

Appendix E
Overview of Current
NE DMV Motor Carrier Services Information System
Last revised by DMV: 7/15/2021

Overview

The current NE DMV Motor Carrier Services system performs two main functions, administering the IRP and IFTA programs for the State of Nebraska. In addition to this, the system has been designed and is maintained to keep Nebraska compliant with the federal CVISN and PRISM programs.

System Specifications

The Motor Carrier Services system was developed and operates on an IBM i series (formally AS400). The software is primarily developed using the 4th generation language CA2E and WEB2E developed by CA Software. The development consists of both a green screen component used by Nebraska Motor Carrier Services users and a web component used by its customers. Most of the functionality in the system is performed online in real time and only a small percentage is performed off hours in batch. The system is made up of some 269 relational database files and 3,867 RPG programs. In addition to the in-house custom code, the system utilizes several 3rd party software solutions, which are listed below.

Optio/Byteware

Used to design and maintain forms overlays, which in turn are used to create formatted reports, statements, letters, etc. The system currently contains 65 different overlays.

KeyesFax

Used to fax reports, statements, documents to our customers.

PKZIP

File compression and expansion software.

Standguard

Scans files uploaded to the system for viruses.

VINtelligence

Accessed via a web service call to the VicToRy system, this software is used to validate VINs.

DB Software

Used by NE DMV MCS auditors to process IRP and IFTA audits.

Internal (Green Screen) Users

Nebraska Motor Carrier Services users perform their day-to-day IRP and IFTA functions in a "green screen" menu driven environment. Access to individual menu options can be added to or removed from a specific user in the menu maintenance utility function. Several of the menu options provide the user with a holistic view (i.e. Work With Carriers, Work With Renewals, Receipt Payments, Printing Cab Cards, etc.), where the user can perform a similar function on multiple carriers without returning to the menu. Other menu items are specific to performing a single task (Edit Unit Number, Delete Unit, Delete Paid Bill, etc.). Internal users can maintain up to four independent login sessions concurrently and toggle between them.

External (Web) Users

External users can perform a limited number of IRP and IFTA functions via the Motor Carrier Services web application. These external users are broken into two groups, premium web users, and generic web users. Generic web users need to answer a series of questions specific to a single carrier to enter the system and perform work for that specific carrier. The functions these users can perform are renewing IRP and IFTA, filing IFTA returns, requesting additional IFTA decals, and paying IRP bills and IFTA balances. Premium web users gain access to the web-based system with a user id and password. They are only allowed to work with the IRP and IFTA carriers they are authorized to work with, and once logged in can switch from working with one carrier to another without logging out. In addition to the functionality provided to the generic web user, premium web users can also issue IRP temporaries, produce reports, create extracts, and print cab cards of our two largest carrier customers.

Interfaces

IRP Data Repository

The system sends monthly IRP transmittal data to the IRP Data Repository based on the "transmit" action taken by the user. The transmittal process performs error checking based on the IRP Data Repository rules to catch and help the user correct errors before the file can be transmitted. Daily uploads of IRP carrier, fleet, and unit registration information (see ITD/SAFER below) will transition from being sent to SAFER to eventually being sent to the IDR.

IFTA Clearinghouse

The system sends IFTA demographic data to the IFTA Clearinghouse every night at 8:00 PM (CT), as part of the nightly batch process. The monthly IFTA Transmittal data is sent to the clearinghouse on the day chosen by the user. The system uses the Nebraska OCIO to perform the sftp transmission.

ITD

SAFER

The system sends updates of IRP and IFTA data to SAFER every night at 7:00 PM (CT), as part of the nightly batch process. We currently upload the T0019, T0020, T0021 and T0022 transaction files. Downloads from SAFER are scheduled to run at 6:30 AM (CT) and again at 5:30 PM (CT) each day. We currently are taking the T0025, T0026, T0028, T0031 and T0032 transaction files from SAFER. The system has a self-monitoring process built into it and will report errors with the upload or download process via email. There are also several tools available to the user to make sure the Nebraska data remains in sync with the Nebraska data contained in SAFER.

PRISM

The system downloads and processes the PRISM Targeted Carrier/Vehicle file every morning at 6:30 AM (CT). The data in this file is used on our daily online processes when performing the interactive PRISM edits. Vehicles for Nebraska carriers who've been placed out of service by FMCSA are sent to SAFER with a status of 950.

CVIEW

Nebraska's web based home-grown CVIEW is primarily used by Nebraska Carrier Enforcement users. The user can perform a search on either a DOT

Number or a Plate Number. Nebraska plate searches return real-time information on the apportioned power unit or apportioned trailer plate by querying directly into the Motor Carrier Services system. Real-time Nebraska plate searches can also be performed against a predefined list of county plated vehicles via a web service call to the VicToRy system.

IRP/IFTA Audits

IRP mileage and IFTA return information is extracted and sent to a MCS “shared” location where it is ultimately loaded into the DB Software auditing software.

NIC

IRP and IFTA payments made in the Motor Carrier Services web application are processed by the state’s designated payment processor, NIC. The front-end work to identify the carrier, amount paid, what is being paid, etc. is handled by the Motor Carrier Service web application. This information is passed on to NIC, and if the payment is successfully completed in the NIC system, then a back-end process is called, and the payment is “posted” to the Motor Carrier Services system.

Cab Card Extract

As mentioned above, Nebraska’s two largest carriers can print their own IRP cab cards using the Motor Carrier Services web application. For the largest carrier, in addition to printing cab cards, the system produces an image file (.tif) of the cab cards and sends this file to the carrier’s ftp server every time cab cards are printed. The carrier imports this image file directly into their imaging system.

VicToRy

NLETs

Nebraska NLETs searches are all run through the VicToRy system. From there AP and AT plate searches are directed to the Motor Carrier System via a web service call where a search is performed for the apportion power unit or trailer plate. The response is returned to VicToRy and then passed back to NLETs.

Add Vehicle (Verify VIN and retrieve title information)

As vehicles are added or changed in the system, the VIN and or Title Number are queried against the VicToRy system, where VINs are validated with the VINtelligence software and titling information is returned to populate the MCS screen fields. If a record found in VicToRy contains either a VIN error or an issue with the title, the user is made aware of the problem. These queries are performed via web service calls to VicToRy.

GVWR

VIN’s are sent to the VicToRy system via a web service call and GVWR information is returned. This information is displayed in the Nebraska CVIEW.

Backend Title/VIN Verification Process

As stated above, the VicToRy system is checked and vehicle information is supplied to the Motor Carrier Services system as vehicles are added or changed in the Motor Carrier Services system. This process was developed to verify if any of the information initially captured changed due to any alterations made in the VicToRy system. This batch process entails extracting all actively registered trailer and power units contained in the Motor Carrier System and sending this

file to the VicToRy system. The VicToRy system reviews this file and verifies that titles are still current and in good standing, and if not, the record will be marked accordingly. The VicToRy processed file is returned to the Motor Carrier Services system, where green screen users can review and address the errors the following day. This process is typically run every six weeks, and during the renewal period it is run more frequently, every two weeks. Carrier are not allowed to renew if they have vehicles in the Title/VIN Verification Error file.

Display Apportioned Registration Information in VicToRy

The VicToRy system has incorporated a mechanism where the VicToRy system user can press a key and view the IRP registration information on the screen. This information is returned to the VicToRy system via web service call. The record is selected from the Motor Carrier Services system based on a match with the title number and VIN stored in VicToRy.

Return County Plated Vehicle Information to CVIEW

The Nebraska CVIEW has a feature available to its users where they can search for county registered vehicles stored in the VicToRy system. This information is made available to the Nebraska CVIEW via a web service call to VicToRy.

IRP Registration Data

A weekly extract of new/changed IRP registration data is sent to the VicToRy system where it is ultimately supplied to organizations who purchase this data from the State of Nebraska.

Provide Name and Address for Apportioned Plates (Requested by Toll Vendors)

Once a week, a file supplied to the State of Nebraska from toll road vendors is checked to see if a name and address can be returned for ticket enforcement purposes. The VicToRy system processes this file and returns IRP registrant names and addresses via a web service call to the Motor Carrier Services system.

NE Department of Revenue

Each week the Nebraska Department of Revenue sends the Motor Carrier Services system a file of all common and contract carriers identified in the DOR system. This file is loaded into the Motor Carrier Services system and is used to verify the accuracy of the tax id numbers captured in the system.

NCJIS

For the past 10 years, the Motor Carrier Services system has been sending an extract file containing IRP and IFTA data to the NCJIS system. This data was intended to be included with other data that law enforcement users of the NCJIS system are able to access. Because the IRP and IFTA data has never been used by the NCJIS system, and because of network changes related to sending the weekly file, this extract process has recently been put on hold. It is the intention of Motor Carrier Services that sharing IRP and IFTA data with the NCJIS system will be revived at some point in the future.

JD Edwards (E1)

Four times a year a file containing IFTA refund payments is created, and this file is imported into E1 where the refunds are processed.

Statistics

The makeup of Nebraska IRP fleet sizes varies widely and may be somewhat unique compared to other IRP jurisdictions. Over half (54%) of Nebraska IRP carriers have a single power unit in their fleet, and 85% of carriers have less than five power units. At the other end of the spectrum, there are five carriers with more than 1,000 power units in their fleets, and these five fleets account for 48% of registered apportioned power units in Nebraska. As mentioned above, the Motor Carrier Services system has incorporated some features to specifically accommodate the large Nebraska carriers. Below are some additional high-level statistics for IRP and IFTA based on the 2020 registration year.

IRP

Number of Carriers	4,613
Number of Fleets	4,630
Renewed Carrier/Fleets	4,117
Renewed Units	39,389
Supplements processed	9,477
Temporaries issued by green screen users	6,730
Temporaries issued by web users	11,808

IFTA

Number of Carriers	4,579
Renewed Carriers	4,123
Renewed Decals	47,031
Supplemental Decals	11,165