

ITS Field Operational Test Summary

Heavy Vehicle License Plate (HELP) One-Stop

FHWA Contact: Office of Motor Carrier Safety and Technology, ITS CVO Division, (202) 366-0950

Introduction

The One Stop Electronic Purchasing and Processing ITS Field Operational Test demonstrated the technology and process necessary to automate and integrate common motor carrier administrative functions across three states. The operational test demonstrated and tested the *capability* for “one-stop” electronic filing and purchase of motor carrier credentials and permits. Among the renewals and supplements that a motor carrier could process were those described in the International Registration Plan (IRP) and the International Fuel Tax Agreement (IFTA). Carriers could also use the system to obtain oversize or overweight permits. The test highlighted the benefits, to both motor carriers and state agencies, of streamlining regulatory application practices.

The test operated for nine weeks in the spring of 1997 in Arizona, California, and New Mexico. The evaluation of the test looked at five focus areas: system effectiveness, system operation, physical conditions and requirements, user acceptance, and institutional issues.

Project Description

The Heavy Vehicle License Plate (HELP) One-Stop system features a set of user friendly computer interfaces supported by multiple databases. Figure 1 presents a schematic of the electronic credentialing process. Motor carrier users, working on the HELP software, provided the application information required by each state to issue credentials and permits. The users accessed regulatory compliance information, filed applications, and transferred funds electronically through one point of contact for all three states. State agencies avoided manual entry of motor carrier data and participated in a financial clearinghouse that settled regulatory accounts among states.

Using the HELP One-Stop system, motor carriers and service agents were able to determine state-specific credential requirements for each type of credential and could submit an application for a credential. They could also set up fleet accounts, add or modify their vehicle and fleet information, calculate the fees for a credential or permit, and make electronic payments. The carriers or agents performed these transactions by accessing an electronic Service Center using a proprietary communication interface. The system also supported state agency account and vehicle processing, financial payment, and on-site credential and permit issuance.

One of the participants (Lockheed Martin IMS) supported the project with their Vehicle Information System for Tax Apportionment/Registration System (VISTA/RS) product. IRP member jurisdictions used this software to process IRP applications for carriers traveling in two or more IRP jurisdictions. VISTA/RS provided state agencies the ability to process and record IRP accounts. The test participants used the linked VISTA/RS and HELP One-Stop systems to calculate taxes and fees for the credentialing transactions.

The Service Center, set up by HELP, Inc. and Lockheed Martin IMS, acted as the primary contact point for all participating motor carriers, service agents, and state agencies. In addition to being the primary contact point for the system, the Service Center provided user training and on-site and telephone assistance to participants. The Service Center also acted as a financial clearinghouse for fee payment.

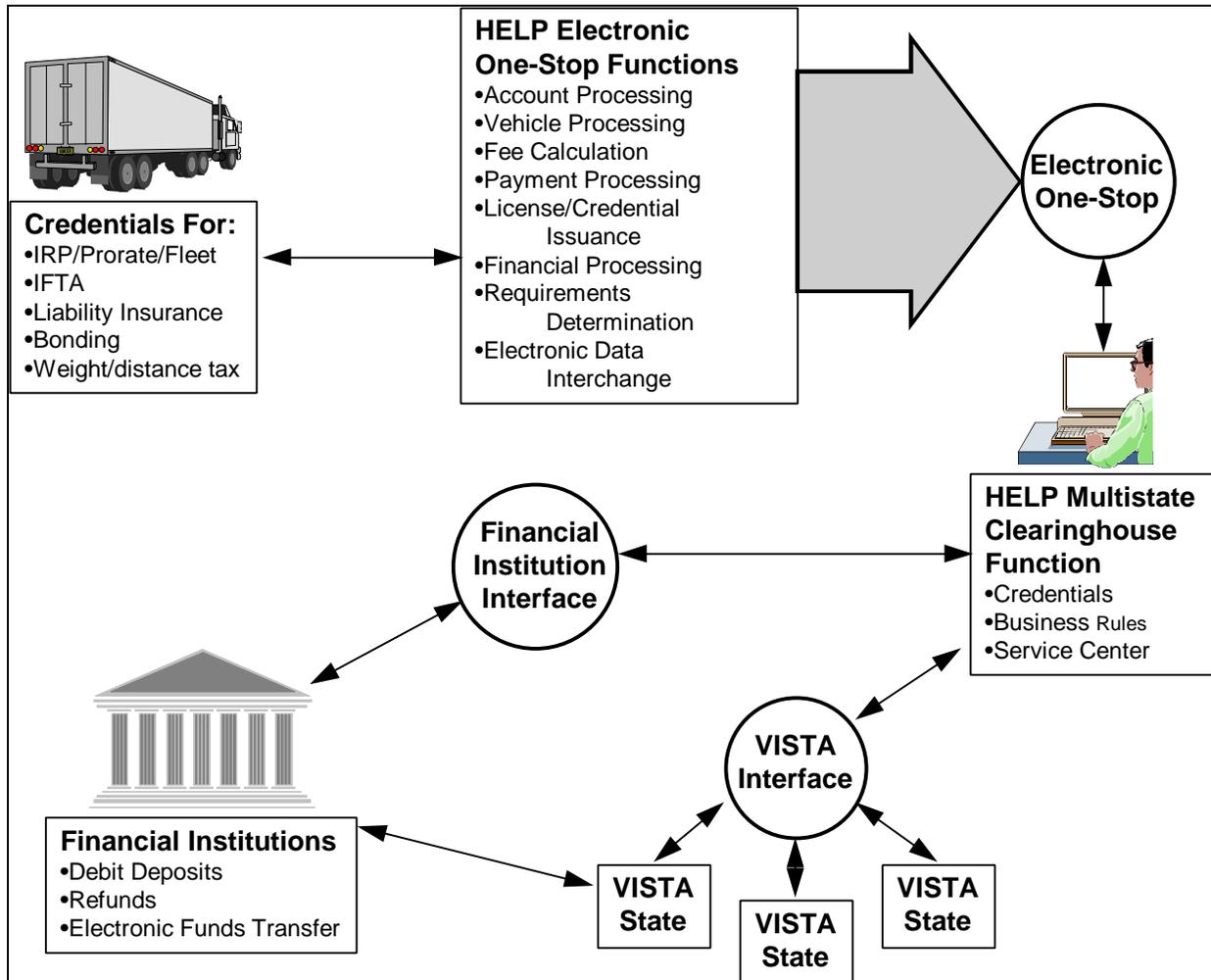


Figure 1: Electronic Credentialing Schematic

Results

The Final Evaluation Report presents the following findings.

The operational test demonstrated the viability of the one-stop concept. Test participants acknowledged the potentially large benefits of one-stop systems for their businesses. The test provided system developers with the feedback needed to improve their product. Those involved with the test were positive about the future of one-stop systems and about the potential for the system to provide them multiple benefits. Motor carrier users anticipate both time and cost savings, as well as achieving a higher efficiency than at present. The greatest benefits would accrue to large motor carriers and service agents.

The test recorded and evaluated the process of IRP transactions, IFTA requests, and permit transactions. The volume of transactions during the system operation was significantly less than expected since the test period did not cover any renewal cycles. Test personnel supplemented the recorded transactions with a series of simulated transactions.

Using the HELP One-Stop system saved about 48 days over the conventional method when obtaining IRP supplement credentials. Based on limited data, evaluators estimated a time saving of about 38 days when processing IFTA renewals. Simulated test data also show the potential for significant time savings in the IRP renewal transactions. The limited test data for oversize and overweight permits indicated that there would be little time or cost savings from using the HELP One Stop system.

The use of the service center as a financial transaction clearinghouse was cumbersome. The fee payment portion of the transaction consumed nearly 80% of the time. If the concept were actually deployed, the Service Center would not perform this function. Therefore, in an actual deployment, the evaluators expect that the fee payment time would be reduced.

The HELP One-Stop system featured a proprietary communication interface with the VISTA/RS system. Lockheed Martin IMS developed both the VISTA/RS and the EOSS software products. During testing, variations in fee calculations were discovered between states using VISTA/RS and those using other systems. These variations were small and mainly resulted from the systems using different reference data to calculate the fees. These test data suggest that the system would be most easily integrated into states already using the VISTA/RS services.

Legacy

The HELP One-Stop system was intended to be a commercial product. The development of a one-stop system that used a standard communications format would be attractive to many states. The test participants concluded that the system is not yet ready for deployment as a commercial product. The commercial test participant developing the product, Lockheed Martin IMS, has identified several components that it would change under a commercial deployment scenario to make it more attractive to a wider range of users. These components include:

- Eliminating the financial clearinghouse function of the Service Center in favor of direct payment to state accounts
- Using a larger, dedicated computer platform
- Using a standard communications format (such as Electronic Data Interchange) to make the system more attractive to non-VISTA/RS states.

Lockheed Martin IMS has not yet made a decision about deploying the system. The company does plan to use the knowledge and technology it learned during HELP One-Stop in its future commercial vehicle operations work.

Test Partners

American Trucking Associations Foundation

Arizona Department of Transportation

California Board of Equalization (IFTA)

California Department of Motor Vehicles (IRP Section)

California Department of Transportation

Federal Highway Administration

HELP, Inc.

International Fuel Tax Agreement

IRP, Inc.

Lockheed-Martin IMS

National Governors Association

New Mexico Taxation and Revenue Department

Private Fleet Management Institute

Western Highway Institute

References

The Western Highway Institute, One-Stop Electronic Purchasing and Processing, (Draft) Final Evaluation Report, July 1997