject's ZIP extension code. This field is left-justified.	This data element is returned to subscribers receiving the Enriched Credit Report.
Urbanization Name	112	30	A/N	Specifies the condominium name for Puerto Rico addresses only.	This data element is returned to subscribers receiving the

Address (AD11) Segment — Total Length: 150 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					Enriched Credit Report.
Reported Date	142	8	A/N	Specifies the date this address was reported in the format CCYYMMDD.	For subscribers receiving the Enriched Credit Report, may appear for all addresses returned, where available.
Housing Status	150	1	A/N	Indicates the type of housing a person lives in. Possible values are: **O** - Own **R** - Rent **B** - Board **Blank** - Not known	

AD02—Extended Address Segment

The AD02 segment returns the subject's extended address. The extended address is the raw street address that is received for a subject. Generally, these addresses do not conform to U.S. address parsing conventions.

The character in displacement field 10 indicates that the Street Address is unparsed. The FFR can include one AD02 segment for each subject.

Address (AD02) Segment Total Length: 127 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **AD02**.	
Segment Length	5	3	N	Value is **127**.	
Source Indicator	8	1	A	Indicates whether the address was sent in the FFI or is the address that appears in the file. Possible values are: **I** - Data received in the inquiry	For services where the telephone information is the main focus (Contact Locator, Contact Verification, Contact

Address (AD02) Segment Total Length: 127 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				F - Data that appears on the TransUnion credit database **D** - Data that appears on vendor database **C** - Data that appears on the TransUnion non-credit database **Q** - Data that appears on consumer inquiry **E** - Data that appears on vendor's aggregated database	Verification Plus, and Phone Append) the F value indicates telephone company-sourced information; the C value indicates TransUnion credit database-sourced information.
Address Qualifier	9	1	A/N	Indicates that the returned address is an extended address. The value is: **4** Extended Address	
Address Type	10	1	A/N	Indicates the type of address being sent. Possible values are: **0** - Conventional street address **1** - Post office box **2** - Rural route / highway contract **4** - General delivery **5** - Firm address **8** - Postmaster / military **9** - Not determined **H** - Multi-dwelling residential or office building ***Blank*** - Address type not known	Currently returned only for Contact Identity Services. For other services, ignore any data returned in this field unless otherwise announced.
Street Address Unparsed	11	70	A/N	Lists the street address, which is displayed in an unparsed format.	
City	81	27	A	Specifies the name of the subject's city.	
State Code	108	2	A	Specifies the two-digit state code of the subject's state.	
ZIP Code	110	10	A/N	Specifies the subject's ZIP Code. This field is left justified.	For subscribers receiving the Enriched Credit

Address (AD02) Segment Total Length: 127 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					Report, may also return a four-digit extension left-justified with a hyphen (e.g., NNNNN-NNNN).
Reported Date	120	8	A/N	Specifies the date this address was reported in the format CCYYMMDD.	For Enriched Credit Reports, may appear for all addresses returned.

AH11—Account History Segment

The AH11 segment displays one occurrence of Account History information about the subject's trade account. A maximum of 30 AH11 segments may be returned for a single trade account.

When present, the AH11 segments follow the TR11 or AT11 segment in the response.

Address (AH11) Segment Total Length: 77 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AH11**.
Segment Length	5	3	N	Value is **077**.
History Effective Month	8	6	A/N	Displays the month and year this history occurrence represents. The format is CCYYMM.
History Availability Indicator	14	1	A	Indicates whether or not this occurrence of Account History is available for this Effective Month. Possible values are: **N** - No history available for this month **Y** - History is available for this month **X** - No history available for the account
Current Balance Amount	15	9	A/N	Displays in whole dollars the balance remaining on this account. If there is no amount available, this field is blank.
High Credit Amount	24	9	A/N	Displays in whole dollars either the highest amount ever owed on this account or the original balance owed. If there is no amount available, this field is blank.

Address (AH11) Segment Total Length: 77 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Credit Limit Amount	33	9	A/N	Displays in whole dollars the subject's credit limit for this account. If there is no amount available, this field is blank.
Payment Due Amount	42	9	A/N	Displays in whole dollars the subject's scheduled payment amount for this account. If there is no amount available, this field is blank.
Past Due Amount	51	9	A/N	Displays in whole dollars the amount that is past due on this account. If there is no amount available, this field is blank.
Generic Remark Code	60	3	A/N	If applicable, displays the generic remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes. If there is no remark code available, this field is blank.
Rating Remark Code	63	3	A/N	If applicable, displays the rating remark code that applies to this account. Rating remark codes are typically related to collections. Refer to Appendix C: Account Codes on page 666 for a list of these codes. If there is no remark code available, this field is blank.
Compliance Remark Code	66	3	A/N	If applicable, displays the compliance remark code that applies to this account. Compliance remark codes are typically related to disputes. Refer to Appendix C: Account Codes on page 666 for a list of these codes. If there is no remark code available, this field is blank.
Actual Payment Amount	69	9	A/N	Specifies in whole dollars the amount of the monthly payment actually made by the subject. If there is no amount available, this field is blank. This field is available to subscribers who report payment data to TransUnion.

AM01—Address Analysis Segment

The AM01 segment is returned immediately following any TA01 segment(s) present in the FFR or, if no TA01 is present, in place of it. Multiple AM01 segments may be returned, one for each combination of input and file addresses.

Address Analysis (AM01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AM01**.
Segment Length	5	3	N	Value is **022**.
Input Address Index	8	2	A/N	**01** - Current Address **02** - Previous Address
File Address Index	10	2	A/N	**01** - Current Address **02** - 1st Previous Address **03** - 2nd Previous Address
House Number Match	12	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined
Pre-Directional Match	13	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined
Street Name Match	14	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined
Street Type Match	15	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined
Filler	16	1	A/N	Reserved for future use
City Name Match	17	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined
State Code Match	18	1	A/N	**Y** - Exact Match **N** - Not an Exact Match

Address Analysis (AM01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				I - Match cannot be determined
Zip Code Match	19	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined
Filler	20	1	A/N	Reserved for future use
Filler	21	1	A/N	Reserved for future use
Unit Number Match	22	1	A/N	**Y** - Exact Match **N** - Not an Exact Match **I** - Match cannot be determined

AO01—Add on Status Segment

The AO01 segment identifies whether the subscriber is authorized to use the requested add-on service and displays the processing status of the add-on service (such as High Risk Fraud Alert or Creditor Contact Information). The FFR includes one AO01 segment for each occurrence of an add-on service.

Add-on Status (AO01) Segment — Total length: 17 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AO01**.
Segment Length	5	3	N	Value is **017**.
Service Code	8	5	A/N	Displays the code for the requested add-on service. Refer to Service and Model Renaming on page 178 for a list of codes for add-on services.
Service Status	13	2	A/N	Specifies whether the service is available. Possible values are: **01** Requested service delivered **02** Requested service not available

Add-on Status (AO01) Segment — Total length: 17 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				03 Subscriber code not authorized for requested service **04** Default service delivered **05** Invalid score request **06** Requested information cannot be scored or returned because data is suppressed or cannot be evaluated. **07** Invalid processing request **08** Default service canceled **09** Processing request cannot be evaluated **10** Invalid input model attribute **11** Transaction ID missing, invalid, or too long **12** Missing or invalid required input data
Search Status	15	3	A/N	Displays the result of special processing for the add-on service. This field applies only to certain add-ons. The service descriptions in Add-on Service Descriptions on page 178 indicate which add-on services use this field.

AR01—Attribute Segment

The AR01 segment displays information about an attribute contained in the Small Business Identification Premium Plus, Financial, Accounts Investment, Lending, Treasury, and Card Packages. One AR01 segment is returned for each attribute available for the small business.

Attribute (AR01) Segment — Total length: 60 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AR01**.
Segment Length	5	3	N	Value is **060**.
Attribute ID	8	8	A/N	Identifies the attribute value. See list of attributes IDs.
Attribute Index ID	16	5	A/N	Index indicator to support multiple values for the same attribute. *(future use)*
Attribute Value	21	40	A/N	Specifies the attribute value.

AS01—Auto Loan Summary Segment

An AS01 segment is returned for the five most recent auto loan accounts in order by Effective/ Verification Date — most recent date first. One segment is returned for each loan account.

Auto Loan Summary (AS01) Segment — Total length: 40 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **AS01**.
Segment Length	5	3	N	Value is **040**.
Account Type	8	2	A	Indicates the type of loan made by the credit grantor to the subject. Possible values are: **AU** - Automobile **AL** - Auto Lease **LE** - Lease
Co-Signer Indicator	10	1	A	Indicates whether the account is a co-signer account. Possible values are: **Y** - Account is a co-signer account **N** - Account is not a co-signer account
Balance Amount	11	9	A/N	Displays the balance the subject owes on this account.
Remaining Months	20	3	N	Displays the number of months remaining in the life of this financial obligation.
Scheduled Monthly Payment Amount	23	9	A/N	Specifies the payment due amount expressed as a monthly amount. This may differ from the actual payment amount due in accordance with the Frequency of Payment value. The amount is specified in whole dollars. If there is no payment due amount, this field is blank-filled.
Times Late Last 24 Months Reported	32	2	N	Displays the number of times a late payment was received in the last 24 months reported.
Estimated APR	34	6	A/N	Displays the estimated annual percentage rate which includes two integers plus a decimal point and 3

Auto Loan Summary (AS01) Segment — Total length: 40 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				decimal places. Not returned for Lease type accounts. Examples: 07.835 = 7.835% or 05.500 = 5.5%
Account Status Indicator	40	1	A	Indicates whether or not the account is still active or closed. Possible values are: **C** - Account is closed or paid **O** - Account is open

AT11—Additional Trade Account Segment

The AT11 segments display additional information about the subject's trade accounts. When present, the AT11 segment immediately follows the TR11 segment with which it is associated.

Additional Trade Account (AT11) Segment — Total length: 95 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **AT11**.	
Segment Length	5	3	N	Value is **095**	
Specialized Payment Type Code	8	1	A/N	Classifies the Payment Schedule Amount and Date for this account. Possible values are: **B** - Balloon **D** - Deferred	
Total Payment Due Amount	9	9	A/N	Displays in whole dollars the final payment amount owed on this account at the end of the term (if specialized payment type is balloon). Blank if specialized payment type is not balloon.	
Total Payment Due Date	18	8	A/N	Displays the date the final payment for this account is due (if specialized payment type is balloon) or the date the	

Additional Trade Account (AT11) Segment — Total length: 95 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				deferred payments started (if payment type is deferred). The date format is CCYYMMDD.	
Portfolio Sale Indicator Code	26	1	A/N	Classifies the sale situation for this account and helps describe the Portfolio Sale Name. Possible values are: **1** - Portfolio Purchased From name **2** - Portfolio Sold To name	
Portfolio Sale Name	27	30	A/N	Displays the name of the creditor involved in the sale situation for the account.	
Original Creditor Name	57	30	A/N	Displays the name of the company or agent who originally opened the account for the consumer.	
Original Charge-off Amount	87	9	A/N	Displays in whole dollars the amount that was still owed at the time the credit grantor wrote off the account.	This data element is returned to subscribers receiving the Enriched Credit Report.

BR01—Business Record Segment

The BR01 segment identifies the business and contains all the data defined in the Small Business Identification Core and Premium packages. It includes the data that can be used in a filter, except Title and the Executive Update Date, which are returned in an Employment segment (EM11), and Contact Name, which is returned in a standard Name segment (NM11). One BR01 segment is returned for each small business delivered in the transaction.

Business Record (BR01) Segment — Total length: 338 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **BR01**.
Segment Length	5	3	N	Value is **338**.
Business Update Date (Core)	8	8	A/N	Specifies the date the executive information was last updated in the format CCYYMMDD.

Business Record (BR01) Segment — Total length: 338 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Business Identifier	16	16	A/N	Displays the unique identifier assigned to the business.
Business Name (Core)	32	35	A/N	Displays the name of the business.
Address Number (Core)	67	10	A/N	Specifies the building number or post office box number for the business street address.
Predirectional (Core)	77	2	A	Specifies the street pre-directional (N, S, E, W, NE, SE, NW, SW) for the business street address.
Street Name (Core)	79	28	A/N	Specifies the street name or rural route or post office box text in the business address.
Postdirectional (Core)	107	2	A	Specifies a street post-directional (N, S, E, W, NE, SE, NW, SW) for the business street name.
Street Type Code (Core)	109	4	A	Specifies the primary type of street for the business street address.
Unit Type (Core)	113	4	A	Specifies the type of unit number that follows.
Unit Number (Core)	117	10	A/N	Specifies a unit number for the business street address.
City Name (Core)	127	28	A	Specifies the name of the business city.
State Code (Core)	155	2	A	Specifies the code of the business state.
ZIP Code (Core)	157	5	A/N	Specifies the business ZIP Code. This field is left justified.
ZIP Extension Code	162	4	A/N	Specifies the business ZIP Extension Code. This field is left justified.
Executive ID	166	16	A/N	Displays the unique identifier of the executive returned with this business.
Data Source ID	182	2	A/N	Indicates the source of the information. Possible values are: **01** - vendor1
Top Firm Indicator (Premium)	184	1	A/N	Indicates whether the business is the top firm in the relationship. Possible values are: **X** - Top Firm **Blank** - Not Top Firm

Business Record (BR01) Segment — Total length: 338 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Home Based Indicator (Premium)	185	1	A/N	Home-based business indicator. Possible values are: **Y** - Yes, business is home-based **N or Blank** - Business is not home-based
Corporate Entity Type (Premium)	186	1	A/N	Corporate entity type. Possible values are: **I** - Incorporated **P** - Partnership **L** - LLC or LLP **X** - Professional Corporation **N** - Non Profit **S** - Sole Proprietorship **C** - Cooperative **G** - Government **W** - Assumed Proprietorship **Y** - Assumed Incorporated **Blank** - Unknown *(includes other undefined codes)*
Location Status (Premium)	187	1	A/N	Type of location housed at address. Possible values are: **B** - Branch **H** - Headquarters **S** - Single Location **Blank** - Unknown *(includes other undefined codes)*
Ownership Type (Premium)	188	1	A/N	Ownership structure. Possible values are: **U or O** - Unknown (multi values-needs translation) **A or 1** - Owns (needs translation) **C or 2** - Leases (needs translation) **B** - Rents **D** - From Residence **E or L** - Other *(includes other undefined codes)*
Year Company Established (Premium)	189	4	A/N	Specifies the Year Company was established. Format is CCYY. For example: 2007
Match Type	193	2	A/N	Specifies the type of match that occurred. Possible values are:

Business Record (BR01) Segment — Total length: 338 bytes				
Field	Displacement	Length	Type	Description
				B1 - Consumer Last Name matched to the business name, and a Phone Number match, and an Address match. **B2** - Consumer Last Name matched to the business name, and an Address match, and no Phone Number match. **E1** - Consumer First Name and Last Name matched to an executive (not the top), and an Address match, and a Phone Number match. **E2** - Consumer First Name and Last Name matched to an executive (not the top), and an Address match, and no Phone Number match. **P1** - Consumer First Name and Last Name matched to an executive (either top or another), and a Phone Number Match, No Address Match, and was the only person within the Zip Code. **P2** - Consumer First Name and Last Name matched to an executive (either top or another), No Phone Number Match, No Address Match, and was the only person within the Zip Code. **P3** - Consumer First Name and Last Name matched to an executive (either top or another), and a Phone Number Match, no Address match, and was *not* the only person within the Zip Code. **R1** - Consumer Last Name matched, no First Name match to an executive (either top or another), and an Address match, and a Phone Number match. **R2** - Consumer Last Name matched, no First Name match to an executive (either top or another), and an Address match, and no Phone Number match. **T1** - Consumer First Name and Last Name match to the top executive, and an Address match, and a Phone Number match. **T2** - Consumer First Name and Last Name matched to the top executive,

Business Record (BR01) Segment — Total length: 338 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				and an Address match, and no Phone Number match.
Confidence Score (Core)	195	3	A/N	Indicates the overall confidence that the business is still an active business. *(higher number is best)*
Primary SIC (Premium)	198	8	A/N	Specifies the primary Standard Industrial Classification (SIC) code for the business. For example: 17420000
Secondary SIC (Premium)	206	8	A/N	Specifies the second SIC code on file for the business.
Third SIC (Premium)	214	8	A/N	Specifies the third SIC on file for the business.
Fourth SIC (Premium)	222	8	A/N	Specifies the fourth SIC on file for the business.
Fifth SIC (Premium)	230	8	A/N	Specifies the fifth SIC on file for the business.
Sixth SIC (Premium)	238	8	A/N	Specifies the sixth SIC on file for the business.
Seventh SIC (Premium)	246	8	A/N	Specifies the seventh SIC on file for the business.
Total Sales/ Revenue (Premium)	254	12	N	Displays the total annual sales for the business in whole dollars. For example: 0000549000 = $549,000
Sales by Location (Premium)	266	12	N	Displays sales for this location in whole dollars. For example: 0000549000 = $549,000
Total Number of Employees (Premium)	278	12	N	Displays the total number of employees for the business.
Number of Employees by Location (Premium)	290	12	N	Displays the number of employees for the location.
Primary NAICS (Premium)	302	6	A/N	Specifies the primary North American Industry Classification System (NAICS) code for the business. For example: 238310

Business Record (BR01) Segment — Total length: 338 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Secondary NAICS (Premium)	308	6	A/N	Specifies the secondary NAICS code for the business.
Third NAICS (Premium)	314	6	A/N	Specifies the third NAICS code for the business.
Sole Proprietorship Indicator (Premium)	320	1	A/N	Specifies whether the business is a Sole Proprietorship/Home Business. Possible values are: **Y** - Sole Proprietorship/Home Business **Blank** - Not Sole Proprietorship/ Home Business
Revenue Growth (Premium)	321	8	A/N	Percentage of revenue growth over time; recalculated on a quarterly basis, right justified, signed decimal. For example: 41.9855 or -0.112
Closed Date (Premium)	329	10	A/N	Date the business closed; left justified, blank filled. Date appears in the format CCYYMMDD.

CA01—Credit Availability Summary Segment

The Credit Availability Summary (CA01) segment summarizes the credit availability for a specific type of credit account on the consumer's credit file.

Credit Availability Summary (CA01) Segment — Total length: 17 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CA01**.
Segment Length	5	3	N	Value is **017**.
Summary Type	8	1	A	Specifies the type of credit account that is summarized. Possible values are: **R** Revolving and check credit accounts
Available Credit Amount	9	9	A/N	Displays the amount of credit available to the subject for the summary type. The amount is specified in whole dollars.

CC11—Credit Card Segment

The CC11 segment displays detailed information about a specific credit card. The FFR can include one CC11 segment for each of the subject's credit cards.

Credit Card (CC11) Segment — Total length: 47 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CC11**.
Segment Length	5	3	N	Value is **047**
Credit Card Type	8	2	A/N	Reserved for future use.
Credit Card Number	10	30	A/N	Displays the account number on the credit card.
Expiration Date	40	8	A/N	Displays the date the credit card expires. The date format is CCYYMMDD.

CD01—Customer Data Segment

The CD01 segment returns information sent in the FFI from subscribers.

Customer Data (CD01) Segment — Total Length: 41 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CD01**.
Segment Length	5	3	N	Value is **041**.
Customer Identifier Qualifier	8	2	A/N	Identifies the type of information sent in the Customer Identifier field. Possible values are: **5** - Subscriber's Internal User ID **6** - Service Requestor
Customer Identifier	10	20	A/N	Contains the value sent in the FFI.
Reserved for internal use	30	4	A/N	Will be blank-filled
Filler	34	8	A/N	

CH01—Characteristic Segment

The CH01 segment displays information about Score model characteristics. This segment is returned only for designated Score models.

Characteristic (CH01) Segment — Total length: 30 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CH01**.
Segment Length	5	3	N	Value is **030**.
Service Code	8	5	A/N	Identifies the algorithm ID associated with the characteristic.
Characteristic ID	13	8	A/N	Displays the model characteristic.
Characteristic Value	21	10	A/N	Identifies the characteristic value (attribute).

CI01—Consumer Identifier Segment

The CI01 segment returns the unique identifier associated with the consumer's file . If returned, it appears after the SH01 segment.

Consumer Identifier (CI01) Segment — Total length: 19 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CI01**.
Segment Length	5	3	N	Value is **019**.
Consumer Identifier	8	12	A/N	Displays the unique identifier that is assigned to the consumer file on the credit database.

CL11— Collection Account Segment

This segment displays information about a collection account for this subject.

CL11 Collection Account Segment — Total length: 213 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **CL11**.	
Segment Length	5	3	N	Value is **213**.	
Industry Code	8	2	A/N	One- or two-digit industry codes may be returned depending on subscriber setup. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.	For subscribers receiving the Enriched Credit Report, a two-digit industry code is automatically returned.
Reporting Subscriber Code	10	8	A/N	Displays the reporting subscriber's member code.	The member code is right justified with leading zeroes.
Collection Agency Name	18	30	A/N	Displays the name of the collection agency.	
Portfolio Type	48	1	A	Displays the type of account being collected. Possible values are: **R** - Revolving account **O** - Open account **C** - Line of credit **I** - Installment account **M** - Mortgage account	
Account Number	49	30	A/N	Displays the number of the account.	For Enriched Credit Reports, a maximum length of the data element delivered changes from 18 to 30.
Equal Credit Opportunity Act Designator	79	1	A	Displays the contractual ownership of the account. Possible values are: **U** - Undesignated account **I** - Individual account **C** - Joint contractual liability on account **A** - Authorized user on account **P** - Participant on account	

CL11 Collection Account Segment — Total length: 213 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				S - Co-signer on account **M** - Primary borrower on account **T** - Account relationship terminated **X** - Consumer deceased	
Account Type	80	2	A	Indicates the type of loan made by the credit grantor to the subject. Appendix C: Account Codes on page 666 lists these codes.	This data element is returned to subscribers receiving the Enriched Credit Report.
Original Creditor Name	82	30	A/N	Displays the name of the original credit grantor.	
Creditor Classification	112	2	A/N	Indicates the designation for a collection account's original creditor. Possible values are: **01** - Retail **02** - Medical/Health care **03** - Oil company **04** - Government **05** - Personal services **06** - Insurance **07** - Educational **08** - Banking **09** - Rental/Leasing **10** - Utilities **11** - Cable/Cellular **12** - Financial **13** - Credit union **14** - Automotive **15** - Check guarantee	This data element is returned to subscribers receiving the Enriched Credit Report.
Effective Date	114	8	A/N	Displays the date the account data was last verified or updated. The date format is CCYYMMDD.	
Open Date	122	8	A/N	Displays the date the account was placed with the collector. The date format is CCYYMMDD.	
Closed Date	130	8	A/N	Displays the date the account was closed by the collector.	

CL11 Collection Account Segment — Total length: 213 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				The date format is CCYYMMDD.	
Closed Date Indicator	138	1	A	Indicates how the account was closed. Possible values are: **C** - Account was closed normally **F** - Account was closed because of charge-off or repossession (that is, if the account rating is 08, 8A, 8P, 09, 9B, or 9P)	
Paid Out Date	139	8	A/N	Displays the date the collection was paid out. The date format is CCYYMMDD.	
Current Balance Amount	147	9	A/N	Displays in whole dollars the balance remaining on this account.	
Amount Placed *(renamed)*	156	9	A/N	Displays in whole dollars either the highest amount ever owed on this account or the original balance owed.	Previously *Original Balance Amount.* This field has been renamed to better describe the data element returned at this displacement.
Past Due Amount	165	9	A/N	Displays in whole dollars the amount past due on this account.	
Manner of Payment *(renamed)*	174	2	A/N	Displays the condition of the account as of the Effective Date. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	Previously *Current Account Rating*. This field has been renamed to better describe the data element returned at this displacement.
Consolidated Remark Code	176	3	A/N	Displays the Combination Remark Code, if multiple remark codes are present for the account.	This is a configuration option for the Enriched Credit Report. Special subscriber setup

CL11 Collection Account Segment — Total length: 213 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					is required to receive this data.
Filler	179	5	A/N	Reserved for future use.	
Actual Payment Amount	184	9	A/N	Specifies in whole dollars the amount of the last payment made by the subject.	This data element is returned to subscribers receiving the Enriched Credit Report and who report payment data to TransUnion.
Last Payment Date	193	8	A/N	Displays the date of the most recent payment made by the subject. The date format is CCYYMMDD.	This data field is returned to subscribers receiving the Enriched Credit Report.
Note: In the Standard Credit Report, all remark codes — Affiliate, Compliance, Generic or Rating — are returned in the Remark/Affiliate Remark Code field. If multiple remark codes are present for the account, a combination code may be returned in this field. For subscribers receiving the CreditVision® Enriched Credit Report, three new and separate data fields are returned for Generic, Rating, and Compliance remarks, and the Remark/Affiliate Remark Code field returns only affiliate remark code. Combination codes are not returned. *Refer to* Appendix C: Account Codes *on page 666 for a complete list of code definitions.*					
Remark/ Affiliate Remark Code	201	3	A/N	Specifies a type of remark related to the consumer (e.g., bankruptcy). Refer to Appendix C: Account Codes on page 666 for a list of these codes.	
Generic Remark Code	204	3	A/N	Specifies a type of remark code based on a special comment reported by the data provider. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	This data element is returned for subscribers receiving the Enriched Credit Report.
Rating Remark Code	207	3	A/N	Specifies a type of remark code related to the account status or payment rating. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	This data element is returned for subscribers receiving the Enriched Credit Report.

CL11 Collection Account Segment — Total length: 213 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Compliance Remark Code	210	3	A/N	Specifies a type of remark code required for legal compliance reasons (e.g., account in dispute). Refer to Appendix C: Account Codes on page 666 for a list of these codes.	This data element is returned for subscribers receiving the Enriched Credit Report.
Update Indicator	213	1	A	Displays the update indicator. Possible values are: **A** - Automated account **V** - Manual account **M** - Locked (frozen) account	

CL13—Account Reporting Review Collection Account Segment

This segment displays information about a collection account for this subject.

Account Reporting Review Collection Account (CL13) Segment — Total length: 230 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **CL13**.	
Segment Length	5	3	N	Value is **230**.	
Industry Code	8	2	A/N	Identifies the subscriber's industry code. Refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646 for a list of industry codes.	For subscribers receiving the CreditVision® version of Account Reporting Review, a two-digit industry code is automatically returned.
Reporting Subscriber Code	10	8	A/N	Displays the reporting subscriber's member code. Reporting Subscriber Code in this segment is returned right-justified with leading zeroes.	

Account Reporting Review Collection Account (CL13) Segment — Total length: 230 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Collection Agency Name	18	30	A/N	Displays the name of the collection agency.	
Portfolio Type	48	1	A	Displays the type of account being collected. Possible values are: **R** - Revolving account **O** - Open account **C** - Line of credit **I** - Installment account **M** - Mortgage account	
Account Number	49	30	A/N	Displays the number of the account.	For CreditVision® subscribers, the length of the data element changes from 18 to 30.
Equal Credit Opportunity Act Designator	79	1	A	Displays the contractual ownership of the account. Possible values are: **U** - Undesignated account **I** - Individual account **C** - Joint contractual liability on account **A** - Authorized user on account **P** - Participant on account **S** - Co-signer on account **M** - Primary borrower on account **T** - Account relationship terminated **X** - Consumer deceased	
Account Type	80	2	A	Indicates the type of loan made by the credit grantor to the subject. Appendix C: Account Codes on page 666 lists these codes.	
Original Creditor Name	82	30	A/N	Displays the name of the original credit grantor.	
Creditor Classification	112	2	A/N	Indicates the designation for a collection account's original creditor. Possible values are:	This is returned for subscribers receiving the CreditVision® version.

Account Reporting Review Collection Account (CL13) Segment — Total length: 230 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				01 - Retail **02** - Medical/Health care **03** - Oil company **04** - Government **05** - Personal services **06** - Insurance **07** - Educational **08** - Banking **09** - Rental/Leasing **10** - Utilities **11** - Cable/Cellular **12** - Financial **13** - Credit union **14** - Automotive **15** - Check guarantee	
Effective Date	114	8	A/N	Displays the date the account data was last verified or updated. The date format is CCYYMMDD.	
Open Date	122	8	A/N	Displays the date the account was closed. The date format is CCYYMMDD.	
Closed Date	130	8	A/N	Displays the date the account was closed by the collector. This date should appear only for one of the following reasons: **1** - The account has a zero balance, **2** - The account is paid in full, **3** - The account was closed by the collector and returned to the original owner, **4** - The account was settled for less than the amount owed. The date format is CCYYMMDD	
Closed Date Indicator	138	1	A	Indicates how the account was closed. Possible values are:	

Account Reporting Review Collection Account (CL13) Segment — Total length: 230 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				C - Account was closed normally **F** - Account was closed because of charge-off or repossession(that is, if the account rating is 08, 8A, 8D, 8P, 8R, K, KP, J, JP, 09, 9B, 9P, G, GP, L, or LP)	
Paid Out Date	139	8	A/N	Displays the date the account was paid out. The date format is CCYYMMDD.	
Current Balance Amount	147	9	A/N	Displays in whole dollars the balance remaining in this account.	For CreditVision® subscribers, the 16,000,001 cap is removed.
Amount Placed *(renamed)*	156	9	A/N	Displays in whole dollars either the highest amount ever owed on this account or the original balance owed.	Previously *Original Balance Amount*. This field has been renamed to better describe the data element returned at this displacement.
Past Due Amount	165	9	A/N	Displays in whole dollars the amount past due on this account.	For CreditVision® subscribers, the 65,000 cap is removed.
Manner of Payment *(renamed)*	174	2	A/N	Data field previously called Current Account Rating. Displays the condition of the account as of the Effective Date. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	
First Delinquency Date	176	8	A/N	Displays the date the account first became delinquent. The date format is CCYYMMDD.	
Actual Payment Amount	184	9	A/N	Specifies in whole dollars the amount of the last payment made by the subject.	This is returned for subscribers receiving the CreditVision®

Account Reporting Review Collection Account (CL13) Segment — Total length: 230 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					version of Account Reporting Review.
Last Payment Date	193	8	A/N	Displays the date of the most-recent payment made by the subject. The date format is CCYYMMDD.	
Note: In the Standard version of Account Reporting Review, all remark codes — Affiliate, Compliance, Generic, or Rating — are returned in the Remark/Affiliate Remark Code field. If multiple remark codes are present for the account, a combination code may be returned in this field. For subscribers receiving the CreditVision® version, three new and separate data fields are returned for Generic, Rating, and Compliance remarks, and the Remarks/Affiliate Remark Code field returns only affiliate remark codes. Combination codes are not returned.					
Remarks/ Affiliate Remark Code	201	3	A/N	Displays the affiliate (consumer) remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	
Generic Remark Code	204	3	A/N	Displays the generic remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes. For future use.	This data element is returned to subscribers receiving the CreditVision® version of Account Reporting Review.
Rating Remark Code	207	3	A/N	Displays the rating history remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes. For future use.	This data element is returned to subscribers receiving the CreditVision® version of Account Reporting Review.
Compliance Remark Code	210	3	A/N	Displays the compliance remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes. For future use.	This data element is returned to subscribers receiving the CreditVision®

Account Reporting Review Collection Account (CL13) Segment — Total length: 230 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					version of Account Reporting Review.
Update Indicator	213	1		Displays the update indicator. Possible values are: **A** - Automated account **V** - Manual account **M** - Locked (frozen) account	
Reported Date	214	8	A/N	Displays the date this information was reported. The date format is CCYYMMDD.	
Suppressed Date	222	8	A/N	Displays the date this account was suppressed. The date format is CCYYMMDD.	
Suppression Indicator	230	1	A/N	Indicates whether or not this account is suppressed from display to other subscribers. Possible values are: **Y** - Account is suppressed **N** - Account is not suppressed	

CORR—Segment

The CORR segment is returned for low-level errors when the system cannot read enough of the FFI to return a TU4E segment. The CORR segment returns the same TU4 error codes as the TU4E segment.

CORR (CORR) Segment — Total length: 45 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A	Value is **CORR**.
Version switch	5	1	N	Defines the TU40 FFR record version. Possible values are: **0** TU40 version 0 **1** TU40 version 1

CORR (CORR) Segment — Total length: 45 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
User reference number	6	24	A/N	Associates an FFI with an FFR. This field contains the value sent in the FFI.
First or second inquiry error response record	30	1	A	Indicates to which subject the displayed consumer information applies. Possible values are: **F** First subject **S** Second subject
First error condition encountered	31	3	N	Displays the error code. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.
Second error condition encountered	34	3	N	Displays the error code. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.
Third error condition encountered	37	3	N	Displays the error code. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.
Fourth error condition encountered	40	3	N	Displays the error code. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.
Fifth error condition encountered	43	3	N	Displays the error code. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.

CO01—County Information Segment

The CO01 segment displays information about the county associated with a specified phone number or ZIP Code. The FFR can include one CO01 segment for each phone number or ZIP Code.

County Information (CO01) Segment — Total length: 65 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CO01**.
Segment Length	5	3	N	Value is **065**.

County Information (CO01) Segment — Total length: 65 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Source Indicator	8	1	A	Indicates the source of the phone number or Zip Code for which county information is returned. Possible values are: **I** Data received in the inquiry **F** Data that appears on the TransUnion database.
Source Qualifier	9	1	A/N	Specifies the source with which the county is associated. Possible values are: **1** Phone number **2** ZIP Code
City Name	10	28	A	Specifies the city that is associated with the source phone number or ZIP Code.
State Code	38	2	A	Specifies the state that is associated with the source phone number or ZIP Code.
County	40	25	A	Specifies the county that is associated with the source phone number or ZIP Code.
County Type	65	1	A	Specifies population information about the county. Possible values are: **A** County is within one of the 25 largest MSAs **B** Population is over 150,000 **C** Population is over 35,000 **D** Population is under 35,000 ***Blank*** Indeterminate information **X** Not Requested or No Derogatory Information

CP11—Compliance Segment

The CP11 segment contains information that must be returned with a service for compliance reasons when certain conditions exist on a consumer's file.

Compliance (CP11) Segment — Total length: 80 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CP11**.

Compliance (CP11) Segment — Total length: 80 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Length	5	3	N	Value is **80**.
Information Type	8	1	A/N	Displays the type of information being reported. Possible values are: **T** - Trade account **P** - Public record
Subscriber/Source Name	9	30	A/N	Displays the name of the source of the information. For example, if the information is a trade account, the name of the reporting subscriber is returned.
Account/Docket Number	39	30	A/N	Displays one of these values: The number of the account if the information reported is a trade account The docket number if the information reported is a public record
Note: In the Standard CPE 2.0, all remark codes – Affiliate, Compliance, Generic, or Rating – are returned in the Remarks/Affiliate Remark Code field. If multiple remark codes are present for the account, a combination code may be returned in this field. For subscribers receiving the CreditVision® version of CPE 2.0, three new and separate data fields are returned for Generic, Rating, Compliance remarks, and the Remarks/Affiliate Remark Code field returns only affiliate remark codes. Combination codes are not returned.				
Remarks/Affiliate Remark Code or Public Record Type Code	69	3	A/N	Displays the affiliate (consumer) remark code if the Information Type is T. Displays the public record type code if the Information Type is P. Refer to Appendix C: Account Codes on page 666 for a list of these codes.
Generic Remark Code	72	3	A/N	If applicable, displays the generic remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes.
Rating History Remark Code	75	3	A/N	Displays the rating history remark code that applies to the information reported. If the Information Type is P, this field will be left blank. Refer to Appendix C: Account Codes on page 666 for a list of these codes. For future use.
Compliance Remark Code	78	3	A/N	Displays the compliance remark code that applies to the information reported. If the Information Type is P, this field will be left blank. Refer to Appendix C: Account

Compliance (CP11) Segment — Total length: 80 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Codes on page 666 for a list of these codes. For future use.

CR01—Contact Result Segment

The CR01 segment displays information about the specific result status for Contact Identity Services.

Contact Result (CR01) Segment — Total length: 26 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CR01**.
Segment Length	5	3	N	Value is **026**.
Listing Indicator	8	3	N	Specifies the listing for which the result applies. Listings are returned in descending order with the highest scored match returned first. Examples: 001 is returned if the results match the first listing, 002 is returned when the results match the second listing, etc.
Listing Type	11	2	A/N	Indicates the type of the response. Possible values are: **BG** Business & Government Listing Only **BR** Residential, Business & Government **RS** Residential Only ***Blank*** Unknown
Match Code	13	2	A/N	Indicates how well the input information matched to the information in the database. Refer to the description of the Contact Identity Services in Standalone Service Descriptions on page 26 for a list of these codes.
Phone Status Code	15	3	A/N	Indicates the status of the phone line. Only returned for Contact Verification Plus service. Possible values are: **010** Active

Contact Result (CR01) Segment — Total length: 26 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				011 Active in DA/Cons file – wireless **012** Active in DA/Cons file – VoIP **013** Active in DA/Cons file – unknown **020** Active landline **021** Active wireless **022** Active VoIP **023** Active – unknown **030** Inactive **031** Inactive – wireless **032** Inactive – VoIP **033** Inactive – unknown **040** Needs confirmation **041** Needs confirmation - wireless **042** Needs confirmation VoIP **043** Needs confirmation - unknown ***Blank*** if unknown
Listing Create Date	18	8	A/N	Indicates the date the phone number was listed. Format: CCYYMMDD..
Phone Availability Indicator	26	1	A	Indicates whether this phone number is published. Possible values are: ***Blank*** Unknown **P** Published **U** Unpublished

CR02—Additional Contact Result Segment

The Additional Contact Result (CR02) segment displays additional information about specific result status for the service.

Additional Contact Result (CR02) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CR02**.
Segment Length	5	3	N	Value is **022**.
Listing Indicator	8	3	N	Specifies the listing for which the result applies.

Additional Contact Result (CR02) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Listings are returned in descending order with the highest scored match returned first. For example: 001 is returned if the results match the first listing, 002 is returned when the results match the second listing, and so on.
SSN Match Indicator	11	2	A/N	Specifies the result of the SSN matching. Possible values are: **Blank** Match not performed, no SSN on file subject **01** No match **02** Reserved for future use. **03** Match (to 9-digits) **04** Match Last Four (to 4-digits)
Linking Match Indicator	13	1	A/N	Specifies whether a record is found because of internal data linking matches between different databases. Possible values are: **Blank** Record found not by linking matches or linking match not applicable **Y** Record found by linking matches
Filler	14	9	A/N	*Reserved for future use.*

CS11—Consumer Statement Segment

The CS11 segment displays the text of a consumer statement and/or a security alert submitted by the subject. The FFR can include multiple consumer statements or security alerts. Each statement or alert can reside in multiple CS11 segments.

Consumer Statement (CS11) Segment — Total length: 269 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **CS11**.
Segment Length	5	3	N	Value is **269**.

Consumer Statement (CS11) Segment — Total length: 269 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Content Type	8	2	A/N	Indicates whether the statement exists because the consumer was a fraud victim. Possible values are: **01** Regular consumer statement **02** Statement added because consumer was a victim of true-name fraud **03** State-specific security alert **04** Reserved for future use **05** Initial fraud alert **06** Extended fraud alert **07** Active military duty alert
Actual Statement Length	10	4	N	Indicates the number of characters in the statement. If more than one segment is required for the statement or alert, this value is the sum of the characters in all the segments.
Current Segment Number	14	3	N	Identifies the position, or sequence number, of the current CS11 segment. If the statement requires more than one segment, this value allows the segments to appear in the correct order. For example, if two CS11 segments are returned, the first segment has a value of 1 in this field and the second CS11 segment has a value of 2.
Total Segment Number	17	3	N	Specifies the total number of CS11 segments returned to hold this statement or alert.
Statement	20	250	A/N	Displays the free-form text of the consumer statement or fraud or security alert. The FFR may include multiple CS11 segments that together comprise one complete consumer statement or fraud or security alert message. The FFR can contain multiple content types, each returned in multiple CS11 segments.

DA01—Data Analysis Segment

The DA01 segment displays the results of a series of comparison checks performed on the subject's input identification or subscriber number data. This segment is currently used only by Fraud Detect.

Data Analysis (DA01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DA01**.
Segment Length	5	3	N	Value is **022**.
Identification or Customer Number Qualifier	8	2	N	Indicates the type of number checked. Possible values are: **1** - SSN **2** - Federal tax ID **3** - State ID **4** - Driver's license **5** - Credit card number **6** - Phone number
Invalid Format	10	2	N	Indicates whether the format provided is valid. If not, specifies the invalid element. Possible values are: **1** - Valid **2** - Too short **3** - Too long **4** - Invalid characters **5** - Invalid format with separators **9** - Not requested or no derogatory information
Soundex Check	12	1	N	Specifies whether the soundex value is valid. Possible values are: **1** - Valid **2** - Invalid **3** - N/A **4** - Unavailable **9** - Not requested or no derogatory information
Last Name Check	13	1	N	Specifies whether the last name is valid. Possible values are: **1** - Valid **2** - Invalid **3** - N/A **4** - Unavailable **9** - Not requested or no derogatory information
First Name Check	14	1	N	Specifies whether the first name is valid. Possible values are:

Data Analysis (DA01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				1 - Valid **2** - Invalid **3** - N/A **4** - Unavailable **9** - Not requested or no derogatory information
Middle Name Check	15	1	N	Specifies whether the middle name is valid. Possible values are: **1** - Valid **2** - Invalid **3** - N/A **4** - Unavailable **9** - Not requested or no derogatory information
SSN Check	16	1	N	Specifies whether the Social Security number is valid. Possible values are: **1** - Valid **2** - Invalid **3** - N/A **4** - Unavailable **9** - Not requested or no derogatory information
DOB Check	17	1	N	Specifies whether the date of birth is valid. Possible values are: **1** - Valid **2** - Invalid **3** - N/A **4** - Unavailable **9** - Not requested or no derogatory information
Gender Check	18	1	N	Displays the gender specified on the ID. Possible values are: **1** - Male **2** - Female **3** - N/A **9** - Not requested or no derogatory information
Eye Color Check	19	1	N	Displays the eye color specified on the ID. Possible values are:

Data Analysis (DA01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				1 - Black **2** - Brown **3** - Gray **4** - Blue **5** - Hazel **6** - Green **7** - Other **8** - N/A **9** - Not requested or no derogatory information
Expiration Date Check	20	1	N	Indicates whether the expiration date is valid. Possible values are: **1** - Valid **2** - Card is expired **3** - N/A **9** - Not requested or no derogatory information
Match Evaluation	21	2	A/N	Indicates whether the input data matches the data contained on the database. Match values are: **01** - Identification or number equals input name **02** - Identification or number does not equal input name **03** - Identification or number equals input address **04** - Identification or number does not equal input address **05** - Identification or number partially matches input name **06** - Identification or number partially matches input address

DB01—Decision Systems Customer Branch Segment

The DB01 segment returns information sent in the FFI that helps to identify Decision Systems subscribers.

Decision Systems Customer Branch (DB01) Segment — Total Length: 59 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DB01**.
Segment Length	5	3	N	Value is **059**.
Branch ID	8	10	A/N	Identifies the branch of the requesting subscriber. This field contains the value sent in the FFI.
Branch Type	18	2	A/N	For future use.
Client Use 1	20	20	A/N	Provides additional information specific to the subscriber. This field contains the value sent in the FFI.
Client Use 2	40	20	A/N	Provides additional information specific to the subscriber. This field contains the value sent in the FFI.

DC11—Deceased Information Segment

The DC11 segment contains information received from the Social Security Administration (SSA). This data is sourced by deaths reported directly to the SSA or from funeral directors across the USA. Note that the SSA does not guarantee the veracity of this file.

Deceased Information (DC11) Segment — Total length: 167 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DC11**.
Segment Length	5	3	N	Value is **167**.
Message Code	8	6	A/N	If the High Risk Fraud Alert add-on is requested, this field displays message code **6000**. This field is blank for Fraud Detect, Identity Manager Verification, Identity Manager Verification 2.0, and Total ID.
Source Indicator	14	1	A/N	Indicates the source of the message code. Possible values are: **I** Data received in the inquiry **F** Data that appears in the TransUnion database
Last Name	15	32	A	Displays the last name of the subject who has been reported deceased.
First Name	47	20	A	Displays the first name of the subject who has been reported deceased.

Deceased Information (DC11) Segment — Total length: 167 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Name Suffix	67	4	A/N	Displays the name suffix of the subject who has been reported deceased.
City Last Residency	71	28	A	Displays the city where the subject last resided when the claim payments were made. City name is derived from ZIP Code on the file.
State Last Residency	99	2	A	Displays the state where the subject last resided when the claim payments were made. State name is derived from ZIP Code on the file.
ZIP Code Last Residency	101	10	A/N	Displays the ZIP Code for the subject's last residence when the claim payments were made.
City Location of Payments	111	28	A	Displays the city that is the location where claim payments were made. City name is derived from ZIP Code on the file.
State Location of Payments	139	2	A	Displays the state that is the location where claim payments were made. State name is derived from ZIP Code on the file.
ZIP Code Location of Payments	141	10	A	Displays the ZIP Code that is the location where claim payments were made.
Date of Birth of Deceased	151	8	A/N	Displays the reported date of birth. Date format is CCYYMMDD.
Date of Death Claim	159	8	A/N	Displays the date on which death benefits were applied for. Date format is CCYYMMDD.
Deceased Information File Searched	167	1	A	Specifies whether a Deceased Information File search was performed. Possible values are: **Y** Search performed **N** Search not performed

DI01—Decision Systems Custom Information Segment

The DI01 segment returns information sent in the FFI from Decision Systems subscribers.

Decision Systems Custom Information (DI01) Segment — Total Length: 33 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DI01**.
Segment Length	5	3	N	Value is **033**.
Input Type	8	2	A/N	Contains the value sent in the FFI. Possible values for position 1 are: **S** - Short **L** - Long Possible values for position 2 are: **1-8** - Short **1-4** - Long
Custom Input	10	24	A/N	Contains the value sent in the FFI. Positions 1–10 are used if Input Type is Short; positions 1–24 are used if Input Type is Long.

DR01—Decision Systems Response Segment

The DR01 segment returns information that identifies subscriber settings in Decision Systems services.

Decision Systems Response (DR01) Segment — Total Length: 193 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **DR01**.
Segment Length	5	3	N	Value is **193**.
Reference Number	8	12	A/N	Specifies a unique reference identifier assigned to each applicant through a TransUnion Decision Systems service.
Decision Class	20	1	A/N	Specifies the decision class of the applicant. Possible values are: **A** - Pass (approval) **D** - Complete (decline)

Decision Systems Response (DR01) Segment — Total Length: 193 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				R - Review **X** - None/Complete
Decision Text	21	10	A/N	Specifies the decision text of applicant. Possible values are: **Pass** **Complete** **Review** **None**
Level	31	2	N	Specifies the final decision level number.
Level Code	33	1	A/N	Specifies an alphabetic code that denotes the final decision level.
Timestamp	34	14	N	Specifies the date and time at which the Decision Systems service returned a decision. The value is returned in the CCYYMMDDHHMMSS format.
Maximum Level	48	2	N	Specifies the maximum level attainable. This value depends on the subscriber.
Level Reasons	50	44	A/N	Designates the fail reason from each credit level (credit level processed).
DS Reasons	94	44	A/N	Designates the fail reasons in compressed format (no duplicates), or reason codes specific to the subscriber.
Credit Limit	138	9	N	Specifies the credit line that the Decision Systems service assigned to approval records.
Bureau ID	147	1	N	Specifies the bureau ID that was used to process the applicant. Possible values are: **1** - Equifax **2** - TransUnion **3** - Experian
Credit Bureau Error Code	148	3	A/N	Identifies the error code returned by the credit bureau in response to invalid input in the FFI.

Decision Systems Response (DR01) Segment — Total Length: 193 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Address Mismatch Alert	151	1	A/N	Identifies an Address Mismatch Alert. Possible conditions are: **C** - Current address mismatch **P** - Previous address mismatch **B** - Both addresses mismatch **N** - No mismatch Instant Prescreen shows a blank in this field if no Address Mismatch Alert information is returned.
Fraud Alert	152	1	A/N	This field may contain the following values: **Y** - Fraud Alert **N** - No Fraud Alert A blank in this field indicates that no fraud alert information is returned.
Credit Data Status	153	1	A/N	This field may contain the following values: **Y** - Credit data suppressed **N** - Credit data not suppressed **P** - Do not promote **F** - Frozen by consumer as allowed by state law. To obtain access you must obtain authorization from the consumer and provide the required identifier with your inquiry. **E** - Frozen by consumer as allowed by state law. File is returned due to exempted use. **X** - Frozen by consumer as allowed by state law. File is returned due to exempted use. Do Not Promote. **D** - Not returned: per state law disputed data on file. **M** - Not returned: file may belong to a minor, verify consumer identity. If there is an error concerning the consumer's age, please have the consumer contact TransUnion's Consumer Relations at (800)

Decision Systems Response (DR01) Segment — Total Length: 193 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				888-4213 to obtain a copy of his/her Consumer Disclosure.
Account Number	154	24	A/N	Specifies the account number that the Decision Systems service assigned to the applicant record.
Criteria Name	178	6	A/N	Name of final criteria matrix; used only if process is multi-matrix.
Special Use	184	10	A/N	Used for special subscriber requests.

ED01—Edit Segment

The ED01 segment displays information that was removed or changed to avoid rejection of the inquiry. One ED01 segment is returned for each edit action immediately after the applicable SH01 segment.

Edit (ED01) Segment — Total length: 61 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ED01**.
Segment Length	5	3	N	Value is **061**.
Subject Identifier	8	1	N	Indicates the subject that was edited. Possible values are: **1** First subject **2** Second subject
Original Value	9	50	A/N	Contains the original value in the FFI subject input field that was edited.
Edit Code Number	59	3	A/N	Displays a code that describes the edit. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible codes.

EF01—Extended Fields Segment

The EF01 segment contains enhanced data for Contact Identity Services. This segment is returned only if the subscriber's settings in the validation file are activated for this information and the information is available. One EF01 segment may be returned for each listing.

Extended Data (EF01) Segment — Total length: 61 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **EF01**.
Segment Length	5	3	N	Value is **061**.
Listing Indicator	8	3	A/N	Specifies the listing for which the result applies. Listings are returned in descending order with the highest scored match returned first. Examples: 001 is returned if the results match the first listing, 002 is returned when the results match the second listing, etc.
Delivery Point	11	2	A/N	Displays U.S. Postal Service standardized delivery point code (the last two digits of ZIP+6), if available.
Check Digit	13	1	A/N	Displays U.S. Postal Service standardized delivery point check digit, if available.
Latitude	14	12	A/N	Displays standardized latitude in decimal format (negative or positive), if available. Format is XXX.XXXXXXX Example: 38.926583
Longitude	26	12	A/N	Displays standardized longitude in decimal format (negative or positive), if available. Format is XXX.XXXXXXX. Example: -77.032405
Congressional District	38	2	A/N	Displays Federal congressional district code, if available. Can be returned for non-published listings.
Carrier route	40	4	A/N	Displays U. S. Postal Service standardized carrier route, if available.
Sort Zone	44	1	A/N	Displays U. S. Postal Service standardized sort zone, if available. Automated mailing equipment sorting zone instructions.
FIPS	45	5	A/N	Displays county code from Federal information Processing Standards. Includes 2-digit numeric code and a set of two-letter alphabetic codes representing the 50 states, DC, and outlying areas of the U.S.
Line Type	50	2	A/N	*Reserved for future use.*

Extended Data (EF01) Segment — Total length: 61 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
MSA/MD Coder	52	5	N	Displays the Metropolitan Statistical Area/ Metropolitan Division (MD) area number. Can be returned for non-published listings.
CMSA	57	5	A/N	Displays the Consolidated Metropolitan Statistical Area code. These are a group of MSAs, such as a Consolidated MSA for San Francisco, which includes San Francisco, Oakland, and San Jose.

EM11—Employment Segment

The EM11 segment contains the subject's employment information.

Employment (EM11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **EM11**.	
Segment Length	5	3	N	Value is **130**.	
Source Indicator	8	1	A/N	Indicates the source of the employment information. Possible values are: **A** - Employment is active and appears on vendor database **D** - Data that appears on vendor database **F** - Data that appears in the TransUnion database **I** - Data received in the inquiry **N** - Employment is inactive and appears on vendor database	
Employer Name	9	50	A/N	Identifies the name of the subject's employer. For the Small Business Identification service, this field contains the Business Name associated with the contact.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered

Employment (EM11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					changes from 35 to 50.
Occupation	59	30	A/N	Identifies the subject's type of employment. For the Small Business Identification service, this field contains the Contact Title.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 22 to 30 and will also include change of occupation with the same employer.
Hire Date	89	8	A/N	Displays the date the employer hired the subject. Date appears in the format CCYYMMDD.	
Filler	97	8	A/N	Previously End Employment Date. This field is removed because it is not reported; becomes a filler field.	
Reported Date	105	8	A/N	Displays the date this employment record was first reported to TransUnion. Date appears in the format CCYYMMDD.	
Effective Date	113	8	A/N	Displays the date this information was last verified. Date appears in the format CCYYMMDD. For the Small Business Identification service, this field contains the Executive Update Date.	
Income	121	9	A/N	Displays subject's salary at this employment. The figure appears in dollars unless the Pay Basis is H (hourly). Hourly pay appears as dollars and cents.	
Pay Basis	130	1	A	Lists the subject's pay schedule. Possible values are:	

Employment (EM11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				B - Bimonthly (every other month) **D** - Daily **H** - Hourly **M** - Monthly **S** - Semimonthly (twice a month) **W** - Weekly **Y** - Yearly	

END1—Transaction Ending Segment

The END1 segment signifies the end of the FFR.

Transaction Ending (END1) Segment — Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **END1**.
Segment Length	5	3	N	Value is **12**.
Total Number of Segments	8	5	N	Specifies the total number of segments contained in this transaction, including TU4R and END1.

ERRC—Error Code Segment

The ERRC segment displays the code of the error that occurred while this transaction was being processed.

Error Code (ERRC) Segment — Total length: 11 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ERRC**.
Segment Length	5	3	N	Value is **011**.
Subject Identifier	8	1	N	Indicates to which subject the displayed consumer information applies. Value returned is:

Error Code (ERRC) Segment — Total length: 11 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				1 First subject
Error Code Number	9	3	A/N	Displays the error code. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.

ERRT—Error Text Segment

The ERRT segment displays the full message text of an error code that was returned to the subscriber.

Error Description/Text (ERRT) Segment — Total length: 90 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ERRT**.
Segment Length	5	3	N	Value is **090**.
Subject Identifier	8	1	N	Indicates to which subject the displayed consumer information applies. Value returned is: **1** - First subject
Error Code Number	9	3	A/N	Specifies the error code for the error that was found. Refer to Appendix F: Edit and Error Codes on page 683 for a list of possible error codes.
Error Description	12	79	A/N	Contains the text corresponding to the error code that was returned.

FA11—Future Address Segment

The FA11 segment is used by Geo Code. The fields and field attributes are identical to those of the AD11 segment except that the Segment Type is FA11.

A subject record can contain only one FA01 segment.

Future Address (FA11) Segment — Total Length: 150 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **FA11**.
Segment Length	5	3	N	Value is **150**.
Source Indicator	8	1	A	Indicates the source of the address information. Possible values are: **I** - Data received in the inquiry **F** - Data that appears in the TransUnion database
Address Qualifier	9	1	A/N	Indicates whether the returned address is personal or employment. Possible values are: **1** - Personal **2** - Employment **5** - Business **6** - Both Residential and Business Address or not known **P** - Previous personal address (previous addresses are positional: the most recent previous address always precedes the second most recent).
Address Classification Code	10	1	A/N	Indicates the classification of the address per the United States Post Office. Possible values are: **1** - U.S. basic **2** - Overseas military **3** - Territory or protectorate **4** - Other Blank if not known.
Standardized Flag	11	1	A/N	Indicates whether the address is standardized or not. Possible values are: **Y** - Address is standardized **N** - Address is not standardized or is partially standardized Blank if not known.
Address Type	12	1	A/N	Indicates classification of the address. Possible values are: **0** - Conventional address

Future Address (FA11) Segment — Total Length: 150 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				1 - Post office box **2** - Rural route **3** - Highway contract **4** - General delivery **5** - Firm address **8** - Postmaster **9** - Not determined Blank if not known.
Address Number	13	10	A/N	Identifies the subject's house or post office box number in a street address.
Predirectional	23	2	A	Specifies the street directional (N, S, E, W, NE, SE, NW, SW) in a street address.
Street Name	25	28	A/N	Specifies the subject's street name, rural route, or post office box in a street address.
Postdirectional	53	2	A	Specifies a street directional (N, S, E, W, NE, SE, NW, SW) that appears after a street name.
Street Type	55	4	A	Specifies the primary type of street in a street address.
Unit Type	59	4	A	Identifies the type of unit number that follows. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid unit type codes.
Unit Number	63	10	A/N	Specifies a unit number in a street address.
City Name	73	28	A	Specifies the name of the subject's city.
State Code	101	2	A	Specifies the two-digit state code of the subject's state.
ZIP Code	103	5	A/N	Specifies the subject's ZIP Code. This field is left justified.
ZIP Extension Code	108	4	A/N	Specifies the subject's ZIP extension code. This field is left-justified.
Urbanization Name	112	30	A/N	Specifies the name of a condominium for Puerto Rico addresses only.
Date Reported	142	8	A/N	Specifies the date this address was reported in the format CCYYMMDD.
Housing Status	150	1	A/N	Indicates the type of housing a person lives in. Possible values are:

Future Address (FA11) Segment — Total Length: 150 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				O - Own **R** - Rent **B** - Board Blank if not known.

FI01—Collection Credit Report Special Indicators Segment

The FI01 segment displays additional information for Collection Credit Report [FACT] subscribers.

Collection Credit Report Special Indicators (FI01) Segment — Total length: 23 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **FI01**.
Segment Length	5	3	N	Value is **023**.
Subject Deceased	8	1	A	Specifies whether the subject is deceased. Possible values are: **Y** - Deceased **N** - Not deceased
Last Activity Type	9	1	A	Specifies the type of activity that was last performed by or for this subject. Possible values are: **P** - Public record **T** - Tradeline **I** - Inquiry If this field is blank, no activity occurred within the last 12 months.
Date of Last Activity in the Last 12 Months	10	8	A/N	Specifies the date (within the last 12 months) of the subject's last activity. The date format is CCYYMMDD.
Number of Trades	18	3	N	Specifies the total number of tradelines in the file.
Number of Inquiries	21	3	N	Specifies the total number of inquiries in the file.

FT01—Collection Credit Report Segment

The FT01 segment displays trade and collection account information for Collection Credit Report.

Collection Credit Report (FT01) Segment — Total length: 84 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **FT01**.
Segment Length	5	3	N	Value is **084**.
Subscriber Name	8	12	A/N	Displays the subscriber's name.
Subscriber Area Code	20	3	A/N	Displays the subscriber's area code.
Subscriber Phone Number	23	7	A/N	Displays the subscriber's phone number. The number contains no embedded dashes. If the subscriber prefers to be contacted by mail only, the letters BMO are returned in this field.
Portfolio Type	30	1	A	Specifies the type of trade account. Possible values are: **R** - Revolving account **O** - Open account **C** - Line of credit **I** - Installment account **M** - Mortgage account
Account Number	31	30	A/N	Displays the trade's account number.
Last Payment Date *(renamed)*	61	8	A/N	Data field originally called Date of Last Activity. Specifies the date (within the last 12 months) of the subject's last activity. The date format is CCYYMMDD.
Trade Status	69	3	A	Specifies the status of the account. Possible values are: **COL** - Collection set (if KOB is Y or MOP is 9B) **CLS** - Paid or closed (if Date Paid or Date Closed is not equal to spaces) **DLQ** - Delinquent (if rating or MOP is greater than or equal to 02) **CUR** - Current (if rating or MOP is equal to 01) **NRT** - No rating (this is the default if none of the above statuses is true)

Collection Credit Report (FT01) Segment — Total length: 84 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				NOA - No activity (open but with no activity in the last 12 months)
Available Credit Amount	72	9	A/N	Specifies the amount of credit balance available after subtracting the current balance from the credit limit.
New Trade Indicator	81	1	A	Specifies whether the trade is new (less than 4 months old). Possible values are: **Y** - Trade has been open less than 4 months **N** - Trade has been open for 4 or more months
Debt Counseling Indicator	82	3	A/N	Specifies the type of counseling involved in servicing this debt. Possible values are: **MCC** - Account managed by Credit Counseling Service **CCA** - Consumer Counseling Account If neither of these services is involved, the field is blank.

GC01—Geo Code Segment

The GC01 segment contains address and Geo Code data. One or two GC01 segments may be returned for each consumer's primary file.

Geo Code (GC01) Segment — Total length: 54 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **GC01**.
Segment Length	5	3	N	Value is **054**.
Address Indicator	8	1	A/N	Indicates whether the address is current or future. Possible values are: **C** Current Address **F** Future Address
ZIP Code	9	9	A/N	Specifies the subject's ZIP Code. The format is: NNNNNNNNN

Geo Code (GC01) Segment — Total length: 54 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
GEO Status	18	2	A/N	Indicates the status of the Geo Code search. Possible values are: **0** Geo Code No Match **1** ZIP Code Invalid **2** Geo Code Match **3** Geo Code Search Not Performed When No Subject Found **4** No Future Address Entered **5** No Current Address Entered **6** Insufficient Future Address **7** Insufficient Current Address **8** Geo Code Search Error **9** Geo Code Not Available
Filler	20	2	A/N	
MSA/MD Code	22	5	N	Returns the Metropolitan Statistical Area/ Metropolitan Division (MD) area number.
State Code	27	2	A/N	Returns subject's state code. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of state codes.
County Code	29	3	A/N	Returns the subject's county code.
Census Tract Code	32	4	A/N	Returns the subject's 4-character census tract code.
Census Tract Suffix	36	2	A/N	Returns the subject's census tract suffix.
Block Code	38	1	A/N	Returns the subject's census block code number.
Latitude	39	8	A/N	Returns the latitude of the subject's address as it appears in the Demographic Codes record. The format is 999v9999.
Longitude	47	8	A/N	Returns the longitude of the subject's address as it appears in the Demographic Codes record. The format is 999v9999.

ID01—Identification Segment

The ID01 segment displays the number or value of a specified ID. The FFR can include one ID01 segment for each subject identification item (driver's license, federal tax ID, or state ID).

Identification (ID01) Segment — Total length: 49 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ID01**.
Segment Length	5	3	N	Value is **049**.
Source Indicator	8	1	A	Indicates the source of the ID information. Possible values are: **I** Data received in the inquiry **F** Data that appears in the TransUnion database
ID Type	9	1	N	Specifies the type of ID described in this segment. Possible values are: **1** Driver's License **2** Federal Tax ID **3** State ID
ID Number or Value	10	30	A/N	Displays the number or value of the specified ID.
Expiration Date	40	8	A/N	Displays the date the specified ID expires. The date format is CCYYMMDD.
State of Issuance	48	2	A	Identifies the state that issued the ID.

ID02—Miscellaneous Identification Segment

The ID02 segment displays the identification data that may be returned by some services.

Miscellaneous Identification (ID02) Segment — Total length: 265 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ID02**.
Segment Length	5	3	N	Value is **265**.
Source Indicator	8	1	A	Indicates the source of the ID information. Possible values are: **I** Data received in the inquiry

Miscellaneous Identification (ID02) Segment — Total length: 265 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				F Data that appears in the TransUnion database **C** Data that appears on TransUnion non-credit database **D** Data that appears on vendor database **A** Data that application generated
ID Type	9	2	A/N	Specifies the type of ID that this segment identifies. Valid values are **01** Transaction Tracking ID **02** Quote ID **03** Partner ID **04** Program ID **05** Dealer ID **10** Vendor Access/User ID **99** Other Type of ID
ID Number or Value	11	255	A/N	Lists the contents of the ID, such as an insurance Quote ID or a vendor User ID.

IN11—Inquiry Segment

The IN11 segment identifies the origin of an inquiry that appears on this subject file.

Inquiry (IN11) Segment — Total length: 84 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **IN11**.	
Segment Length	5	3	N	Value is **084**.	
Inquiring Subscriber Prefix Code (Bureau Market and Submarket)	8	4	A/N	Identifies the inquiring subscriber's inquiry subscriber prefix code	
Industry Code	12	2	A/N	Specifies the inquiring subscriber's two-character industry code. Refer to Appendix B: Industry and Use Type Permissible Purpose	For subscribers receiving the Enriched Credit Report, a two-digit industry code is

Inquiry (IN11) Segment — Total length: 84 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				Codes on page 646 for a list of industry codes.	automatically returned.
Inquiring Subscriber Code	14	8	A/N	Specifies the inquiring subscriber's member code.	Member code in this segment is returned right-justified with leading zeroes.
Subscriber Name	22	30	A/N	Identifies the name of the subscriber who made this inquiry.	
Equal Credit Opportunity Act Designator	52	1	A	Identifies the inquiry type. Possible values are: **I** - Individual **C** - Contractually liable **A** - Authorized or spouse user **P** - Participating	
Account Type	53	2	A	Identifies the type of account for which the inquiry was made. Refer to Appendix C: Account Codes on page 666 for a list of account type codes.	
Inquiry Date	55	8	A	Displays the date on which the inquiry was made. The date format is CCYYMMDD.	
Requestor's Name	63	20	A/N	Identifies the end user of the requested service.	
Filler	83	2	A/N	For future use.	

IN12—Collection Credit Report Inquiry Segment

The IN12 segment is used for Collection Credit Report and identifies the origin of an inquiry on this subject file.

Collection Credit Report Inquiry (IN12) Segment —Total length: 84 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **IN12**.
Segment Length	5	3	N	Value is **084**.

Collection Credit Report Inquiry (IN12) Segment —Total length: 84 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Subscriber Name	8	30	A	Identifies the subscriber making the inquiry.
Subscriber Area Code	38	3	N	Specifies the area code for the subscriber's phone number.
Subscriber Phone Number	41	7	A/N	Specifies the phone number, which should have no embedded dashes. If the subscriber prefers to be contacted by mail only, the letters BMO are returned in this field.
Extension	48	5	N	Specifies a telephone extension.
Account Type	53	2	A	Identifies the type of account for which the inquiry was made. Refer to Appendix C: Account Codes on page 666 for a list of account type codes.
Inquiry Date	55	8	A/N	Displays the date on which the inquiry was made. The date format is CCYYMMDD.
Requestor's Name	63	20	A/N	Identifies the end user of the requested service.
Filler	83	2	A/N	*For future use.*

LK11 — Creditor Contact Information Segment

The LK11 segment contains information that describes the results of a Creditor Contact Information or Creditor Contact Search request. The FFR can include one LK11 segment per decoded segment.

Note: The LK11 segment may be returned for compliance reasons and not necessarily as part of the Creditor Contact products. For example, if the consumer's current address is California and a public record resides on the file, the LK11 segment will be returned.

Creditor Contact Information (LK11) Segment — Total length: 54 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **LK11**.	
Segment Length	5	3	N	Value is **054**.	
Segment Decoded	8	2	A/N	Identifies the type of segment that Creditor Contact Information or Creditor	

Creditor Contact Information (LK11) Segment — Total length: 54 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				Contact Search is decoding. Possible values are: **PR** - Public record **TR** - Trade account **IN** - Inquiry **CL** - Collection account	
Inquiry Subscriber Prefix Code (Bureau Market and Submarket)	10	4	A/N	Identifies the inquiry subscriber prefix code (formerly known as the subscriber's market and submarket) of the subscriber being looked up.	
Industry Code	14	2	A/N	Identifies the industry code of the subscriber being looked up. Refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646 for a list of industry codes.	
Inquiring Subscriber Code	16	8	A/N	Specifies the inquiring subscriber's member code.	Member code in this segment is returned right-justified with leading zeroes.
Subscriber Name	24	30	A/N	Displays the name of the subscriber being looked up.	
Method of Contact	54	1	A/N	Specifies the method by which to contact the subscriber. Possible values are: **P** - Phone **M** - Mail **O** - Other	

MC01—Message Code Segment

The MC01 segment displays a message code that identifies the message returned. The FFR includes an MC01 segment for each message returned.

Message Code (MC01) Segment — Total length: 29 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **MC01**.	
Segment Length	5	3	N	Value is **029**.	
Message Code	8	6	A/N	Displays the message code.	
Source Indicator	14	1	A/N	Indicates the source of the message code. Possible values are: **I** Data received in the inquiry **F** Data that appears in the TransUnion credit database **A** Data that appears in the Source A database **B** Data that appears in the Source B database **D** Data that appears in the Source D database **C** Data that appears in the Source C database **H** Data that appears in the Source H database	For Identity Manager Verification 2.0 (service code: 06672 and 06682), the D value indicates data that appears on a vendor database and the C value indicates data that appears on the TransUnion non-credit database.
Address Match Flag	15	1	A/N	Indicates which address was used in the matching process. Possible values are: **C** Current address **P** Previous address	
POB, Apartment Number, Unit, or Telephone Indicator	16	1	A/N	Specifies the type of number returned. Possible values are: **U** Unit or apartment number **P** Post Office Box number **T** Telephone number	
POB, Apartment Number, Unit, or Telephone Number	17	10	A/N	Displays the number returned.	
Threshold Number	27	3	A/N	Specifies the threshold number used to return the message. For Identity Manager Verification only, values are:	

Message Code (MC01) Segment — Total length: 29 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				001 No match **002** Match **003** Partial match **004** Not found **005** Match to last four digits	

MI01—Miscellaneous Statement Segment

The MI01 segment displays the text of a miscellaneous statement, such as additional information about a subject's credit history.

Miscellaneous Statement (MI01) Segment — Total length: 77 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **MI01**.
Segment Length	5	3	N	Value is **077**.
Information	8	70	A/N	Displays the free-form text of various messages or statements, such as a miscellaneous statement about the subject's credit history.

ML01—Mileage Segment

The ML01 segment displays mileage between the subject's home and business by comparing the home and business phone numbers or ZIP Codes.

Mileage (ML01) Segment — Total length: 26 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ML01**.
Segment Length	5	3	N	Value is **026**.
Source Indicator	8	1	A	Indicates the source of the phone numbers or ZIP Codes that are being compared. Possible values are:

Mileage (ML01) Segment — Total length: 26 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				I Data received in the inquiry **F** Data that appears in the TransUnion database
Max Mileage	9	8	A/N	Specifies the maximum mileage between the home and business. The mileage is displayed in the format NNNN.NNN.
Max Mileage Indicator	17	1	N	Specifies the comparison used to determine the Max Mileage value. Possible values are: **1** Home vs. business phone numbers **2** Home phone number vs. business ZIP Code **3** Home ZIP Code vs. business phone number **4** Home vs. business ZIP Codes **5** Not available **9** Not requested or no derogatory information
Min Mileage	18	8	A/N	Specifies the minimum mileage between the home and business. The mileage is displayed in the format NNNN.NNN.
Min Mileage Indicator	26	1	N	Specifies the comparison used to determine the Min Mileage value. Possible values are: **1** Home vs. business phone numbers **2** Home phone number vs. business ZIP Code **3** Home ZIP Code vs. business phone number **4** Home vs. business ZIP Codes **5** Not available **9** Not requested or no derogatory information

ML02—Mileage Segment

The ML02 segment displays mileage calculations between the subject's home and business by comparing the home and business phone numbers or ZIP Codes.

Mileage (ML02) Segment — Total length: 40 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ML02**.
Segment Length	5	3	N	Value is **040**.
Source Indicator	8	1	A	Indicates the source of the phone numbers or ZIP Codes that are being compared. Possible values are: **I** Data received in the inquiry **F** Data that appears in the TransUnion database
Home Vs. Business Phone Numbers Mileage	9	8	A/N	Specifies the mileage between the home phone and business phone number. The mileage is displayed in the format NNNN.NNN. This field is blank when the data is not available.
Home Phone Number Vs. Business ZIP Code Mileage	17	8	A/N	Specifies the mileage between the home phone number and business ZIP Code. The mileage is displayed in the format NNNN.NNN. This field is blank when the data is not available.
Home ZIP Code Vs. Business Phone Number Mileage	25	8	A/N	Specifies the mileage between the home ZIP Code and business phone number. The mileage is displayed in the format NNNN.NNN. This field is blank when the data is not available.
Home Vs. Business ZIP Code Mileage	33	8	A/N	Specifies the mileage between the home ZIP Code and business ZIP Code. The mileage is displayed in the format NNNN.NNN. This field blank when the data is not available.

MT01—Message Text Segment

The MT01 segment contains message text. The FFR includes an MT01 segment for each message returned. If the message is longer than 150 characters, multiple MT01 segments are returned to hold the message.

Message Text (MT01) Segment — Total length: 171 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **MT01**.
Segment Length	5	3	N	Value is **171**.
Message Code	8	6	A/N	Identifies the message issued.
Actual Message Length	14	3	N	Indicates the message length (in number of characters). If more than one segment is required, this value is the sum of the characters in all the segments.
Current Segment Number	17	1	N	Identifies the position (or sequence number) of the current MT01 segment. If the message text requires more than one segment, this value allows the segments to appear in the correct order. For example, if two MT01 segments are returned, the first segment has a value of 1 in this field and the second MT01 segment has a value of 2.
Total Segment Number	18	1	N	Specifies the total number of MT01 segments returned to hold this message.
Threshold Number	19	3	A/N	Specifies the threshold number used to return the message. For Identity Manager Verification, values are: **A01** Source A no match **A02** Source A match **A03** Source A partial match **A04** Source A not found **A05** Source A match to last four digits **C01** Source C no match **C02** Source C match **C03** Source C partial match **C04** Source C not found **C05** Source C match to last four digits

Message Text (MT01) Segment — Total length: 171 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				For Authorized User Alert, the value is: **nnn** Returned number depends on the message code: • For AH01, returns the number of authorized user accounts • For AH98, returns the percentage of satisfactory open revolving accounts that are authorized user accounts
Message Text	22	150	A/N	Contains the message text associated with the message code. For ARM Alert, this field may contain multiple ARM record data fields. Refer to Add-on Service Descriptions on page 178 for more information about the ARM Alert add-on service response.

NM11—Name Segment

The NM11 segment lists the name of the subject and indicates whether this name is the primary, also reported as, or business name. For each subject in a file, the FFR can include multiple NM11 segments.

Name (NM11) Segment — Total length: 123 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **NM11**.	
Segment Length	5	3	N	Value is **123**.	
Source Indicator	8	1	A	Indicates the source of the name information. Possible values are: **I** - Data received in the inquiry	For services where the telephone information is the main focus (Contact Locator, Contact Verification, Contact

Name (NM11) Segment — Total length: 123 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				F - Data that appears on the TransUnion credit database **B** - Data that appears on database that best matches input **A** - Data that appears on the RPA database **D** - Data that appears on vendor database **C** - Data that appears on the TransUnion non-credit database **Q** - Data that appears on consumer inquiry **E** - Data that appears on vendor's aggregated database	Verification Plus, and Phone Append) the **F** value indicates telephone company-sourced information; the **C** value indicates TransUnion credit database-sourced information.
Name Indicator	9	1	A/N	Defines the type of name that is returned. Possible values are: **1** - Primary name **3** - Also reported as name **5** - Business/government name **6** - Residential or Business name or not known **7** - Calling Party Name **8** - Residential name listing **9** - Contact name from vendor database **O** - Vehicle Owner Name **L** - Lien Holder Name **S** - Lessor Name **E** - Lessee Name	
Unparsed Name	10	114	A/N	If Name Indicator value is 5, 6, or 7, returns the last name, first name, middle name/ initial, prefix, and/or suffix in an unparsed format.	
Last Name	10	32	A	Specifies the subject's last name unless the returned name is an alias or a business. The complete unparsed alias name is returned in this field.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element

Name (NM11) Segment — Total length: 123 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					delivered changes from 25 to 32.
First Name	42	82	A	If Name Indicator value is 8, returns the first name, middle name/initial, prefix, and/or suffix in an unparsed format.	
First Name	42	20	A	Specifies the subject's first name, as a full name or as an initial.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 15 to 20.
Middle Name	62	20	A	Specifies the subject's middle name, as a full name or as an initial.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 15 to 20.
Prefix	82	4	A/N	Specifies the prefix that is part of the subject's name.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 3 to 4.
Salutation Code	86	3	A/N	Specifies the salutation suffix that is part of the subject's name. For example, MD or DDS.	This data element is returned to subscribers receiving the Enriched Credit Report.
Generation Code	89	3	A/N	Specifies the generation suffix that is part of the subject's name.	For subscribers receiving the Enriched Credit Report, the

Name (NM11) Segment — Total length: 123 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					maximum length of the data element delivered changes from 2 to 4. (Example: JR, SR, III)
Secondary Name	92	32	A	Specifies the subject's secondary name. Used for maternal name.	

NU01—Number Of Segment

The NU01 segment identifies the number of occurrences on the subject file of a certain data type, such as inquiries or matching subjects. The Number Type field indicates which data type the number applies to.

Note: If applicable to a service, the NU01 segment will always be returned.

Number Of (NU01) Segment — Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **NU01**.
Segment Length	5	3	N	Value is **012**.
Number Type	8	2	N	Indicates the type of count that this segment contains. Possible values are: **01** Number of inquiries on subject's file **02** Number of matching subjects on file
Number	10	3	N	Indicates the number or character that applies to the Number Type field.

OB01—Owning Bureau Identification Segment

The OB01 segment identifies the name, address, and phone number of the owning bureau for this subject. The FFR can include only one OB01 segment per subject.

Owning Bureau Identification (OB01) Segment — Total length: 148 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **OB01**.
Segment Length	5	3	N	Value is **148**.
Bureau Name	8	50	A/N	Displays the name of the owning bureau.
Bureau Address	58	40	A/N	Displays the address of the owning bureau.
Bureau City/State/ Zip	98	29	A/N	Displays the city, state, and ZIP Code of the owning bureau.
Bureau Telephone Number	127	22	A/N	Displays in free-form the telephone number of the owning bureau, including the area code and extension.

OB02—Owning Bureau Identification Segment

The OB02 segment identifies the name, address, and phone number of the owning bureau for this subject. It also identifies the URL to access for an adverse action report. The FFR can include only one OB02 segment per subject.

Owning Bureau Identification (OB02) Segment — Total length: 198 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **OB02**.
Segment Length	5	3	N	Value is **198**.
Bureau Name	8	50	A/N	Displays the name of the owning bureau.
Bureau Address	58	40	A/N	Displays the address of the owning bureau.
Bureau City/State/ Zip	98	29	A/N	Displays the city, state, and ZIP Code of the owning bureau.
Bureau Telephone Number	127	22	A/N	Displays in free-form the telephone number of the owning bureau, including the area code and extension.
Adverse Action URL	149	50	A/N	Displays the URL for consumers to access for free adverse action reports. Subscribers are encouraged to display this URL in their adverse-action notices. Only available for credit-related services.

PD01—Property Data Segment

The PD01 segment contains property information.

Property Data (PD01) Segment — Total length: 100 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PD01**.
Segment Length	5	3	N	Value is **100**.
APN	8	50	A/N	Specifies the Assessor's Parcel Number for the property.
FIPS Code	58	5	A/N	Identifies the most prevalent county for the 5-digit ZIP Code listed on the address record.
Sale Price	63	11	A/N	Displays in whole dollars the last sale price for this property.
Date of Sale	74	8	A/N	Displays the date the sale of this property occurred. The date format is CCYYMMDD.
Date Sale Recorded	82	8	A/N	Displays the date the sale of this property was recorded with the county assessor's office The date format is CCYYMMDD.
Calculated Value	90	11	A/N	Displays in whole dollars the estimated value for this property.

PH01—Service Header Segment

The PH01 segment identifies a service requested in this transaction. There will be one PH01 for each service used.

Service Header (PH01) Segment —Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PH01**.
Segment Length	5	3	N	Value is **012**.
Service Code	8	5	A/N	Specifies the service code. This field contains the value that was sent in the FFI.

PH02—Service Header Segment

The PH02 segment identifies a service requested in this transaction and returns a specific result status for the service.

Service Header (PH02) Segment — Total length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PH02**.
Segment Length	5	3	N	Value is **015**.
Service Code	8	5	A/N	Specifies the service code. This field contains the value that was sent in the FFI.
Service Results	13	3	A/N	Specifies a particular result that may be returned for a service. Refer to service description for valid values.

PH03—Service Header Segment

The PH03 segment identifies a service requested in this transaction and returns a specific result status for the service.

Service Header (PH03) Segment — Total length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PH03**.
Segment Length	5	3	N	Value is **015**.
Service Code	8	5	A/N	Specifies the service code. This field contains the value that was sent in the FFI.
Service Result 1 **Phone status**	13	1	A/N	Specifies the status of the phone number returned. Possible values are: **0** Non-dialable **1** Dialable
Service Result 2 **Address status**	14	1	A/N	Specifies the mailability status of the address. *For future use.*
Service Result 3 **Address type**	15	1	A/N	Specifies the type of address returned. Possible values are:

Service Header (PH03) Segment — Total length: 15 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				S Street **R** Rural Route **H** High Rise **P** P.O. Box **F** Firm **G** General Delivery

PH04—Service Header Segment

The PH04 segment identifies which of the Contact Identity Service is requested in this transaction and shows the total number of listings returned for the service.

Service Header (PH04) Segment — Total length: 18 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PH04**.
Segment Length	5	3	N	Value is **018**.
Service Code	8	5	A/N	Specifies the service code. This field contains the value that was sent in the FFI.
Total Listings Returned	13	3	N	Indicates the total number of listings returned in the response.
Total Listings Found	16	3	N	Indicates the total number of listings found in the search.

PI11—Personal Information Segment

The PI11 segment displays the subject's Social Security Number and date of birth. For each subject in a file, the FFR can include one PI11 segment.

Personal Information (PI11) Segment — Total length: 25 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **PI11**.	
Segment Length	5	3	N	Value is **025**.	

Personal Information (PI11) Segment — Total length: 25 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Source Indicator	8	1	A	Indicates the source of the SSN and date of birth. Possible values are: **I** Data received in the inquiry **F** Data that appears on the TransUnion credit database **D** Data that appears on vendor database **C** Data that appears on the TransUnion non-credit database	For Contact Identity Services (Contact Verification and Contact Locator), the C value indicates TransUnion credit database-sourced information.
Social Security Number	9	9	N	Lists the subject's Social Security number. No dashes are included. When a 4-digit SSN is returned, the SSN is right-justified and left-filled with zeroes.	
Date of Birth	18	8	A/N	Specifies the subject's date of birth in one of these formats: **CCYYMMDD** Year, month, and day of birth **CCYY-E** Estimated year of birth followed by a dash and the letter E	

PN01—Phone Number Segment

The PN01 segment displays a phone number, indicates the owner and type of phone to which the number belongs. The FFR can include up to 9 PN01 segments for each subject.

Phone Number (PN01) Segment — Total length: 27 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **PN01**.	

Phone Number (PN01) Segment — Total length: 27 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Length	5	3	N	Value is **027**.	
Source Indicator	8	1	A	Source of the data that appears in the file. Possible values are: **I** Data received in the inquiry **F** Data that appears on the TransUnion credit database **A** Data that appears on the RPA database **D** Data that appears on vendor database **C** Data that appears on the TransUnion non-credit database **Q** Data that appears on consumer inquiry **E** Data that appears on vendor's aggregated database	For services where the telephone information is the main focus (Contact Locator, Contact Verification, Contact Verification Plus, and Phone Append) the F value indicates telephone company-sourced information; the C value indicates TransUnion credit database-sourced information. For the Small Business Identification service, F indicates telephone company-sourced information.
Phone Qualifier	9	1	A/N	Indicates the relationship of the phone number assignee to the subject. Possible values are: **Blank** Unknown **1** Personal **2** Employment **3** Inquiry credit grantor **4** Reporting credit grantor **5** Business	

Phone Number (PN01) Segment — Total length: 27 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				6 Both residential and business number or not known	
Phone Type	10	2	A/N	Specifies the type of communication device to which this number is assigned. Possible values for Fraud Detect, Fraud ID-TECT, and Total ID are: **Blank** Unknown **01** Phone (voice, standard) **02** Fax **03** Cellular **04** Pager **05** Toll-free **06** Mobile **07** Non-geographic **08** Special services **09** Undefined **10** New **11** Pay phone **12** VoIP **21** De-duplicate **99** Not requested or no derogatory information For a list of the phone type codes returned by RPA, refer to Appendix A: Name, Address, and Phone Codes on page 626.	These values are used for Compliance Verification 2.0. These values are used for Phone Append. These values are not used in Fraud Detect.
Availability Indicator	12	1	A	Indicates whether this phone number is listed. Possible values are: **Blank** Unknown **L** Listed **U** Unlisted	
Area Code	13	3	A/N	Lists the phone number's area code.	
Telephone Number	16	7	A/N	Lists the phone number.	

Phone Number (PN01) Segment — Total length: 27 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Extension	23	5	A/N	Lists the phone number extension.	

PN02—Phone Number Segment

The PN02 segment displays a phone number and information related to the phone number.

Phone Number (PN02) Segment — Total length: 45 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PN02**.
Segment Length	5	3	N	Value is **045**.
Source Indicator	8	1	A	Source of the phone information. Possible values are: **I** Data received in the inquiry **F** Data that appears on the TransUnion credit database **C** Data that appears on the TransUnion non-credit database **D** Data that appears on vendor database **Q** Data that appears on consumer inquiry **E** Data that appears on vendor's aggregated database
Phone Qualifier	9	1	A/N	Indicates the relationship of the phone number assignee to the subject. Possible values are: **Blank** Unknown **1** Personal **2** Employment **3** Inquiry credit grantor **4** Reporting credit grantor **5** Business **6** Both residential and business number or not known
Phone Type	10	2	A/N	Specifies the type of communication device to which this number is assigned. Possible values are:

Phone Number (PN02) Segment — Total length: 45 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Blank Unknown **01** Phone (voice, standard) **02** Fax **03** Cellular **04** Pager **05** Toll-free **06** Mobile **07** Non-geographic **08** Special services **09** Undefined **10** New **11** Pay phone **12** VoIP **21** De-duplicate **99** Not requested or no derogatory information
Phone Status	12	1	A/N	Specifies the status of the phone number returned. Valid values are: **Blank** Not available **0** Inactive/Non-dialable **1** Active/Dialable **2** Unconfirmed
Availability Indicator	13	1	A	Indicates whether this phone number is listed. Possible values are: **Blank** Unknown **L** Listed **U** Unlisted
Area Code	14	3	A/N	Lists the phone number's area code.
Telephone Number	17	7	A/N	Lists the phone number.
Extension	24	5	A/N	Lists the phone number extension.
Filler	29	17	A/N	*For future use.*

PP11—Extended Payment Pattern Segment

The PP11 segment displays a maximum of 82 months of payment pattern information for the subject. The PP11 segment immediately follows the TR11 segment with which it is associated.

Extended Payment Pattern (PP11) Segment — Total length: 97 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PP11**.
Segment Length	5	3	N	Value is **097**.
Payment Pattern Start Date	8	8	A/N	Displays the start date of the subject's payment pattern. The date format is CCYYMMDD.
Payment Pattern	16	82	A/N	Displays up to 82 months of the subject's payment history when the Extended Payment Pattern option is selected.

PR11—Public Record Segment

The PR11 segment displays public record data for the subject.

Public Record (PR11) Segment — Total length: 216 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **PR11**.	
Segment Length	5	3	N	Value is **216**.	
Industry Code	8	2	A/N	One- or two-digit industry codes may be returned depending on subscriber setup. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.	
Reporting Subscriber Code	10	8	A/N	Identifies the member code of the source of the public record.	Member code in this segment is returned right-justified with leading zeroes.
Public Record Type	18	2	A	Identifies the type of public record this segment describes. Refer to Appendix D: Public Record Codes on page 677 for a list of the public record type codes.	

Public Record (PR11) Segment — Total length: 216 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Docket Number	20	30	A/N	Displays the docket number as shown on the court records.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 11 to 30.
Attorney	50	38	A/N	Displays the name of the attorney or the attorney's firm.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element delivered changes from 36 to 38.
Plaintiff	88	36	A/N	Displays the name of the plaintiff in the case.	
File Date *(renamed)*	124	8	A/N	Displays the date the case was filed with the courts. The date format is CCYYMMDD.	This field has been renamed to better describe the data element returned at this displacement.
Effective Date *(renamed)*	132	8	A/N	Displays the date this public record was last verified. The date format is CCYYMMDD.	This data element is returned to subscribers receiving the Enriched Credit Report.
Paid Date	140	8	A/N	Displays the date the subject paid the assessed amount. The date format is CCYYMMDD.	
Filler	148	9	A/N	This value is no longer used.	
Amount *(renamed)*	157	9	A/N	For judgments and tax liens only, displays in whole dollars the subject's original balance amount.	Previously *Liabilities/ Amount*. This field is renamed since liabilities

Public Record (PR11) Segment — Total length: 216 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					are no longer returned.
Filler	166	9	A/N	This value is no longer used.	
Filler	175	9	A/N	This value is no longer used.	
Equal Credit Opportunity Act Designator	184	1	A	Displays the contractual ownership of an account. Possible values are: **U** - Undesignated account **I** - Individual account **C** - Joint contractual liability on account **A** - Authorized account **P** - Participant on account **S** - Co-signer on account **M** - Primary borrower on account **T** - Account relationship terminated **X** - Consumer deceased	
Public Record Source Code	185	2	A	Identifies the type of court in which the case occurred. Refer to Appendix D: Public Record Codes on page 677 for a list of the court type codes.	
Source Location City	187	28	A	Displays the city in which the source (court) is located.	Returned for Collection Credit Report.
Source Location State	215	2	A	Displays the two-digit state code of the state in which the source (court) is located.	Returned for Collection Credit Report.

PS01—Points Summary Segment

The PS01 segment accumulates the results of the verification matches used with various databases.

Points Summary (PS01) Segment — Total length: 127 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PS01**.
Segment Length	5	3	N	Value is **127**.
First Name Sources	8	2	A/N	Number of sources used to verify first name.
Last Name Sources	10	2	A/N	Number of sources used to verify last name.
Address Sources	12	2	A/N	Number of sources used to verify address.
Previous Address Sources	14	2	A/N	Number of sources used to verify previous address.
Area Code Sources	16	2	A/N	Number of sources used to verify phone's area code.
Phone Number Sources	18	2	A/N	Number of sources used to verify telephone number.
SSN Sources	20	2	A/N	Number of sources used to verify Social Security number.
Total Sources	22	2	A/N	Number of sources used in verification.
First Name Summary	24	2	A/N	Number of sources matched.
	26	2	A/N	Number of sources partially matched.
	28	2	A/N	Number of sources not matched.
	30	2	A/N	Number of sources in which name not found.
Last Name Summary	32	2	A/N	Number of sources matched.
	34	2	A/N	Number of sources partially matched.
	36	2	A/N	Number of sources not matched.
	38	2	A/N	Number of sources in which name not found.
Current Address Summary	40	2	A/N	Number of sources matched.
	42	2	A/N	Number of sources partially matched.
	44	2	A/N	Number of sources not matched.
	46	2	A/N	Number of sources in which address not found.

Points Summary (PS01) Segment — Total length: 127 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Previous Address Summary	48	2	A/N	Number of sources matched.
	50	2	A/N	Number of sources partially matched.
	52	2	A/N	Number of sources not matched.
	54	2	A/N	Number of sources in which address not found.
Area Code Summary	56	2	A/N	Number of sources matched.
	58	2	A/N	Number of sources partially matched.
	60	2	A/N	Number of sources not matched.
	62	2	A/N	Number of sources in which area code not found.
Phone Number Summary	64	2	A/N	Number of sources matched.
	66	2	A/N	Number of sources partially matched.
	68	2	A/N	Number of sources not matched.
	70	2	A/N	Number of sources in which phone number not found.
SSN Summary	72	2	A/N	Number of sources matched.
	74	2	A/N	Number of sources partially matched.
	76	2	A/N	Number of sources not matched.
	78	2	A/N	Number of sources in which SSN not found.
Total Match Summary	80	2	A/N	Number of sources matched.
	82	2	A/N	Number of sources partially matched.
	84	2	A/N	Number of sources not matched.
	86	2	A/N	Number of sources in which items not found.
First Name Total Points	88	2	A/N	Total points for First Name.
Last Name Total Points	90	2	A/N	Total points for Last Name.
Current Address Total Points	92	2	A/N	Total points for Address.
Previous Address Total Points	94	2	A/N	Total points for Previous Address.
Area Code Total Points	96	2	A/N	Total points for Area Code.
Phone Number Total Points	98	2	A/N	Total points for Phone Number.

Points Summary (PS01) Segment — Total length: 127 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
SSN Total Points	100	2	A/N	Total points for SSN.
Total Points	102	2	A/N	Total points scored.
First Name Percent	104	3	A/N	First Name Verification Percentage.
Last Name Percent	107	3	A/N	Last Name Verification Percentage.
Current Address Percent	110	3	A/N	Address Verification Percentage.
Previous Address Percent	113	3	A/N	Previous Address Verification Percentage.
Area Code Percent	116	3	A/N	Telephone Area Code Verification Percentage.
Phone Number Percent	119	3	A/N	Telephone Number Verification Percentage.
SSN Percent	122	3	A/N	SSN Verification Percentage.
Total Percent	125	3	A/N	Total Verification Percentage.

PS02—Points Summary Segment

The PS02 segment accumulates the results of the verification matches used with various databases.

Points Summary (PS02) Segment — Total length: 142 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **PS02**.
Segment Length	5	3	N	Value is **142**.
First Name Sources	8	2	A/N	Number of sources used to verify first name
Last Name Sources	10	2	A/N	Number of sources used to verify last name
Address Sources	12	2	A/N	Number of sources used to verify address
Previous Address Sources	14	2	A/N	Number of sources used to verify previous address
Date of Birth Sources	16	2	A/N	Number of sources used to verify DOB.
Area Code Sources	18	2	A/N	Number of sources used to verify phone's area code

Points Summary (PS02) Segment — Total length: 142 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Phone Number Sources	20	2	A/N	Number of sources used to verify telephone number
SSN Sources	22	2	A/N	Number of sources used to verify Social Security number
Total Sources	24	2	A/N	Number of sources used in verification.
First Name Summary	26	2	A/N	Number of sources matched
	28	2	A/N	Number of sources partially matched
	30	2	A/N	Number of sources not matched
	32	2	A/N	Number of sources in which name not found
Last Name Summary	34	2	A/N	Number of sources matched
	36	2	A/N	Number of sources partially matched
	38	2	A/N	Number of sources not matched
	40	2	A/N	Number of sources in which name not found
Current Address Summary	42	2	A/N	Number of sources matched
	44	2	A/N	Number of sources partially matched
	46	2	A/N	Number of sources not matched
	48	2	A/N	Number of sources in which address not found
Previous Address Summary	50	2	A/N	Number of sources matched
	52	2	A/N	Number of sources partially matched
	54	2	A/N	Number of sources not matched
	56	2	A/N	Number of sources in which address not found
Date of Birth Summary	58	2	A/N	Number of sources matched
	60	2	A/N	Number of sources partially matched
	62	2	A/N	Number of sources not matched
	64	2	A/N	Number of sources in which address not found
Area Code Summary	66	2	A/N	Number of sources matched
	68	2	A/N	Number of sources partially matched
	70	2	A/N	Number of sources not matched
	72	2	A/N	Number of sources in which area code not found

Points Summary (PS02) Segment — Total length: 142 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Phone Number Summary	74	2	A/N	Number of sources matched
	76	2	A/N	Number of sources partially matched
	78	2	A/N	Number of sources not matched
	80	2	A/N	Number of sources in which phone number not found
SSN Summary	82	2	A/N	Number of sources matched
	84	2	A/N	Number of sources partially matched
	86	2	A/N	Number of sources not matched
	88	2	A/N	Number of sources in which SSN not found
Total Match Summary	90	2	A/N	Number of sources matched
	92	2	A/N	Number of sources partially matched
	94	2	A/N	Number of sources not matched
	96	2	A/N	Number of sources in which items not found
First Name Total Points	98	2	A/N	Total points for First Name
Last Name Total Points	100	2	A/N	Total points for Last Name
Current Address Total Points	102	2	A/N	Total points for Address
Previous Address Total Points	104	2	A/N	Total points for Previous Address
Date of Birth Total Points	106	2	A/N	Total points for Date of Birth
Area Code Total Points	108	2	A/N	Total points for Area Code
Phone Number Total Points	110	2	A/N	Total points for Phone Number
SSN Total Points	112	2	A/N	Total points for SSN
Total Points	114	2	A/N	Total points scored
First Name Percent	116	3	A/N	First Name Verification Percentage
Last Name Percent	119	3	A/N	Last Name Verification Percentage
Current Address Percent	122	3	A/N	Address Verification Percentage
Previous Address Percent	125	3	A/N	Previous Address Verification Percentage

Points Summary (PS02) Segment — Total length: 142 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Date of Birth Percent	128	3	A/N	Date of Birth Verification Percentage
Area Code Percent	131	3	A/N	Telephone Area Code Verification Percentage
Phone Number Percent	134	3	A/N	Telephone Number Verification Percentage
SSN Percent	137	3	A/N	SSN Verification Percentage
Total Percent	140	3	A/N	Total Verification Percentage

QH01—Inquiry History Segment

The QH01 segment displays an inquiry history message. The FFR can include one QH01 segment for each input element (address, SSN, and so on).

Inquiry History (QH01) Segment — Total length: 21 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **QH01**.
Segment Length	5	3	N	Value is **021**.
Message Code	8	6	A/N	Displays the inquiry history message code.
Address Match Flag	14	1	A/N	Indicates the address that the inquiry matched. Possible values are: **C** Current address **P** Previous address
Number of Times Input Was Used on Other Inquiries	15	3	A/N	Specifies how many times the current input was used to request a Credit report or a Score report.
Threshold Chosen	18	2	A/N	Specifies the maximum number of inquiries. Number specified must be from 01 to 99.
Time Frame of Occurrences	20	2	A/N	Specifies the time frame for which this data was gathered. Possible values are: **30** 30 days **60** 60 days **90** 90 days

RE01—Region Analysis Segment

The RE01 segment displays the results of comparisons of various elements—such as ZIP Code and city or phone number and state—in the input or file address.

Region Analysis (RE01) Segment — Total length: 20 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RE01**.
Segment Length	5	3	N	Value is **020**.
Source Indicator	8	1	A	Indicates the source of the address elements that were compared. Possible values are: **I** Data received in the inquiry **F** Data that appears in the TransUnion database
ZIP Code vs. City	9	1	N	Specifies the results of comparing the source ZIP Code to the source city. Possible values are: **1** Valid **2** Invalid **3** Not available **4** ZIP Code not issued **5** New ZIP Code, check not performed **9** Not requested or no derogatory information
ZIP Code vs. State	10	1	N	Specifies the results of comparing the source ZIP Code to the source state. Possible values are: **1** Valid **2** Invalid **3** Not available **4** ZIP Code not issued **5** New ZIP Code, check not performed **9** Not requested or no derogatory information
Phone Number vs. State	11	1	N	Specifies the results of comparing the source phone number to the source state. Possible values are: **1** Valid

Region Analysis (RE01) Segment — Total length: 20 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				2 Invalid **3** Not available **4** Phone number not issued **5** New phone number, check not performed **9** Not requested or no derogatory information
Phone Number vs. ZIP Code	12	1	N	Specifies the results of comparing the source phone number to the source ZIP Code. Possible values are: **1** Valid **2** Invalid **3** Not available **4** Phone number not issued **5** New phone number, check not performed **6** ZIP Code not issued **7** Mileage is a mismatch **8** New ZIP Code, check not performed **9** Not requested or no derogatory information
Mileage	13	8	A/N	Displays the mileage between the phone number and ZIP Code. The format is NNNN.NNN.

RR01—Record Reported History Segment

The RR01 segment contains the dates the full record was reported and the frequency with which data was reported.

Record Reported History (RR01) Segment — Total length: 21 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **RR01**.
Segment Length	5	3	N	Value is **021**.
Record Number	8	2	N	Indicates for which record the segments that follow apply.
Last Reported Date	10	8	A/N	Specifies the date that information was last reported, either for the address or for the

Record Reported History (RR01) Segment — Total length: 21 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				subject inquired upon. The date format is CCYYMMDD.
Frequency Reported	18	4	N	Indicates the number of times that information was reported, either for the address or for the subject inquired upon.

SA11—Subscriber Address Segment

The SA11 segment lists the Subscriber Address returned for a limited number of products and for compliance purposes.

Subscriber Address (SA11) Segment — Total length: 106 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SA11**.
Segment Length	5	3	N	Value is **106**.
Subscriber Address1	8	30	A/N	Specifies the first line of the subscriber's unparsed street address.
Subscriber Address2	38	30	A/N	Specifies the second line of the subscriber's unparsed street address.
City	68	27	A	Specifies the name of the subscriber's city.
State	95	2	A	Specifies the two-digit state code of the subscriber's state. Refer to Appendix A: Name, Address, and Phone Codes on page 626 for a list of valid state codes.
ZIP Code	98	5	A/N	Specifies the subscriber's ZIP Code. This field is left justified.
ZIP ExtensionCode	103	4	A/N	Specifies the subscriber's ZIP Extension Code. This field is left justified.

SC01—Scoring Segment

The SC01 segment displays the results of scoring the subject and lists the highest-scoring factors. The FFR can include only one SC01 segment per score delivered except for an Income Estimator score. Income Estimator scores are returned in the TC01 segment.

Scoring (SC01) Segment — Total length: 34 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SC01**.
Segment Length	5	3	N	Value is **034**.
Service Code	8	5	A/N	Displays the algorithm ID of the input or of the returned score. Refer to Add-on Service Descriptions on page 178 for a list of algorithm IDs.
Sign	13	1	A/N	Contains a plus sign (+) or a minus sign (-) to indicate whether the score is positive or negative. A score of zero is always positive.
Score	14	5	A/N	Displays the results of the scoring process. If the file is not scored, this field will be blank.
Scoring Indicator Flag	19	1	A/N	Displays the reason a file could not be scored. Possible values are: **2** File not scored because subject is deceased **3** File not scored because subject does not have sufficient data **4** Score out of range **5** Requirements not met **C** Cascading model **M** Missing required risk models
Score Derog and Inquiry Alert Flag	20	1	A/N	Depending on the model returned, indicates either or both of the following: Whether derogatory info was found on the consumer file Whether inquiries impacted the credit score Possible values for this field are: **A** Derogatory info is in the file and, for models that indicate it, inquiries did not impact the credit score **Blanks** No derogatory info was found in the file and/or inquiries did not impact the credit score **I** Inquiries did adversely impact credit score and, for models that indicate it, no derogatory info found in the file **B** Derogatory info is in the file and inquiries did impact the credit score

Scoring (SC01) Segment — Total length: 34 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Note: Not all models indicate that derogatory info is in the file. Similarly, not all models indicate whether inquiries impact the credit score. Some models indicate both. Further, the definition of derogatory info varies among models and the threshold for inquiries impacting the credit score varies.
First Factor	21	3	A/N	Identifies the highest-scoring factor in the calculation. For a list of scoring factors, refer to the Models section of Add-on Service Descriptions on page 178.
Second Factor	24	3	A/N	Identifies the second highest-scoring factor in the calculation.
Third Factor	27	3	A/N	Identifies the third highest-scoring factor in the calculation.
Fourth Factor	30	3	A/N	Identifies the fourth highest-scoring factor in the calculation.
Score Card Indicator	33	2	A/N	Identifies the score card used in the scoring process.

SD01—Credit Summary Description Segment

The SD01 segment summarizes credit data for a specific type of credit account included in the consumer file. The FFR can include up to 7 SD01 segments per subject, one for each account type on the credit file and one for all account types.

Note: An SD01 segment is returned for an account type only if the credit file contains that type of account. For example, an SD01 with a Summary Type of M is returned only if the credit file includes a mortgage account.

Credit Summary Description (SD01) Segment — Total length: 56 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SD01**.
Segment Length	5	3	N	Value is **056**.
Summary Type	8	1	A	Specifies the type of credit account for which this segment contains data. Possible values are:

Credit Summary Description (SD01) Segment — Total length: 56 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				R - Revolving or check credit account **I** - Installment account **M** - Mortgage account **O** - Open account **U** - Unspecified (blank) account **B** - Closed with balance **T** - Totals
High Credit Amount	9	9	A/N	Displays the maximum amount of credit that the subject incurred in this account type.
Credit Limit Amount	18	9	A/N	Displays the subject's credit limit on this account type.
Current Balance Amount	27	9	A/N	Displays the balance the subject owes on this account type.
Past Due Amount	36	9	A/N	Displays the amount past due on this account type.
Monthly Payment Amount	45	9	A/N	Displays the minimum monthly payment required of the subject for this account type.
% of Credit Available	54	3	A/N	Displays the percent of credit available to the subject in revolving, check credit, or open accounts. If the account type is installment, mortgage, closed with balance, unspecified, or totals, this field is blank.

SH01—Subject Header Segment

The SH01 segment specifies which subject the returned file describes, identifies how the file and subject match, and lists the bureau that owns the file. This is the subject header segment that is returned for most services.

Subject Header (SH01) Segment — Total length: 27 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH01**.
Segment Length	5	3	N	Value is **027**.
Subject Identifier	8	1	N	Indicates to which subject the displayed consumer information applies. Possible values are:

Subject Header (SH01) Segment — Total length: 27 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				1 First subject **2** Second subject
File Number	9	2	N	Specifies the file number (of those returned for this subject).
File Hit	11	1	A	Specifies whether this file is a no-hit. Possible values are: **Y** Regular hit on file **C** Hit on file, but one or more files not returned because of failure to pass California subject selection criteria—more identification information is needed **N** Regular no-hit—a no-hit file is returned **X** No-hit file is returned, but files exist that do not pass California subject selection criteria—more identification information is needed **H** Hit on fraud searches (applies only to Compliance Verification, Fraud Detect/Fraud ID-Tect, Identity Manager Verification, Identity Manager Verification 2.0, and Total ID) **P** Clear for all fraud searches performed (applies only to Fraud Detect/Fraud ID-Tect, Identity Manager Verification, Identity Manager Verification 2.0, and Total ID) **Z** No-hit file is returned – due to state-specific subject selection criteria — **more identification information is needed**
SSN Match Indicator	12	2	A/N	Describes how the file matched or did not match on the input SSN. Possible values are: **00** No-hit returned—no match processing performed **01** No match on SSN **02** No SSN on file but SSN appears on input **03** No SSN on input but SSN on file **04** No SSN on input and no SSN on file

Subject Header (SH01) Segment — Total length: 27 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				05 Exact match between SSN on input and SSN on file **06** Difference of 1 digit between SSN on input and SSN on file **07** Difference of 2 digits between SSN on input and SSN on file
Consumer Statement Indicator	14	1	A/N	Indicates whether a consumer statement was returned with this file. Possible values are: **N** No consumer statement on file **Y** Consumer statement present on file
Bureau Market File Control	15	2	A/N	Identifies the market code of the owning credit bureau (the contact for Consumer Relations Services). Returned only for permissible purpose services.
Bureau Submarket File Control	17	2	A/N	Identifies the submarket code of the owning credit bureau (the contact for Consumer Relations Services). Returned only for permissible purpose services.
Suppression Indicator	19	1	A	Indicates whether the credit data in the file is returned. If suppressed, the remaining credit data fields will be blank or filled with zeroes and no credit segments are returned. Contact the owning bureau for more information. Possible values are: **Y** Credit data suppressed **N** Credit data not suppressed **P** Do not promote **F** Frozen by consumer as allowed by state law. To obtain access, you must obtain authorization from the consumer and provide the required identifier with your inquiry. **E** Frozen by consumer as allowed by state law. File is returned due to exempted use. **X** Frozen by consumer as allowed by state law. File is returned due to exempted use. Do not promote. **D** Not returned: per state law disputed data on file. **M** Not returned: file may belong to a minor, verify consumer.

Subject Header (SH01) Segment — Total length: 27 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
In File Since Date	20	8	A/N	Defines in the CCYYMMDD format the date the subject was first placed on file.

SH02—Subject Header Segment for Special Services

The SH02 segment identifies the subject and action performed for a service. This is the subject header segment that is returned for the Individual Monitoring Report.

Subject Header Segment for Special Services (SH02) — Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH02**.
Segment Length	5	3	N	Value is **012**.
Subject Identifier	8	1	N	Indicates for which subject the service information is returned. Possible values are: **1** First subject **2** Second subject
File Number	9	2	N	Specifies the file number (of those returned for this subject).
Service Action	11	2	A	Identifies the action associated with this service report. Possible values for Individual Monitoring Report are: **01** Individual Monitoring Report set **02** Individual Monitoring Report deleted **03** Subject no-hit **04** Individual Monitoring Report does not exist **05** Individual Monitoring Report not set—file suppressed **06** Individual Monitoring Report satisfaction **07** Individual Monitoring Report satisfaction—file frozen as allowed by state law. File is returned due to exempt use. **08** Individual Monitoring not set—possible minor

Subject Header Segment for Special Services (SH02) — Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Z No-hit file is returned – due to state-specific subject selection criteria — **more identification information is needed**

SH03—Subject Header Segment

The SH03 segment identifies the subject number to which the service information applies. This is the subject header segment that is returned for Contact Identity Services and IDA Model Report.

Subject Header (SH03) Segment — Total length: 10 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH03**.
Segment Length	5	3	N	Value is **010**.
Subject Identifier	8	1	N	Indicates to which subject the information that follows applies. Possible values are: **1** First subject **2** Second subject
Subject Hit Status	9	1	A/N	Specifies whether the search for the subject's record was a hit or no-hit. Possible values are: **H** Hit (subject record found) **N** No-hit (no subject record found)
Filler	10	1	A/N	For future use.

SH04—Subject Header Segment

The SH04 segment specifies which subject the returned file describes, identifies how the file and subject match, returns Best Match information if applicable, and lists the bureau that owns the file. This is the subject header segment that is returned for ID Report, ID Report with Score, and ID Search.

Subject Header (SH04) Segment — Total length: 28 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH04**.
Segment Length	5	3	N	Value is **028**.
Subject Identifier	8	1	N	Indicates to which subject the displayed consumer information applies. Possible values are: **1** First subject **2** Second subject
File Number	9	2	N	Specifies the file number (of those returned for this subject).
File Hit Status	11	1	A	Specifies the hit status of the request. Possible values are: **Y** Regular hit on file—all files are returned **C** Hit on file, but one or more files not returned because of failure to pass California subject selection criteria—more identification information is needed **N** Regular no-hit—a no-hit file is returned **X** No-hit file is returned, but files exist that do not pass California subject selection criteria—more identification information is needed **Z** No-hit file is returned – due to state-specific subject selection criteria — **more identification information is needed** **Blank** Not used, not applicable, or data not available
SSN Match Indicator	12	2	A/N	Describes how the file matched or did not match on the input SSN. Possible values are: **00** No-hit returned—no match processing performed **01** No match on SSN **02** No SSN on file but SSN appears on input **03** No SSN on input but SSN on file **04** No SSN on input and no SSN on file

Subject Header (SH04) Segment — Total length: 28 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				05 Exact match between SSN on input and SSN on file **06** Difference of 1 digit between SSN on input and SSN on file **07** Difference of 2 digits between SSN on input and SSN on file **Blank** Not used, not applicable, or data not available
Match Indicator	14	1	A/N	Describes how the file matched the input subject data provided: **M** Best Match **H** Hit— File is a Hit but not a Best Match file **N** No-Hit—No files are selected **Blank** Not used, not applicable, or data not available
Consumer Statement Indicator	15	1	A/N	Indicates whether a consumer statement was returned with this file. Possible values are: **N** No consumer statement on file **Y** Consumer statement present on file **Blank** Not used, not applicable, or data not available
Bureau Market File Control	16	2	A/N	Identifies the market code of the owning credit bureau (the contact for Consumer Relations Services). Returned only for permissible purpose services.
Bureau Submarket File Control	18	2	A/N	Identifies the submarket code of the owning credit bureau (the contact for Consumer Relations Services). Returned only for permissible purpose services.
Suppression Indicator	20	1	A	Indicates whether the credit data in the file is returned. If suppressed, the remaining credit data fields will be blank or filled with zeroes and no credit segments are returned. Contact the owning bureau for more information. Possible values are: **Y** Credit data suppressed **N** Credit data not suppressed **P** Do not promote

Subject Header (SH04) Segment — Total length: 28 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				F Frozen by consumer as allowed by state law. To obtain access, you must obtain authorization from the consumer and provide the required identifier with your inquiry. **E** Frozen by consumer as allowed by state law. File is returned due to exempted use. **X** Frozen by consumer as allowed by state law. File is returned due to exempted use. Do not promote. **D** Not returned: per state law disputed data on file. **M** Not returned: file may belong to a minor, verify consumer. **Blank** Not used, not applicable, or data not available
In File Since Date	21	8	A/N	Defines in the CCYYMMDD format the date the subject was first placed on file.

SH05—Subject Header Segment

The SH05 segment specifies which subject the returned file describes and how the file and input phone matched. This is the subject header segment that is returned for Reverse Phone Append.

Subject Header (SH05) Segment — Total length: 13 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH05**.
Segment Length	5	3	N	Value is **013**.
Subject Identifier	8	1	N	Indicates for which subject the information is returned. Possible values are: **1** First subject **2** Second subject
File Number	9	2	N	Specifies the file number (of those returned for this subject).
Subject Hit Status	11	1	A/N	Specifies the hit status of the request. Possible values are:

Subject Header (SH05) Segment — Total length: 13 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				1 Subject found (hit) and returned **2** Subject not found (no-hit) **3** Private listing found but not selected (no-hit) **4** Residential listing found but not selected (no-hit) **5** Business listing found but not selected (no-hit) **6** Listing with no name found but not selected (no-hit) **7** Non-mail-able address found but not selected (no-hit)
Subject Restriction Status	12	1	A/N	Specifies whether the listing information has restrictions for use. Possible values are: **Blank** Restriction Unknown **1** No solicitation restrictions for use **2** Phone solicitation restricted **3** Mail solicitation restricted **4** Both phone and mail solicitation restricted
Subject Country	13	1	A/N	Specifies the subject's country. Possible values are: **U** US **C** Canada

SH06—Subject Header

The SH06 segment specifies indicators that describe special information found on the subject file. This is the subject header segment that is returned for the Collection Prioritization Service (CPE) 2.0. This service/segment is for batch use only.

Subject Header (SH06) Segment — Total length: 14 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SH06**.
Segment Length	5	3	N	Value is **014**.

Subject Header (SH06) Segment — Total length: 14 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Subject Identifier	8	1	N	Indicates for which subject the information is returned. Possible values are: **1** First subject **2** Second subject
File Number	9	2	N	Specifies the file number (of those returned for this subject). Only 1 file is returned for CPE.
File Hit Status	11	1	A/N	Specifies the hit status of the request. Possible values are: **Y** Regular hit - subject found **C** Hit on file, but one or more files not returned (N/A) **N** Regular No-hit - no subject found **X** No-hit file is returned – more id info needed (N/A)
Suppression Indicator	12	1	A/N	Possible values are: **F** Frozen by consumer – does not apply to CPE **E** Frozen by consumer file – returned due to exempt **X** Frozen by consumer due to exempt use (do not promote) – does not apply to CPE **Y** Credit data suppressed **P** Do Not Promote – does not apply to CPE **N** Credit data not suppressed **D** Not returned: per state law – disputed data on file. Does not apply to CPE. **M** Not returned: file may belong to a minor **Z** No-hit file is returned – due to state-specific subject selection criteria — **more identification information is needed**
SSN Deceased Indicator	13	1	A/N	Possible values are: **Y** SSN used to claim death benefits **N** SSN not found on Death Master File **Blank** Option not requested.
Bankruptcy Indicator	14	1	A/N	Possible values are:

Subject Header (SH06) Segment — Total length: 14 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Y Bankruptcy public record found on file **N** Bankruptcy public record not found on file **Blank** Option not requested.

SM11—Credit Summary Segment

The SM11 segment displays the totals of the public records, inquiries, and different types of accounts included in this consumer file. The FFR can include only one SM11 segment per subject.

Credit Summary (SM11) Segment — Total length: 44 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SM01**.
Segment Length	5	3	N	Value is **044**.
Credit Summary Reporting Period	8	1	N	Specifies the time period for which the figures in this segment apply to the consumer file. Possible values are: **1** Total history **2** 12 months
Number of Public Records	9	3	N	Displays the number of public records contained in this file.
Number of Collection Accounts	12	3	N	Displays the number of collection accounts contained in this file.
Number of Negative Accounts	15	3	N	Displays the number of negative accounts contained in this file.
Accounts with any Historical Negative	18	3	N	Displays the number of accounts contained in this file that have any previous negative data.
Occurrence of Historical Negatives	21	3	N	Displays the number of occurrences of negative data in this file's history.
Number of Trade Accounts	24	3	N	Displays the total number of accounts contained in this file. The total includes

Credit Summary (SM11) Segment — Total length: 44 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				revolving/check credit, installment, mortgage, open, and unspecified accounts.
Number of Revolving and Check Credit Trade Accounts	27	3	N	Displays the number of revolving accounts and check credit accounts contained in this file.
Number of Installment Trade Accounts	30	3	N	Displays the number of installment accounts contained in this file.
Number of Mortgage Trade Accounts	33	3	N	Displays the number of mortgage accounts contained in this file.
Number of Open Trade Accounts	36	3	N	Displays the number of open accounts (trade accounts with an O portfolio type) contained in this file.
Number of Unspecified Portfolio Type Accounts	39	3	N	Displays the number of accounts with an unspecified (blank) portfolio type contained in this file.
Number of Inquiries	42	3	N	Displays the number of inquiries contained in this file.

SV01—Subject Verification Segment

The SV01 segment handles the results of Fraud Detect subject verification. Each SV01 segment displays a Verification Analysis code and message.

Subject Verification (SV01) Segment — Total length: 67 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **SV01**.	
Segment Length	5	3	N	Value is **067**.	
Verification Status	8	2	A/N	Values are: **01** Insufficient Input Data Provided **02** No Subject Found	

Subject Verification (SV01) Segment — Total length: 67 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				03 Subject Data Verified **04** Verification Discrepancy **05** Byte-by-Byte Verification Performed **08** Subject Verification not available	
Results of Name Verification	10	2	A/N	**01** Matched **02** Not Matched **03** Not Performed	
Results of Address Verification	12	2	A/N	**01** Matched **02** Not Matched **03** Not Performed	
Results of SSN Verification	14	2	A/N	**01** Matched **02** Not Matched **03** Not Performed **04** Matching Pattern Performed	
Results of DOB Verification	16	2	A/N	**01** Matched **02** Not Matched **03** Not Performed	
Results of Suffix Verification	18	2	A/N	**01** Matched **02** Not Matched **03** Not Performed	
Message Text	20	48	A/N	Displays the message text associated with the verification status of the subject. Valid values are: **01** Insufficient Input Data Provided **02** No Subject Found **03** Subject Data Verified	Could also be a combination of these items—the program creates a string based on the returned match codes. Matching pattern for the data verified

Subject Verification (SV01) Segment — Total length: 67 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				04 [Name, Address, SSN, DOB, Suffix] Not Matched **05** [Matching Indicators] **08** Subject Verification not available	may be returned. For example, YYNNYYYYY may be returned for byte-by-byte verification between input SSN and file SSN.

SV02—Subject Verification Segment

The SV02 segment is used to identify the response obtained from opening individual databases.

Subject Verification (SV02) Segment — Total length: 31 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **SV02**.
Segment Length	5	3	N	Value is **031**.
File Source	8	2	A/N	Specifies the source of the returned file. Valid values are: **01** TransUnion credit database **02** RPA database **03** Vendor database **04** TransUnion non-credit database
File Number	10	2	N	Specifies the file number (of those returned for this subject).
Subject Hit Status	12	2	A/N	Specifies the result of the subject search. Valid values are: **01** Subject found (hit) **02** Subject not found **03** Private listing found but not selected **04** Residential listing found but not selected **05** Business listing found but not selected

Subject Verification (SV02) Segment — Total length: 31 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				06 Listing with no name found but not selected **07** Non-mailable address found but not selected. **90** Phone number not entered **99** Database not available Values 03 through 07 are only available with RPA logic—when there is a hit on the RPA file.
Subject Restriction Status	14	1	A/N	Specifies whether the listing information has restrictions for use. Valid values are: **Blank** Not available **1** No solicitation restrictions for use **2** Phone solicitation restricted **3** Mail solicitation restricted **4** Both phone and mail solicitation restricted
Phone Status	15	1	A/N	Specifies the status of the phone number returned. Valid values are: **Blank** Not available * **0** Non-dialable **1** Dialable **2** Unconfirmed *This field is used with Total ID RPA logic only.
Date of Birth	16	1	A/N	Valid values are: **Blank** Match not performed **0** Not found **1** No match **2** Partial match **3** Match **9** Input data not available
Address Type	17	1	A/N	Specifies the type of address returned. Valid values are: **Blank** Not available * **S** Street **R** Rural Route

Subject Verification (SV02) Segment — Total length: 31 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				H High Rise **P** P.O. Box **F** Firm **G** General Delivery **M** Military/Postmaster *This field is used with Total ID RPA logic only
First Name	18	2	A/N	Specifies results of first name verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **09** Input data not available
Last Name	20	2	A/N	Specifies results of last name verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **09** Input data not available
Current Address	22	2	A/N	Specifies results of current address verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **09** Input data not available
Previous Address	24	2	A/N	Specifies results of previous address verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **09** Input data not available

Subject Verification (SV02) Segment — Total length: 31 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Area Code	26	2	A/N	Specifies results of area code verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **09** Input data not available
Phone Number	28	2	A/N	Specifies results of phone verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **09** Input data not available
SSN	30	2	A/N	Specifies results of SSN verification. Possible values are: **Blank** Match not performed **00** Not found **01** No match **02** Partial match **03** Match **04** Match to last four digits **09** Input data not available

SV03—Subject Verification Segment

The SV03 segment displays the identity verification analysis by matching the input indicative information to the file information of a specific database.

Subject Verification (SV03) Segment — Total length: 47 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **SV03**.	
Segment Length	5	3	N	Value is **047**.	

Subject Verification (SV03) Segment — Total length: 47 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Source Indicator	8	2	A/N	Specifies the data source that the identity is verified against. Valid values are: **01** TransUnion credit database **02** RPA database **03** Vendor database **04** TransUnion non-credit database	
Subject Hit Status	10	2	A/N	Specifies the result of the subject search. Valid values are: **01** Subject found (hit) **02** Subject not found **03** Subject found but not returned because of data restriction **99** Database unavailable or matching service error	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
First Name	12	2	A/N	Specifies results of first name verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Middle Name	14	2	A/N	Specifies results of middle name verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.

Subject Verification (SV03) Segment — Total length: 47 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				09 Input data not available **10** File data restricted	
Last Name	16	2	A/N	Specifies results of last name verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Maternal Name	18	2	A/N	Specifies results of maternal name verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted For future use.	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Suffix	20	2	A/N	Specifies results of name suffix verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.

Subject Verification (SV03) Segment — Total length: 47 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Current Address	22	2	A/N	Specifies results of current address verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Previous Address	24	2	A/N	Specifies results of previous address verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Phone Number	26	2	A/N	Specifies results of phone number (10 digits including area code) verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
SSN	28	2	A/N	Specifies results of SSN verification. Possible values are:	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze

Subject Verification (SV03) Segment — Total length: 47 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				00 Not found **01** No match **02** Partial match **03** Match **04** Match to last four digits **05** Match not performed **09** Input data not available **10** File data restricted	or other suppression.
Date of Birth	30	2	A/N	Specifies results of date of birth verification. Possible values are: **00** Not found **01** No match **02** Partial match **03** Match **05** Match not performed **09** Input data not available **10** File data restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Filler	32	16	A/N	For future use	

TA01—ID Mismatch Alert Segment

The TA01 is returned with the other segments containing the subject's indicative information. The TA01 resides after the PI11 segment, if present, and before the first AD11 segment for the subject.

Multiple TA01 segments may be returned if the input current and previous addresses did not match the file addresses and/or if there are multiple ID Mismatch Alerts (SSN, ZIP Code, Surname, Recorded Inquiries). When multiple TA01 segments exist, they are returned one after the other in the FFR.

The TA01 segment is returned for each subject, when applicable, in the FFR.

ID Mismatch Alert (TA01) Segment — Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TA01**.

ID Mismatch Alert (TA01) Segment — Total length: 12 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Length	5	3	N	Value is **012**.
Address Type	8	1	A/N	Indicates whether the ID Mismatch Alert message refers to a current address or a previous address. Possible values are: **C** Current address **P** Previous address This field will be blank if the Message Type value is 2, 4, or 5.
Message Type	9	1	A/N	Indicates the type of ID Mismatch Alert message that this segment contains. Possible values are: **1** Address alert **2** SSN alert **3** ZIP Code alert (transaction can contain two TA01 segments of this type, one each for current and previous ZIP Codes) **4** Surname alert **5** Recorded inquiries alert
Alert Condition	10	1	A/N	Indicates the condition that invoked the ID Mismatch Alert message. Possible values are: **1** Mismatch—input does not match file **2** Invalid information This field will be blank if the Message Type is 5.
Number of Inquiries in Last 60 Days	11	2	A/N	Indicates the number of inquiries on this file in the last 60 days.

TC01—Income Estimator Model Score Segment

The TC01 segment is returned for Income Estimator 2.0.

Income Estimator Model Score (TC01) Segment — Total length: 30 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TC01**.
Segment Length	5	3	N	Value is **030**.
Service Code	8	5	A/N	Identifies the service that returned income information used for the Income Estimator Model score model.
Debt to Income Percentage Indicator	13	1	A/N	Indicates whether a debt to income percentage was calculated. Possible values are: **Y** - Yes **N** - No An **N** in this field indicates one of these conditions: • Income is equal to 0 • No trade verified in the last 12 months • Total number of trades is less than 2 • Total for balance, credit limit, and high credit is 0
Debt to Income Percentage	14	3	A/N	Displays the subject's debt to income percentage.
Low Range	17	7	N	Displays the lower number in the subject's income range. Commas are not included. For example, an income range figure of $25,000 is displayed as 0025000. These are the income ranges available: $ 000,000–14,999 $15,000–24,999 $25,000–34,999 $35,000–49,999 $50,000–74,999 $75,000–99,999 $ 100,000+
Upper Range	24	7	N	Displays the upper number in the subject's income range. The above row displays the list of possible income ranges.

TM11—Trade MOP Totals Segment

The TM11 segment lists, for each Manner of Payment (MOP) level, the number of the subject's trade accounts that have that MOP rating. The FFR can include only one TM11 segment per subject.

Trade MOP Totals (TM11) Segment — Total length: 46 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TM11**.
Segment Length	5	3	N	Value is **046**.
Filler	8	3	N	Previously H/HP Counter; becomes filler field.
MOP 09/9B/9P Counter	11	3	N	Specifies the number of returned trade accounts that have a MOP of 09, 9B, or 9PLP.
MOP 08/8A/8P Counter	14	3	N	Specifies the number of returned trade accounts that have a MOP of 08, 8A, or 8P.
MOP 07/BK Counter	17	3	N	Specifies the number of returned trade accounts that have a MOP of 07.
Filler	20	3	N	Previously MOP 06 Counter; becomes filler field.
MOP 05 Counter	23	3	N	Specifies the number of returned trade accounts that have a MOP of 05.
MOP 04 Counter	26	3	N	Specifies the number of returned trade accounts that have a MOP of 04.
MOP 03 Counter	29	3	N	Specifies the number of returned trade accounts that have a MOP of 03.
MOP 02 Counter	32	3	N	Specifies the number of returned trade accounts that have a MOP of 02.
MOP 01 Counter	35	3	N	Specifies the number of returned trade accounts that have a MOP of 01.
Filler	38	3	N	Previously MOP 00 Counter; becomes filler field.
All Other Counter	41	3	N	Specifies the number of returned trade accounts that do not have any of the above MOP values.
Number of Accounts in Dispute	44	3	N	Specifies the number of returned trade accounts that are in dispute. These trade

Trade MOP Totals (TM11) Segment — Total length: 46 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				accounts are included in the above MOP totals.

TR11—Trade Account Segment

The TR11 segment displays information about the subject's trade accounts.

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **TR11**.	
Segment Length	5	3	N	Value is **332**.	
Industry Code	8	2	A/N	One- or two-digit industry codes may be returned depending on subscriber setup. For a list of industry codes, refer to Appendix B: Industry and Use Type Permissible Purpose Codes on page 646.	For subscribers receiving the Enriched Credit Report, a two-digit industry code is automatically returned.
Reporting Subscriber Code	10	8	A/N	Displays the reporting subscriber's member code.	Member code is returned right-justified with leading zeroes.
Subscriber Name	18	30	A/N	Displays the subscriber's name.	
Portfolio Type	48	1	A	Displays the type of portfolio. Possible values are: **R** - Revolving account **O** - Open account **C** - Line of credit **I** - Installment account **M** - Mortgage account	
Account Number	49	30	A/N	Displays the number of the account.	For subscribers receiving the Enriched Credit Report, the

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					maximum length of the data element delivered changes from 18 to 30.
Equal Credit Opportunity Act Designator	79	1	A	Displays the contractual ownership of the account. Possible values are: **U** - Undesignated account **I** - Individual account **C** - Joint contractual liability on account **A** - Authorized account **P** - Participant on account **S** - Co-signer on account **M** - Primary borrower on account **T** - Account relationship terminated **X** - Consumer deceased	
Account Type	80	2	A	Indicates the type of loan made by the credit grantor to the subject. Refer to Appendix C: Account Codes on page 666 for a list of account types.	
Effective Date	82	8	A/N	Displays the date the account was last verified. The date format is CCYYMMDD.	
Open Date	90	8	A/N	Displays the date the account was opened. The date format is CCYYMMDD.	
Closed Date	98	8	A/N	Displays the date the account was closed. The date format is CCYYMMDD.	

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Closed Date Indicator	106	1	A	Indicates how the account was closed. Possible values are: **C** - Account was closed normally **F** - Account was closed because of charge-off or repossession (that is, if the account rating is 08, 8A, 8P, 09, 9B, or 9P)	
Paid Out Date	107	8	A/N	Displays the date the account was paid out. The date format is CCYYMMDD.	
Current Balance Amount	115	9	A/N	Displays in whole dollars the balance remaining in this account.	
High Credit Amount	124	9	A/N	Displays in whole dollars either the highest amount ever owed in the account or the original balance owed.	
Credit Limit Amount	133	9	A/N	Displays in whole dollars the subject's credit limit for this account.	
Terms: Payment Schedule Month Count	142	3	A/N	Displays the number of months in the life of this financial obligation. For minimum payments on revolving accounts, the value in this field is MIN.	
Terms: Frequency of Payment	145	1	A/N	Specifies the frequency of payments required for this financial obligation. Possible values are: **D** - Deferred **P** - Payroll or deduction **W** - Weekly (due every week)	

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				B - Biweekly (due every two weeks) **E** - Semimonthly (due twice a month) **M** - Monthly (due every month) **L** - Bimonthly (due every two months) **Q** - Quarterly (due every three months) **T** - Triennially (due every four months) **S** - Semiannually (due twice a year) **Y** - Annually (due every year) **X** - Unspecified **V** - Variable payment	
Terms: Scheduled Monthly Payment Amount	146	9	A/N	Specifies the amount, expressed as a monthly payment, the subject must pay on this installment or mortgage loan. The amount is specified in whole dollars. If there is no payment amount, this field is blank-filled.	ACB Metro Format standards require the figure in this field to be the monthly amount due regardless of the actual payment frequency. For example, a 30-year mortgage is expressed as 000000590 (the monthly amount due) even if the consumer makes annual payments of $7080 or quarterly payments of $1770.
Actual Payment Amount	155	9	A	Specifies in whole dollars the amount of the monthly payment actually made by the subject.	This data element is returned to subscribers receiving the Enriched Credit Report and who

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					report payment data to TransUnion.
Last Payment Date	164	8	A/N	Displays the date of the most-recent monthly payment. The date format is CCYYMMDD.	
Manner of Payment *(renamed)*	172	2	A/N	Displays the condition of the account as of the Effective Date. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	Previously *Current Account Rating*.
Payment Pattern Start Date	174	8	A/N	Displays the start date of the subject's payment pattern. The date format is CCYYMMDD.	
Payment Pattern	182	48	A/N	Displays the subject's payment history and includes enriched values. Refer to Appendix C Trade Loan Account Codes for a complete list of enriched and standard Payment Pattern values.	For subscribers receiving the Enriched Credit Report, displays the subject's payment history and includes additional enriched values. Refer to Payment Pattern Logic on page 675 for a list of enriched and standard values.
Number of Months Reviewed	230	2	N	Displays the number of months (up to 48) for which the subject's payment history was reviewed. The results of the review are listed in the following three fields.	For subscribers receiving the Enriched Credit Report, reviews up to 82 months of History.
Times 30 Days Late	232	2	A/N	Displays the number of times in this time period the subject's payment was 30–59 days late.	
Times 60 Days Late	234	2	A/N	Displays the number of times in this time period the subject's payment was 60–89 days late.	

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Times 90 Days Late	236	2	A/N	Displays the number of times in this time period the subject's payment was 90 or more days late.	
Past Due Amount	238	9	A/N	Displays in whole dollars the amount that is past due on this account.	
Consolidated Remark Code (*renamed*)	247	3	A/N	Displays the Combination Remark Code, if multiple remark codes are present for the account.	This is a configuration option for the Enriched Credit Report. Special subscriber setup is required to receive this data. Previously First Delinquency Date.
Filler	250	34	A/N	*For future use.*	Previously for Highest Past Due and Earliest Highest Past Due information, but this data is not returned, and so the data fields become filler.
For subscribers receiving the Enriched Credit Report, two occurrences of maximum delinquency will be returned — the earliest occurrence and the most recent occurrence. Also, the history reviewed changes from a maximum of 48 months to 82 months. For subscribers receiving the Standard Credit Report, only the earliest occurrence of maximum delinquency is returned and the history reviewed remains at 48 months.					
Maximum Delinquency Manner of Payment (MOP)	284	2	A/N	Displays the condition of the account at the time of the subject's maximum delinquency. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	
Maximum Delinquency Amount	286	9	A/N	Displays in whole dollars the amount the subject owed at the earliest instance of maximum delinquency. This amount	

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				represents the earliest instance of maximum delinquency and is not removed for charge-off accounts.	
Maximum Delinquency Date	295	8	A/N	Displays the date of the earliest instance of the subject's maximum delinquency. This date represents the earliest instance of maximum delinquency and is not removed for charge-off accounts.	
Most Recent Maximum Delinquency Amount *(renamed)*	303	9	A/N	Displays in whole dollars the amount the subject owed at the most recent instance of maximum delinquency.	This data element is returned to subscribers receiving the Enriched Credit Report.
Most Recent Maximum Delinquency Date *(renamed)*	312	8	A/N	Displays the date of the most recent instance of the subject's maximum delinquency.	This data element is returned to subscribers receiving the Enriched Credit Report.
Remarks/ Affiliate Remark Code	320	3	A/N	If applicable, displays the affiliate (consumer) remark code that applies to this account. Affiliate remarks are typically related to bankruptcies. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	
Generic Remark Code	323	3	A/N	If applicable, displays the generic remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	This data element is returned to subscribers receiving the Enriched Credit Report.
Rating Remark Code	326	3	A/N	If applicable, displays the rating remark code that applies to this account.	This data element is returned to

Trade (TR11) Segment — Total length: 332 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				Rating Remark Codes are typically related to collections. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	subscribers receiving the Enriched Credit Report.
Compliance Remark Code	329	3	A/N	If applicable, displays the compliance remark code that applies to this account. Compliance Remark Codes are typically related to disputes. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	This data element is returned to subscribers receiving the Enriched Credit Report.
Update Indicator	332	1	A	Displays the update indicator. Possible values are: **A** - Automated account **V** - Manual account **M** - Locked (frozen) account	

TR12—Individual Monitoring Report Trade Account Segment

The TR12 segment displays information about a subject's trade account that satisfied a subscriber's Individual Monitoring Report.

Individual Monitoring Report Trade (TR12) Segment — Total length: 122 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is TR12.
Segment Length	5	3	N	Value is 122.
Industry Code	8	2	A/N	Displays the subscriber's industry code. Refer to Appendix B, "Industry Codes," for a list of industry codes.
Reporting Subscriber Code	10	8	A/N	Displays the reporting subscriber's member code.
Subscriber Name	18	30	A/N	Displays the subscriber's long name.

Individual Monitoring Report Trade (TR12) Segment — Total length: 122 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Portfolio Type	48	1	A	Specifies the type of portfolio on the account that satisfied the Individual Monitor. Possible values are: **R** - Revolving account **O** - Open account **C** - Line of credit **I** - Installment account **M** - Mortgage account
Account Number	49	30	A/N	Displays the account number of the trade that satisfied the Individual Monitoring Report.
Current Balance Amount	79	9	A/N	Displays in whole dollars the balance remaining in this account. Amount is not shown for derogatory accounts.
Current Manner of Payment (MOP)	88	2	A/N	Displays the current condition of the subject's account. Refer to Appendix C: Account Codes on page 666 for a list of MOP code definitions.
Current Past Due Amount	90	9	A/N	Displays in whole dollars the amount that is past due on this account. The amount is not shown for improved accounts.
Previous Manner of Payment (MOP)	99	2	A/N	Displays the previous condition of the subject's account. Refer to Appendix C: Account Codes on page 666 for a list of MOP code definitions.
Previous Past Due Amount	101	9	A/N	Displays in whole dollars the amount that was previously past due on this account. The amount is not shown for improved accounts.
Remarks Code/ Affiliate Remark Code	110	3	A/N	All remark codes — Affiliate, Compliance, Generic, or Rating — are currently returned in the Remark/ Affiliate Remark Code field. If multiple remark codes are present for the account, a combination code is returned in this field. Affiliate remark codes are typically related to bankruptcies. Refer to Appendix C: Account Codes on page 666 for a list of remark codes.
Generic Remark Code	113	3	A/N	If applicable, displays the generic remark code that applies to this

Individual Monitoring Report Trade (TR12) Segment — Total length: 122 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				account. Refer to Appendix C: Account Codes on page 666 for a list of these codes. *For future use.*
Rating Remark Code	116	3	A/N	If applicable, displays the rating remark code that applies to this account. Rating remark codes are typically related to collections. Refer to Appendix C: Account Codes on page 666 for a list of these codes. *For future use.*
Compliance Remark Code	119	3	A/N	If applicable, displays the compliance remark code that applies to this account. Compliance remark codes are typically related to disputes. Refer to Appendix C: Account Codes on page 666 for a list of these codes. *For future use.*
Method of Contact	122	1	A	Displays the method by which the subscriber wants to be contacted. Possible values are: **P** - Phone (voice) **M** - Mail only **O** - Other

TR13—Account Reporting Review Trade Account Segment

The TR13 segments display information about the subject's trade accounts. It differs from the standard TR11 segment because it displays suppression information.

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **TR13**.	
Segment Length	5	3	N	Value is **387**.	
Industry Code	8	2	A/N	Identifies the industry code of the subscriber whose account is included.	For CreditVision® subscribers, a two-digit industry code is

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					automatically returned.
Reporting Subscriber Code	10	8	A/N	Displays the reporting subscriber's member code.	Reporting Subscriber Code is right-justified with leading zeroes.
Subscriber Name	18	30	A/N	Displays the subscriber's name.	
Portfolio Type	48	1	A	Displays the type of portfolio. Possible values are: **R** - Revolving account **O** - Open account **C** - Line of credit **I** - Installment account **M** - Mortgage account	
Account Number	49	30	A/N	Displays the number of the account.	For CreditVision® subscribers, the length of the data element changes from 18 to 30.
Equal Credit Opportunity Act Designator	79	1	A	Displays the contractual ownership of the account. Possible values are: **U** - Undesignated account **I** - Individual account **C** - Joint contractual liability on account **A** - Authorized account **P** - Participant on account **S** - Co-signer on account **M** - Primary borrower on account **T** - Account relationship terminated **X** - Consumer deceased	

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Account Type	80	2	A	Indicates the type of loan made by the credit grantor to the subject. Refer to Appendix C: Account Codes on page 666 for a list of account types.	
Effective Date	82	8	A/N	Displays the date the account was opened. The date format is CCYYMMDD.	
Open Date	90	8	A/N	Displays the date the trade was last verified. The date format is CCYYMMDD.	
Closed Date	98	8	A/N	Displays the date the account was closed. The date format is CCYYMMDD.	
Closed Date Indicator	106	1	A	Indicates how the account was closed. Possible values are: **C** - Account was closed normally **F** - Account was closed because of charge-off or repossession (that is, if the MOP is 08, 8A, 8D, 8P, 8R, 09, 9B, or 9P) **F** - Account was closed because of charge-off or repossession (that is, if the account rating is 08, 8A, 8D, 8P, 8R, K, KP, J, JP, 09, 9B, 9P, G, GP, L, or LP)	
Paid Out Date	107	8	A/N	Displays the date the account was paid out. The date format is CCYYMMDD.	
Current Balance Amount	115	9	A/N	Displays in whole dollars the balance remaining in this account.	For CreditVision® subscribers, the 16,000,001 cap is removed.

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
High Credit Amount	124	9	A/N	Displays in whole dollars either the highest amount ever owed in the account or the original balance owed.	For CreditVision® subscribers, the 16,000,001 cap is removed.
Credit Limit Amount	133	9	A/N	Displays in whole dollars the subject's credit limit for this account.	For CreditVision® subscribers, this value is no longer rounded.
Terms: Payment Schedule Month Count	142	3	A/N	Displays the number of months in the life of this financial obligation. For minimum payments on revolving accounts, the value in this field is MIN.	
Terms: Frequency of Payment	145	1	A/N	Specifies the frequency of payments required for this financial obligation. Possible values are: **D** - Deferred **P** - Payroll or deduction **W** - Weekly (due every week) **B** - Biweekly (due every two weeks) **E** - Semimonthly (due twice a month) **M** - Monthly (due every month) **L** - Bimonthly (due every two months) **Q** - Quarterly (due every three months) **T** - Triennially (due every four months) **S** - Semiannually (due twice a year) **Y** - Annually (due every year) **X** - Unspecified **V** - Variable payment	
Terms: Scheduled Monthly	146	9	A/N	Specifies the amount the subject must pay on this	

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Payment Amount				installment or mortgage loan at the scheduled times (as specified in the Frequency of Payment field). The amount is specified in whole dollars. If there is no payment amount, this field is blank-filled. **Note:** ACB Metro Format standards require the figure in this field to be the monthly amount due regardless of the actual payment frequency. For example, a 30-year mortgage is expressed as 000000590 (the monthly amount due) even if the consumer makes annual payments of $7080 or quarterly payments of $1770.	
Actual Payment Amount	155	9	A	Specifies in whole dollars the amount of the monthly payment actually made by the subject.	This data element is returned to subscribers receiving the CreditVision® version of Account Reporting Review.
Last Payment Date	164	8	A/N	Displays the date of the most-recent monthly payment. The date format is CCYYMMDD.	This segment is returned for to CreditVision®s ubscribers only.
Manner of Payment (MOP) *(renamed)*	172	2	A/N	Displays the condition of the account as of the Effective Date. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	Previously *Current Account Rating*. This field has been renamed to better describe the data element returned at this displacement.

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Payment Pattern Start Date	174	8	A/N	Displays the start date of the subject's payment pattern. The date format is CCYYMMDD.	
Payment Pattern	182	48	A/N	Displays the subject's payment history. Refer to Appendix C: Account Codes on page 666 for a description of the payment pattern logic.	
Number of Months Reviewed	230	2	N	Displays the number of months for which the subject's payment history was reviewed. The results of the review are listed in the following three fields.	For CreditVision® subscribers, the maximum number of months reviewed changes from 48 to 82.
Times 30 Days Late	232	2	A/N	Displays the number of times in this time period the subject's payment was 30–59 days late.	
Times 60 Days Late	234	2	A/N	Displays the number of times in this time period the subject's payment was 60–89 days late.	
Times 90 Days Late	236	2	A/N	Displays the number of times in this time period the subject's payment was 90 or more days late.	
Past Due Amount	238	9	A/N	Displays in whole dollars the amount that is past due on this account.	For CreditVision® subscribers, the 65,000 cap is removed.
First Delinquency Date	247	8	A/N	Displays the date the account first became delinquent. The date format is CCYYMMDD.	
Filler	255	29	A/N	*For future use.*	Previously for Highest Past Due and Earliest Highest Past Due information, but this data is not

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					returned, and so the data fields become filler.
For subscribers receiving the CreditVision® version of Account Reporting Review, two occurrences of maximum delinquency will be returned — the earliest occurrence and the most recent occurrence. Also, the history reviewed changes from a maximum of 48 months to 82 months. For subscribers receiving the Standard version of Account Reporting Review, only the earliest occurrence of maximum delinquency is returned, and the history reviewed remains at 48 months.					
Maximum Delinquency Manner of Payment	284	2	A/N	Displays the condition of the account at the time of the subject's earliest instance of maximum delinquency. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	
Maximum Delinquency Amount	286	9	A/N	Displays in whole dollars the amount the subject owed at the earliest instance of maximum delinquency. The amount represents the earliest instance of maximum delinquency.	For CreditVision® subscribers, the 65,000 cap is removed.
Maximum Delinquency Date	295	8	A/N	Displays the date of the earliest instance of the subject's maximum delinquency. This date represents the earliest instance of maximum delinquency.	
Most Recent Maximum Delinquency Amount *(renamed)*	303	9	A/N	Displays in whole dollars the amount the subject owed at the most recent instance of maximum delinquency.	This data field is only returned for the CreditVision® version of the Account Reporting Review.
Most Recent Delinquency Date *(renamed)*	312	8	A/N	Displays the date of the most recent instance of the subject's maximum delinquency.	This data field is only returned for the CreditVision® version of the Account

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
					Reporting Review.
Note: In the Standard version of Account Reporting Review, all remark codes — Affiliate, Compliance, Generic, or Rating — are returned in the Remarks/Affiliate Remark Code field. If multiple remark codes are present for the account, a combination code may be returned in this field. For subscribers receiving the CreditVision® version, three new and separate data fields are returned for Generic, Rating and Compliance remarks, and the Remarks/Affiliate Remark Code field returns only affiliate remark codes. Combination codes are not returned.					
Remarks/ Affiliate Remark Code	320	3	A/N	If applicable, displays the affiliate (consumer) remark code that applies to this account. Affiliate Remark Codes are typically related to bankruptcies. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	For CreditVision® subscribers, returns Affiliate Remark Codes only.
Generic Remark Code	323	3	A/N	If applicable, displays the generic remark code that applies to this account. Refer to Appendix C: Account Codes on page 666 for a list of these codes.	This data field is only returned for the CreditVision® version of the Account Reporting Review.
Rating Remark Code	326	3	A/N	If applicable, displays the rating remark code that applies to this account. Rating Remark Codes are typically related to collections. Refer to Appendix C: Account Codes on page 666 for a list of these codes. *For future use.*	This data field is only returned for the CreditVision® version of the Account Reporting Review.
Compliance Remark Code	329	3	A/N	If applicable, displays the compliance remark code that applies to this account. Compliance Remark Codes are typically related to disputes. Refer to Appendix C: Account Codes on page 666 for a list of these codes. *For future use.*	This data field is only returned for the CreditVision® version of the Account Reporting Review.

Account Reporting Review Trade (TR13) Segment — Total length: 387 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Update Indicator	332	1	A	Displays the updated indicator. Possible values are: **A** - Automated account **V** - Manual account **M** - Locked (frozen) account	
Reported Date	333	8	A/N	Displays the date this information was reported. The date format is CCYYMMDD.	
Suppressed Date	341	8	A/N	Displays the date the account was suppressed. The date format is CCYYMMDD.	
Suppression Indicator	349	1	A/N	Indicates whether or not this account is suppressed from display to other subscribers. Possible values are: **Y** - Account is suppressed **N** - Account is not suppressed	
Filler	350	2	A/N	*Reserved for special use.*	
Filler	352	18	A/N	*Reserved for special use.*	
Filler	370	18	A/N	*Reserved for special use.*	

TT01—Transaction Tracking

The TT01 segment contains a transaction control number for some services.

Transaction Tracking (TT01) Segment — Total length: 33 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TT01**.
Segment Length	5	3	N	Value is **033**.

Transaction Tracking (TT01) Segment — Total length: 33 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Transaction Number	8	26	A/N	Indicates the control number for this transaction if one was assigned by the service application.

TU4E—Error Control Segment

The TU4E segment is the control record for error responses.

Error Control (TU4E) Segment — Total length: 62 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TU4E**.
Segment Length	5	3	N	Value is **062**.
Version Switch	8	1	N	Defines the TU40 FFR record version. T Possible values are: **0** - TU40 version 0 **1** - TU40 version 1
Country Code	9	1	A/N	Accommodates Canadian access. Possible values are: **1** - United States **2** - Canada **Note:** Refer to the Canadian version of the TransUnion "Automated Inquiry User Manual" for special Canadian segments, table definitions, and so on.
Language Indicator	10	1	N	Defines the language used for print images and error message text: **1** - English **2** - Spanish (U.S. only) **3** - French (Canada only)
User Reference Number	11	24	A/N	Associates an FFI with an FFR. This field contains the value sent in the FFI.
Bureau Market	35	2	N	Identifies the retailing bureau. This field contains the value sent in the FFI.
Bureau Submarket	37	2	A/N	Identifies the retailing bureau. This field contains the value sent in the FFI.

Error Control (TU4E) Segment — Total length: 62 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Industry Code	39	2	A/N	Identifies the subscriber's type of business. This field contains the value sent in the FFI.
Inquiring Subscriber Code	41	8	A/N	Identifies the inquiring subscriber's member code. This field contains the value sent in the FFI.
Transaction Date	49	8	A/N	Specifies the date the transaction was processed in the format CCYYMMDD.
Transaction Time	57	6	A/N	Specifies the time the transaction was processed in the format HHMMSS (Central Standard/Daylight Savings Time).

TU4R—Transaction Control Segment

Every FFR begins with a TU4R segment. This segment contains transaction identification such as language indicator, user reference number, market/submarket, and so on. Each FFR can have only one TU4R segment.

Transaction Control (TU4R) Segment — Total length: 62 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TU4R**.
Segment Length	5	3	N	Value is **062**.
Version Switch	8	1	N	Defines the TU4R FFR output format and product version (Standard or CreditVision®) for TransUnion standalone services being returned. Possible values are: **0** - TU4.0 Standard **1** - TU4.1 Standard **2** - TU4.0 CreditVision® **3** - TU4.1 CreditVision®
Country Code	9	1	A/N	Accommodates Canadian access. Possible values are: **1** - United States **2** - Canada

Transaction Control (TU4R) Segment — Total length: 62 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				Note: Refer to the Canadian version of the TransUnion "Automated Inquiry User Manual" for special Canadian segments, table definitions, and so on.
Language Indicator	10	1	N	Defines the language used for print images and error message text: **1** - English **2** - Spanish (U.S. only) **3** - French (Canada only)
User Reference Number	11	24	A/N	Associates an FFI with an FFR. This field contains the value sent in the FFI.
Bureau Market	35	2	N	Identifies the retailing bureau. This field contains the value sent in the FFI.
Bureau Submarket	37	2	A/N	Identifies the retailing bureau. This field contains the value sent in the FFI.
Industry Code	39	2	A/N	Identifies the subscriber's type of business. This field contains the value sent in the FFI.
Inquiring Subscriber Code	41	8	A/N	Identifies the inquiring subscriber's member code. This field contains the value sent in the FFI.
Transaction Date	49	8	A/N	Specifies the date the transaction was processed in the format CCYYMMDD.
Transaction Time	57	6	A/N	Specifies the time the transaction was processed in the format HHMMSS.

TX01—Text Statement Segment

The TX01 segment contains text statements that are returned for a service. Multiple TX01 segments are returned if the text statement is too long to be contained in one segment.

Text Statement (TX01) Segment — Total length: 172 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **TX01**.
Segment Length	5	3	N	Value is **172**.

Text Statement (TX01) Segment — Total length: 172 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Content Type	8	3	A/N	Identifies the type of text returned. Possible types are: **001** Consumer Bill of Rights statement **002** Employment Credit Report addendum **004** Decision Systems statement **CFX** Vehicle history raw data from vendor **VHS** Financial Service Vehicle History Score statement **Blank** The Content Type field is not used for a particular service
Statement Identifier	11	3	A/N	Identifies the specific message issued for messages that have unique identifiers.
Filler	14	3	N	
Current Segment Number	17	3	N	Identifies the position, or sequence number, of the current TX01 segment. If the message text requires more than one segment, this value allows the segments to appear in the correct order. For example, if two TX01 segments are returned, the first segment has a value of 1 in this field and the second TX01 segment has a value of 2.
Total Segment Number	20	3	N	Specifies the total number of TX01 segments in this FFR.
Statement Text	23	150	A/N	Contains the message text associated with the message code.

UA11—Unparsed Address Segment

The UA11 segment displays the subject's address.

The address status information returned is the same whether it is contained in an AD11 or a UA11 segment. If multiple addresses are returned, the first AD11 or UA11 segment is the current address, the second AD11 or UA11 segment is the previous address, and so on.

Unparsed Address (UA11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **UA11** unless the address is a future address.	

Unparsed Address (UA11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				The segment type for a future address is **UF11**.	
Segment Length	5	3	N	Value is **130**.	
Source Indicator	8	1	A	Indicates the source of the address information. Possible values are: **I** - Data received in the inquiry **F** - Data that appears on the TransUnion credit database **M** - Data that appears on database that best matches input **A** - Data that appears on the RPA database **D** - Data that appears on vendor database **C** - Data that appears on the TransUnion non-credit database **Q** - Data that appears on consumer inquiry **E** - Data that appears on vendor's aggregated database	For services where the telephone information is the main focus (Contact Locator, Contact Verification, Contact Verification Plus, and Phone Append) the F value indicates telephone company-sourced information; the C value indicates TransUnion credit database sourced-information.
Address Qualifier	9	1	A/N	Indicates whether the returned address is personal or employment. Possible values are: **1** - Personal **2** - Employment **3** - Credit grantor **5** - Business **6** - Both Residential and Business Address or not known **P** - Previous personal address (previous addresses are positional: the most recent previous address always precedes the second most recent) **Blank** - Not applicable	

Unparsed Address (UA11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Address Classification Code	10	1	A/N	Indicates the classification of the address per the United States Post Office. Possible values are: **1** - U.S. basic **2** - Overseas military **3** - Territory or protectorate **4** - Other **Blank** - Not known	
Standardized Flag	11	1	A/N	Indicates whether the address is standardized or not. Possible values are: **Y** - Address is standardized **N** - Address is not standardized or is partially standardized **Blank** - Not known	
Address Type	12	1	A/N	Indicates the classification of the address. Possible values are: **0** - Conventional address **1** - Post office box **2** - Rural route **3** - Highway contract **4** - General delivery **5** - Firm address **8** - Postmaster **9** - Not determined **H** - Multi-dwelling residential or office building **Blank** - Address type not known	Currently returned only for Contact Identity Services. For other services, ignore any data returned in this field unless otherwise announced.
Unparsed Address Line 1	13	70	A/N	Specifies the first line of the subject's street address, unparsed.	
City	83	28	A	Specifies the name of the subject's city.	For subscribers receiving the Enriched Credit Report, the maximum length of the data element changes from 27 to 28.

Unparsed Address (UA11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
State	111	2	A	Specifies the two-digit state code of the subject's state.	
ZIP Code	113	5	A/N	Specifies the subject's ZIP Code. This field is left-justified.	For subscribers receiving the Enriched Credit Report, may be returned for an Employer Address.
ZIP Extension Code	118	4	A/N	Specifies the subject's ZIP extension code. This field is left-justified.	This data element is returned to subscribers receiving the Enriched Credit Report.
Reported Date	122	8	A/N	Specifies the date this address was reported in the format CCYYMMDD.	For subscribers receiving the Enriched Credit Report, may appear for all addresses returned, where available.
Housing Status	130	1	A/N	Indicates the type of housing a person lives in. Possible values are: **O** - Own **R** - Rent **B** - Board **Blank** - Not known	

UF11—Future Unparsed Address Segment

The UF11 segment is currently used only by Geo Code. The fields and field attributes are identical to those of the UA11 segment except that the Segment Type is UF11.

A subject record can contain only one UF11 segment.

Future Unparsed Address (UF11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **UF11**.	
Segment Length	5	3	N	Value is **130**.	
Source Indicator	8	1	A	Indicates the source of the address information. Possible values are: **I** - Data received in the inquiry **F** - Data that appears on the TransUnion credit database **A** - Data that appears on the RPA database **D** - Data that appears on vendor database **C** - Data that appears on the TransUnion database (for Contact Identity Services)	This value refers to data that appears on the telephone company-sourced database for Contact Identity Services (Contact Locator, Contact Verification, and Contact Verification Plus).
Address Qualifier	9	1	A/N	Indicates whether the returned address is personal or employment. Possible values are: **1** - Personal **2** - Employment **5** - Business **6** - Both Residential and Business Address or not known **P** - Previous personal address (previous addresses are positional: the most recent previous address always precedes the second most recent)	
Address Classification Code	10	1	A/N	Indicates the classification of the address per the United States Post Office. Possible values are:	

Future Unparsed Address (UF11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				1 - U.S. basic **2** - Overseas military **3** - Territory or protectorate **4** - Other **Blank** - Not known.	
Standardized Flag	11	1	A/N	Indicates whether the address is standardized or not. Possible values are: **Y** - Address is standardized **N** - Address is not standardized or is partially standardized **Blank** - Not known.	
Address Type	12	1	A/N	Indicates the classification of the address. Possible values are: **0** - Conventional address **1** - Post office box **2** - Rural route **3** - Highway contract **4** - General delivery **5** - Firm address **8** - Postmaster **9** - Not determined **Blank** - Address type not known	
Unparsed Address Line 1	13	70	A/N	Specifies the first line of the subject's street address, unparsed.	
City	83	28	A	Specifies the name of the subject's city.	
State	111	2	A	Specifies the two-digit state code of the subject's state.	
ZIP Code	113	5	A/N	Specifies the subject's ZIP Code. This field is left-justified.	

Future Unparsed Address (UF11) Segment — Total length: 130 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
ZIP Extension Code	118	4	A/N	Specifies the subject's ZIP extension code. This field is left-justified.	
Reported Date	122	8	A/N	Specifies the date this address was reported in the format CCYYMMDD.	
Housing Status	130	1	A/N	Indicates the type of housing a person lives in. Possible values are: **O** - Own **R** - Rent **B** - Board **Blank** - Not known.	

VH01—Vehicle Information Segment

The VH01 segment displays a vehicle's data that may be returned by some insurance services.

Vehicle Information (VH01) Segment — Total length: 184 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **VH01**.
Segment Length	5	3	N	Value is **184**.
Source Indicator	8	1	A	Indicates the source of the address information. Possible values are: **I** Data received in the inquiry **F** Data that appears on the TransUnion credit database **C** Data that appears on TransUnion non-credit database **D** Data that appears on vendor database **S** Data that is suggested by vendor since the original input data results in a no-hit on vendor database
Vehicle Identification Number	9	17	A/N	Specifies the unique serial number used by the automotive industry to identify individual motor vehicles for which the information applies.

Vehicle Information (VH01) Segment — Total length: 184 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Year	26	4	A/N	Displays the year the vehicle was made. The date format is CCYY.
Make	30	16	A/N	Displays the brand of the vehicle in free form text.
Model	46	35	A/N	Displays the style of the vehicle in free form text.
Body Style	81	10	A/N	Displays the classification of the vehicle in free form text.
Odometer Mileage	91	6	N	Displays the vehicle's odometer mileage reading.
Odometer Reading Date	97	8	A/N	Displays the date when the odometer mileage was recorded. The date format is CCYYMMDD.
State Registered	105	2	A	Specifies the code of the state where the vehicle is registered.
Business Use Indicator	107	1	A/N	Indicates whether the vehicle is used for business purposes. Possible values are: **Y** Vehicle is used for business purposes **N** Vehicle is not used for business purposes
Anti-Theft Device Type code	108	2	A/N	Displays the type of device or method used to prevent or deter the unauthorized appropriation of the vehicle. Possible values are: **00** None **01** Alarm **02** Active disabling device **03** Passive disabling device **04** Electronic homing device **05** VIN etching on glass **06** Combination – alarm & disabling device **07** Combination – alarm & electronic homing device **08** Combination – alarm & VIN etching on glass **09** Combination – disabling device & electronic homing device **10** Combination – disabling device & VIN etching on glass **11** Combination – electronic homing device & VIN etching on glass **99** Other/Unknown

Vehicle Information (VH01) Segment — Total length: 184 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Collision Deductible Amount	110	9	A/N	Specifies in whole dollars the amount of the collision deductible.
Comprehensive Deductible Amount	119	9	A/N	Specifies in whole dollars the amount of the comprehensive deductible.
Towing Limit Amount	128	9	A/N	Specifies in whole dollars the amount of the towing limit.
Daily Rental Reimbursement Limit Amount	137	9	A/N	Specifies in whole dollars the amount of the maximum reimbursement that will be paid per day for the duration of the rental. For example, 20/600 rental reimbursement coverage provides a maximum of $20 per day for the duration of the rental.
Total Rental Reimbursement Limit Amount	146	9	A/N	Specifies the maximum amount of rental reimbursement per accident. For example, 20/600 rental reimbursement coverage provides a $600 maximum for the total duration of the rental.
Plate Type	155	1	A/N	Indicates the type of license plate issued. Possible values are: **0** Unassigned **1** Regular Passenger **2** Regular Truck **3** Regular **4** Official **5** Exempt **6** Dealer **7** Vanity **8** Ham Radio **9** Antique **A** Handicap **B** Disabled Veteran **C** Prisoner of War **D** Farm **E** Pro-Rate **F** Commercial **G** Recreational / Off Road **H** Special Interest Group **J** Temporary **P** Environmental **R** Temporary Tag **Z** Unknown
Branded Title	156	1	A/N	Indicates if the Vehicle's VIN is branded. Possible values are: **Y** Vehicle VIN is branded **N** Vehicle VIN is NOT branded

Vehicle Information (VH01) Segment — Total length: 184 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Lease Indicator	157	1	A/N	Indicates if the vehicle has a lease. Possible values are: **Y** Vehicle has a lease **N** Vehicle does NOT have a lease
Filler	158	27	A/N	*For future use.*

VS01—Verification Summary Segment

The VS01 segment summarizes the identity risk for Identity Manager Verification 2.0 services.

Text Statement (VS01) Segment — Total length: 33 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
Segment Type	1	4	A/N	Value is **VS01**.	
Segment Length	5	3	N	Value is **033**.	
Identity Risk Indicator	8	1	A/N	Displays the risk level. Possible values are: **1** High **2** Medium **3** Low	
Best Match Source Indicator	9	2	A/N	Specifies the data source to which the input identity information best matches. Valid values are: **01** TransUnion credit database **03** Vendor database **04** TransUnion non-credit database **99** Undetermined because file data is restricted	A TransUnion credit file is restricted when it is unavailable as a result of a security freeze or other suppression.
Sign	11	1	A/N	Contains a plus sign (+) or a minus sign (-) to indicate whether the Verification Point value is positive or negative. A	

Text Statement (VS01) Segment — Total length: 33 bytes					
Field	**Displacement**	**Length**	**Type**	**Description**	**Notes**
				verification point of zero is always positive.	
Verification Point	12	4	A/N	Displays the results of the verification process.	
Risk Lower Threshold	16	4	A/N	Displays the lower threshold of the verification point range. The Identity Risk Indicator is determined by the Verification Point against the Risk Lower Threshold and Risk Upper Threshold: • Low – Verification Point that is less than this threshold falls into the Low Risk category. • Medium – Verification Point that is greater than or equal to this threshold but less than the Risk Upper Threshold falls into the Medium Risk category.	
Risk Upper Threshold	20	4	A/N	Displays the upper threshold of the Verification Point range. The Identity Risk Indicator is determined by the Verification Point against the Risk Lower Threshold and Risk Upper Threshold: • Medium – Verification Point that is less than or equal to this threshold but greater than the Risk Lower Threshold falls into the Medium Risk category. • High – Verification Point that is greater than this threshold falls into the High Risk category.	
Filler	24	10	A/N	*For future use*	

WS01—Individual Monitoring Report Satisfaction Segment

The WS01 segment identifies an Individual Monitoring Report criterion that was satisfied.

Individual Monitoring Report Satisfaction (WS01) Segment — Total length: 10 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **WS01**.
Segment Length	5	3	N	Value is **010**.
Satisfaction Criteria	8	3	A/N	Specifies the Individual Monitoring Report criterion that the file satisfied. Possible values are: **001** New address **002** New employment **003** New inquiry **004** Derogatory trade account **005** New trade account **006** Improved trade account **007** Trade account bankruptcy **008** New public record **009** Public record bankruptcy **010** Enhanced new inquiry **011** True name fraud consumer statement

YI01—Year of Issuance Segment

The YI01 segment displays the year that a specific ID was issued to the subject. The FFR can include one Y101 segment for each input subject.

Year of Issuance (YI01) Segment — Total length: 36 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **YI01**.
Segment Length	5	3	N	Value is **036**.
ID Qualifier	8	2	A/N	Specifies the ID to which this segment data applies. Possible values are: **1** - SSN **2** - Federal Tax ID **3** - State ID

Year of Issuance (YI01) Segment — Total length: 36 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				4 - Driver's License
Message Code	10	6	A/N	Possible values are: **5503** or **5504** for High Risk Fraud Alert Returns blanks for all other products
Source Indicator	16	1	A/N	Indicates the source of the message code. Possible values are: **I** - Data received in the inquiry **F** - Data that appears in the TransUnion database This field is used only for High Risk Fraud Alert and Identity Manager Verification. Returns blanks for all other products.
Number of Years Covered	17	2	A/N	Specifies the number of years covered by this transaction. For the 5503 High Risk Fraud Alert message code, these are the valid values: **02** - 2 years **05** - 5 years **10** - 10 years A blank field indicates that no threshold was assigned.
Range of Years Issued: From	19	4	N	Displays the starting year of the range of years that the ID was issued for.
Range of Years Issued: To	23	4	N	Displays the ending year of the range of years that the ID was issued for.
State Code	27	2	A	Specifies the state in which the SSN was issued. Besides state codes, a subscriber might receive this value: **EE** - SSN was issued to an alien **XX*** - Not requested or no derogatory information * This value is used only by Fraud ID-Tect and Total ID.
Sign of Age Obtained: From	29	1	A/N	Specifies whether the beginning age of the age range returned is a positive or a negative value. Possible values are:

Year of Issuance (YI01) Segment — Total length: 36 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
				- - Negative + - Positive
Age Obtained: From	30	2	A/N	Specifies the beginning age in an age range. This is only present if the age is present.
Sign of Age Obtained: To	32	1	A/N	Specifies whether the ending age of the age range returned is a positive or a negative value. Possible values are: - - Negative + - Positive
Age Obtained: To	33	2	A/N	Specifies the ending age in an age range. This is only present if the age is present.
Issuance Year Status	35	2	A/N	Specifies the Fraud Detect/Identity Manager Verification message returned for this ID. The message indicates whether any evidence of possible fraud applies to the ID's year of issuance. If High Risk Fraud Alert was requested, this field is filled with blanks. Possible messages are: **01** - Clear **02** - Not Issued Yet **03** - Assigned Before DOB **04** - Pocket Book Number **05** - SSN Issued Within Last 7 Years **06** - Issued After Age 21 **09** - Not requested or no derogatory information

ZC01—ZIP Code Segment

The ZC01 segment displays information about a listed ZIP Code.

ZIP Code (ZC01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is **ZC01**.
Segment Length	5	3	N	Value is **022**.

ZIP Code (ZC01) Segment — Total length: 22 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Source Indicator	8	1	A	Indicates the source of the ZIP Code. Possible values are: **I** Data received in the inquiry **F** Data that appears in the TransUnion database
ZIP Code Qualifier	9	2	A/N	Indicates whether this ZIP Code is for the subject's home or employment. Possible values are: **1** Personal **2** Employment
ZIP Code Indicator	11	1	N	Indicates whether the ZIP Code is literal or estimated. Possible values are: **1** Input **2** Closest ZIP Code **3** Most common
ZIP Code Type	12	1	A/N	Specifies the type of ZIP Code. Possible values are: **P** PO Box **U** Unique **A** APO/FPO **R** Regular **N** New **M** Military* (Value is not used in Fraud Detect) **9** Not requested or no derogatory information **Blank** Not requested or no derogatory information * Value is not used in Fraud Detect
ZIP Code	13	10	A/N	Displays the ZIP Code.

Appendices

Appendix A: Name, Address, and Phone Codes

This appendix shows examples of how several different types of addresses are coded in TU4.1 and contains the following lists of codes that are valid in TU4.1:

- Street type codes
- State codes
- Unit type codes
- Prefix codes
- Suffix codes
- Phone codes

Sample Addresses

The following table contains sample addresses and shows how these addresses are coded in the TU4.1 format.

Full Input Address								
Segment Type		**House Number**	**Pre-Direct.**	**Street Name**	**Post Direct.**	**Street Type**	**Apt/ Unit**	**Note**
123456 NW Massachusetts Avenue - Apartment 2B								
AD11		123456	NW	MASSACH USETTS		AV	2B	
6 N 144 Higgins								
AD11		6	N	HIGGINS			144	
19 W412 Briar Place								
AD11		19		W412 BRIAR		PL		
1349 1/2 Broadway								
AD11		1349		BROADWA Y				
1105 W North Shore								
AD11		1105	W	NORTH SHORE				
893 Portage Road West								
AD11		893		PORTAGE	W	RD		
893 Portage South Road West								

Full Input Address								
Segment Type		House Number	Pre-Direct.	Street Name	Post Direct.	Street Type	Apt/ Unit	Note
AD11		893		PORTAGE SOUTH	W	RD		
893 Portage West								
AD11		893		PORTAGE WEST				
7326 Avenue G								
AD11		7326		AVENUE G				
14 West Avenue of the Americas								
AD11		14	W	AVENUE OF THE AMERICAS				
100 School St Apt 2-B								
AD11		100		SCHOOL		ST	2B	
257 17th EE Ave								
AD11		257		17TH EE		AV		
150 Grove Av 2ND Floor								
AD11		150		GROVE		AV	2	
6134 N 3 Road								
AD11		6134	N	3RD		RD		
72 11 St								
AD11		72		11TH		ST		
Lot 185 671 W Airwood								
AD11		185	W	AIRWOOD				
Grand Square Building								
AD11		1		GRAND		SQ		
West Wind Trailer Park								
AD11		1	W	WIND TRAILER		PK		
1425 US Hwy 19 S 404								
AD11		1425	S	US HY 19404				
1130 ST Andrew								
AD11		1130		ST ANDREW				
Box 853 Route 2								

Full Input Address								
Segment Type		House Number	Pre-Direct.	Street Name	Post Direct.	Street Type	Apt/ Unit	Note
AD11		2		RR 2 POB 853				
Box 123 Star Route 4								
AD11		4		STAR 4 POB 123				
Post Office Box 345								
AD11		345		POB 345				
Rural Route Box 345								
AD11		1		RR POB 345				
Star Route Box 678								
AD11		1		STAR POB 678				
Rural Route B Box 678								
AD11		1		RR B POB 678				
Star Route A Box 123								
AD11		1		STAR A POB 123				
Rural Route 5 Box 99-A								
AD11		5		RR 5 POB 99A				
Star Route 3 Box G-78								
AD11		3		STAR 3 POB G78				
Route 48 Kitty Corners								
AD11		48		RR 48				
64TH ORD CO								
AD11		64		ORD CO				
7TH ARMY TRNG CMD								
AD11		7		ARMY TRNG CMD				
USS BOSTON								
AD01		0		USS BOSTON				To complete this address, use a city/

Full Input Address								
Segment Type		House Number	Pre-Direct.	Street Name	Post Direct.	Street Type	Apt/ Unit	Note
								state/ZIP code of FPO/AE/ 09565.
874 PSC								
AD01		874		PSC				To complete this address, use a city/ state/ZIP code of APO/AP/ 96262.

Example of House Number Editing

These house numbers are acceptable and will invoke no edits or errors:

1	1N2	0N23	1SW2
12	12N3	0N234	12SW3
123	123N4	1N2345	123SW4
12345	123N45		1SW23
123456			0SW234

These house numbers will invoke critical errors:

N	1N	1234SW	ST34
N1	12N	SW	123NX
N12	123N	SW1	123NXT
N123	1234N	SW12	TXN123
N1234	1SW	SW123	TN123
N12345	12SW	SW1234	

The following house numbers will be edited by TU4.1. Blanks, non-directional alpha characters, and special characters are edited out.

T1	1T2	ABCDE1
T12	12T	A1
T123	123T	1A
T12345	12345T	1ABCDE

Street Type Codes

The following table lists the TU4.1 street type codes.

Code	Street Type
AD	Arcade
AL	Alley
ALY	Alley
ANX	Annex
ARC	Arcade
AV	Avenue
AVE	Avenue
AX	Annex
BCH	Beach
BD	Bend
BE	Bridge
BF	Bluff
BG	Burg
BH	Beach
BK	Brook
BL	Bluffs
BLF	Bluff
BLFS	Bluffs
BLVD	Boulevard
BM	Bottom
BN	Branch
BND	Bend
BP	Bypass
BR	Branch

Code	Street Type
BRG	Bridge
BRK	Brook
BRKS	Brooks
BS	Brooks
BTM	Bottom
BU	Burgs
BV	Boulevard
BY	Bayou
BYP	Bypass
BYU	Bayou
CI	Circle
CIR	Circle
CIRS	Circles
CLB	Club
CLF	Cliff
CLFS	Cliffs
CMN	Common
CN	Center
COR	Corner
CORS	Corners
CP	Camp
CPE	Cape
CR	Crescent
CRES	Crescent
CRST	Crest
CSWY	Causeway
CT	Court
CTR	Center
CTRS	Centers
CTS	Courts
CURV	Curve
CV	Cove
CVS	Coves
DA	Dale

Code	Street Type
DL	Dale
DM	Dam
DR	Drive
DRS	Drives
DV	Divide
EST	Estate
ESTS	Estates
EX	Expressway
EXPY	Expressway
EXT	Extension
EXTS	Extensions
FLD	Field
FLDS	Fields
FLS	Falls
FLT	Flat
FLTS	Flats
FRD	Ford
FRDS	Fords
FRG	Forge
FRGS	Forges
FRK	Fork
FRKS	Forks
FRST	Forest
FRY	Ferry
FT	Fort
FY	Freeway
FWY	Freeway
GA	Garden
GDN	Garden
GDNS	Gardens
GRN	Green
GRNS	Greens
GR	Grove
GRV	Grove

Code	Street Type
GRVS	Groves
GTWY	Gateway
HBR	Harbor
HBRS	Harbors
HL	Hill
HLS	Hills
HOLW	Hollow
HT	Heights
HTS	Heights
HVN	Haven
HY	Highway
HWY	Highway
INLT	Inlet
IS	Island
ISLE	Isle
ISS	Islands
JCT	Junction
JCTS	Junctions
KN	Knoll
KNL	Knoll
KNLS	Knolls
KY	Key
KYS	Keys
LAND	Land
LCK	Lock
LCKS	Locks
LDG	Lodge
LF	Loaf
LGT	Light
LGTS	Lights
LK	Lake
LKS	Lakes
LN	Lane
LNDG	Landing

Code	Street Type
LOOP	Loop
LP	Loop
MA	Mall
MALL	Mall
MDW	Meadow
MDWS	Meadows
MEWS	Mews
ML	Mill
MLS	Mills
MNR	Manor
MNRS	Manors
MSN	Mission
MT	Mount
MTNS	Mountains
MTWY	Motorway
NCK	Neck
OPAS	Overpass
OVAL	Oval
PA	Path
PARK	Park
PASS	Pass
PATH	Path
PI	Pike
PIKE	Pike
PK	Park
PKWY	Parkway
PL	Place
PLN	Plain
PLNS	Plains
PLZ	Plaza
PNE	Pine
PNES	Pines
PR	Prairie
PRT	Port

Code	Street Type
PRTS	Ports
PSGE	Passage
PT	Point
PTS	Points
PY	Parkway
PZ	Plaza
RADL	Radial
RAMP	Ramp
RD	Road
RDG	Ridge
RDGS	Ridges
RDS	Roads
RIV	River
RN	Run
RNCH	Ranch
RO	Row
ROW	Row
RPDS	Rapids
RST	Rest
RT	Route
RTE	Route
RUE	Rue
RUN	Run
SHL	Shoal
SHLS	Shoals
SHR	Shore
SHRS	Shores
SKWY	Skyway
SMT	Summit
SPG	Spring
SPGS	Springs
SPR	Spur
SQ	Square
SQS	Squares

Code	Street Type
ST	Street
STA	Station
STRA	Stravenue (US Postal Service standard street suffix)
STRM	Stream
STS	Streets
TE	Terrace
TER	Terrace
TP	Turnpike
TPKE	Turnpike
TR	Trail
TRAK	Track
TRCE	Trace
TRFY	Traffic way
TRL	Trail
TRWY	Throughway
TUNL	Tunnel
UN	Union
UNS	Unions
UPAS	Underpass
VI	Viaduct
VIA	Viaduct
VIS	Vista
VL	Ville
VLG	Village
VLGS	Villages
VLY	Valley
VLYS	Valleys
VW	View
VWS	Views
WALK	Walk
WALL	Wall
WAY	Way
WAYS	Ways
WK	Walk

Code	Street Type
WL	Well
WLS	Wells
WY	Way
XING	Crossing
XRD	Crossroad

State Codes

The following table lists the TU4.1 state codes, which include:

- U.S. states
- Canadian provinces
- Other geographic areas

The U.S. state codes are:

Alphabetic Code	State	Numeric Code
AL	Alabama	01
AK	Alaska	02
AZ	Arizona	04
AR	Arkansas	05
CA	California	06
CO	Colorado	08
CT	Connecticut	09
DE	Delaware	10
DC	Washington D.C.	11
FL	Florida	12
GA	Georgia	13
HI	Hawaii	15
ID	Idaho	16
IL	Illinois	17
IN	Indiana	18
IA	Iowa	19
KS	Kansas	20
KY	Kentucky	21
LA	Louisiana	22

Alphabetic Code	State	Numeric Code
ME	Maine	23
MD	Maryland	24
MA	Massachusetts	25
MI	Michigan	26
MN	Minnesota	27
MS	Mississippi	28
MO	Missouri	29
MT	Montana	30
NE	Nebraska	31
NV	Nevada	32
NH	New Hampshire	33
NJ	New Jersey	34
NM	New Mexico	35
NY	New York	36
NC	North Carolina	37
ND	North Dakota	38
OH	Ohio	39
OK	Oklahoma	40
OR	Oregon	41
PA	Pennsylvania	42
RI	Rhode Island	44
SC	South Carolina	45
SD	South Dakota	46
TN	Tennessee	47
TX	Texas	48
UT	Utah	49
VT	Vermont	50
VA	Virginia	51
WA	Washington	53
WV	West Virginia	54
WI	Wisconsin	55
WY	Wyoming	56

The codes for Canadian provinces and territories are:

Code	Canadian Province or Territory
AB	Alberta
BC	British Columbia
LB	Labrador
MB	Manitoba
NB, NK	New Brunswick
NF	Newfoundland
NT, NW	Northwest Territories
NS	Nova Scotia
ON	Ontario
PE	Prince Edward Island
QU, PQ	Quebec
SK	Saskatchewan
YU, YT	Yukon

Other valid geographic codes are:

Code	Location
AA	Military address in America other than Canada
AE	Military address in Europe, Middle East, or Canada
AP	Military address in Pacific
AS	American Samoa
CA	Canada
CZ	Canal Zone
FM	Federated States
GU	Guam
MH	Marshall Islands
MP	N. Mariana Isles
MX	Mexico
PW	Palau
PR	Puerto Rico
VI	Virgin Islands

Unit Type Codes

The following tables list the TU4.1 abbreviated unit type codes in the new relational database. These codes are available only in TU4.1.

Abbreviated Unit Type Code	Description
APT	Apartment
BSMT	Basement
BLDG	Building
DEPT	Department
FL	Floor
FRNT	Front
HNGR	Hanger
KEY	Key
LBBY	Lobby
LOT	Lot
LOWR	Lower
OFC	Office
PH	Penthouse
PIER	Pier
REAR	Rear
RM	Room
SIDE	Side
SLIP	Slip
SPC	Space
STOP	Stop
STE	Suite
TRLR	Trailer
UNIT	Unit
UPPR	Upper
blank	Blank. Unavailable to determine

Prefix Codes

The TU4.1 FFI accepts and the FFR returns 2-byte, 3-byte, and 4-byte prefix codes. A 2-byte or 3-byte prefix code in the FFI must be left-justified. The following table lists valid TU4.1 prefix codes:

Prefix Code	Description
1LT	1st Lieutenant
1SG	1st Sergeant
2LT	2nd Lieutenant
ADCS	ADCS
ADM	Admiral
AP	AP
BGEN	Brigadier General
BKT	BKT
BROR	BROR
CCA	CCA
CCB	CCB
CCC	CCC
CCL	CCL
CCR	CCR
CCW	CCW
CDT	CDT
CKS	CKS
CLA	CLA
CMDR	Commander
CMS	CMS
COL	Colonel
CPL	CPL
CPO	Chief Petty Officer
CPT	Captain
CSM	CSM
CW2	CW2
CW3	CW3
CW4	CW4
CWO	CWO
CWS	CWS
DCCB	DCCB
DR	Doctor
ECCB	ECCB

Prefix Code	Description
ENS	Ensign
FR	Father
GEN	General
GMMI	GMMI
GSGT	Gunnery Sergeant
HF	HF
HL	HL
JCCB	JCCB
LCD	LCD
LCDO	LCDO
LCDR	Lieutenant Commander
LCOL	Lieutenant Colonel
LCOR	Lance Corporal
LDR	LDR
LGEN	Lieutenant General
LT	Lieutenant
LTJG	LTJR Grade
MAJ	Major
MGEN	Major General
MGST	MGST
MIDN	MIDN
MISS	MISS
ML	Military
MP	Military Police
MR	Mister
MRS	MRS
MS	MS
PCCB	PCCB
PFC	Private 1st Class
PO	PO
PO1	PO1
PO2	PO2
PO3	PO3
PSG	PSG

Prefix Code	Description
PVT	Private
RAB	Rabbi
RADM	Rear Admiral
RDML	READ AMD
RV	Reverend
SFC	Sergeant 1st Class
SGT	Sergeant
SMAJ	Sergeant General Major
SMG	SMG
SMS	SMS
SMSG	SMSG
SP4	Specialist 4
SP5	Specialist 5
SP6	Specialist 6
SP7	Specialist 7
SP8	Specialist 8
SP9	Specialist 9
SPC	Specialist
SS	Sister
SSGT	Staff Sergeant
TDRL	TDRL
TSFT	TSFT
TSGT	Technical Sergeant
USAF	Air Force
XGEN	XGEN
XLT	XLT

Suffix Codes

There are two types of suffix codes used by TU4.1:

- Salutation codes, which are either 2 or 3 bytes long. The 2-byte salutation code must be left-justified in the FFI.
- Generation codes, which are 1, 2, or 3 bytes long. All generation codes must be left-justified in the FFI.

Salutation Codes

The following table lists valid salutation codes.

Salutation Code	Description
DD	DD
DDS	Doctor Of Dental Science
DMD	DMD
DO	Doctor Of Osteopathy
DVM	Doctor Of Veterinary Medicine
MD	Medical Doctor
ML	Military
OD	Orthopedic Doctor
PHD	Doctorate Degree
RN	Registered Nurse

Generation Codes

The following table lists valid generation codes.

Generation Code	Description
3	Third
7	Seventh
8	Eighth
I	First
II	Second
IV	Fourth
V	Fifth
VI	Sixth
IX	Ninth
JR	Junior
ND	Second
RD	Third
SR	Senior
ST	First

Generation Code	Description
TH	Fourth

RPA Phone Type Codes

Reverse Phone Append (RPA) and TOTAL ID use phone type codes returned from the RPA database:

Code	Description
00	Standard service
01	Mobile
02	Pager
03	Packet switching
04	Cellular
05	Plant test
06	Maritime
07	Air to ground
08	800 service
09	900 service
10	Called party pays
11	Information provider service
12	500 service
13	Directory assistance
14	Special calling cards
15	Official exchange carrier service
16	Originating only
17	Billing only
18	800 database
30	Broad band
50	Shared among three or more services
51	Shared between standard and mobile
52	Shared between standard and paging
53	Reserved for future use
54	Shared between POTS and cellular
55	Special billing option – cellular

Code	Description
56	Special billing option – paging
57	Special billing option – mobile
58	Special billing option shared among two or more (cellular, page, mobile)
60	Service provider requests – cellular, page, mobile, or shared
61	Service provider requests – cellular, page, mobile, or shared
62	Service provider requests - cellular, page, mobile, or shared
63	Service provider requests - cellular, page, mobile, or shared
64	Personal communication services (NPA 500)
65	Miscellaneous service (non-500 PCS, etc.)
66	Shared between standard and miscellaneous service
88	Toll station – Ring down
99	No information available

Appendix B: Industry and Use Type Permissible Purpose Codes

This appendix shows the valid industry codes and use type codes for TU4.1.

Industry Codes

Note: Industry codes are assigned by TransUnion. Use the industry code assigned with your subscriber code rather than picking one.

The following table lists subscriber industry codes:

Code (1 char)	Code (2 char)	Industry
A		**Automotive**
	AA	Auctions / Wholesale
	AC	Auto / Truck Leasing
	AF	Farm Implement Dealers
	AL	Truck Dealers
	AN	Auto Dealers, New
	AP	Auto Parts
	AR	Auto Repairs, Body Shops
	AS	Service Stations
	AT	TBA Stores, Tire Dealers

Code (1 char)	Code (2 char)	Industry
	AU	Auto Dealers, Used
	AZ	Miscellaneous
B		**Banks**
	BA	Auto Loans
	BB	Commercial Banks
	BC	Credit Cards
	BH	Home Equity Loans
	BI	Installment Loans
	BL	Line of Credit
	BM	Mortgage Loans
	BO	Full Service Banks
	BS	Student Loans
	BY	Bank Collection
	BZ	Miscellaneous
C		**Clothing**
	CB	Men's Apparel
	CG	Men / Women's Apparel
	CO	Off Price Clothing
	CS	Specialty Clothing
	CT	Textile Mills
	CU	Upscale Clothing
	CW	Women's Apparel
	CY	Clothing Store Collection
	CZ	Miscellaneous
D		**Department / Variety and Other Retail**
	DC	Complete Department Store
	DN	National Chain
	DO	Off Price Store
	DP	Mail Order Firms
	DU	Used Merchandise
	DV	Variety Store
	DY	Department Store Collection
	DZ	Miscellaneous
E		**Education/Employment**

Code (1 char)	Code (2 char)	Industry
	EB	Business Education
	EL	Student Loan Servicing
	ES	Employment Services
	ET	Junior Colleges / Technical Education
	EU	Universities / Colleges
	EV	Vocational / Trade Schools
	EY	Education Collection
	EZ	Miscellaneous
F		**Finance / Personal**
	FA	Auto Financing
	FC	Credit Cards Issued by Finance Companies
	FF	Sales Financing
	FH	Home Equity Loans
	FI	Investment Firms
	FM	Mortgage Loans
	FP	Personal Loan Companies
	FS	Savings and Loan Co.
	FY	Finance Collection
	FZ	Miscellaneous
G		**Groceries**
	GB	Bakeries
	GD	Dairies
	GL	Liquor Stores
	GM	Meat / Fish Markets
	GN	Neighborhood Grocery
	GS	Supermarkets
	GZ	Miscellaneous
H		**Home / Office Furnishings**
	HA	Appliance Sales and Service
	HC	Carpet / Floor Coverings
	HD	Interior Decorators / Design
	HE	Home Electronics Sales and Service
	HF	Furniture and Home / Office Furnishings Stores
	HM	Music / Record Stores

Code (1 char)	Code (2 char)	Industry
	HR	Furniture Rentals / Leasing
	HT	Television / Radio Sales and Service
	HY	Home / Office Furnishings Collection
	HZ	Miscellaneous
I		**Insurance**
	IG	General Insurance
	IH	Health and Accident Insurance
	IL	Life Insurance
	IP	Property and Casualty Insurance
	IR	Retirement / Pension Plans
	IZ	Miscellaneous
J		**Jewelry, Cameras**
	JA	Jewelers
	JC	Cameras
	JP	Computer Sales and Service
	JZ	Miscellaneous
K		**Contractors**
	KG	General Contractors
	KI	Home Improvement Contractors
	KS	Subcontractors
	KZ	Miscellaneous
L		**Lumber / Building Materials / Hardware**
	LA	Air Conditioning, Heating, Plumbing, Electrical
	LC	Concrete / Clay / Stone Products
	LD	Doors / Windows Sales and Service
	LF	Fixture and Cabinet Supplies
	LH	Hardware Stores
	LP	Paint, Glass, Wallpaper Stores
	LY	Lumber Yards / Mills
	LZ	Miscellaneous
M		**Medical / Related Health**
	MB	Dentists
	MC	Chiropractors
	MD	Doctors / Clinics

Code (1 char)	Code (2 char)	Industry
	ME	Medical Equipment
	MF	Funeral Homes
	MH	Hospitals
	MM	Cemeteries
	MO	Osteopaths
	MP	Pharmacies / Drug Stores
	MV	Veterinarians / Animal Services
	MZ	Miscellaneous
N		**Travel / Entertainment**
	NA	Airline Card
	NC	Affinity Credit Card
	ND	National Drug Chain
	NR	Auto Rental Companies
	NT	Travel / Entertainment Card
	NZ	Miscellaneous
O		**Oil Companies**
	OC	Oil Companies
	OZ	Miscellaneous
P		**Personal Services Other Than Medical**
	PA	Accountants / Related
	PB	Barber / Beauty Shops
	PC	Equipment Rentals / Leasing
	PD	Dry Cleaning / Laundry and Related Services
	PE	Engineering of all Kinds
	PF	Florists
	PG	Photographers
	PH	Health and Fitness Clubs
	PI	Investigative / Detective Services
	PJ	Janitorial Services
	PL	Legal and Related Services
	PM	Management / Investment Services
	PN	Entertainment
	PP	Pest Control
	PR	Restaurants / Bars / Country Clubs

Code (1 char)	Code (2 char)	Industry
	PS	Storage / Warehouse
	PT	Transportation / Delivery Service
	PW	Animal Specialty Services
	PZ	Miscellaneous
Q		**Credit Unions and Finance Companies Other Than Personal Finance Companies**
	QA	Auto Finance
	QC	Credit Union Credit Card
	QF	Sales Financing Companies
	QM	Mortgage Companies
	QU	Credit Unions
	QY	Line of Credit
	QZ	Miscellaneous
R		**Real Estate and Public Accommodations**
	RA	Apartments
	RC	Office Leasing
	RD	Mobile Home Manufacturers / Dealers
	RE	Real Estate, Sales, and Rentals
	RH	Hotels
	RM	Motels
	RP	Mobile Home Parks
	RR	Property Management
	RZ	Miscellaneous
S		**Sporting Goods**
	SA	Aircraft Sales and Service
	SB	Boats / Marinas Sales and Service
	SG	Sporting Good Stores
	SM	Motorcycles / Bicycles Sales and Service
	SZ	Miscellaneous
T		**Farm and Garden Supplies**
	TC	Farm Chemicals / Fertilizer Stores
	TF	Feed / Seed Stores
	TN	Nursery / Landscaping Supplies and Services
	TZ	Miscellaneous

Code (1 char)	Code (2 char)	Industry
U		**Utilities and Fuel**
	UB	Cable / Satellite Companies
	UC	Coal / Wood Dealers
	UD	Garbage / Rubbish Disposal Companies
	UE	Electric Light / Power Companies
	UF	Fuel / Oil Distributors
	UG	Gas Companies, Natural / Bottled
	UR	Cellular Telephone / Paging Companies
	UT	Telephone Companies
	UW	Water / Sanitary Service Companies
	UZ	Miscellaneous
V		**Government**
	VC	City / County
	VF	Federal
	VG	Government Student Loans
	VL	Law Enforcement
	VS	State
	VZ	Miscellaneous
W		**Wholesale**
	WA	Automotive Supplies
	WB	Building Supplies / Hardware
	WC	Clothing / Dry Goods
	WD	Drugs / Chemicals
	WG	Groceries / Related Products
	WH	Home / Office Furnishings
	WM	Machinery / Equipment Supplies
	WP	Petroleum Products
	WZ	Miscellaneous
X		**Advertising**
	XA	Agencies
	XM	Media
	XZ	Miscellaneous
Y		**Collection Services**
	YA	Collection Departments within ACB Credit Bureaus

Code (1 char)	Code (2 char)	Industry
	YC	Other Collection Agencies
Z		**Miscellaneous**
	ZB	Credit Report Brokers
	ZC	Credit Bureau Inquiries
	ZM	Credit Bureaus / Mortgage Processing
	ZP	Public Records
	ZT	Tenant Screeners

Use Type Codes

The following table lists use type codes that can be used to access a frozen file or certify the permissible purpose for obtaining the requested report. Use Type codes will allow access to a file with a freeze only where that use is an exemption under the applicable state freeze law.

Refer to the descriptions of the AF01 and EU01 segments for more details about how to provide one of these codes.

Note: For the latest information about use type codes, including current legal- and compliance-related updates, go to the Client Technical Support web site at https://techservices.transunion.com

Use Type Code	Description
AA	Alaska Department of Health and Social Services or its agents, or its assigns when investigating fraud and in connection with the written instructions of the consumer to whom it relates. Section 604(a)2
AB	Alaska Department of Health and Social Services or its agents, or its assigns when investigating fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
AC	Alaska Department of Revenue or its agents, or its assigns when investigating or collecting delinquent taxes or unpaid court orders or when implementing its other statutory responsibilities and in connection with the written instructions of the consumer to whom it relates. Section 604(a)2
AD	Alaska Department of Revenue or its agents, or its assigns when investigating or collecting delinquent taxes or unpaid court orders or when implementing its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
AE	Alaska Department of Revenue or its agents, or its assigns when investigating or collecting delinquent taxes or unpaid court orders or when implementing its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)

Use Type Code	Description
AF	Arkansas or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders to fulfill any of its other constitutional or statutory responsibilities and in connection with written instructions. Section 604(a)2
AI	Arkansas or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders to fulfill any of its other constitutional or statutory responsibilities if such responsibilities and for employment purposes with written authorization. Section 604(b)
AM	Arkansas or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders to fulfill any of its other constitutional or statutory responsibilities if such responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
AR	Intends to use the information as a potential investor or servicer, or current insurer in connection with a valuation of, or assessment of the credit or prepayment risks associated with an existing credit obligation. Section 604(a)3(E)
BN	A legitimate business need in connection with a business transaction that is initiated by the consumer. Section 604(a)3(F)(i)
CD	Colorado Department of Human Services or its agents or assignees acting to investigate fraud and in connection with written instructions. Section 604(a)2
CG	Colorado Department of Human Services or its agents or assignees acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
CF	In connection with a credit transaction where medical information is relevant to the credit transaction and where the consumer provides specific written consent that describes in clear and conspicuous language the use for which any medical information will be furnished.
CI	In accordance with written instructions of the consumer to whom it relates. Section 604(a)2
CJ	Colorado Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities or exercise any of its statutory authority and in connection with written instructions. Section 604(a)2
CN	Colorado Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities or exercise any of its statutory authority and for employment purposes with written authorization. Section 604(b)
CQ	Colorado Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities or exercise any of its statutory authority and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)

Use Type Code	Description
CK	Colorado Department of Health Care Policy and Financing or its agents or assigns acting to investigate fraud and in connection with written instructions. Section 604(a)2
CV	Colorado Department of Health Care Policy and Financing or its agents or assigns acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
CL	In connection with a collection transaction involving the consumer for the collection of an account of the consumer. Section 604(a)3(A)
CP	In response to an agency administering a state plan under Section 454 of Social Security Act (42 U.S.C. 654) to set an initial or modified child support award. Section 604(a)5
CR	In accordance with written instructions of the consumer through a reseller. Section 604(a)2
CS	In response to a request by the head of a state or local child support enforcement agency (or a state or local government official authorized by the head of such an agency) that has met all requirements of Section 604 (a) (4) (A,B,C,D).
CT	In connection with a credit transaction involving the consumer and for the extension of credit or review or collection of an account of the consumer.
DD	The Delaware Department of Justice, law enforcement agencies, and the Delaware Department of Health and Social Services and their agents or assigns acting to investigate fraud and in connection with written instructions. Section 604(a)2
DH	The Delaware Department of Justice, law enforcement agencies, and the Delaware Department of Health and Social Services and their agents or assigns acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
DE	The Delaware Division of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
DK	The Delaware Division of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
DN	The Delaware Division of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
EF	For employment purposes where medical information is relevant to the employment transaction and where the consumer provides specific written consent that describes in clear and conspicuous language the use for which any medical information will be furnished.
EP	For employment purposes with written authorization. Section 604(b)

Use Type Code	Description
FA	The Commonwealth or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
FD	The Commonwealth or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
FG	The Commonwealth or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
GA	Any depository financial institution for checking, savings, and investment accounts and in accordance with written instructions of the consumer to whom it relates. Section 604(a)2
GB	Any depository financial institution for checking, savings, and investment accounts and a legitimate business need in connection with a business transaction that is initiated by the consumer. Section 604(a)3(F)(i)
GF	In connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
GR	Use falling under FCRA Section 608 – Disclosures to Governmental Agencies
HA	The Hawaii Department of the Attorney General, county prosecuting attorneys, or their agents or assignees acting to investigate Medicaid fraud and in connection with written instructions. Section 604(a)2
HB	The Hawaii Department of the Attorney General, county prosecuting attorneys, or their agents or assignees acting to investigate Medicaid fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
HC	The Texas Health and Human Services Commission acting under Section 531.102 Government Code (Investigations and Enforcement Office) and in connection with written instructions. Section 604(a)2
HF	The Texas Health and Human Services Commission acting under Section 531.102 Government Code (Investigations and Enforcement Office) and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
HI	The Hawaii Department of Taxation, county taxing authorities, or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their other statutory or charter responsibilities and in connection with written instructions. Section 604(a)2
HL	The Hawaii Department of Taxation, county taxing authorities, or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments,

Use Type Code	Description
	including interest and penalties, unpaid court orders, or to fulfill any of their other statutory or charter responsibilities and for employment purposes with written authorization. Section 604(b)
HO	The Hawaii Department of Taxation, county taxing authorities, or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their other statutory or charter responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
HS	If the end user of the consumer report product is the California State Department of Health Services or its agents or assigns acting to investigate Medi-Cal fraud and in connection with written instructions. Section 604(a)2
HV	If the end user of the consumer report product is the California State Department of Health Services or its agents or assigns acting to investigate Medi-Cal fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
IA	The Iowa Department of Human Services or its agents or assignees acting to investigate fraud under the medical assistance program and in connection with written instructions. Section 604(a)2
IC	The Iowa Department of Revenue or local taxing authorities; or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties and unpaid court orders, or to fulfill any of their other statutory or other responsibilities and in connection with written instructions. Section 604(a)2
IE	The Iowa Department of Revenue or local taxing authorities; or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties and unpaid court orders, or to fulfill any of their other statutory or other responsibilities and for employment purposes with written authorization. Section 604(b)
IG	The Iowa Department of Revenue or local taxing authorities; or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties and unpaid court orders, or to fulfill any of their other statutory or other responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
IL	Illinois Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
IQ	Illinois Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
IV	Illinois Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)

Use Type Code	Description
IM	In connection with the underwriting of insurance and the consumer affirmatively consents to the release of any medical information contained on the consumer's file.
IN	In connection with the underwriting of insurance. Section 604(a)3(B)
IS	In connection with an insurance claim where written permission of the consumer has been obtained. Section 604(a)2
MC	Relevant Illinois state agency or its agents or assigns acting to investigate Medicaid fraud and in connection with written instructions. Section 604(a)2
MB	Relevant Illinois state agency or its agents or assigns acting to investigate Medicaid fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
MD	The Massachusetts child support agency under Title IV-D of the Social Security Act and Section 604(a)5.
ME	Maine's Department of Administrative and Financial Services, Maine Revenue Services; municipal taxing authorities; the Secretary of State, Bureau of Motor Vehicles; or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties and unpaid court orders, or to fulfill any of their statutory or charter responsibilities and in connection with written instructions. Section 604(a)2
MK	Maine's Department of Administrative and Financial Services, Maine Revenue Services; municipal taxing authorities; the Secretary of State, Bureau of Motor Vehicles; or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties and unpaid court orders, or to fulfill any of their statutory or charter responsibilities and for employment purposes with written authorization. Section 604(b)
ML	Maine's Department of Administrative and Financial Services, Maine Revenue Services; municipal taxing authorities; the Secretary of State, Bureau of Motor Vehicles; or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties and unpaid court orders, or to fulfill any of their statutory or charter responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
MF	The Massachusetts Executive Office of Health and Human Services or its agents or assigns acting to investigate Medicaid fraud and in connection with written instructions. Section 604(a)2
MA	The Massachusetts Executive Office of Health and Human Services or its agents or assigns acting to investigate Medicaid fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
MG	Maine's Department of Health and Human Services or its agents or assignees acting to investigate Medicaid fraud and in connection with written instructions. Section 604(a)2
MW	Maine's Department of Health and Human Services or its agents or assignees acting to investigate Medicaid fraud and in connection with a determination of eligibility for

Use Type Code	Description
	a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
MH	Maryland Department of Health acting to investigate fraud and in connection with written instructions. Section 604(a)2
MM	Maryland Department of Health acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
MJ	Maryland state department of assessments and taxation, the comptroller, or any other state or local taxing authority in connection with an investigation, the collection of delinquent taxes or unpaid court orders, or the performance of any other duty provided for by law and in connection with written instructions. Section 604(a)2
MQ	Maryland state department of assessments and taxation, the comptroller, or any other state or local taxing authority in connection with an investigation, the collection of delinquent taxes or unpaid court orders, or the performance of any other duty provided for by law and for employment purposes with written authorization. Section 604(b)
MU	Maryland state department of assessments and taxation, the comptroller, or any other state or local taxing authority in connection with an investigation, the collection of delinquent taxes or unpaid court orders, or the performance of any other duty provided for by law and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
MP	Mississippi Tax Commission acting to investigate or collect delinquent sales or franchise taxes and in connection with written instructions. Section 604(a)2
MS	Any person or entity administering a credit file monitoring subscription service to which the consumer has subscribed. Section 604(a)3(F)(i)
MT	The Massachusetts Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
MV	The Massachusetts Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
NE	A person holding a license issued by the Nevada Gaming Commission pursuant to Title 41 of the Nevada Revised Statutes, or the subsidiary, affiliate, agent, assignee or prospective assignee of that person, for purposes relating to any activities conducted and in connection with written instructions. Section 604(a)2
NK	A person holding a license issued by the Nevada Gaming Commission pursuant to Title 41 of the Nevada Revised Statutes, or the subsidiary, affiliate, agent, assignee or prospective assignee of that person, for purposes relating to any activities conducted and for employment purposes with written authorization. Section 604(b)
NG	A person holding a license issued by the Nevada Gaming Commission pursuant to Title 41 of the Nevada Revised Statutes, or the subsidiary, affiliate, agent, assignee or

Use Type Code	Description
	prospective assignee of that person, for purposes relating to any activities conducted and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
NF	New Hampshire Department of Revenue Administration, municipal taxing authorities, the Secretary of State, the Division of Motor Vehicles in the Department of Safety, or any of their agents or assignees acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their statutory or charter responsibilities and in connection with written instructions. Section 604(a)2
NP	New Hampshire Department of Revenue Administration, municipal taxing authorities, the Secretary of State, the Division of Motor Vehicles in the Department of Safety, or any of their agents or assignees acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their statutory or charter responsibilities and for employment purposes with written authorization. Section 604(b)
NS	New Hampshire Department of Revenue Administration, municipal taxing authorities, the Secretary of State, the Division of Motor Vehicles in the Department of Safety, or any of their agents or assignees acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their statutory or charter responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
NH	New Hampshire Department of Health and Human Services, the Department of Justice, or any of their agents or assignees, acting to Investigate Medicaid Fraud and in connection with written instructions. Section 604(a)2
NU	New Hampshire Department of Health and Human Services, the Department of Justice, or any of their agents or assignees, acting to Investigate Medicaid Fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
NJ	New Jersey Division of Taxation in the Department of the Treasury for the purpose of enforcing New Jersey tax laws and in connection with written instructions. Section 604(a)2
NW	New Jersey Division of Taxation in the Department of the Treasury for the purpose of enforcing New Jersey tax laws and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
NY	The state of New York or its political subdivision or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities provided such responsibilities are consistent with a permissible purpose and in connection with written instructions. Section 604(a)2
NB	The state of New York or its political subdivision or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities provided such

Use Type Code	Description
	responsibilities are consistent with a permissible purpose and for employment purposes with written authorization. Section 604(b)
NI	The state of New York or its political subdivision or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities provided such responsibilities are consistent with a permissible purpose and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
OA	The state of Missouri or its agents or assigns for the purpose of investigating fraud or investigating or collecting delinquent taxes and in connection with written instructions. Section 604(a)2
OC	The state of Missouri or its agents or assigns for the purpose of investigating fraud or investigating or collecting delinquent taxes and for employment purposes with written authorization. Section 604(b)
OE	The state of Missouri or its agents or assigns for the purpose of investigating fraud or investigating or collecting delinquent taxes and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D).
OK	The state of Oklahoma or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
ON	The state of Oklahoma or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
OQ	The state of Oklahoma or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
PI	A person conducting a pre-sentence investigation in a criminal matter or a probation officer using this information for supervision of an offender and in connection with written instructions. Section 604(a)2
PB	A person conducting a pre-sentence investigation in a criminal matter or a probation officer using this information for supervision of an offender and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
PP	A pension plan acting to determine the consumer's eligibility for plan benefits or payments authorized by law or to investigate fraud; a pension plan acting to determine the consumer's eligibility for plan benefits or payments authorized by law or to investigate fraud and in connection with written instructions. Section 604(a)2
PQ	A pension plan acting to determine the consumer's eligibility for plan benefits or payments authorized by law or to investigate fraud; a pension plan acting to determine the consumer's eligibility for plan benefits or payments authorized by law

Use Type Code	Description
	or to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
PR	In connection with the review of existing policy holders for insurance underwriting purposes. Section 604(a)3(C)
PY	For a legitimate business need in connection with a transaction initiated by the consumer for the approval or processing of negotiable instruments, EFTs, or similar methods of payment through a check, fraud prevention, or deposit account information service. Section 604(a)3(F)(i)
RA	A legitimate business need to review an account to determine whether the consumer continues to meet the terms of the account. Section 604(a)3(F)(ii)
RB	The Rhode Island attorney general or its agents or assigns acting to investigate fraud and in connection with written instructions. Section 604(a)2
RC	The Rhode Island attorney general or its agents or assigns acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
RD	The Rhode Island department of health or its agents or assigns acting to investigate fraud and in connection with written instructions. Section 604(a)2
RF	The Rhode Island department of health or its agents or assigns acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
RI	The Rhode Island division of taxation or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
RL	The Rhode Island division of taxation or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
RN	The Rhode Island division of taxation or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
RP	Any person or entity for the purpose of providing a consumer with a copy of his or her credit report upon the consumer's request and in connection with written instructions. Section 604(a)2
SA	South Carolina Department of Social Services to investigate fraud in connection with eligibility for a license or other government benefit required to consider financial status.
SB	South Carolina Department of Revenue acting to administer state tax laws and in connection with written instructions.
SC	South Carolina Department of Social Services acting to investigate fraud and in connection with written instructions.

Use Type Code	Description
SD	South Dakota Department of Social Services acting to fulfill any of its statutory responsibilities and in connection with written instructions. Section 604(a)2
SE	South Carolina Department of Revenue to administer state tax laws and in connection with eligibility for a license or other benefit granted by a government to consider financial status.
SF	South Dakota Department of Social Services acting to fulfill any of its statutory responsibilities and for employment purposes with written authorization. Section 604(b)
SH	South Dakota Department of Social Services acting to fulfill any of its statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
SI	In response to the order of a court having jurisdiction or subpoena issued by a federal grand jury. Section 604(a)1
SP	If the end user is any state or local agency, law enforcement, trial court, or private collection agency acting on a court order, warrant, or subpoena. Section 604(a)1
TB	End user is California Franchise Tax Board or its agents or assigns investigating or collecting delinquent taxes or unpaid court orders or to fulfill any of its statutory responsibilities and in connection with written instructions. Section 604(a)2
TE	End user is California Franchise Tax Board or its agents or assigns investigating or collecting delinquent taxes or unpaid court orders or to fulfill any of its statutory responsibilities and for employment purposes with written authorization. Section 604(b)
TI	End user is California Franchise Tax Board or its agents or assigns investigating or collecting delinquent taxes or unpaid court orders or to fulfill any of its statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
TN	Any Tennessee department or division of the state that is acting to investigate a child support case, Medicare or TennCare fraud, delinquent taxes or assessments, unpaid court orders or settlements of any sort or type, or to fulfill any of their statutory or other duties and in connection with written instructions. Section 604(a)2
TP	Any Tennessee department or division of the state that is acting to investigate a child support case, Medicare or TennCare fraud, delinquent taxes or assessments, unpaid court orders or settlements of any sort or type, or to fulfill any of their statutory or other duties and for employment purposes with written authorization. Section 604(b)
TR	Any Tennessee department or division of the state that is acting to investigate a child support case, Medicare or TennCare fraud, delinquent taxes or assessments, unpaid court orders or settlements of any sort or type, or to fulfill any of their statutory or other duties and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
TS	In connection with a tenant screen application involving the consumer. Section 604(a)3(F)(i)

Use Type Code	Description
TX	The Texas Comptroller acting to investigate or collect delinquent sales or franchise taxes, or a tax assessor-collector acting to investigate or collect delinquent ad valorem taxes and in connection with written instructions. Section 604(a)2
VF	Vermont department of prevention, assistance, transition, and health access or its agents or assignee acting to investigate Medicaid fraud and in connection with written instructions. Section 604(a)2
VI	Vermont department of prevention, assistance, transition, and health access or its agents or assignee acting to investigate Medicaid fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
VT	Vermont department of taxes, municipal taxing authorities, or the department of motor vehicles or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their statutory or charter responsibilities and in connection with written instructions. Section 604(a)2
VW	Vermont department of taxes, municipal taxing authorities, or the department of motor vehicles or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their statutory or charter responsibilities and for employment purposes with written authorization. Section 604(b)
VY	Vermont department of taxes, municipal taxing authorities, or the department of motor vehicles or any of their agents or assignees, acting to investigate or collect delinquent taxes or assessments, including interest and penalties, unpaid court orders, or to fulfill any of their statutory or charter responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
WH	West Virginia Dept of Health and Human Resources or its agents or assigns acting to investigate fraud and in connection with written instructions. Section 604(a)2
WL	West Virginia Dept of Health and Human Resources or its agents or assigns acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
WI	The state of Wisconsin or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
WO	The state of Wisconsin or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
WR	The state of Wisconsin or its agents or assigns acting to investigate fraud or acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)

Use Type Code	Description
WB	A Washington mortgage broker or loan originator required to be licensed under Chapter 19.146 RCW and in connection with a credit transaction involving the consumer and for extension of credit or review or collection of an account of the consumer. Section 604(a03(A).
WS	Washington department of social and health services acting to fulfill any of its statutory responsibilities and in connection with written instructions. Section 604(a)2
WT	Washington department of social and health services acting to fulfill any of its statutory responsibilities and for employment purposes with written authorization. Section 604(b)
WU	Washington department of social and health services acting to fulfill any of its statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
WV	West Virginia Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with written instructions. Section 604(a)2
WX	West Virginia Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
WZ	West Virginia Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
ZA	The Arizona Department of Health Services or its agents or assigns acting to investigate fraud and in accordance with written instructions of the consumer to who it relates. Section 604(a)2
ZC	The Arizona Department of Health Services or its agents or assigns acting to investigate fraud and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3
ZD	The Arizona Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in accordance with written instructions of the consumer to whom it relates. Section 604(a)2
ZE	The Arizona Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
ZG	The Arizona Department of Revenue or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)

Use Type Code	Description
ZJ	The Arizona Department of Transportation or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in accordance with written instructions of the consumer to whom it relates. Section 604(a)2
ZK	The Arizona Department of Transportation or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and for employment purposes with written authorization. Section 604(b)
ZM	The Arizona Department of Transportation or its agents or assigns acting to investigate or collect delinquent taxes or unpaid court orders or to fulfill any of its other statutory responsibilities and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3
ZN	The Arizona Administrative Office of the courts to conduct audits or investigate fraud or for applicant screening and in connection with a determination of eligibility for a license or other benefit granted by a governmental instrumentality required by law to consider financial responsibility or status. Section 604(a)3(D)
ZO	The Arizona Administrative Office of the courts to conduct audits or investigate fraud or for applicant screening and in accordance with written instructions of the consumer to whom it relates. Section 604(a)2
ZP	The Arizona Administrative Office of the courts to conduct audits or investigate fraud or for applicant screening and for employment purposes with written authorization. Section 604(b).

Appendix C: Account Codes

This appendix contains the TU4.1 codes for fields that apply to trade account information. These fields are located in the trade account (TR11) and collection account (CL11) segments, but some also appear in other TU4.1 segments. These are the field codes listed in this appendix:

- Account type codes
- Manner of Payment (MOP) codes
- Remark codes

The final section of this appendix describes the payment pattern logic reflected in the TU4.1 FFR trade data.

Account Type Codes

The following table lists the account type codes used in TU4.1.

Code	Type of Account
AF	Appliance/Furniture
AG	Collection Agency/Attorney

Code	Type of Account
AL	Auto Lease
AU	Automobile
AX	Agricultural Loan
BC	Business Credit Card
BL	Revolving Business Lines
BU	Business
CB	Combined Credit Plan
CC	Credit Card
CE	Commercial Line of Credit
CH	Charge Account
CI	Commercial Installment Loan
CO	Consolidation
CP	Child Support
CR	Cond. Sales Contract; Refinance
CU	Telecommunications/Cellular
CV	Conventional Real Estate Mortgage
CY	Commercial Mortgage
DC	Debit Card
DR	Deposit Account with Overdraft Protection
DS	Debt Counseling Service
EM	Employment
FC	Factoring Company Account
FD	Fraud Identify Check
FE	Attorney Fees
FI	FHA Home Improvement
FL	FMHA Real Estate Mortgage
FM	Family Support
FR	FHA Real Estate Mortgage
FT	Collection Credit Report Inquiry
FX	Flexible Spending Credit Card
GA	Government Employee Advance
GE	Government Fee for Services
GF	Government Fines
GG	Government Grant

Code	Type of Account
GO	Government Overpayment
GS	Government Secured
GU	Govt. Unsecured Guar/Dir Ln
GV	Government
HE	Home Equity Loan
HG	Household Goods
HI	Home Improvement
IE	ID Report for Employment
IS	Installment Sales Contract
LC	Line of Credit
LE	Lease
LI	Lender-placed Insurance
LN	Construction Loan
LS	Credit Line Secured
MB	Manufactured Housing
MD	Medical Debt
MH	Medical/Health Care
NT	Note Loan
PS	Partly Secured
RA	Rental Agreement
RC	Returned Check
RD	Recreational Merchandise
RE	Real Estate
RL	Real Estate — Junior Liens
RM	Real Estate Mortgage
SA	Summary of Accounts — Same Status
SC	Secured Credit Card
SE	Secured
SF	Secondary Use of a Credit Report for Auto Financing
SH	Secured by Household Goods
SI	Secured Home Improvement
SM	Second Mortgage
SO	Secured by Household Goods & Collateral
SR	Secondary Use of a Credit Report

Code	Type of Account
ST	Student Loan
SU	Spouse Support
SX	Secondary Use of a Credit Report for Other Financing
TS	Time Shared Loan
UC	Utility Company
UK	Unknown
US	Unsecured
VM	V.A. Real Estate Mortgage
WT	Individual Monitoring Report Inquiry

Manner of Payment (MOP) Codes

The following table lists the MOP (formerly Account Rating) codes returned in a TU4.1 FFR.

Code	Description
01	Paid or paying as agreed
02	30 days past due
03	60 days past due
04	90 days past due
05	120 days past due
07	Wage earner or similar plan
08	Repossession
8A	Voluntary surrender
8P	Payment after repossession
09	Charged off as bad debt
9B	Collection account
9P	Payment after charge off/collection
UR	Unrated or bankruptcy (remark codes will show whether the account is a bankruptcy and, if so, what type of bankruptcy)

Remark Codes

The following tables list the remark codes returned in a TU4.1 FFR.

Note: In the Standard Credit Report, all remark codes — Affiliate, Compliance, Generic or Rating — are returned in the Remarks/Affiliate Remark Code field. If multiple remark codes are

present for the account, a combination code may be returned in this field. For subscribers receiving the Enriched Credit Report, three new and separate data fields are returned for Generic, Rating, and Compliance remarks, and the Remarks/Affiliate Remark Code field returns only affiliate remark codes. Combination codes are not returned.

Combination Remark Codes

The Remark Codes column in the table below lists remark codes that are combined when multiple remark codes are present.

Combination Remark Code	Remark Codes	Class	Description
BCD	BKL	Affiliate	Included in Bankruptcy
	CAD	Compliance	Dispute of account information/closed by consumer
BKC	BKL	Affiliate	Included in Bankruptcy
	CBC	Compliance	Account closed by consumer
BKD	AID	Compliance	Account information disputed by consumer
	BKL	Affiliate	Included in Bankruptcy
BRC	BKL	Affiliate	Included in Bankruptcy
	CBD	Compliance	Dispute resolved; consumer disagrees/account closed by consumer
BRR	BKL	Affiliate	Included in Bankruptcy
	DRC	Compliance	Dispute resolved-subscriber disagrees
CCD	CBC	Compliance	Account closed by consumer
	CBL	Affiliate	Chapter 7 bankruptcy
CDC	CAD	Compliance	Dispute of account information/closed by consumer
	CBL	Affiliate	Chapter 7 bankruptcy
CDD	CBC	Compliance	Account closed by consumer
	CBR	Affiliate	Chapter 11 bankruptcy
CDL	AID	Compliance	Account information disputed by consumer
	CBL	Affiliate	Chapter 7 bankruptcy
CDR	AID	Compliance	Account information disputed by consumer
	CBR	Affiliate	Chapter 11 bankruptcy
CDT	AID	Compliance	Account information disputed by consumer
	CBT	Affiliate	Chapter 12 bankruptcy
CED	CBC	Compliance	Account closed by consumer
	CBT	Affiliate	Chapter 12 bankruptcy
CRC	CAD	Compliance	Dispute of account information/closed by consumer
	CBR	Affiliate	Chapter 11 bankruptcy

Combination Remark Code	Remark Codes	Class	Description
CRD	CBD	Compliance	Dispute resolved; consumer disagrees/account closed by consumer
	CBL	Affiliate	Chapter 7 bankruptcy
CRL	CBL	Affiliate	Chapter 7 bankruptcy
	DRC	Compliance	Dispute resolved-consumer disagrees
CRR	CBL	Compliance	Dispute resolved; consumer disagrees/account closed by consumer
	DRC	Affiliate	Chapter 11 bankruptcy
CRT	CBD	Compliance	Dispute resolved; consumer disagrees/account closed by consumer
	CBT	Affiliate	Chapter 12 bankruptcy
CRV	CBR	Affiliate	Chapter 11 bankruptcy
	DRC	Compliance	Dispute resolved- consumer disagrees
CTC	CAD	Compliance	Dispute of account information/closed by consumer
	CBT	Affiliate	Chapter 12 bankruptcy
CTV	CBT	Affiliate	Chapter 12 bankruptcy
	DRC	Compliance	Dispute resolved- consumer disagrees
WCD	CAD	Compliance	Dispute of account information/closed by consumer
	WEP	Affiliate	Chapter 13 bankruptcy
WPC	CBC	Compliance	Account closed by consumer
	WEP	Affiliate	Chapter 13 bankruptcy
WPD	AID	Compliance	Account information disputed by consumer
	WEP	Affiliate	Chapter 13 bankruptcy
WRC	CBD	Compliance	Dispute resolved; consumer disagrees/account closed by consumer
	WEP	Affiliate	Chapter 13 bankruptcy
WRR	DRC	Compliance	Dispute resolved- consumer disagrees
	WEP	Affiliate	Chapter 13 bankruptcy

Affiliate Remark Codes

The possible affiliate remark codes returned in a TU4.1 FFR are listed below.

Remark Code	Description
BKL	Included in bankruptcy

Remark Code	Description
BKW	Bankruptcy withdrawn
CBL	Chapter 7 bankruptcy
CBR	Chapter 11 bankruptcy
CBT	Chapter 12 bankruptcy
DM	Bankruptcy dismissed
LA	Lease assumption
PRS	Personal receivership
REA	Reaffirmation of debt
WEP	Chapter 13 bankruptcy

Compliance Remark Codes

The possible compliance remark codes returned in a TU4.1 FFR are listed below.

Remark Code	Description
AID	Account information disputed by consumer
CAD	Dispute of account information/closed by consumer
CBC	Account closed by consumer
CBD	Dispute resolved; consumer disagrees/account closed by consumer
DRC	Dispute resolved—subscriber disagrees
DRG	Dispute resolved reported by grantor

Generic Remark Codes

The possible generic remark codes returned in a TU4.1 FFR are listed below.

Remark Code	Description
AAP	Loan assumed by another party
ACQ	Acquired from another lender
ACR	Account closed due to refinance
ACT	Account closed due to transfer
AFR	Account acquired by RTC/FDIC/NCUA
AJP	Adjustment pending
AMD	Active military duty

Remark Code	Description
AND	Affected by natural/declared disaster
BAL	Balloon payment
CBG	Account closed by credit grantor
CLB	Contingent liability—corporate defaults
CLC	Account closed
CLR	Credit line reduced due to collateral depreciation
CLS	Credit line suspended
CPB	Subscriber pays balance in full each month
CRB	Collateral released by creditor/balance owing
CTR	Account closed—transfer or refinance
CTS	Contact subscriber
ER	Election of remedy
ETB	Early termination/balance owing
ETI	Early termination/insurance loss
ETO	Early termination/obligation satisfied
ETS	Early termination/status pending
FCL	Foreclosure
FOR	Account in forbearance
FPD	Account paid, foreclosure started
FPI	Foreclosure initiated
FTB	Full termination/balance owing
FTO	Full termination/obligation satisfied
FTS	Full termination/status pending
INA	Inactive account
INP	Debt being paid through insurance
INS	Paid by insurance
IRB	Involuntary repossession/balance owing
IRE	Involuntary repossession
IRO	Involuntary repossession/obligation satisfied
JUG	Judgment granted
LMD	Loan modified under federal government plan
LMN	Loan modified non-government
LNA	Credit line no longer available – in repayment phase
MCC	Managed by debt counseling service

Remark Code	Description
MOV	No forwarding address
NIR	Student loan not in repayment
NPA	Now paying
PAL	Purchased by another lender
PDD	Paid by dealer
PDE	Payment deferred
PDI	Principal deferred/interest payment only
PFC	Account paid from collateral
PLL	Prepaid lease
PNR	First payment never received
PPA	Paying under partial or modified payment agreement
PPD	Paid by co-maker
PRD	Payroll deduction
PWG	Account payment, wage garnish
REP	Substitute/Replacement account
RMM	Rent paid before day six
RNN	Rent paid on day six or before day 15
ROO	Rent paid on or after day 15
RPP	Rent paid, but required demand letter
RQQ	Eviction—non legal action
RRE	Repossession; redeemed
RRR	Eviction
RSS	Rent unpaid—renter skipped, and did not fulfill remaining lease term
RVR	Voluntary surrender redeemed
SCD	Credit line suspended due to collateral depreciation
SET	Settled—less than full balance
SIL	Simple interest loan
SLP	Student loan perm assign government
SPL	Single payment loan
STL	Credit card lost or stolen
TRL	Transferred to another lender
TTR	Transferred to recovery

Rating Remark Codes

The possible rating remark codes returned in a TU4.1 FFR are listed below.

Remark Code	Description
CLA	Placed for collection
CLO	Closed
DLU	Deed in lieu
FPD	Account paid, foreclosure started
FRD	Foreclosure, collateral sold
PCL	Paid collection
PLP	Profit and loss now paying
PPL	Paid profit and loss
PRL	Profit and loss write-off
RFN	Refinanced
RPD	Paid repossession
RPO	Repossession
RVN	Voluntary surrender
SGL	Claim filed with government
TRF	Transfer

Payment Pattern Logic

The payment pattern, returned in the TR11 and TR13 segments, displays the history of the MOP values on a trade account. Subscribers provide their own complete payment patterns or, in the event that they don't, TransUnion builds them. The pattern is incremented each month during processing of automated trade accounts.

The pattern contains values that correspond to the following Account Rating values:

This AccountRating Received	01	02	03	04	05	07	08	8A	8P	09	9B	9P	UR
Corresponding Legacy Payment Pattern	1	2	3	4	5	Payment Pattern is not displayed.							X
Corresponding Enriched Payment Pattern	1 or E	2	3	4	5 or H	X	K	J	K	L	G	G or L	X

Reading the Payment Pattern

The payment pattern is read from left to right, the leftmost value being the most recent. The Payment Pattern Start Date, which begins in column 158 of the TR11 segment, specifies the year and month to which this first value applies. The Payment Pattern Start Date will be one month prior to the Date Verified.

The remaining entries indicate monthly intervals (from most recent to oldest) from that start date and specify the Account Rating value in effect for each month.

In the following example, the start date is April 2004 (200404) and the remaining entries list the Account Rating values for March, February, and January in that order.

Payment Pattern Entry	3	2	1	1
Date Effective	200404 (start date)	200403	200402	200401

When no data is received from a subscriber for the month or when an account is in dispute, the Account Rating value is X. To continue the above example, if no Account Rating was received in May and an MOP value of 2 was received in June, this would be the payment pattern in July:

Payment Pattern Entry	2	X	3	2	1	1
Date Effective	200406 (start date)	200405	200404	200403	200402	200401

Payment Pattern Account Codes

The account rating profile codes returned in the Payment Pattern are listed below.

The CreditVision® values returned with the Enriched Credit Report are indicated in bold.

Standard Payment Pattern Code	Enriched Payment Pattern Code	Description
1	**E**	**Paid as agreed, zero balance.**
1	1	Current Account
2	2	Account 30 days past due date.
3	3	Account 60 days past due date.
4	4	Account 90 days past due date.
5	5	Account 120 days past due date.
None	X	Bankruptcy

Standard Payment Pattern Code	Enriched Payment Pattern Code	Description
		In the Standard Credit Report, when the Account is included in bankruptcy (07 = Wager Earner Plan or Similar plan - Chapter 13)
X	X	Hold rating
None	**J**	**Voluntary surrender**
None	**K**	**Repossession or Account paid in full, was a repossession**
X	**H**	**Foreclosure**
None	**G**	**Collection or Account paid in full, was a collection**
None	**L**	**Charge-off or Account paid in full, was a charge-off**
X	X	Unrated
X	**Y**	**Represents a gap in monthly payment reporting**

Appendix D: Public Record Codes

This appendix contains the TU4.1 codes for public record sources and types.

Public Record Source Codes

The following table lists the codes returned in TU4.1 to identify the sources of public records.

Code	Court Type
AS	Associate Court
BK	U.S. Bankruptcy Court
CA	County Auditor
CC	County Clerk
CH	Chancery Court
CI	Circuit Court
CL	County Court at Law
CN	Conciliation Court
CO	Common Claims
CP	Common Pleas
CR	County Recorder
CT	County Court
CY	City Court

Code	Court Type
DC	District Court
DO	Domestic Court
DS	District Judge System
FE	Federal District
GS	General Sessions
IC	Inferior Court
JU	Justice of the Peace
MA	Magistrate Court
MU	Municipal Court
PC	Parish Court
PR	Probate Court
RD	Recorder of Deeds
SC	Small Claims
ST	State Court
SU	Superior Court

Public Record Types

The following table lists the codes returned in TU4.1 to identify types of public records.

Code	Public Record Type	Code	Public Record Type
AM	Attachment	RM	Release of mechanic's lien
CB	Civil judgment in bankruptcy	RS	Real estate attachment satisfied
CJ	Civil judgment	SF	Satisfied foreclosure
CP	Child support	SL	State tax lien
CS	Civil suit filed	TB	Tax lien included in bankruptcy
DF	Dismissed foreclosure	TC	Trusteeship canceled
DS	Dismissal of court suit	TL	Tax lien
FC	Foreclosure	TP	Trusteeship paid/state amortization satisfied
FD	Forcible detainer	TR	Trusteeship paid/state amortization
FF	Forcible detainer dismissed	TX	Tax lien revived
FT	Federal tax lien	WS	Water and sewer lien

Code	Public Record Type	Code	Public Record Type
GN	Garnishment	1D	Chapter 11 bankruptcy dismissed
HA	Homeowner's association assessment lien	1F	Chapter 11 bankruptcy filing
HF	Hospital lien satisfied	1V	Chapter 11 bankruptcy voluntary dismissal
HL	Hospital lien	1X	Chapter 11 bankruptcy discharged
JL	Judicial lien	2D	Chapter 12 bankruptcy dismissed
JM	Judgment dismissed	2F	Chapter 12 bankruptcy filing
LR	A lien attached to real property	2V	Chapter 12 bankruptcy voluntary dismissal
ML	Mechanics lien	2X	Chapter 12 bankruptcy discharged
PC	Paid civil judgment	3D	Chapter 13 bankruptcy dismissed
PF	Paid federal tax lien	3F	Chapter 13 bankruptcy filing
PG	Paving assessment lien	3V	Chapter 13 bankruptcy voluntary dismissal
PL	Paid tax lien	3X	Chapter 13 bankruptcy discharged
PQ	Paving assessment lien satisfied	7D	Chapter 7 bankruptcy dismissed
PT	Puerto Rico tax lien	7F	Chapter 7 bankruptcy filing
PV	Judgment paid, vacated	7V	Chapter 7 bankruptcy voluntary dismissal
RL	Release of tax lien	7X	Chapter 7 bankruptcy discharged

Appendix E: Puerto Rico Name and Address Logic

Special logic exists for storing and retrieving Hispanic paternal and maternal surnames. Special logic also exists for formatting the addresses using Hispanic conventions. The name and address logic applies to subject files in Puerto Rico and the Virgin Islands. The following sections describe the special steps that users should follow to maximize effectiveness of the file retrieval logic.

Special Logic for Hispanic Surnames

TransUnion searches under both paternal and maternal surnames if they are input. If eligible, files are combined before they are returned. In all cases, the output records display both surnames if present in the database. Because many surnames are common, an FFI that contains both paternal and maternal surnames is likelier to return the correct record.

Other ways to help ensure the return of correct records is to use as much information as possible as input:

Social Security Number

Residents of Puerto Rico and the Virgin Islands receive Social Security numbers. Use the Social Security number as part of the input whenever possible because of the presence of many common surnames.

Other Input Data

Use other available data, such as date of birth, as input to better narrow the range of the record search. The TransUnion file selection algorithm makes use of all input data.

> **Note:** Add these fields if they are known. Transmitting fabricated information can cause improper file selection.

Input of Surnames

Place the first surname (generally the paternal name) in the Last Name field of the NM11 segment. Place the first name, middle name, prefix, salutation code, and generation code in the appropriate fields.

Place the second surname (generally the maternal name) in the Secondary Name field of the NM11 segment.

Sample of Surname Input

Below is an example of how to correctly input a Hispanic surname.

Source Applicant Information: **Barbara F Ecchevarria De Colon**

FFI NM11 Segment Input:

Field Name	Displacement	Input
Name Type	5	1 (primary name)
Last Name	6	Ecchevarria (paternal name)
First Name	38	Barbara
Middle Name	58	F
Prefix	78	*Leave blank*
Salutation Code	82	*Leave blank*
Generation Code	85	*Leave blank*

Field Name	Displacement	Input
Secondary Name	88	Colon (*maternal name*) **Note:** The preposition of "De" is dropped.

Output Of Multiple Surnames

When credit information is located under one surname, only that file is returned. When credit information is located under each surname separately, the data is returned in separate files.

Special Logic for Hispanic Addresses

This section describes how to input Hispanic addresses, what to expect in the output, and examples of both.

Address Input

Whenever possible, follow the normal TransUnion address input conventions. When uncertain of the proper entry format, place a zero (0) in the Address Number field (displacement 6 of the AD11 segment). Then enter the entire address (or as much as will fit, blanks included) in the Delivery Address Text field (displacement 18 in the AD11 segment).

Address Output

Regardless of the input, TransUnion reformats the output Puerto Rican addresses to standardize them for both file retrieval and mail delivery. The Address Number field is zero-filled, and the the Delivery Address Text field contains the address.

Samples of Address Input and Output

Below are samples of how to send Hispanic addresses in the FFI and how the addresses are returned.

CASE 1

Source Applicant Information:

804 Ponce De Leon Avenue

San Juan, PR 00907

This table shows the FFI AD11 Segment Input:

Field Name	Displacement	Input
Address Number	6	804
Delivery Address Text	18	Ponce de Leon
Primary Street Type Code	48	AV
CityName	70	San Juan

Field Name	Displacement	Input
State Code	98	PR
Zip Code	100	00907

The following table shows the FFR AD11 Segment Output:

Field Name	Displacement	Input
Address Number	13	0000000000
Delivery Address Text	25	Ponce de Leon
Primary Street Type	55	AV
CityName	77	San Juan
StateCode	105	PR
Zip Code	107	00907

CASE 2

Source Applicant Information: **Munoz Rivera Apt. 6A Guaynabo, PR 00657**

The following table shows the FFI AD11 Segment Input:

Field Name	Displacement	Input
Address Number	6	0
Delivery Address Text	18	Munoz Rivera
Unit Number	60	6A
CityName	70	Guaynabo
StateCode	98	PR
Zip Code	100	00657

The following table shows the FFR AD11 Segment Output:

Field Name	Displacement	Input
Address Number	13	0000000000
Delivery Address Text	25	Urb Munoz Rivera
Unit Number	67	6A
CityName	77	Guaynabo

Field Name	Displacement	Input
StateCode	105	PR
Zip Code	107	00657

CASE 3

Source Applicant Information: **Calle San Justo 23 Carolina, PR 00630**

The following table shows the FFI AD11 Segment Input:

Field Name	Displacement	Input
Address Number	6	0
Delivery Address Text	18	Calle San Justo 23
CityName	70	Carolina
StateCode	98	PR
Zip Code	100	00630

The following table shows the FFR AD11 Segment Output:

Field Name	Displacement	Input
House Number	13	0000000000
Delivery Address Text	25	Calle San Justo 23
City	77	Carolina
State	105	PR
Zip Code	107	00630

Appendix F: Edit and Error Codes

This appendix describes how edit and error records are created and lists the edit codes and error codes that can be generated during transactions.

Edit Response Records

To avoid rejection of an inquiry, the system attempts to edit improperly formatted fields in the fixed format inquiry record (FFI). If an inquiry is rejected, the output is an error response record instead of a fixed format response.

Generating an Edit Response Record

During processing, certain fields in the FFI are edited for invalid characters. The system removes any invalid data that it finds and creates an optional edit response record (ED01). You receive this record if you request the edit response on the OR01 segment in the FFI.

The system returns the edit segment if you requested one in the OR01 segment and if no error response (TU4E) record was created. The edit record is returned after the subject header for the first file returned for the first subject as shown below. Multiple edit segments may be returned for a subject, one segment for each field edited.

Segment ID	Segment Name
TU4R	Transaction Control
PH01	Service Header (Credit Report)
CD01	Customer Data
SH01	Subject Header (Subject 1, File 1)
ED01	Edit Segment
CI01	Consumer Identifier
NM11	Name
PI11	Personal Information
TA01	ID Mismatch-Alert
AD11/UA11	Address
PN01	Phone
PR11	Public Record
TR11	Trade Account Segment
MI01	Miscellaneous
CS11	Consumer Statement
IN11	Inquiry
OB01/OB2	Owning Bureau
AO01	Add-on Status (High Risk Fraud Alert)
MC01	Message Code
SH01	Subject Header (Subject 2)
ED01	Edit Segment
END1	End Segment

The edit record is not shown on printed output.

EDIT Segment Layout

The ED01 segment identifies the field that was edited.

Edit (ED01) Segment Total length: 61 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is ED01.
Segment Length	5	3	N	Value is 61.
Subject Identifier	8	1	N	Indicates the subject for which the edit applies. Possible values are: **1** First subject **2** Second subject
Original Value	9	50	A/N	Contains the original value in the fixed format inquiry field for subject input data before it was edited
Edit Code Number	59	3	A/N	Displays the edit code.

Edit Codes

Code	Segment ID	Field Name	Edit Action
001	OR01	Owning Bureau Identification of Credit File Request	Defaulted to 'N' option – do not return.
002	OR01	Error Text Segment Request	Defaulted to 'N' – return only the error code.
003	OR01	Trade MOP Totals Request	Defaulted to 'N' option – do not return.
004	OR01	Summary Segment Request	Defaulted to subscriber option.
005	SH01	Subject Input Data	Invalid subject input data – subject ignored.
006	NM11	Last Name	Embedded blanks, special characters or numerics were edited out.
007	NM11	First Name	Embedded blanks, special characters or numerics were edited out.

Code	Segment ID	Field Name	Edit Action
008	NM11	Middle Name	Embedded blanks, special characters or numerics were edited out.
009	NM11	Prefix	Invalid code is ignored.
010	NM11	Generation Code	Invalid code is ignored.
012	PI11	Social Security Number	Invalid format is ignored.
013	PI11	Date of Birth	Invalid format is ignored.
015	AD11	Address Number	Invalid alphabetic, special characters, embedded blanks or fractions were edited out.
017	AD11	Delivery Address Text	Special characters or fractions were edited out.
018	AD11	Street Type Code	Invalid Type is ignored.
019	AD11	Unit Number	Special characters or fractions were edited out.
020	AD11/UA11	City Name	Embedded special characters or numerics were edited out.
021	AD11	Employer Address Number	Invalid alphabetic, special characters, embedded blanks or fractions were edited out.
022	AD11	Employer Delivery Address Text	Special characters or fractions were edited out.
023	AD11/UA11	Employer City Name	Embedded special characters or numerics were edited out.
024	EM11	Occupation	Invalid format – contains characters not A-Z or 0-9 — is ignored.
025	PN01	Phone Type	Invalid type — phone is ignored.
026	PN01	Telephone	Invalid or missing — phone is ignored.
027	EM11	Employer State	Invalid State is ignored.
028	EM11	Date Hired	Invalid Date format is ignored.
029	EM11	Terminated Date	Invalid Date format is ignored.
030	EM11	Pay Basis	Invalid code is ignored.
031	EM11	Income	Invalid format is ignored.
032	AI01	Account Type	Invalid code is ignored.
033	AI01	Account Amount	Invalid format is ignored.
034	AD11	Predirectional	Invalid street directional is ignored.

Code	Segment ID	Field Name	Edit Action
035	AD11	Postdirectional	Invalid street directional is ignored.
036	AD11	Primary Street Type Code	Invalid street type is ignored.
037	AD11/UA11	Length of Residence	Invalid format is ignored.
038	AD11/UA11	Housing Status	Invalid valid is ignored.
039	OD01	Form Type	Default of 01 or 04 was used.
041	UA11	Unparsed Address Line 1 or 2	Street address could not be parsed so cannot be used for matching.

Error Response Records

This section describes the errors and error codes that TU4.1 generates and specifies how to structure your FFI to avoid causing errors.

Generating an Error Response Record

Each fixed format inquiry record (FFI) is edited when received in the current consumer database. An error response record results if:

- In a required field, there is invalid or incorrect data for which database processing cannot compensate.
- There is a failure of software, hardware, or telecommunication lines.

Five Levels of Errors

These are the five levels of errors used to check systematic conditions and the validity of data received:

Level 0 Failure of software, hardware, or telecommunication lines.

Level 1 Invalid segment identification, version switch, or segment structure errors.

Level 2 Invalid credit bureau control fields.

Level 3 Invalid request.

Level 4 Invalid subject identification data.

Structure Editing Process

To avoid causing errors, the FFI must meet all of the following structure requirements:

- The first segment of the FFI must be the Transaction Control Segment (TU4I).
- All segment types must be valid.
- The FFI must be in all caps. Do not use mixed case or lowercase for your inquiry.
- The total length of the FFI must equal the sum of the lengths of all the segments received.
- The last segment of the FFI must be the END1 segment.
- The FFI must contain at least one Request Service segment (RP01).

- The End User segment (EU01), if the FFI contains one, must immediately follow the TU4I segment.
- A subject segment—SH01, NM11, PI11, AD11/UA11, PN01, ID01, CC11, EM11—must precede a service segment—RP01, OR01, AI01, OD01, RA01.
- The FFI cannot include more than the maximum number of segments specified for a subject or service.
- The subject data segments—NM11, PI11, AD11/UA11, PN01, ID01, CC11, EM11—must follow a Subject Header (SH01).
- The request processing segments—OD01, OR01, AI01, RA01—must follow a Request Service segment (RP01).
- There must be at least one subject data segment following a Subject Header (SH01).

Error Segment Layouts

TU4.1 includes two error segments, ERRC and ERRT, both of which are described below.

Error Code Segment

The ERRC segment displays the code of the error that occurred during transaction processing.

Error Code (ERRC) Segment **Total length: 11 bytes**				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is ERRC.
Segment Length	5	3	N	Value is 011.
Subject Identifier	8	1	N	Indicates the subject for which the error applies: **1** First subject
Error Code Number	9	3	A/N	Displays the error code.

Error Text Segment

The ERRT segment displays the full message text of an error code that was returned to the subscriber. Request the error text segment with an OR01 (Optional Request) segment in the FFI. If no error text segment is requested, then an error code segment is returned.

Error Description/Text (ERRT) Segment **Total length: 90 bytes**				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Type	1	4	A/N	Value is ERRT.

Error Description/Text (ERRT) Segment Total length: 90 bytes				
Field	**Displacement**	**Length**	**Type**	**Description**
Segment Length	5	3	N	Value is 090.
Subject Identifier	8	1	N	Indicates the subject for which the error applies: **1** First subject
Error Code Number	9	3	A/N	Specifies the error code for the error that was found. The next section lists possible error codes.
Error Description	12	79	A/N	Contains the text corresponding to the error code that was returned.

Sample Error Response

The following example shows how an error response is returned when no service is delivered for an inquiry transaction:

Segment ID	Segment Name	Current Maximum Returned
TU4E	Transaction Control	1 Per Transaction
PH01	Service Header (Credit Report)	1 Per Service/Subject
ERRC	Error	1 Per Service/Subject except for Level Four errors. The FFR can return up to 5 Level Four errors per service/subject.
END1	End	1 Per Transaction

Note: It is possible for a low-level error to occur for which TU4.1 cannot read enough of the FFI to send a TU4E segment. If this occurs, we return a CORR segment without a TU4E. The CORR segment returns the same TU4.1 error codes as the TU4E segment.

Error Codes—Level Zero

Level zero errors denote a failure of software, hardware, or telecommunication lines.

Code	Description	Recovery
001	The transaction was abnormally terminated due to a system error.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
006	The transaction was abnormally terminated due to a system error.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
015	The CRONUS® system is not available at this time.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
021	The market area being accessed is out of service.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
027	The subject record being accessed is too long.	Notify the TransUnion help desk (312-258-8088).
029	Hardware failure exists on new subject file disk drive.	Notify the TransUnion help desk (312-258-8088).
031	The subject record being accessed is misformatted.	Notify the TransUnion help desk (312-258-8088).
033	Too many duplicate inquiries for the same file. This commonly occurs on test records and may also occur when the same subject file is requested repeatedly by the same subscriber.	Notify the TransUnion help desk (312-258-8088).
035	The transaction was terminated due to an Individual Monitoring system error. For batch transactions, the subject name was received more than one time in the same batch.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
041	The transaction was abnormally terminated due to an internal DecisionPoint error.	Notify the TransUnion help desk (312-258-8088).
042	DecisionPoint model error.	Notify the TransUnion help desk (312-258-8088).
043	Invalid response from service server.	Retry transaction and if situation persists, notify the TransUnion help desk (312-258-8088).
050	Invalid or no response for desired product.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
051	Internal system error returned for desired product.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
052	Unable to connect to data provider.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).

Code	Description	Recovery
053	Request to data provider timed out.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088).
054	Invalid, incomplete, misformatted, or duplicate type of input data to data provider.	Check the input data required by the third party data provider and retry transaction after correction.
055	Invalid request to service server.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088)
056	Response from data provider could not be created.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088)
057	Unable to connect to secondary data provider.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088)
081	DSBundle transaction timed out.	Retry transaction and if the situation persists, notify the TransUnion help desk (312-258-8088)
090	The service requested is not available at this time.	Retry transaction and if situation persists, notify the TransUnion help desk (312-258-8088).
091	Internal system error.	Notify the network help desk (312-258-8088).
095	Unable to connect to server for service requested.	Notify network help desk. Retry transaction and notify the TransUnion help desk (312-258-8088) if the situation persists.
096	Unable to connect to TransUnion Routing Facility.	Retry transaction and notify the TransUnion help desk (312-258-8088) if situation persists.
098	Fraud Detect connection failed.	Notify the TransUnion help desk (312-258-8088).
099	Undefined system error.	Notify the TransUnion help desk (312-258-8088).

Error Codes—Level One

Level one errors denote invalid segment identification, a version switch, or a segment structure error.

Code	Description	Recovery
101	FFI segment contains an invalid segment ID.	Fixed format inquiry record contains an invalid segment ID element name or invalid country

Code	Description	Recovery
		code, invalid country code, or the sum of the individual segment lengths is invalid.
102	Invalid input FFI message type.	Occurs when first segment is not TU4.I. Check input to ensure properly formatted segments and resend transaction.
105	Invalid version switch.	TU4.I segment contains an invalid version switch.
117	The length of the FFI is invalid.	Occurs when an incomplete FFI is received or if the END1 segment is not the last segment in the FFI . Check input to ensure proper format and sequence of segments and resend transaction.
131	Number of CI01 segments greater than maximum allowed.	Only 1 CI01 segment allowed per subject. Check input, delete extra segments and resend transaction.
132	Number of subject AD11/UA11 segments greater than maximum allowed.	Only 2 AD11/UA11 segments per subject. Check input, delete extra segments and resend transaction.
133	Number of employment AD11/UA11 segments greater than maximum allowed.	Only 1 AD11/UA11 per employer. Check input, delete extra segments and resend transaction.
134	Number of AI01 segments greater than maximum allowed.	Only 1 AI01 segment allowed per service. Check input, delete extra segments and resend transaction.
135	Number of CC11 segments greater than maximum allowed.	Only 1 CC11segment per subject. Check input, delete extra segments and resend transaction.
136	Number of EM11 segments greater than maximum allowed.	Only 1 EM11 segment per subject. Check input, delete extra segments and resend transaction.
137	Number of EU01 segments greater than maximum allowed.	Only 1 EU01 segment per FFI. Check input, delete extra segments and resend transaction.

Code	Description	Recovery
138	Number of FA11/UF11 segments greater than maximum allowed.	Only 1 FA11/UF11 segment per subject. Check input, delete extra segments and resend transaction.
139	Number of ID01 segments greater than maximum allowed.	Only 1 ID01 segment per subject. Check input, delete extra segments and resend transaction.
140	Number of primary NM11 segments greater than maximum allowed.	Only 1 primary NM11 segment per subject. Check input, delete extra segments and resend transaction.
142	Number of NM11 segments (also reported as) greater than maximum allowed.	Only 3 also reported as NM11 segments per subject. Check input, delete extra segments and resend transaction.
143	Number of 0D01 segments greater than maximum allowed.	Only 2 OD01 segments allowed (1 per output type). Check input, delete extra segments and resend transaction.
144	Number of OR01 segments greater than maximum allowed.	Only 1 OR01 segment per service. Check input, delete extra segments and resend transaction.
145	Number of PI11 segments greater than maximum allowed.	Only 1 PI11 segment per subject. Check input, delete extra segments and resend transaction.
146	Number of subject PN01 segments greater than maximum allowed.	Only 1 PN01 segment per subject. Check input, delete extra segments and resend transaction.
147	Number of employment PN01 segments greater than maximum allowed.	Only 1 PN01 segment per employer. Check input, delete extra segments and resend transaction.
148	Number of RA01 segments greater than maximum allowed.	Only 20 RA01 segments per service.

Code	Description	Recovery
		Check input, delete extra segments and resend transaction.
149	Number of RP01 segments greater than maximum allowed.	Check input, delete extra segments and resend transaction.
151	Number of SH01 segments greater than maximum allowed.	Only 2 SH01 segments per FFI. Check input, delete extra segments and resend transaction.
152	Number of TU4I segments greater than maximum allowed.	Only 1 TU4I segment per FFI. Check input, delete extra segments and resend transaction.
154	Subject information found after service information.	Fixed format inquiry record contains subject segments out of proper sequence. Check input to ensure properly formatted segments and resend transaction.
155	No subject data found for subject header.	FFI must contain at least one of these segments: NM11, PI11 or AD11/UA11. This error is returned only if none of these segments is present. Check input to ensure properly formatted segments and resend transaction.
157	Subject data found without subject header.	Fixed format inquiry record does not contain an SH01 segment for subject data. Check input to ensure properly formatted segments and resend transaction.
158	Request service header not present in FFI.	FFI record does not contain an RP01 segment. Check input to ensure properly formatted segments and resend transaction.
159	Service data found without service header.	FFI record does not contain an RP01 segment for service data. Check input to ensure properly formatted segments and resend transaction.
160	End user segment not in proper order	EU01 segment does not immediately follow the TU4I segment.

Code	Description	Recovery
		Check input to ensure proper format and sequence of segments and resend transaction.
162	Name type field invalid on name (NM11) segment.	See NM11 segment description.
170	Invalid segment count.	Only 1 CD01 segment per service. Check input, delete extra segments, and resend transaction.
171	Segment out of order.	CD01 segment does not immediately precede the SH01 segment. Check input to ensure proper format and sequence of segments and resend transaction.
172	Required segment missing or invalid.	FFI does not include a CD01 segment. Check input for proper format and resend transaction.
173	Invalid Trans ID, TU4N Trans ID is restricted.	Check SBMT settings.
174	VN01 segment missing.	VN01 segment required for service.
175	Number of VN01 segments greater than maximum allowed.	Only 1 VN01 segment allowed.
177	No SU01 segment or multiple SU01 segments received	Only 1 SU01 segment may be provided per FFI.
181	Number of RP02 segments greater than maximum allowed.	Only 2 RP02 segments allowed. Check input, delete extra segments, and resend transaction.
182	Number of RP02 segments less than minimum required.	Minimum of 2 RP02 segments required if one present. Check input, add additional segment, and resend transaction.

Error Codes—Level Two

Level two errors denote invalid credit bureau control fields.

Code	Description	Recovery
201	Bureau market missing or invalid	Contact Client Technical Support (TUCTS@transunion.com) if assistance is needed.
203	Bureau submarket missing or invalid	
205	Member code missing or invalid	
209	Password missing/invalid	
211	EP code is valid only for employment services.	Recheck the settings in the FFI. This error is returned if the inquiry requests an

Code	Description	Recovery
		employment service without including the EP use type code (in the EU01 segment) or includes the EP code while requesting a non-employment service.
212	Missing or invalid Use Type or End User field(s)	Recheck the settings in the FFI. This error is returned when information in the End Usage (EU01) segment is missing or invalid.
213	Not a valid use type code for service/ model requested.	Recheck the settings in the FFI. This error is returned when information in the End Usage (EU01) segment is missing or invalid.
215	Invalid access code.	Recheck the settings in the FFI. This error is returned if a security freeze exists on a consumer file and the input access code does not match the file access code.
216	Input use type code does not match use type code established for this subscriber code.	Recheck the settings in the FFI. This error is returned when the use type code in the EU01 segment is different than expected per the subscriber's settings.
220	Missing required additional identification information.	Recheck input to insure that an ID02 segment with required data is provided.
221	ID Number missing or invalid.	See ID02 segment description.
222	ID Type missing or invalid.	See ID02 segment description.
223	Invalid or inactive vendor system user ID, password or other type of access control.	See ID02 segment description and recheck input to insure that valid third party data provider user ID/password is provided. Notify TransUnion help desk (312-258-8088) if the situation persists.
241	DecisionPoint subscriber ID, subscriber password, agent ID, and/or agent password missing or invalid.	Contact your account manager if assistance is needed.
299	Undefined error in a credit bureau control field or internal error.	Contact TransUnion help desk (312-258-8088) if assistance is needed.

Error Codes—Level Three

Level three errors denote invalid delivery or processing instructions.

Code	Description	Recovery
301	Inquiry type missing or invalid.	RP01 Inquiry Type must be I, C, A, or P.
303	Service requested invalid or missing.	Check service code specified in RP01 segment.

Code	Description	Recovery
304	Type of output requested is not supported.	Check the type of output requested in OD01 segment and the requirements for the service requested.
305	Model request is missing.	Provide an RA01 segment with a valid model code or contact Client Technical Support (TUCTS@transunion.com) to set up default models.
307	Member code is valid only for government agency disclosure (Government Report) service.	Contact Client Technical Support (TUCTS@transunion.com).
309	Member code is valid only for High Risk Fraud Search.	Contact Client Technical Support (TUCTS@transunion.com).
313	Output blocksize requested is missing or invalid.	See output blocksize requested description in OD01 segment.
323	Subscriber not authorized for service requested.	Contact Client Technical Support (TUCTS@transunion.com).
324	Subscriber not authorized for loan type requested.	Contact Client Technical Support (TUCTS@transunion.com).
325	Security error returned for desired product.	Contact Client Technical Support (TUCTS@transunion.com).
381	Duplicate subscriber and service information provided.	RP02 segments cannot contain duplicate data. Modify input and resend transaction.
399	Undefined error in a processing option field.	Recheck the settings in the FFI.

Error Codes—Level Four

Level four errors denote invalid subject identification data or noncompliance with a service's requirements.

Code	Description	Recovery	Notes
400	More name data is needed; check input for full name	Recheck input data to insure that required input fields were entered and segments are properly formatted.	
401	Last name missing or invalid	See NM11 segment description.	Last name and other indicative information must be in all capital letters.
403	First name missing or invalid	See NM11 segment segment description.	

Code	Description	Recovery	Notes
407	UNISSN was invoked, but the SSN is missing or invalid or a pocketbook SSN was entered.	See PI11 segment description.	
410	More data is needed, check input for address number or street type.	See AD11 segment description.	
411	Address number in current address house number is missing or invalid.	See AD11 segment description.	
413	Current address delivery address text is missing or invalid.	See AD11 segment description.	
415	Current address city name missing or invalid.	See AD11/UA11 segment description.	
417	Current address state code missing or invalid.	See AD11/UA11 segment description.	
419	Current address ZIP code missing or invalid.	See AD11/UA11 segment description.	
420	Invalid state or ZIP code.	See AD01 segment description.	
421	Address number in previous address house number missing or invalid.	See AD11 segment description.	
422	Invalid city or city/state combination.	See AD01 segment description.	
423	Previous address delivery address text missing or invalid.	See AD11 segment description.	
425	Previous address city name missing or invalid.	See AD11/UA11 segment description.	
427	Previous address state code missing or invalid.	See AD11/UA11 segment description.	
431	Employer name missing/ invalid	See EM11 segment description.	
435	Current address unit number invalid.	See AD11 segment description.	
447	Telephone number invalid.	See PN01 segment description.	
448	Phone area code invalid.	See PN01 segment description.	
449	Middle name invalid.	See NM11 segment description.	
451	Current address street direction invalid.	See AD11 segment description.	

Code	Description	Recovery	Notes
453	Current address street type invalid.	See AD11 segment description.	
454	Birth date missing or invalid.	Recheck input data to insure that required input fields were entered and segments are properly formatted.	
455	Subject cross market invalid.		
456	Driver's License and State Issued missing or invalid.	Recheck input data to insure that required input fields were entered and segments are properly formatted.	
457	Invalid format to be decoded for Creditor Contact Search.	See LK01 segment description.	
458	Invalid VIN (Vehicle Identification Number).	See VH01 segment description and recheck input data to insure that valid VIN was entered.	
459	California AB-156—at least three pieces of identifying information must be present in input.	Review NM11, AD11, and PI11 segments.	
461	Account Reporting Review: subscriber/inquiry link not established.	See RS11 segment description.	
466	Account Reporting Review: subscriber/inquiry link not active.	Contact local credit bureau.	
472	Subscriber identifier missing or invalid.	See CD01 segment description.	
473	Subscriber identifier qualifier missing or invalid.	See CD01 segment description.	
474	Application missing or invalid.	Review your TransUnion Net Access settings.	
475	Digital Certificate missing or invalid.	Review your TransUnion Net Access settings.	
476	Net ID missing or invalid.	Review your TransUnion Net Access settings.	
477	Fraud Detect: insufficient input to call fraud detect.	Review Fraud Detect service description.	
478	Insufficient input.	Recheck input data to ensure that required input fields were entered and segments are properly formatted.	
479	Invalid City/State combination.	Recheck input data to ensure that required input fields were entered and segments are properly formatted.	

Code	Description	Recovery	Notes
484	Input vendor data on VN01 segment does not match file vendor data.	Recheck input data to insure that required input fields were entered and segments are properly formatted.	
488	Perm ID not found/matched on Individual Monitoring Report/Consumer Disclosure.	Contact local credit bureau.	
499	Undefined error in subject identification field or internal error.		

Appendix G: The TU4.1 Format in the U.S. and Canada

The table below lists the segment fields in the TU4.1 FFI and FFR that are handled differently in the United States and Canada and describes the differences.

Segment Type	Segment ID	Field or Segment Name	U.S. Rule	Canadian Rule
FFI	OD01	Output Delivery Segment	Optional segment. Required only if requestor wants a delivery method other than FFR and standard (electronic) response.	Required segment.
FFI	RP01	ECOA Inquiry Type	Optional field. Type A used for authorized or spouse user.	Required field. Type J used for authorized or spouse user, but this is not usually used in Canada.
FFI	TU4I	Bureau Market/ Submarket	Needed because Member Numbers are not unique outside a bureau.	Not used.
FFI	TU4I	Contractual Indicator	Determines whether the transaction includes two subjects that have a contractual relationship. Replaces ECOA Inquiry Type.	Not used.
FFI	VN01	Vendor Information Segment	Supplies the name and service description of the vendor.	Not used.

Segment Type	Segment ID	Field or Segment Name	U.S. Rule	Canadian Rule
FFI	EU01	End Usage Segment	Provides end user name and use type code for compliance purposes.	Not used.
Note: Multiple subject processing is different in the U.S. than it is in Canada. While the U.S. requires that only one subject be valid to process the transaction, Canada requires that both subjects are valid.				
FFR	SE02	Spouse's Employment	Not used. This information is returned in an EM11 segment.	Returned for Joint Credit Report.
FFR	SN02	Spouse's Name	Not used. This information is returned in an NM11 segment.	Returned for Joint Credit Report.
FFR	TU4R	Transaction Time	Returns Central Standard Time.	Returns Eastern Standard Time.
FFR	Various	Date Fields	If day does not exist on database, returns 01 in day field.	If day does not exist on database, returns 00 in day field. Also, when no date is present, the date field returned is zero-filled although it is an A/N field.
FFR	TA01	ID Mismatch Segment	Returned for each ID Mismatch message generated. There are no message codes defined for ID Mismatch Alert messages, only indicators.	Not used.
Note: ID Mismatch processing is different in the U.S. than it is in Canada.				
FFR	TA02	ID Mismatch Segment	Not used. The exact number of inquiries is returned in the More Than 4 Inquiries in the Last 60 Days message.	Returns message code and text for each ID Mismatch Alert message generated. Message codes range from 000001-000503. The exact number of inquiries is **not** returned in the *More Than 4 Inquiries in the Last 60 Days message*.
Note: High Risk Fraud Alert message processing is different in the U.S. than it is in Canada.				
FFR	MT01	Message Code	High Risk Fraud Alert message codes range from 000000 through 009999.	High Risk Fraud Alert message codes range from 000040

Segment Type	Segment ID	Field or Segment Name	U.S. Rule	Canadian Rule
			Possible message segments include: **MT01** (message text) **MC01** (message code) **QH01** (Inquiry History) **DC11** (Deceased SSN) YI01 (Year of Issuance)	through 000130 and are always returned in an MT01 segment. MC01, QH01, DC11 , and YI01 are never returned. No Inquiry History or SSN Year of Issuance messages.
FFR	MT01	Message Code	The MT01 message segment is not returned for High Risk Fraud Alert when the result is High Risk Fraud Alert Clear. This status is communicated in the AO01 segment. Actual High Risk Fraud Alert code has been defined as 9997.	The MT01 segment is returned for a High Risk Fraud Alert Clear message with a code of '000000'. This was a subscriber requirement.
FFR	LE02	Legal Items segment	Not used.	Returned for Credit Report.
FFR	RC02	Registered Item/ Chattel segment	Not used.	Returned for Credit Report.
FFR	BK02	Banking Information	Not used.	Returned for Credit Report.
Note: IDSearch service processing is different in the U.S. than it is in Canada.				
FFR	SH04	Subject Header	Returns the best match indicator for ID Report with Score [Scoresearch] and ID Search services.	Not used. Canada returns SH01 segment for IDSearch. Canadian service performs matches on additional information such as Date of Birth, Employment, and Phone Number, and returns only the Best Match file.

Appendix H: Test Files

Test subjects have been developed to accommodate the testing requirements of TransUnion's subscribers. Use any of the files listed below to test your system setup.

Note: If you need additional test subjects, please see the Test Subjects page of the Client Technical Services website or contact your TransUnion Client Technical Support (800.985.4208 or TUCTS@transunion.com).

You must request a test subscriber code and password from your local TransUnion Account Representative to access the files in the test environment. If you are using a production subscriber code, you can access the test environment by:

- Setting the Special Routing Indicator in the TU4.1 segment to **1** and
- Changing the password to **PSWD**

Last Name	First Name	SSN	House Number	Street Name	Apt	City	State	Zip
Cranberry	Saucey	666-22-2525	876	Turkey		Fantasy Island	IL	60750
Day	Sunny	666-88-5678	333	Hop		Fantasy Island	IL	60750
Ggrant	Cary	666-66-5985	139	Main		Fantasy Island	IL	60750
Fmacommon	Raymundo	666-94-1456	523	Lillian		Fantasy Island	IL	60750
Fqacommon	Garry	666-24-0723	547	Hazel		Fantasy Island	IL	60750
Ftacommon	Theresa	666-86-0116	4815	Donald		Fantasy Island	IL	60750
Dancer	Line	666-39-3933	525	Country		Fantasy Island	IL	60750
Ffbrown	Shaun	666-12-3333	1807	Huntsville		Fantasy Island	IL	60750
Fvacommon	Michael	666-38-0731	573	Pell		Fantasy Island	IL	60750
Fyacommon	Calvin	666-84-9896	177	Willow		Fantasy Island	IL	60750
Golfer	Gary	666-11-7788	256	Parr		Fantasy Island	IL	60750
Grape	Juice	666-11-3332	224	South		Fantasy Island	IL	60750
Hhbrown	Shawn	666-12-9999	1807	Kerman		Fantasy Island	IL	60750
Medica	Donna	666-68-2484	44	Oak		Fantasy Island	IL	60750
Olantern	Jack	666-15-2468	329	Pumpkin		Fantasy Island	IL	60750
Pgartp	Scooby	666-50-8251	7514	Rainflower		Fantasy Island	IL	60750

Last Name	First Name	SSN	House Number	Street Name	Apt	City	State	Zip
Spec	Special	666-36-1971	1920	Spectacular		Fantasy Island	IL	60750
Studently	Jose	666-40-6498	5	Loan		Fantasy Island	IL	60750
Starr	Twinkle	666-29-4411	55	Sparklen		Fantasy Island	IL	60750
Start	Zup	666-12-1181	9999	In morning		Fantasy Island	IL	60750
Stpatrick	Patty	666-33-5551	14	Clover		Fantasy Island	IL	60750
Summer	July	666-41-8888	3222	Warm		Fantasy Island	IL	60750
Toast	Cla	666-88-5858	4566	Jelly		Fantasy Island	IL	60750
Toomany	Susan	666-38-1719	585	Wonderway		Fantasy Island	IL	60750
Zehorne	Qjohn	666-82-2307	11315	Gordon		Fantasy Island	IL	60750

Glossary

Account	Any credit transaction such as a bank loan, credit card, or mortgage.
Account designator	Code that describes the contractual ownership of a line of credit.
Account type code	A code that indicates a general type of credit account.
Algorithm	A computational procedure that is used to score (evaluate) a credit report.
Alphabetic (or alpha) character	A letter of the alphabet.
Alphanumeric character	A letter of the alphabet, a number, or a symbol.
Also Reported As (ARA), Alias	Another name used by the subject, such as a maiden name.
ARM	Adjustable Rate Mortgage.
Automated reports	Tape-to-tape and CPU-to-CPU reports.
Broker	A TransUnion subscriber who buys TransUnion products and resells them to end users.
Byte	A measurable portion of eight consecutive binary digits (bits) that is equivalent to one character.
Character	The unit of storage of information by the computer. A character may be alphabetic, numeric, or alphanumeric.
Consumer Relations	The TransUnion customer service department that handles consumer inquiries and disputes.
Consumer statement	A subject's statement on facts or conditions entered into the subject's credit file.
Credit file	A file containing a subject's identifying information and credit history.
Database	The collection of consumer credit information.
Date reported	The date an item of data is entered into the database.
Decode	The process of using a subscriber code to return information about the subscriber.
Displacement	The position within a segment at which a field starts.
Editing the inquiry	The process of validating inquiry data to ensure the correct format and syntax.
Edit segment	The edit segment provides the user with an audit trail of all non-critical erroneous fields in the inquiry that were either corrected or ignored. Refer to Appendix F for a more detailed description of the edit segment.
Effective date	The date the subscriber last verified the status of an entry in the database.
End user	A subscriber who buys TransUnion products through a broker.

Error segment	The error segment provides codes and/or text that describe why the CPU inquiry record could not be processed. Refer to Appendix F for a more detailed description of the error segment.
FCRA	Fair Credit Reporting Act. A 1971 law that defines certain standards that the credit industry must adhere to and procedures it must follow.
Field	A set of one or more characters that define a specific item in a TU4.1 segment. The information provided in the field helps to define the subject or request.
Field length	The maximum number of characters allowed in a field.
Fixed-format inquiry record (FFI)	The formatted inquiry composed of segments that identify the subject for whom data is requested and the product to use to find and return the data.
Fixed-format response record (FFR)	The formatted response composed of segments that contain data about the requested subject.
Format	The arrangement of data in a file, record, or field.
Format error	An error in the arrangement or content of a field.
High Risk Fraud Alert system	Automated screening of data for information that may be fraudulent.
Indicative information	Information that identifies a subject, such as name, address, and Social Security number.
Industry codes	A series of TransUnion codes used to classify the types of subscribers. This term is sometimes used to refer to a KOB.
Input	Information that a user (such as an operator or a subscriber) enters into a data processing system or a computer.
Inquiry	A query into a subject’s history for credit, employment, or collection purposes.
Joint inquiry	An inquiry that performs a double search using input subject and spouse names and Social Security numbers.
Justify	To adjust the position of characters to either the left or right margins of a field. Generally, an alphabetic or alphanumeric field is left-justified and a numeric field is right-justified.
KOB	Kind of Business code. A one- or two-character code used to identify the nature of the subscriber's industry. See also Industry code.
Left-justified	Data adjusted to the leftmost position of a field, followed by spaces.
Market Area	Designated service area within the TransUnion network.
Maximum delinquency	The most serious delinquency within the history of an account as monitored by the system.
Miscellaneous set	The data set containing any miscellaneous information that applies to a subject’s credit history.
Model	See Score model.
MOP code	The Manner of Payment code indicates the manner in which the consumer maintains the account. Formerly known as Account Rating code.

Multiple applicant processing	Sending an inquiry for two subjects with different names and addresses in one transaction.
Multiple product processing	Sending a request for two products, such as Credit Report and Fraud Detect, in one transaction.
Numeric character	A number. A numeric value consists of numbers only—no alphabetic characters or symbols.
Output	The information produced by a computer process.
Pay basis	The frequency with which a subject is paid by an employer.
Permissible purpose	A legally-allowed purpose that certain types of subscribers must have to obtain a credit report.
Prefix	A title, such as Reverend or Doctor, that precedes a subject's name.
Public record	The record of a legal action that involves the subject.
Remark codes	A series of three-position codes that further describe an account in a subject file.
Required field	A field that must be present to access a subject's file.
Reseller	See Broker.
Right-justified	Data adjusted to the rightmost position of a field, preceded by either zeros or spaces.
SSN	Social security number.
Score	See Score model.
Score model	A mathematical system used to predict credit behavior. The output from a score model is a number (score) representing the likelihood of a particular behavior, such as delinquency.
Segment	An element in a TU4.1 FFI or FFR. Each segment has its own segment ID and contains a unique set of data. Every FFI or FFR begins with a TU4I or TU4R segment and ends with an END1 segment.
Subject	A person about whom information is being requested.
Submarket	A designated service area within a market area.
Subscriber code	A unique number assigned to each member of a credit bureau.
Suffix	A title, such as junior or III, that follows a subject's name.
Update indicator	Code used to identify the manner in which a database entry (employment, trade account, and so on) was verified by the source.