



**District of Columbia
Department of Motor Vehicles**

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**DRIVERS KNOWLEDGE
TESTING SYSTEM**

TECHNICAL RESPONSE

RFQ No: DCTO-2008-Q-0188

June 27, 2008 – 2:00 P.M.



**VIISAGE
SECURE CREDENTIALING SOLUTIONS**

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ORIGINAL

June 18, 2008

Government of the District of Columbia
Department of Motor Vehicles
Office of the Chief Technology Officer
441 4th Street, NW, Suite 1050 North
Washington, DC 20001

Attn: Ms. Veronica Dhaness
Re: RFQ DCTO-2008-Q-0188

Dear Ms. Dhaness,

L-1 Identity Solutions Secure Credentialing Division ("L-1/Visage") is pleased to respond to this RFQ for an Automated Knowledge Driver's License Testing System to be implemented for the District of Columbia Department of Motor Vehicles. Our response is based on the **AutoTest System**, designed and developed by L-1/Visage and in use by other driver service agencies in the U.S. and abroad for the delivery, administration, and statistical analysis of tests and assessments.

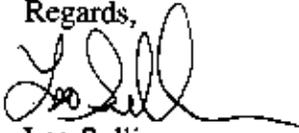
The **AutoTest System** meets or exceeds all of the requirements presented in the RFQ. **AutoTest** truly represents state-of-the-art in computerized testing and was developed specifically to meet the unique needs and requirements of driver service agencies. The **AutoTest** software's thin client, browser based architecture provides an open and flexible testing environment that is reliable and allows for ease of systems integration and future expansion. In addition, the **AutoTest System** offers the DC DMV a full range of options for upgrades to the testing environment, including appointment scheduling, integration of biometrics, and automation of pre-trip inspections and road testing via use of portable computers. If selected as the successful bidder, **as an added value**, L-1/Visage will provide to the DC DMV, at no additional charge, 2 standalone Tablet PC's equipped with our RoadTest Automated Skills Testing software for the DC DMV to utilize in a CDL Road Test facility for a period of 90 days. The provided tablets will be delivered with customized CDL scoring forms for pre-trip, basic controls, and the skills testing portion of your CDL road test. Please see Appendix C for further information on our RoadTest application software.

For this project, L-1/Visage has partnered with Vantix Inc. Headquartered in Washington DC, Vantix Inc. is registered by DSLBD as a Goods and Equipment, General Services, Business Services, **Local Business Enterprise, Small Business Enterprise, Disadvantaged Business Enterprise and a Resident Owned Business**. L-1/Visage with over 200 employees, combined with Vantix Inc. offers the DC DMV an experienced implementation team, training staff and superior support and maintenance. We look forward to bringing our experience to the DC DMV.

L-1/Visage acknowledges the terms and conditions of the RFQ document and receipt of all addenda pertaining to this procurement. Please do not hesitate to contact me if you have any questions or wish to discuss any part of our proposal. L-1/Visage is flexible and will be happy to negotiate a mutually acceptable arrangement on terms and/or issues.

Thank you for the opportunity to respond and for your consideration.

Regards,



Leo Sullivan
Division President
Viisage
An L-1 Identity Solutions Company

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PRICING PROPOSAL response is included in a separately sealed document

DOCUMENTATION is provided in a separate binder.

EXECUTIVE SUMMARY



The **AutoTest System** is the most advanced technology available for automation of driver knowledge exams. And, because **AutoTest** is based on the latest thin-client technologies, it offers greater flexibility and ease of use than other solutions.

AutoTest does more than just turn a paper test into a computer test. It puts powerful tools in the hands of examiners and administrators for every aspect of the testing process...saving time and money, and reducing the incidence of fraud and abuse. Combined with L-1/Visage's experienced implementation and support team and a range of testing kiosk styles and prices, **AutoTest** is a complete, end-to-end solution for driver service agencies.



The **AutoTest System** offers many distinct benefits including:

- **Ease of use** – One of the strongest **AutoTest System** features is its excellent test presentation. Using an intuitive interface and crisp graphics, the **AutoTest System** provides a non-threatening testing solution that is easy to use, even for "first-time" or rare PC users. The system uses prompts and feedback to guide users through the test-taking process and to ensure that they use the system properly. From an administrative standpoint, the point-and-click interface is designed so that non-technical users can easily navigate the system to assign tests, generate reports, and create and modify tests.
- **Browser-based architecture** – Our web-based, .NET architecture eliminates the need to install software on every PC that needs to access the system. Authorized examiners and administrators can perform system functions, such as assign tests, generate reports, and create and modify test questions, from any PC equipped with a web browser and a connection to the State network. This means that an unlimited number of examiner personnel can have remote access to the Examiner Console in any local office without purchasing additional licenses, supervisory personnel can access the Administrator Console from their own desk through a web browser, and itembank editors can work off-site if desired, simply by launching a web browser and logging in with security credentials.
- **L-1/Visage-hosted Web Testing Service** - Deliver and administer tests outside of the traditional DMV office environment using **AutoTest** over the Internet. L-1/Visage hosts and maintains the software from our secure Web hosting facility. Any location with

Internet-capable PCs can be turned into a testing location. For example, high school students can be tested in their school's computer lab under the supervision of either a DMV or school-provided proctor. The student simply points his/her browser to a designated Web address, logs-on with username/password information supplied by the proctor/examiner, and takes the assigned test. This option opens up new possibilities for workflow efficiency and enhanced customer service.

- **Anti-fraud features – AutoTest** stops cheaters by producing a fully randomized, unique test for each applicant. And, our system goes the extra mile to help you stamp out fraud with security features including:
 - **Re-Testing Alerts** – **AutoTest** automatically alerts examiners when applicants are in violation of the re-testing rules which have been configured for your system. For example, if your rules prohibit an applicant who fails a CDL test from re-testing in the same day, the system will flag an individual who tries to "beat the system" by driving to another office.
 - **Digital Image Capture** - This optional feature allows you to capture a digital photograph of the applicant (either at the Examiner console or the Test Station) and store it with the testing record. **Examiners may use the image to verify that the person who supplied the required documentation actually took the test;** or that an applicant who fails a test does not send someone else in to re-test for them.
 - **Examiner Audit Capability** – The **AutoTest** System tracks all examiner (proctor) and administrator activity by the unique ID assigned to each system user. This allows the DMV to build an audit trail for each user, and potentially assist in tracking any fraudulent activity.
 - **Applicant Verification Questions** – **AutoTest** provides the capability to ask the applicant a series of authentication questions at the Test Station before beginning a knowledge exam. This may be as simple as choosing the correct date of birth, or a more extensive series of questions drawn at random from the applicant info on record. Applicants who cannot answer the questions correctly are referred back to the examiner for further screening.
 - **Biometrics** – **AutoTest** provides optional capability for capture of digital fingerprints (single print or complete set – slap and/or rolled). Biometric information may be gathered to comply with U.S. Patriot Act requirements, or may be stored in a central database for verification and authentication purposes.
- **Reliability** - The **AutoTest System** is based on tried and true web and database technology to provide robust operation while allowing wide latitude in the way tests are presented to applicants. Data is never lost, and applicants can be assured that their test results will be accurate and complete. For example, if the Examiner Console is unavailable due to a hardware failure, currently allocated tests at the Test Stations can continue to be taken without interruption and the results stored while the Backup Examiner is brought on-line. Once the Backup Examiner is brought on-line, other computers in the office can access the **Examiner** application through a browser. Since the **Examiner** application is browser-based, the Backup Examiner can both function as a Test Station and host the **Examiner** application for other PCs. This is just one example

of the software design that permeates the **AutoTest System** to provide continued operation and resumption of the testing process even when an unexpected system fault occurs.

- **Secure testing environment** – Only authorized personnel can login to the **AutoTest System** using a username and password that is administered by headquarters. All passwords are encrypted in the database, which provides an extra layer of security and further ensures that unauthorized individuals will be unable to obtain password information. Direct access to the testing database is only accessible from an application on the Administrator Console. Select administrators assign Staff different levels of security clearance as defined by headquarters. The system provides a detailed audit trail of all personnel who access the system for whatever purpose. For test applicants, verification procedures are in place to help confirm that the person taking the test is the actual person seeking the license. Browser users can only access information for which they provide proper credentials. Access to Administrator Console, Examiner Console, and Test Station files are restricted to authorized users within the network using Windows NT authentication. And the system's anti-fraud features, including automatic re-test alerts and both digital image capture and biometric options, enhance the security and integrity of the driver license testing process.
- **Uninterrupted testing service** – **AutoTest** offers multiple features designed to ensure continuation of service in the event of network outages, hardware failures, or power failures. Fully redundant and fault tolerant, the **AutoTest** software is designed to recover following power failures or other disruptions at exactly the point of interruption with no loss of data. And, the **AutoTest Backup Examiner** provides for the quickest method of re-establishing examiner functions in the event of Examiner Console hardware failure.
- **Multiple language support** – **AutoTest** supports test delivery in any language with both text and audio support. The **AutoTest** database comes pre-configured with the entire AAMVA/FMCSA CDL 4.0 itembank with accompanying graphics and audio. State-specific itembank content can be provided in any language. And since all modules of the **AutoTest System** are Unicode compliant, new languages can be easily added at any time...even those that use non-Roman fonts. The **AutoTest System** even offers the ability to test in American Sign Language through its unique multimedia capabilities.
- **Advanced multimedia** – **AutoTest** is the only system that offers 3-D simulations of driving situations based on AAMVA-approved diagrams to accompany test question content. This enhances the test-taker's ability to understand and fairly evaluate test items before answering. L-1/Visage provides full services to continually add to and improve **AutoTest's** multimedia features.
- **Comprehensive and flexible reporting** – The **AutoTest System's** standard reports provide both examiners and system administrators with powerful tools to produce statistical reports on testing activity, spot atypical trends which may be further analyzed for possible fraud, and to gauge the effectiveness of test item content. Reports may be accessed, viewed, and printed by any authorized user through a web browser. All reports may be refined by date range, location, test type, test status, and other parameters. New or custom reports may be easily developed and added to the system by either L-1/Visage or the client.

- **Commitment to customer service and support** – Our clients will attest to our excellent service and support. Your success with the **AutoTest System** is our success too! Plus, L-1/Visage offers a variety of convenient ways to access support, including:
 - Toll free support hotline
 - Internet help desk
 - E-mail support
- **Easy-to-expand system** – **AutoTest's** open, web-based architecture makes it easy to implement customized features, interfaces to other systems, and interfaces to hardware devices. **AutoTest** allows for future expansion, as well as the addition of new capabilities such as vision testing, remote CDL testing, improved testing access for individuals with disabilities, and use of barcode readers and other portable devices. L-1/Visage already has many of these features available as system options, with a full pipeline of new features in research and development. Options include:
 - **Biometrics**

Various biometric hardware and software solutions may be integrated with **AutoTest** for stricter control of fraud and abuse. The **AutoTest System** is the only system featuring full compatibility with LiveScan-compliant devices for the capture of the ten rolled fingerprints required for CDL Hazmat endorsement holders mandated by the U.S. Patriot Act.
 - **Digital Image Capture**

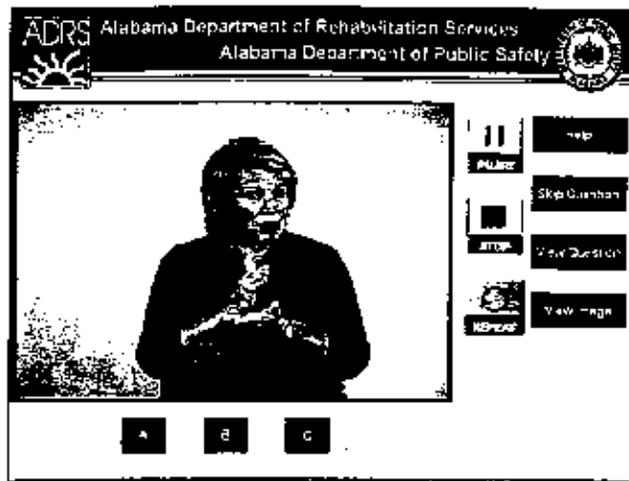
With the addition of a digital camera, **AutoTest** allows DMV personnel to capture and store a digital photograph of each applicant. This feature may be used to combat fraud, as well as to facilitate smoother workflow and customer service.
 - **AutoTest Scheduler**

Scheduler is a web-based application that may be used by staff to schedule knowledge and/or road tests, or it can be deployed over the Internet as a self-service application for customers to make their own appointments.
 - **Portable Road Testing**

This **AutoTest** option allows examiners to perform pre-trip inspections and road tests in the field on a portable PC. Scores and other information may be transmitted real-time via wireless network connection, or may be stored on the portable device for batch download.
 - **American Sign Language**

AutoTest is the only system offering optional testing in American Sign Language. Utilizing the system's multimedia capabilities, **AutoTest** presents a sign language interpreter in a video window signing all questions and answer choices. This unique

feature allows hearing-impaired applicants to test in the standard testing environment, without any other special accommodations.



- **AutoTest WAVPrompter**

This feature automates the process of recording voice prompts in multiple languages and adding the recorded files to the database. This makes it easier for system administrators who wish to record audio narration for new or revised itembank content to do so from a PC equipped with an inexpensive microphone. *WAVPrompter* can display text for recording in any language, even those utilizing non-Roman fonts and characters.

AutoTest Automated Driver License Testing System

There are three primary software components in the **AutoTest System**:

- **AutoTest Test Station**
- **AutoTest Examiner**
- **AutoTest Administrator**

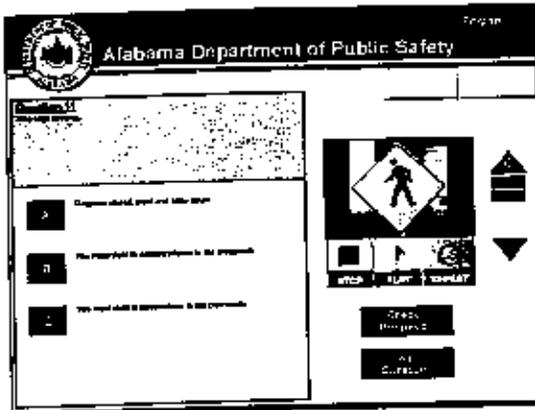
These components are fully integrated, and L-1/Visage consults with the client's network and security team, if desired, to set up the required network security and protocol rules at the routers and firewalls to facilitate communications between the examination sites and the central Administrator Console. L-1/Visage's **distributed database model allows each examination site to continue testing even if the State-supplied network connectivity between the examination site and the central office is disrupted**, whether momentarily or indefinitely.

The Examiner Consoles and Testing Stations reside at the specified driver examination sites and use each location's Local Area Network for connectivity. The Administrator Console is housed at the central location designated by DMV, and is networked with the Examiner Consoles and Test Stations through the state-supplied Wide Area Network.

In addition, because the **AutoTest System** software is browser-based, it can be securely and easily deployed over the Internet to remote locations such as high schools and field offices, if this capability is desirable in the future.

- **Primary System Components**

- **Test Station**



Test Station is the user-friendly touchscreen interface used by applicants to take a test. Prior to starting the test, the Test Station will perform a verification procedure in order to help confirm that the person taking the test is the actual person seeking the license.

The Test Station will present preliminary questions that are specific to the applicants, asking them to confirm their address, date of birth, social security number, previously issued driver license number, etc. If a test-taker answers a preliminary question incorrectly, they will not be able to proceed with the driver test. Optionally, the applicant's signature or biometric identifier may be captured at the Test Station and stored for future comparison as an anti-fraud measure.

Upon successful verification, the appropriate driver test commences. Test questions are presented via text and/or voice audio files and then answered by simply touching the computer screen. When answering a question, applicants have three options:

- Immediately answering the question
- Skipping the question (Note: The applicant will be given an opportunity to answer skipped questions at the end of the test.)
- Repeating the question

Once the question has been answered, the **AutoTest System** displays the appropriate feedback. At the end of the test, the program informs applicants if they passed or failed and allows them to review the completed test. The Test Stations operate automatically when powered-up, and, should a loss of power occur, applicants are able to resume testing at the exact point of interruption immediately when power is restored. On-screen help is always available to the test-taker.

- **Examiner Console**

The Examiner Console is the central point of control at each testing location. It is used to initiate the testing process by entering applicants and designating tests.

The Examiner Console also assigns Test Stations, monitors test progress, displays results, reviews tests, prints results and reports, and prints written test forms. Options for the Examiner Console include digital image capture, digital signature capture, and digital fingerprinting through integration with a finger imaging device.

The examiner can intervene and cancel a test from the Examiner Console, and enable the *Quick Pass/Fail* feature that automatically terminates tests after a preset percentage or number of questions has been answered correctly or incorrectly. Additionally, through the Examiner Console, examiners can track designated aspects of system performance and troubleshoot minor difficulties associated with normal system activities and usage.

The Examiner Console houses a duplicate of the central system itembank with all test content. This allows each location to continue testing even if connectivity to the central Administrator Console is disrupted.

o **Administrator Console**

The Administrator Console is the central point of administration for the entire testing network. Equipped with a SQL 2000 database, it will contain the central repository for all testing and results databases, and connect to all Examiner Consoles and Test Stations through the State's Wide Area Network.

The Administrator Console provides the intuitive interface for test creation, item-bank (database) management, transfer of new and revised data to and from the local Test Stations, and the generation of system-wide statistical reports. Administrator functions include the following:

- Manage users and set security levels
- Set business rules and parameters for test construction
- Create new test categories and tests
- Create and modify test questions
- Store tests, test results, and applicant information
- Purge old test and item-bank content
- Import item-bank media (i.e., images, voice, or video)
- Create associations between media and item-bank content
- Generate system-wide statistical reports
- Maintain audit trail of all database updates and transfers

Since the *AutoTest System* is web-based, it allows authorized examiners and administrators to access the Administrator Console from any approved PC equipped with a browser and a network or Internet (if allowed) connection.

- **Tests** – Test types include, but are not limited to: CDL (all), State Basic Operator, Motorcycle, and Certified Driver Examiner. New test types may be easily added to the system in the future through the Administrator Console software. Many of our states use AutoTest to deliver additional exams, such as boat operator certification.

The *AutoTest System* permits authorized test-creators to designate the length of each test, question type (multiple choice, true/false), the number of possible multiple-choice answers per question, time allowed and other variables. Questions and answers are both randomized. Tests may be presented visually on the monitor, printed on the printer for written tests, and delivered in audio format through a handset on the Test Station.

- **Test Results & Reports** - The *AutoTest System* includes user-friendly reporting tools accessible from both the *Examiner* and the *Administrator* interfaces. Examiners have the ability to generate select reports that reflect real-time testing data from any examination site. A variety of Standard Reports are included in the *AutoTest System*:
 - **Test Activity Summary** – Provides overview of test activity at a single location or at all locations for any specified time period
 - **Test Log Report** – Provides detailed listing of all tests taken within a particular time period.
 - **Applicant History** – Allows retrieval of test history and results for individual applicants.
 - **Examiner Audit** – Builds audit trail of all system activity keyed to a specific user ID
 - **Item-bank Analysis** – Helps administrators identify and correct problems related to the question pool.
 - **Individual Session Analysis** – Allows search by date and applicant name for individual test session information

In addition to the standard *AutoTest System* reports, additional custom reports may be easily added to the system by L-1/Visage or by client personnel. The *AutoTest System* interfaces easily with most standard report writing software.

- **Test System Hardware** – The *AutoTest System* software is compatible with any industry-standard Windows 2000 PCs and servers. Clients may provide their own system hardware if desired, or L-1/Visage will provide, configure and maintain all PCs and servers.
- **Test Kiosks** – The *AutoTest System* may be deployed on a wide range of hardware/kiosk platforms... from modular, quick-assemble panel stations to countertop touchscreens. L-1/Visage works with each client to determine the optimal configuration

for each environment taking into account factors from available space to budgetary concerns.

- **Training** – Training ensures that each user is able to operate The **AutoTest System** as authorized and planned in advance.

Each training session includes traditional instructor-led training and hands-on training. In addition to supplying each student training materials, L-1/Viisage employs visual aids (such as PowerPoint presentations) during the classroom training sessions to support the instructor and enhance the training experience for the students. If desired, the classroom session is videotaped, and copies may be used to help facilitate training for new employees in the future.

Following the classroom training session, students participate in guided hands-on training and have the opportunity to engage in unguided use of the system. Students are monitored and evaluated in their use of the system to measure proficiency. The trainer is available after training sessions have been completed to answer questions and to provide additional help if needed.

- **Maintenance and Support** – L-1/Viisage provides a range of system support and maintenance options to fit varying client requirements. Software support is provided by L-1/Viisage and may be accessed via one of the following three methods:
 - Toll free support hotline
 - L-1/Viisage's Internet Help Desk
 - E-mail support

Past and current customers will testify to L-1/Viisage's exceptional maintenance and support record.

Conclusion

The **AutoTest System** is the only automated testing system designed specifically for the mission-critical nature of driver license testing that can offer all the following features and benefits:

- The **AutoTest System** is the only system offering a completely browser-based architecture. All components of the system utilized by test takers, driver license examiners and system administrators are Web-based, which produces the following benefits:
 - Eliminates the need to install proprietary software on every computer that needs to access the system. This allows multiple driver license examiners and administrators to access the applications through a Web browser, without paying license fees for multiple copies of the software.
 - Allows tests to be delivered either to dedicated, touchscreen test units or to any computer with Internet/Intranet access through a standard Web browser. This unique feature gives the State the flexibility to offer driver testing at off-site locations, such as high schools or driving schools, if desired.

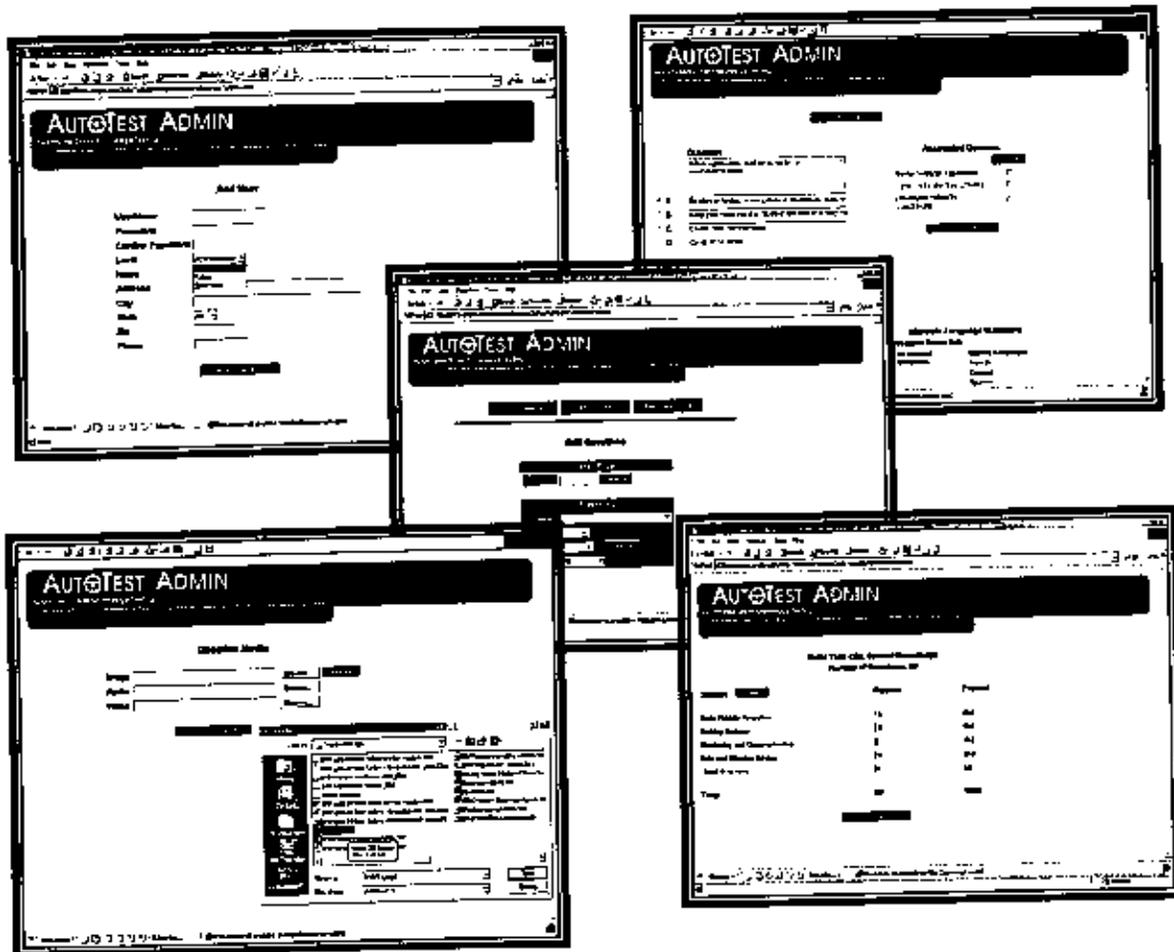
- All system reporting and statistical analysis tools are accessible by authorized personnel through a Web browser. This allows State personnel “anywhere, anytime” access to the information they need.
 - The ability to link **AutoTest** to the State’s website and allow applicants to take “practice tests” for a variety of license types, including operator, motorcycle and commercial driver. These “practice tests” are configured from a special database of practice questions, and are a useful learning tool to ensure that prospective drivers are prepared for a knowledge exam.
- The **AutoTest System** offers the most extensive fraud-prevention capabilities, including the following:
 - The system allows administrators to configure business rules for the administration of various tests and test types, such as re-test parameters for those who fail examinations. This means that driver license examiners will be automatically warned if an applicant is attempting to “beat the system” by driving to another office to re-test before any mandatory waiting period expires.
 - The system’s digital image capture feature allows examiners to capture a digital photograph of an applicant and associate the image with the driver information record. The system can generate a printed receipt with the applicant’s picture which he or she must present before a license is produced. This helps ensure that the applicant who takes the test is the same person who shows up to have a license produced.
 - The system offers biometric capabilities. The **AutoTest System** is the only system featuring full compatibility with Livescan-compliant devices for the capture of the ten rolled fingerprints required for CDL Hazmat endorsement holders mandated by the U.S. Patriot Act.
 - The **AutoTest System** offers optional customer scheduling capabilities without the need to purchase third-party scheduling/queuing software. AutoTest Scheduler provides assisted scheduling for driver knowledge and/or skills test appointments, as well as self-service scheduling for customers via the Internet.
 - The **AutoTest System** provides expansion capability to allow examiners to perform pre-trip inspections and road tests in the field on a portable computing device. Scores and other information may be transmitted real-time via wireless network connection, or may be stored on the portable device for batch download.

The **AutoTest System** also offers opportunities to streamline and improve the driver license workflow process through integration with other key systems and applications, including queuing systems. Our open architecture simplifies the integration process, and our experienced consultants can assist in determining the optimal utilization of our automated testing system within your existing DL environment.

This section gives a brief discussion of the three consoles that make up the AutoTest System. For greater detail of the Administrator, Examiner, and Test Station Consoles, L-1/Visage has provided the DC DMV with the following Console Overviews.

CONSOLE OVERVIEWS

Administrator Console Overview



The Administrator Console will be housed at a location of DC DMV's choosing and is the central point of administration and control for the **AutoTest System**. Viisage's **AutoTest Administrator** is the **AutoTest** software component that runs the Administrator Console. Through **AutoTest Administrator**, the Administrator Console communicates with the remote Examiner Consoles (distributed model), which are configured as local web servers, via an DC DMV-supplied network. Because **AutoTest Administrator** is completely browser-based, it can be accessed by authorized users from any approved PC with a standard web-browser.

AutoTest Administrator provides the interface for test creation and modifications, itembank (database) management, transferring new and revised data to and from the local Examiner Consoles, and generating system-wide statistical reports. It also allows authorized personnel to manage users, establish user rights and maintain logon IDs and passwords.

The optional **AutoTest Scheduler** module can be installed on the Administrator Console server for use by DC DMV personnel for scheduling of CDL road tests or other appointment types that may be required in the future. *Scheduler* is a web-based application, and may also be deployed via the Internet for self-service scheduling by applicants at DC DMV's option.

The Administrator Console is a Windows 2000 Server running IIS, and houses a central SQL question and answer itembank. The SQL database has the capacity for virtually an unlimited number of test questions and answers plus associated media files including digital images, videos and audio files.

Connectivity

The Administrator Console is generally equipped with integrated Ethernet 10/100 RJ45 LAN connectors. They communicate with the Examiner Consoles at each office via TCP/IP over the DC DMV network. They may also communicate with Test Stations using the same communication protocols.

All **AutoTest System** utilities are menu-driven (see Figure 1) and are designed for use by non-technical personnel.

Figure 1: Administrator and Examiner Menus



Since **AutoTest System** is a web-based application, the graphical user interface follows commonly used web design protocols, incorporating simple pull-down menus and check boxes for configuring system options, therefore

allowing DC DMV employees to learn the system quickly and easily. Examiners and administrative personnel will find that no system utility requires more than a couple of clicks to perform a routine.

Additionally, **AutoTest Administrator** also includes an online help guide for quick answers to commonly asked questions.

AutoTest Administrator is a secure browser-based application, thereby allowing authorized users to access the Administrator Console through a standard web-browser. "Authorized" users can add new users, change user information, create and modify tests, administrate service centers and generate various reports from any PC with a standard web browser connected to the specified network (or Internet, if allowed). The browser-based feature eliminates the need to install software on every PC that needs access to the Administrator Console. However, in order to access the Administrator Console, users must enter an "authorized" User ID and Password.

Test Administration Overview

The Administrator Console provides authorized DC DMV users an intuitive process to create and modify tests and test items, assign corresponding audio and graphics, and set global test parameters, without Viisage Intervention. The following discusses the various elements of an **AutoTest** test, and how tests are created and modified.

AutoTest tests are comprised of four elements:

1. Test Items – Questions and answers
2. Tests (e.g., Combination Vehicles, Doubles/Triples, Hazardous Materials, etc.) – Individual Tests (made up of Knowledge Domains)
3. Test Categories (e.g., CDL, Regular Operator, Motorcycle, Vessel, etc.) – Made up of tests
4. Knowledge Domains (e.g., Road Signs) – Groups or sections of similar questions (made up of Test Items)

Authorized personnel can set global parameters for tests including:

- Number of questions
- Pass/fail threshold
- Time limit
- Quick Pass/Fail options
- Domains (knowledge areas) used for test
- Number of questions from each domain
- Specify fixed questions, if any, for a test
- Language options
- ID verification option

The test elements reside in a SQL database on the Administrator Console.

Test Administration

New tests are created through the *Create New Tests* interface accessed by authorized users at the Administrator Console or from any approved workstation with an appropriate browser. See Figure 2 below.

Figure 2: Create New Test Screen

AUTOTEST ADMIN

Create New Test

Test Name: Admin Training Evaluation

Test Category: Training

Number of Questions: 30

Test Cycle: 0 days @ - no restriction

Time Limit: 30 minutes

Quick Pass/Fail Option: Enabled

Passing Type: Percent

Passing Level: 85

Feedback Type: None

Review Type: None

Display Status: Yes

Choose Languages: Arabic, Chinese, English, French, German (13 Available, 1 Selected)

Submit Reset Cancel

Once a new test name has been created, **AutoTest Administrator** interface/wizard walks users through the process of building the test, which includes assigning Knowledge Domains (see Figure 3 below).

Figure 3: Administrator - Build Test screen

Build Test: Doubles/Triples		
Number of Questions: 40		
Domain	Add	Percent
Accidents (4)	<input type="text" value="1"/>	2.5
Alcohol (7)	<input type="text" value="2"/>	5.0
Doubles/Triples - Domain 1 (32)	<input type="text" value="16"/>	40.0
Doubles/Triples - Domain 2 (23)	<input type="text" value="12"/>	30.0
Freeway Highway Driving (6)	<input type="text" value="1"/>	2.5
General Driving Behaviors (54)	<input type="text" value="1"/>	2.5
Laws & Rules (39)	<input type="text" value="2"/>	5.0
Passing (2)	<input type="text" value="1"/>	2.5
Railroad (2)	<input type="text" value="1"/>	2.5
Right of Way (7)	<input type="text" value="1"/>	2.5
Seat Belts (6)	<input type="text" value="1"/>	2.5
Signs With Graphics (13)	<input type="text" value="1"/>	2.5
Permanently Assigned Questions	<input type="text" value="0"/>	0.0
Total	40	100.0

The number in parentheses indicates how many questions are available in that knowledge domain.

Item Administration

AutoTest Administrator provides complete tools to manage the question and answer itembank.

- a. Add item – When an item is added to the system, the **AutoTest System** will automatically assign a unique item number to the question, though users can manually specify a second item number. The Question text is entered and question parameters are assigned including: type of question (T/F, multiple choice), number of possible answers, Knowledge Domain(s), difficulty level (optional), source in manual (optional), and associated media files including audio. The item can be added as active, or the administrator can select an active date for the question. The administrator can also select an inactive date, if s/he wishes the question to expire at a certain date/time (see Figure 4 below).

Figure 4: Add Question Screen

AUTOTEST ADMIN Automated Driver Knowledge Testing
Manage Users | Manage Tests | Manage Service Centers | Reports & Data | Help | Logout

Question Details

Question Text	Who is responsible for safely transporting a hazardous material shipment without delay and keeping the shipping papers in the right place?
Type of Question	Multiple Choice
Number of Answers	3
Knowledge Domain	HZMAT - Domain 4
Difficulty Level	2
Item Number	
Source in Manual	
Activate Question Immediately	<input checked="" type="checkbox"/>
Never Expires	<input type="checkbox"/>

Activate Question Immediately

Never Expires

Active Date [] / [] / []

Inactive Date [] / [] / []

After the Question, Question Parameters, and Question Media have been entered, a screen prompts users to enter the correct answer and distracters along with the corresponding answer media references (See Figure 5).

Figure 5: Admin Console - Answers Screen

Answers

Question: Who is responsible for safely transporting a hazardous material shipment without delay and keeping the shipping papers in the right place?

Correct Answer:

A the driver

B the shipper

C the carrier

Always present the answers in a random order

- b. **Edit Item** - Users can modify any existing question (see Figure 6 below), including question/answer text and graphics, as well as all parameters and associations. Administrative personnel can search for items by ID number, Knowledge Domain, associated media type, language or by active/inactive status. When edits are made, the original item, as well as all revisions are maintained in the database. All revisions are maintained in the audit log and are keyed to an operator ID.

Figure 6: Edit Question Screen

Delete Question

Question 1026

Who is responsible for safely transporting a hazardous material shipment without delay and keeping the shipping papers in the right place?

1 the driver
 2 the shipper
 3 the carrier

Knowledge Domain
 HZMAT - Domain 4
Change Domain

Question 1026 Properties

Image **Change**
Audio **Change**
Video **Change**
Report Image **Change**

Answer Audio Files

Answer 1: **Change**
 Answer 2: **Change**
 Answer 3: **Change**

Active
Active Date
Inactive Date
Difficulty Level
Item Number
Source in Manual
Save

Related Questions

Other Languages	Missing Language
	ARB
	CHN
	ESP
	FAR
	FRN
	GER
	GRK
	JPN
	KOR
	RUS
	THA
	VTH
	ZZZ

- c. Delete item – This function deletes a question, including all language versions, from the system. If the item has been used on previous tests for which test results are still in the system, the question cannot be deleted from the system, however, it can be made inactive and removed from a test.
- d. Edit domains – Users may add or delete Knowledge Domains (categories) to which individual test questions may be assigned.
- e. Add languages – New language options may be added through the Administrator Console. As language options are added, administrators have the ability to select all active questions and add the appropriate language translation for each, as well as associate any required voice or other media files. If a revision is made to an English language

question, the system will prompt the user if other language translations of that question exist. This helps to prevent the user from revising English language questions, which are not also applied to all other language versions.

All new or modified test questions and answers are automatically downloaded to each the Examiner Console nightly, when network traffic is at a minimum. This download may alternatively be scheduled to run periodically throughout the day if DC DMV desires. There is also a "demand" download available through the *Administrator* software interface to force a download prior to the normally scheduled downloads. Support files for the questions and answers (audio files, graphics, motion videos, animations, etc.) and program changes are also downloaded at scheduled times or on demand.

The Administrator Console can be configured to perform all Examiner and Test Station functions.

Data Management

All statistical data at the local offices is uploaded to the Administrator Console either real-time or at regularly scheduled intervals (e.g., at night when the network is less taxed). Test information can then be accessed on-demand via the Administrator Console, and administrators can view statistical and user data that reflects any single or all testing locations. The reports are menu-driven, easy to initiate, and take place in real-time.

The upload of statistical data from all Examiner consoles takes place in an unattended, scheduled process and does not require local office operator intervention.

System Security/Log-On Credentials

All users must enter an authorized User ID and Password to gain access to the **AutoTest Administrator** and *Examiner* components. Administrative functions, such as username and password maintenance, are easily accomplished from the simple menu-driven *Administrator* and *Examiner* interfaces. An individual user will have the ability to change only his or her own password. Only users with the appropriate security authorization (Administrator or Supervisor level) can change other employees' passwords, if needed. Administrators and Supervisors will also have the ability to add, modify, or delete users from the **AutoTest System**. Viisage will work with

DC DMV to define the appropriate security standards and format for network security during the design phase.

Viisage will work with DC DMV to define and implement the appropriate levels of security during the design phase. Currently, the default security levels are as follows:

Administrator Console Access Levels

- **Administrator** – Has access to all features and functions of the Administrator Console (includes password administration, managing service centers, report generation, and test creation and modification).
- **Editor** – Only has clearance to create and modify tests via the Administrator Console.

Examiner Console Access Levels

- **Supervisor** – Has total access to the Examiner Console (includes examiner and password administration, adding applicants and assigning tests, and reviewing tests and accessing test histories). Has no access to the Administrator Console.
- **Examiner** – Same as Supervisor but does not have the ability to add and delete examiners to/from the system or administrate passwords other than their own.

Administrator users will select the "Change Your Password" command under the "Manage Users" menu on the main menu, which will present the following screen:

Figure 7: Change Administrator Password

AUTOTEST ADMIN Automated Driver Knowledge Testing
 Manage Users | Manage Tests | Manage Service Centers | Reports & Data | Help | Logout

Change Your Password

UserName: harmon

Old Password: *****

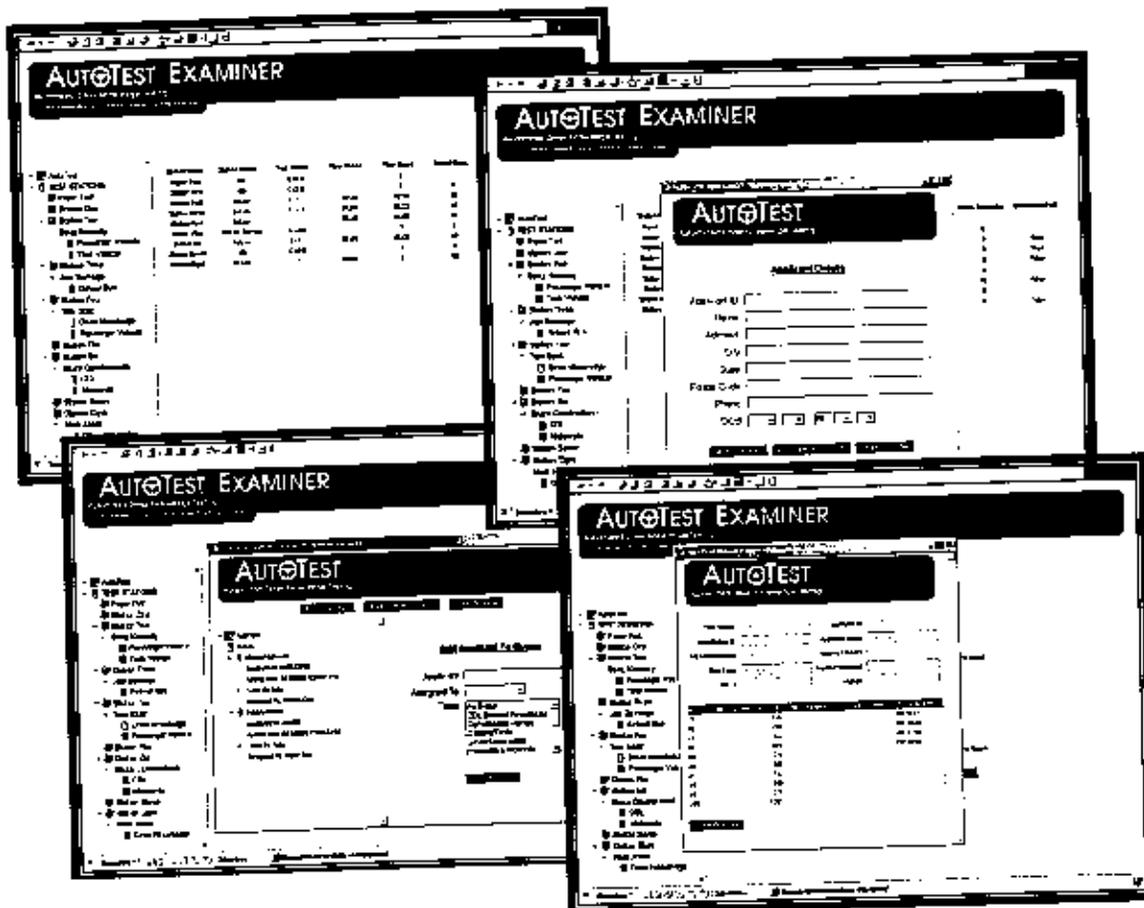
New Password: (max 25 chars)

Verify New Password: (max 25 chars)

Because users are already logged in, they only need to enter their new password twice for verification and click "Change Password." The change is immediate, so next time they log in, they will log in with their new password.

Authorized examiners and administrators may search and change a user's password to a temporary password. This will allow the user access to the system, at which time s/he will be required to change the password to a discretionary password.

Examiner Console Overview



The *Examiner Console* application serves as the control center of the **AutoTest System** for each local testing facility, putting the examiner in complete control of all testing activity including:

- System startup and shutdown
- User/password management (local site only)
- Queuing applicants
- Digital image/fingerprint capture (optional)
- Assigning tests
- Display of re-test alerts for tests violating DC DMV-configured re-test rules
- Configuration of test options for each test
- Monitoring tests in progress

- Suspending/restarting/canceling tests
- Producing paper tests, if required
- Conducting test reviews
- Generating local reports

Examiner Console Technical Architecture

The *Examiner Console* application may be deployed in Central Server or Distributed mode.

Central Server

In this option, the *Examiner Console* application is installed on a central application server and is accessed by Web browsers in the local testing offices via the Internet or the DC DMV's WAN. Any PC or thin client device in the local testing office may be used to access the *Examiner Console* application and administer testing. The *Examiner* application interacts with the central database server to submit/retrieve applicant and test information.

If connectivity between the central application/database servers is lost, new testing activity in the local office is temporarily suspended, although tests that were assigned and started at a test station kiosk prior to the connectivity outage can be finished by the applicant(s).

Distributed Model

The chief advantage of this model is enhanced fault tolerance and redundancy. The *Examiner Console* application is installed on a local webserver running IIS in each office, and houses a mirrored version of the question and answer database in a local database. This feature allows each local office to operate in a stand-alone mode and continue testing even if WAN connectivity is lost.

In addition to providing the ability to continue testing during network outages, the local database model significantly improves the speed and performance of the testing system since most test data is transferred over the LAN instead of having to utilize the available bandwidth of the existing wide area network. Only test results and statistics are transferred over the network connection from the *Examiner Console* to the central database (if utilized). This data can either be written in real-time, or transferred in an unattended batch mode.

Any changes to the question/answer itembank can be made on the central database and then easily replicated down to the local *Examiner* database at a time when network traffic is low.

Examiner Console User Interface

The *Examiner Console* interface is a browser-based application running under Internet Explorer. This important feature allows any PC or thin client device capable of supporting a Web browser on the office LAN to access the *Examiner* interface if an **authorized user logs on with password/username authentication**. The *Examiner* graphical user interface follows commonly used web design protocols, incorporating simple pull-down menus and check boxes for configuring system options. Examiners will find that no system utility requires more than a couple of clicks to access.

User Administration and Security

Authorized personnel log in to the *Examiner Console* with a username and password. The system has customizable security levels that can be assigned to all functions of the *Examiner* interface. Passwords can be assigned to examiners, supervisors, maintenance personnel, and others as configured – each category with different groups of accessible functions. Only those *Examiner Console* functions for which a user is authorized will be visible on the *Examiner* menu bar when the individual logs in. For example, the supervisor may have access to all functions including report generation, while an examiner may have access only to the functions required for normal testing.

Applicant Intake and Queue Management

Entry of applicant information can be performed manually at the *Examiner Console* or through a customized, automated interface to any existing legacy systems in use for processing driver license transactions. If information is input manually, the examiner enters the appropriate information and places the applicant in the testing queue. The Applicant Details Form is fully customizable to include any information required by DC DMV (see Figure). Optionally, the *Examiner Console* can also be used to capture a digital image or fingerprint biometric of the applicant and store the image, view the image during testing, and/or print the image on a customizable form (see Figure).

Figure 8: Examiner Console - Applicant Information

AUTOTEST EXAMINER Automated Knowledge Testing System

Add Applicant

Applicant # _____ SS # 514 - 05 - 0514
License # 5204537 License Type 0
Title: Miss (+) First Name: Isham
Middle Name: Louise Last Name: Jacobs
Address: 412 North 2nd Street
Address: Apartment B
City: Birmingham State: AL Postal Code: 35246
Phone: 205 - 585 - 1985
Sex: Female Race: Caucasian/Latino Eye: Brown
Height: 5' 10" Weight: 180 Hair: Brown
Occupation: Secretary
DOB: May - 14 - 19 - 8 - 5
* required field

Buttons: Add New Applicant, Save, Clear Form, Cancel, Close Window

Figure 9: Examiner Console - Digital Image Capture

AUTOTEST EXAMINER Automated Knowledge Testing System

AutoCap

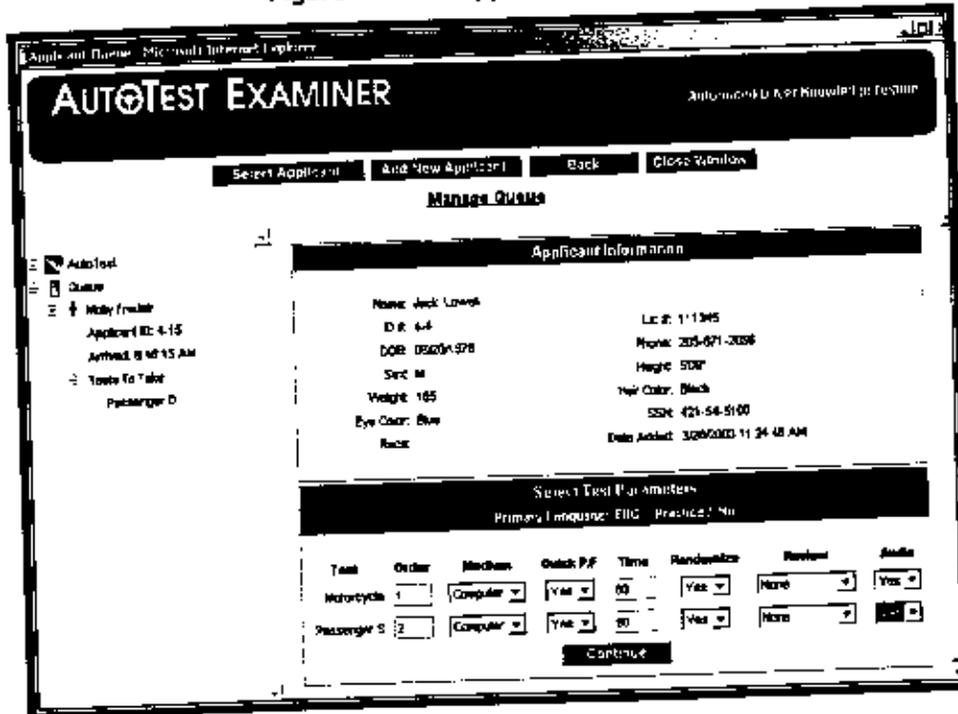
On/Off Zoom In Zoom Out Full Screen Refresh All
Stop Video Close Image Save Image Close Window

Device Name: Speed Forward: [420 (100-150)]

Buttons: AutoCap On, AutoCap Off, Cancel

The examiner then selects the appropriate test type for the applicant from the pull-down menu. Clicking a test type brings up a list of configurable options for the particular test. These may include *Alternate Language* option, *Audio-Assisted Test*, *Review* options, *Quick Pass/Fail* override, or production of a *Printed Test*. (See Figure).

Figure 10: Add Applicant to Queue



Once the test has been configured, the examiner may either: (1) instruct the applicant to proceed to any open *Test Station*, input a PIN (DL number or other) and begin the test, or (2) manually assign the applicant to a *Test Station*. The examiner has the option of choosing a specific *Test Station* from the *Test Station* tree-view or telling the system to automatically assign the applicant to the next available station (useful when all testing stations are currently assigned). The **AutoTest System** automatically configures a **randomized test from the question/answer itembank and sends it to the appropriate Test Station.**

Test Monitoring

The examiner uses the *Test Station* tree-view menu to monitor the status of all tests in progress. The *Test Station* tree-view menu is always displayed on the left side of the screen and gives the examiner an at-a-glance overview of the automated testing area. *Test Station* icons indicate status:

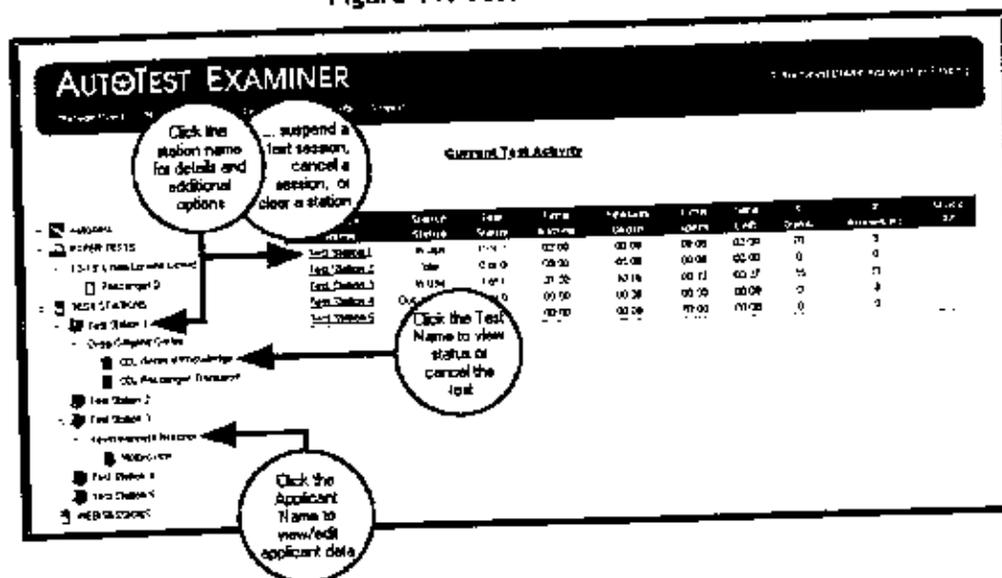
- Green *Test Station* icon – indicates a *Test Station* that is on-line and ready to be assigned to an applicant
- Yellow *Test Station* icon – indicates a *Test Station* that is on-line but is currently assigned to an applicant
- Blue *Test Station* icon – indicates a *Test Station* that is on-line and the assigned test session has been completed
- Red *Test Station* icon – indicates a *Test Station* that is off-line

The applicant name (and/or ID) is displayed for each *Test Station*, as well as the test(s) taken by the applicant. The file icon beside each test is also color-coded:

- Green file icon – Test has been assigned but not started
- Yellow file icon – Test in progress
- Red icon – Test has been completed

Clicking any applicant name/ID will bring up the Applicant Details profile for that applicant. Clicking a test icon for any test brings up the Test Status detail for that test on the right side of the screen. See Figure .

Figure 11: Test Status screen



Selecting the *Test Details* option on the Test Status detail will show the examiner the questions used on the test including the ID number of each question and the correct answer for each. Clicking on any question ID link

will display the questions text, correct answer identifier, associated graphic and source page in driver manual (if configured by DC DMV).

Figure 12: Test Details

Applicant ID	2-27	Test ID	2-498
Applicant Name	Jeff J Jackson	# Of Questions	25
Test Type	Motorcycle	Number Correct	2
Test Status	Completed	Number Incorrect	6
Test Station ID	2	Number Skipped	0
Test Station Name	GX260	Results	Failed

Question ID	Question #	Correct Answer ID	Correct Answer	Answer Given	Time Spent
371	1	2	A	A	00:00:03
406	2	4	D	B	00:00:01
396	3	4	A	C	00:00:01
380	4	2	D	D	00:00:02
425	5	1	A	C	00:00:02
414	6	3	A	B	00:00:02
324	7	2	C	A	00:00:02
369	8	3	A	B	00:00:01
308	9	4	A		
423	10	2	A		

Test Station Control

The *Examiner Console* allows the examiner to suspend any test, resume the test, cancel a test in progress, or reassign an applicant to another *Test Station*.

- Suspend test – The examiner can pause any test in progress to assist an applicant by selecting the Suspend Test command from the Test Status screen. The applicant’s *Test Station* will display a screen with appropriate instructions.
- Resume test – Once the applicant’s problem has been resolved, the examiner can select the Resume Test command. The applicant’s test will be restarted at the exact point at which it was suspended.
- Cancel test – If the examiner elects to cancel a test in progress, all results are captured and are identified with a cancelled outcome in the database. The applicant’s *Test Station* will display an appropriate message (configurable by the examiner). A unique feature of the **AutoTest System** is the ability for the examiner to note the reason

that the test is being cancelled. This information is captured in the database and will be available for all cancelled tests.

- Reassign applicant – An applicant can be reassigned to another *Test Station* for any reason, even if the test is in progress. The examiner chooses another *Test Station* and the test file, with all data collected so far, will be transferred to the new station. The applicant's test resumes at the exact point at which it was interrupted.

The examiner has the ability to monitor the status of tests in progress in detail and to retrieve results from tests previously completed. The Examiner Console provides menu-driven search utilities that allow examiners to search for results information from previously completed tests.

A test may be reviewed at the Test Station by an applicant if the examiner has configured a test review for that particular test. The test review will be available to the applicant immediately after each test is completed. The examiner may also specify the type of test review including:

- Review of questions answered incorrectly with the applicant's selected answer highlighted.
- Review of questions answered incorrectly with the applicant's selected answer highlighted and the correct answer shown.

If a test was given in an alternate language, the English language version of each question will be available to the applicant and/or Examiner at the Test Station simply by touching the language toggle button at the top of each screen.

Test Review

The *Examiner Console* allows examiners to review all questions and answers for tests that have been taken in the exact order and representation as seen by the applicant. Test reviews can also be printed out for the applicant, if desired.

Any test completed in a language other than English includes an English version for the convenience of the examiner.

Report Generation

The *Examiner Console* offers a complete set of tools for producing site-specific reports. The report generation interface follows the same standards for ease of use...using simple pull-down menus and check boxes to configure report parameters. The *Examiner Console* provides seven standard reports. Additional custom reports may be added by Viisage or DC DMV.

The examiner has the ability to monitor the status of tests in progress in detail and to retrieve results from tests previously completed. The Examiner Console provides menu-driven search utilities that allow examiners to search for results information from previously completed tests.

A test may be reviewed at the Test Station by an applicant if the examiner has configured a test review for that particular test. The test review will be available to the applicant immediately after each test is completed. The examiner may also specify the type of test review including:

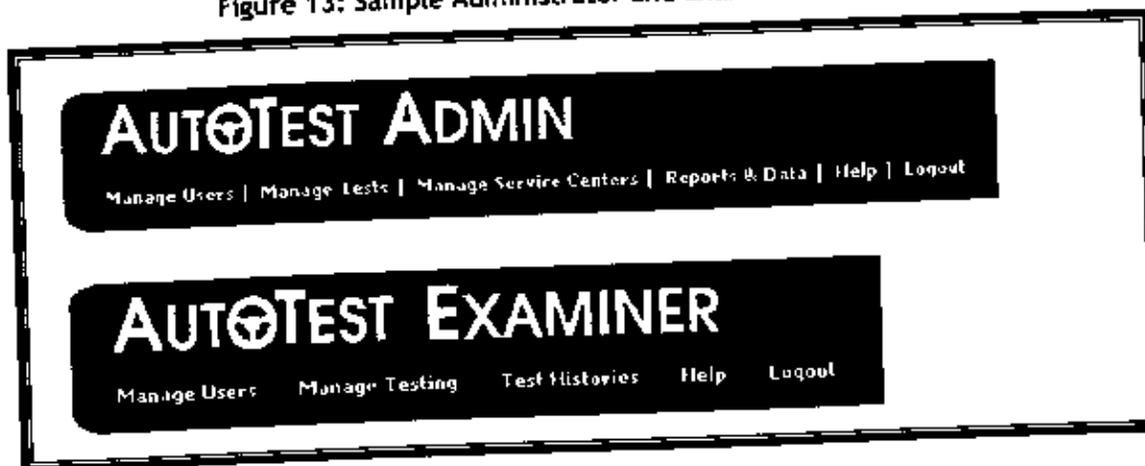
- Review of questions answered incorrectly with the applicant's selected answer highlighted.
- Review of questions answered incorrectly with the applicant's selected answer highlighted and the correct answer shown.

If a test was given in an alternate language, the English language version of each question will be available to the applicant and/or Examiner at the Test Station simply by touching the language toggle button at the top of each screen.

Menu Driven System

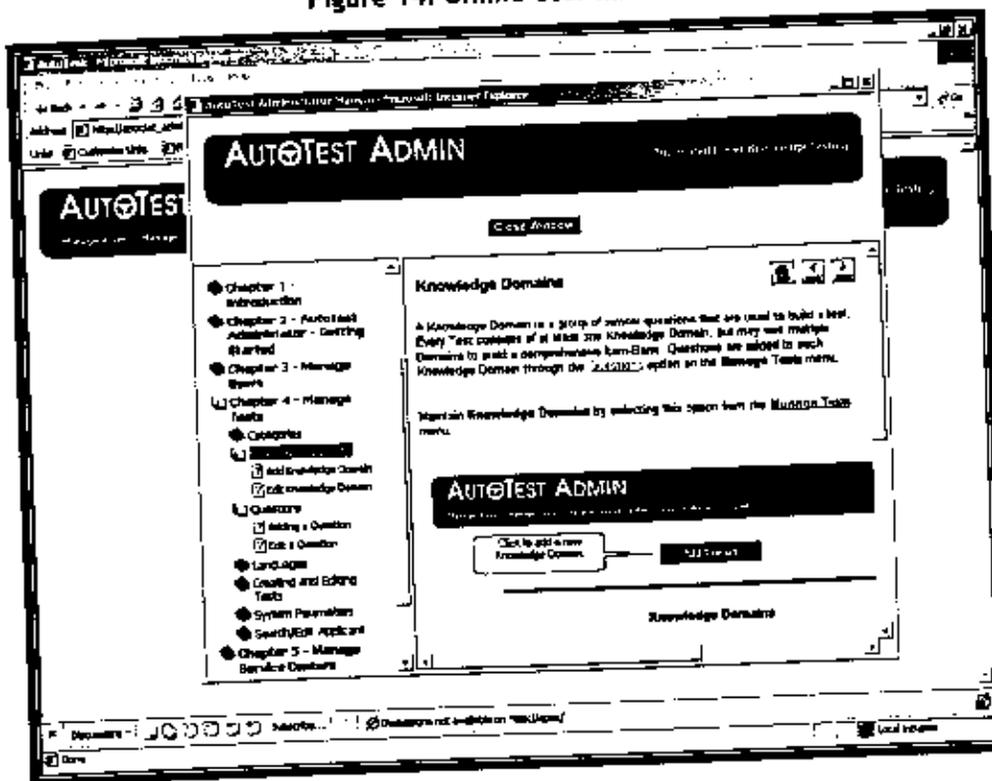
All **AutoTest System** utilities are menu-driven and are designed for use by non-technical personnel. Since the **AutoTest System** is a web-based application, the graphical user interface follows commonly used web design protocols, incorporating simple pull-down menus and check boxes for configuring system options. Examiner and administrative personnel will find that no system utility requires more than a couple of clicks to access.

Figure 13: Sample Administrator and Examiner Main Menus



In addition, both the *Examiner* and *Administrator* interfaces incorporate an online version of the complete User Manual, if desired. This allows personnel to easily find answers to questions, even if they do not have access to a hard copy of the User Manual. The online User Manual features sample screen captures with highlighted call-outs for further ease of use. See Figure

Figure 14: Online User Manual



The examiner has the capability to monitor the status of tests in progress in detail and to retrieve results from tests previously completed. The Examiner Console provides menu-driven search utilities that allow examiners to search for results information from previously completed tests.

Reports

The **AutoTest System** offers a complete set of tools for producing reports for authorized users from both the Examiner and the Administrator Consoles. Reports are generated from information contained in the Central Statistical Database.

A sample report generation interface is shown in Figure .

Figure 15: Report Generation User Interface

AUTOTEST EXAMINER Automated Driver Knowledge Testing

Test Log Report

Start Date: Mar | 1 | 2003
End Date: Mar | 31 | 2003
Audio: ALL
Test Category: Commercial
Test Type: CDL General Knowledge
Language: ALL
Status: Passed
ALL
Failed
Cancelled

Continue Close Window

Browser Based System

All components of the **AutoTest System** are browser-based and are accessed through an Internet Explorer web browser. This integral system architecture offers driver testing agencies new levels of ease of use and convenience.

An important benefit of **AutoTest Examiner's** browser-based architecture is the ability for multiple examiners to access the Examiner Console server through a simple web browser *without the need to install software on each examiner's computer*. This will save time and effort as new examiner personnel are added at each local testing office.

Another important benefit of our browser-based architecture is the ability for authorized DC DMV personnel to "sign-on" to the Administrator Console or any local Examiner server on the DC DMV network from their own desk and PC. This means that supervisors can monitor the testing activity in any local office without leaving their desk, or itembank editors can work on question and answer content without having to be physically present at the Administrative Server.

User Control/Access Levels

Authorized DC DMV personnel log in to the **AutoTest Examiner Console** and **Administrator Console** with a username and password. The system has customizable security levels that can be assigned to all functions of the **Examiner** and **Administrator** interfaces. Passwords can be assigned to examiners, supervisors, maintenance personnel, and others as configured – each category with different groups of accessible functions. Only those functions for which a user is authorized will be visible on the menu bar when the individual logs in. For example, the supervisor may have access to all functions including report generation, while an examiner may have access only to the functions required for normal testing.

Vilsage will work with DC DMV to define and implement the appropriate levels of security. Currently, the default security levels are as follows:

Administrator Console Access Levels

- **Administrator** – Has access to all features and functions of the **Administrator Console** (includes password administration, managing service centers, report generation, and test creation and modification).
- **Editor** – Only has clearance to create and modify tests via the **Administrator Console**.

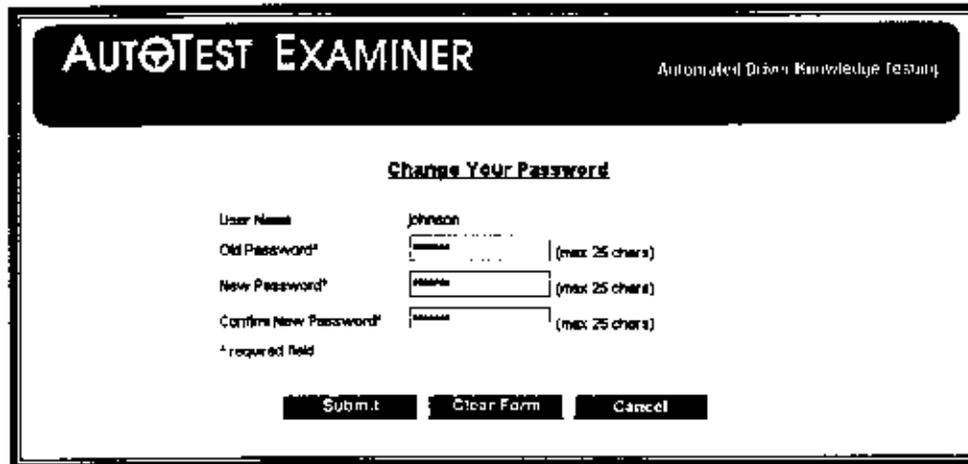
Examiner Console Access Levels

- **Supervisor** – Has total access to the **Examiner Console** (includes examiner and password administration, adding applicants and assigning tests, and reviewing tests and accessing test histories). Has no access to the **Administrator Console**.

- **Examiner** – Same as Supervisor but does not have the ability to add and delete examiners to/from the system or administer passwords other than their own.

Administrative functions such as username and password maintenance can be easily done from a simple menu-driven interface in the Administrator or Examiner Console (see Figure). Each individual user will have the ability to change his or her password, but not someone else's. Only users with the appropriate security authorization (administrator level) can change other employee's passwords, if needed. These users will also have the ability to add, modify, or delete users from the **AutoTest System**. Viisage will work with DC DMV to define the appropriate levels of security prior to system installation.

Figure 16: Change Examiner Password



The screenshot shows a web interface titled "AUTOTEST EXAMINER" with the subtitle "Automated Driver Knowledge Testing". The main heading is "Change Your Password". The form includes the following fields and controls:

- User Name:** Johnson
- Old Password*:** [password field] (max 25 chars)
- New Password*:** [password field] (max 25 chars)
- Confirm New Password*:** [password field] (max 25 chars)
- * required field**
- Buttons:** Submit, Clear Form, Cancel

Digital Image Capture

This optional feature of the **AutoTest System** provides the capability to capture a digital photograph of the applicant (either at the Examiner console or the Test Station) and store the image with the testing record. Examiners may use the image to verify that the person who supplied the required documentation actually took the test; or that an applicant who fails a test does not send someone else in to re-test for them.

Once the digital image is captured, it may be printed along with other applicant/test data as specified by DC DMV on a test "receipt". This printed document may be presented by the applicant to personnel responsible for the next phase of license issuance. Print quality of the test "receipt" will be determined by the printer used to produce the document.

The digital image capture feature is compatible with a variety of digital camera models. Vilsage will be happy to provide specifications and pricing upon request.

Assigning Test Types/Multiple Tests

The Examiner Console allows the examiner to select a specific test type for each applicant (see Figure below) as the applicant is added to the testing queue. If multiple tests are required for the applicant, the examiner may select all test types that apply. This function is performed from a simple pull-down menu of all test types currently configured in the system. The examiner may also enter a unique identifier for the applicant as part of entering the applicant into the system.

Figure 17: AutoTest System Examiner Queue (selecting specific test type)

The screenshot displays the 'AUTOTEST EXAMINER' application window. At the top, there are buttons for 'Go Back Applicant', 'Add New Applicant', 'Back', and 'Close Window'. Below these is a 'Waiting Queue' section. The main area is divided into two sections: 'Applicant Information' and 'Test Selection Parameters'.

Applicant Information:

Name: Jack Tinsell	DOB: 08/29/1978	Sex: M	Weight: 160	Eye Color: Blue	Race:	UC#: 111345	Phone: 202-421-2052	Height: 5'07"	Hair Color: Black	SSN: 021-84-1-00	Date Added: 3/28/2002 11:24:48 AM
--------------------	-----------------	--------	-------------	-----------------	-------	-------------	---------------------	---------------	-------------------	------------------	-----------------------------------

Test Selection Parameters:

Language: English

Apply Test? [NO]

Select Tests: [DDL Preparing Transport], [DDL Testee], [Passenger D], [Passenger T]

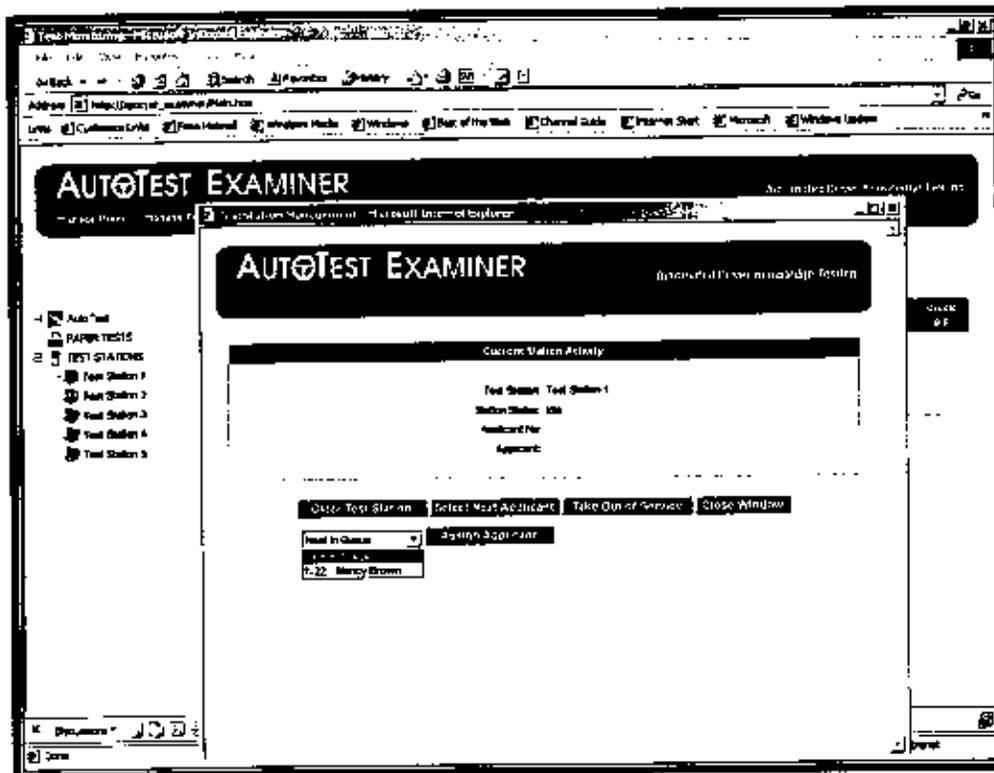
[Continue]

Once configured, the applicant's test may be delivered to a Test Station in one of two ways:

The applicant may access the test by going to any Test Station and using the touchscreen keyboard/keypad to enter a unique identifier. Once the applicant has entered this information, the test process begins.

The examiner can manually assign the applicant to a specific Test Station, choosing from the stations showing green icons on the Test Station tree-view menu (see Figure below). The examiner can elect to assign the applicant who had been waiting the longest to an available station. The "Next Available" option is useful during periods of heavy testing activity when all Test Stations are occupied. The Examiner Console will automatically place the applicant in the queue until a Test Station is free. The examiner will then be notified via a pop-up screen of the Test Station to which the applicant is being assigned.

Figure 18: AutoTest System Examiner Queue (Selecting a specific Test Station)

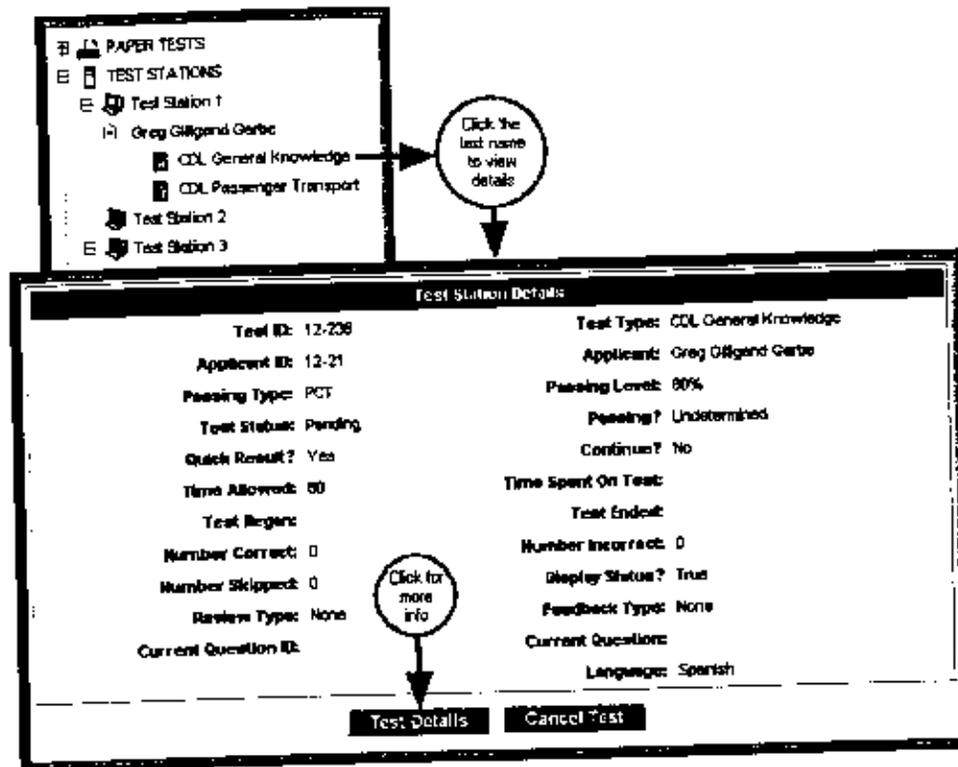


Additional Test Monitoring Details

The **AutoTest System** Examiner Console allows the examiner to monitor test status and progress for all Test Stations from an easy-to-use graphical interface (see Figure below). The Test Station tree-view menu is always displayed on the left side of the screen and gives the examiner an at-a-glance overview of the automated testing area.

Applicant name and/or ID are displayed for each Test Station, as well as the test(s) taken by the applicant. The file icon beside each test is also color-coded.

Figure 20: Test Station Detail (Test in Progress)



This allows the examiner to obtain either a general overview of Test Station activity or drill down to a detailed look at each test in progress or for tests already completed by an applicant who has not left the testing area. In addition, clicking the "Test Details" button will bring up a finer level of detail about each test (See Figure) including all questions used on the particular test with:

- Question ID
- Question number (position within test)
- Correct answer
- Answer given
- Time spent on each question

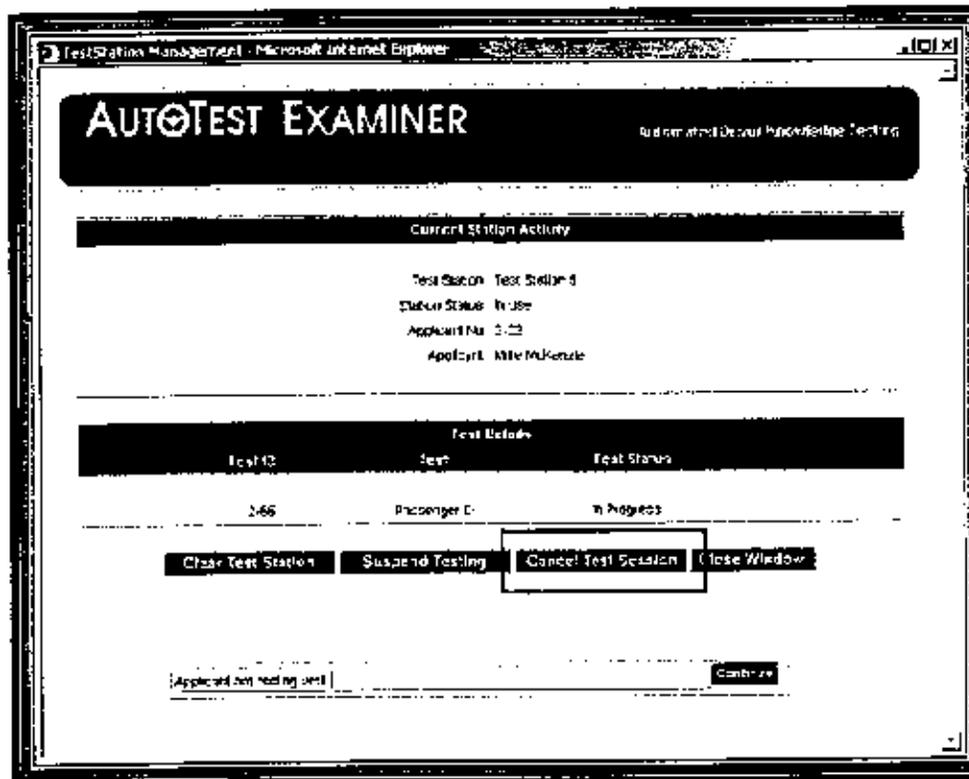
Cancel Tests

The Examiner Console allows the examiner to cancel any test in progress at any time. The examiner simply clicks the "Cancel Test" button from the Test Station detail screen for the appropriate test. (See Figure)

The Test Station will then display a message (configurable by the examiner) to the applicant informing him/her that the test has been interrupted and giving instructions.

All normal statistical data for the test will be captured up to point of interruption, and the test will be logged as a cancelled test. In addition, the examiner may use the provided field to note the reason that the test is being cancelled. This information will be stored in the database.

Figure 22: Cancel Test Session



Practice Tests

The Examiner Console allows examiners to request any test in "Practice Test" mode. This allows a test to be requested by the examiner, assigned to a Test Station, and completed at the Test Station. The test results are stored in the database but are not included in statistical data. This feature may be

Figure 21: Test Details

Applicant ID	2-27	Test ID	2-498
Applicant Name	Jeff J Jackson	# Of Questions	25
Test Type	Motorcycle	Number Correct	2
Test Status	Completed	Number Incorrect	6
Test Station ID	2	Number Skipped	0
Test Station Name	GX260	Results	Failed

Question ID	Question #	Correct Answer ID	Correct Answer	Answer Given	Time Spent
371	1	2	A	A	00:00:03
436	2	4	D	B	00:00:01
395	3	4	A	C	00:00:01
380	4	2	D	D	00:00:02
425	5	1	A	C	00:00:02
414	6	3	A	B	00:00:02
354	7	2	C	A	00:00:02
389	8	3	A	B	00:00:01
368	9	4	A		
423	10	2	A		

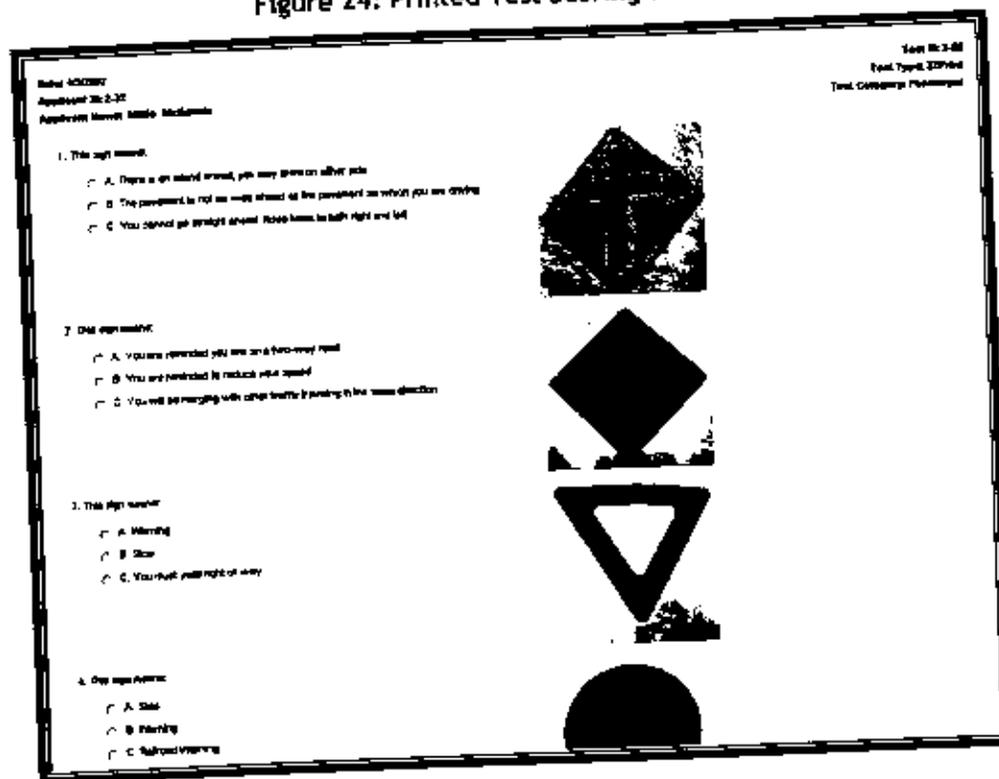
The examiner has the capability to monitor the status of tests in progress in detail and to retrieve results from tests previously completed. The Examiner Console provides menu-driven search utilities that allow examiners to search for results information from previously completed tests.

The Examiner Console allows examiners to review all questions and answers for tests that have been taken in the exact order and representation (with graphics) as seen by the applicant. The review will display the answer for each question selected by the applicant, as well as the correct answer for the question. In addition, the test review will also display a reference for each question indicating where in the DC DMV's driver manual the question content may be found. (Note: In order to display the manual reference this information must be provided by DC DMV so that it can be stored in the database along with the question text.)

Test reviews may also be printed out for the applicant. However, these generally should be reviewed with the applicant in the office and should not be allowed outside the testing area.

Any test completed in a language other than English includes an English version for the convenience of the examiner. If the test is reviewed at a Test Station, the examiner simply touches a button marked "English" to view the question in the English language.

Figure 24: Printed Test Scoring Window



Since the **AutoTest System** is browser-based, printed tests may also be scored from the Administrator Console server by:

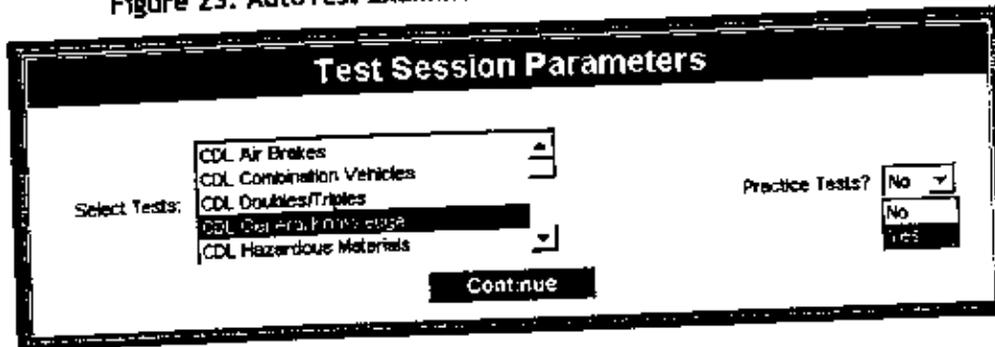
1. Launching web browser
2. Access the URL of the Examiner server in the location in which the printed test was generated.
3. Log on with appropriate username/password authentication
4. Use the menu-driven search utility to find applicant's pending test

Score test using Option 2 or Option 3 as defined above.

The test will be automatically scored and all statistical data will be captured as per normal.

used on demand for employee training or to test or troubleshoot hardware or software. (See Figure .)

Figure 23: AutoTest Examiner Console with Practice Test menu



Scoring Printed Tests

Scoring printed tests can be accomplished in one of three ways:

1. Applicants answer test questions on bubble sheets, which are scanned and graded using an Optical Mark Read (OMR) Scanner at the local office or a central location. Test results are then automatically sent to the Central Database. This option requires purchasing a scanner and bubble-sheets.
2. The examiner enters applicant test answers into the Examiner Console, which automatically grades the test and sends results to the Central Database.
3. The examiner manually grades the test against a scoring key that is printed at the time the test is printed. Then, later, the examiner enters the test answers into the Examiner Console, which automatically sends test results to the Central Database.

- Question feedback options (none, correct/incorrect with or without correct answer information)
- Post-test review options
- Ergonomic and ADA compliant *Test Station* designs

Test Station Technical Architecture

AutoTest Test Station is a browser-based application consisting of an ASP.NET testing application where the applicant interacts with the test engine within the context of the Web browser.

Test Station may be deployed either via a central server to browser clients in the field, or in distributed mode with the application installed on each test station machine. A brief discussion of each option follows. Viisage will be happy to discuss the advantages/disadvantages of each with DC DMV at your convenience.

Central Server Model

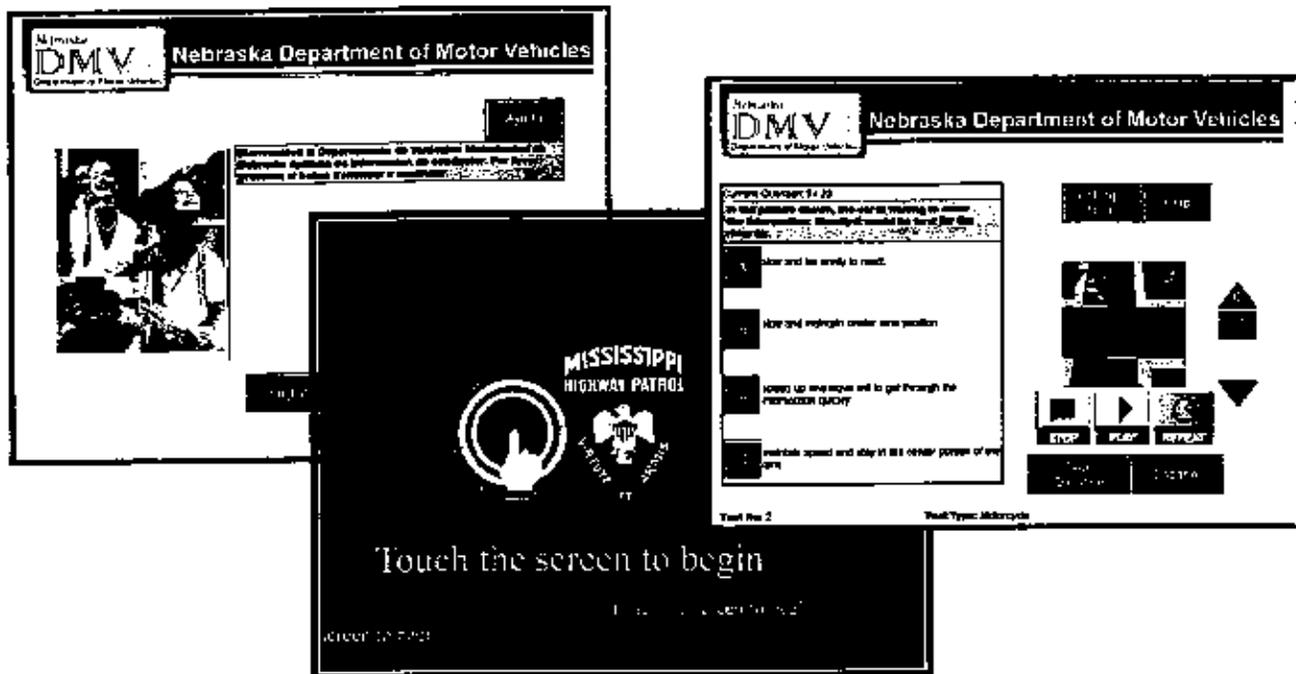
Test Station may be housed on a central application server, along with **AutoTest Examiner**, and accessed via Intranet or Internet by Web browsers at the local testing offices. If audio narration files (MP3 format) and graphic files (road sign images, etc.) are required to support the testing process, they may be accessed by the *Test Station* application in one of several ways:

- If thin client devices are used to deliver testing in local offices – Audio and graphic files are stored on the central database server and may be streamed across the Internet or DC DMV's network. The actual performance in this scenario is a function of the available bandwidth.
- If PCs are used to deliver testing in local offices – Audio and graphic files may be stored locally on the hard drive of each test station. This option improves speed and performance and does not negatively impact network bandwidth. Updates to audio/graphic files are performed once on the central database server and are distributed to all testing machines in an overnight replication process.

As tests are taken in each local office, results information is sent real-time to the central database server. An interruption in network connectivity will suspend testing activity in the local office until the network is restored.

Distributed Model

Test Station Overview



The **AutoTest System Test Station Console** provides the driver license applicant with an easy to use, media-rich, self-service environment in which to take a knowledge exam. Viisage's years of experience in designing and implementing **touchscreen**-driven self-service applications has produced a user interface that is simple, yet incorporates a professional look and advanced features including the following:

- High-quality screen graphics
- Professionally produced digital video and 3-D animations
- Professional voiceover narration for audio tests
- User-controlled audio volume
- Multi-language delivery, including optional delivery in American Sign Language
- Language toggle feature for all foreign-language tests, allowing applicant or examiner to view English translation on any screen
- On-screen, user controlled text enlargement feature
- Optional test progress display allows applicant to track correct/incorrect answers, time remaining and other test details
- Optional practice questions
- Applicant identity verification
- On-screen help features
- Optional customer survey module

Test Station Process Flow

The automated testing process is highly intuitive and requires no computer literacy. Touchscreen entry of answers provides a stress-free experience for even the most technology-challenged applicant.

The **AutoTest System** provides appropriate on-screen prompts (including all those required above) to assist applicants in completing the testing process. In addition, the text of many screen prompts and instructions may be edited by DC DMV personnel through the **AutoTest Administrator's** easy-to-use, point-and-click interface.

When an applicant arrives at the assigned *Test Station*, s/he will see an attract loop on the touchscreen monitor. The attract loop is an animated application with screen instructions (i.e. "Touch screen to begin") that runs when the monitor is not being used for a test (See Figure below). This helps prevent still images from burning into the screen over time. Once the applicant interrupts the attract loop by touching the screen, they are presented with a welcome screen, as required and approved by DC DMV. Screen text can be periodically edited by DC DMV staff without programming changes.

Figure 25: Test Station - "Touch Screen to Begin" Attract Loop



This model assumes that testing machines in each local office will be Windows PCs with enough local storage to install the *Test Station* application and any required audio and/or graphic files.

Each *Test Station* in a local testing facility communicates with the *Examiner Console* application via LAN or WAN connection. **Note: This is dependent on whether the Examiner application is executed from a central server or from a local computer in each office.*

The *Test Station* CPU is a Windows 2000 or XP client running the **AutoTest System's** secure web browser. This browser is built on the Internet Explorer engine, but offers greater *Test Station* security through added special features for the self-service environment, such as the ability to set screen timeouts, turn on/off cursors and scroll bars, and lock down the desktop to prevent unauthorized access to the *Test Station* OS.

The *Test Station* application uses XML technology to read the test datafile sent to the *Test Station* from the *Examiner Console* and administer the test. As the applicant progresses through the test, the results and usage statistics can be written to a central or local office database, as well as to an XML file on the *Test Station* hard drive (in case of LAN or WAN failure). In this model, even if LAN or WAN connectivity is interrupted, the applicant may continue taking the test he or she has begun. Test results will be held on the test station until LAN/WAN connectivity is restored.

As previously stated, Viisage will be happy to discuss the benefits and drawbacks of each of these models with DC DMV in greater detail.

The *Test Station* is capable of presenting multiple tests of differing lengths to an individual applicant. When a test is completed, the next assigned test is automatically presented to the applicant without any intervention from the examiner. Test data is updated to the XML datastore on the *Test Station* and the local database on the *Examiner Console* and reported per individual test. Reliability and accuracy is assured, regardless of the number of tests assigned to an applicant.

CDL applicants may be assigned multiple tests (i.e. General Knowledge, then Combination plus Air Brakes) for a single test session. Each test is scored as the test progresses and the result is displayed for the examiner and the applicant at the end of the test. If an applicant fails a General Knowledge test, the examiner may end the session and cancel the other tests that have not been started. If the applicant passes the General Knowledge tests, he or she may proceed to the remaining endorsement tests without any further Examiner intervention.

Figure 27: Identity Confirmation

NEBRASKA
IDMV
Department of Motor Vehicles

Nebraska Department of Motor Vehicles

You have identified yourself as:
Applicant DOB: 01/01/1961
Applicant ID: 2-25
Applicant Name: Joe Smith

Continue

You are scheduled to take the following test(s). Please be sure that the following testing information is correct. When you are ready, touch the Continue button on the screen.

Test Name	# of Questions	Time Allowed	Status
Class C	25	01:00:00	Pending
Motorcycle	25	01:00:00	Pending

Figure 27: Identity Confirmation

This figure represents the screen that allows the applicant to confirm his or her identity before proceeding with the test. It also contains details about the test(s) to be taken for review by the applicant.

The *Test Station* interface will include testing rules, instructions, information, and sample test questions for the applicant's use. Proper demonstration of the system will be presented to the applicant. The applicant will have the option to skip introductory information if he or she is already familiar with the system.

Questions and answers will be presented to the applicant in a standard format. The applicant will be able to answer questions, skip questions, and proceed to the next question by touching the appropriate area of the screen. Please see Figure for an example of an **AutoTest System** Question screen.

Figure 26: Welcome Screen

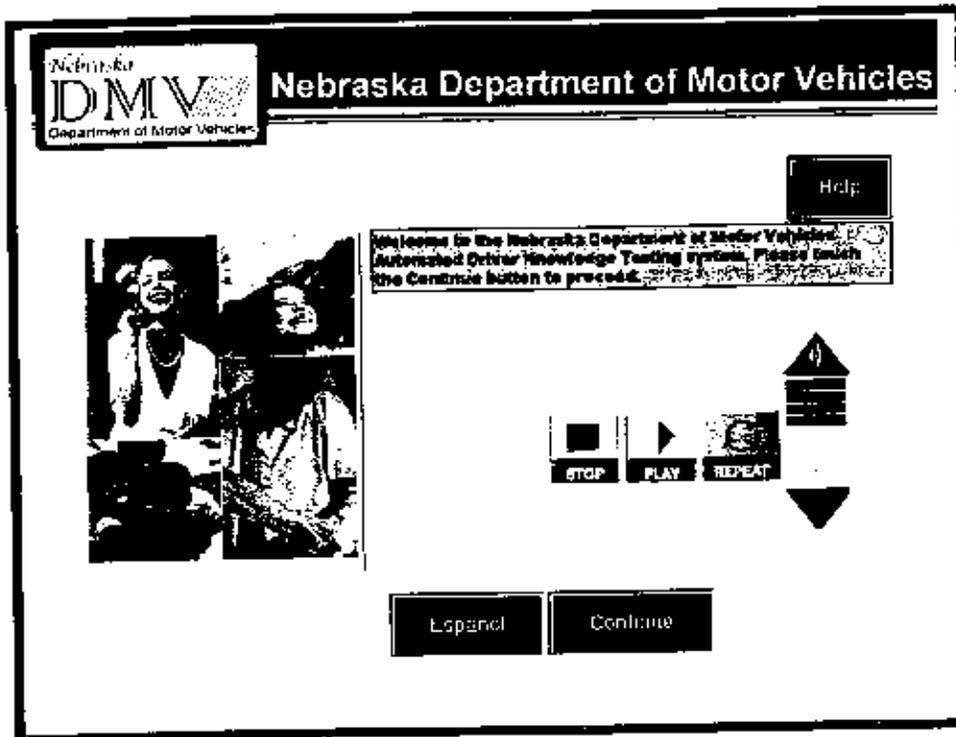


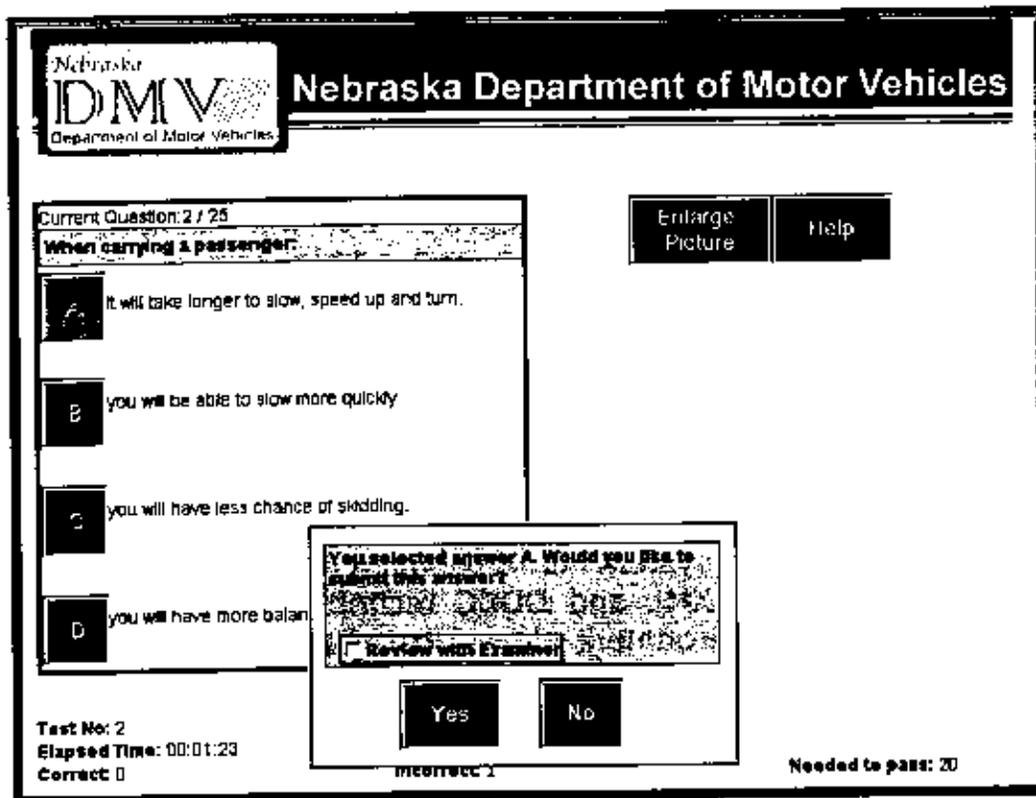
Figure 26: Welcome Screen

This figure represents a Welcome screen for the *AutoTest System Test Stations*. Note that there is a Language toggle button in the lower center of the screen. This would allow the user to switch between languages, in this case, from English to Spanish.

of feedback is configured by the administrator or the examiner prior to test delivery and may include one of the following options:

- No feedback
- Incorrect answer
- Incorrect answer with correct answer

Figure 29: Test Screen - Answer Selected



Upon completion of the test, the applicant is shown their score and informed of whether they have passed or failed. The multimedia and text on the screen gives the applicant instructions on what to do. At the conclusion of the test, the applicant also has the opportunity to conduct a post-test review (if the administrator or examiner has configured this option).

If multiple tests have been assigned to the applicant, the *Test Station* will prompt the applicant to proceed to the next test to begin and the process begins again.

When each test is completed, test data is immediately updated to the XML datastore on the Test Station and the local database on the Examiner Console, and reported per individual test. Completed test data is typically

Figure 28: Question Screen

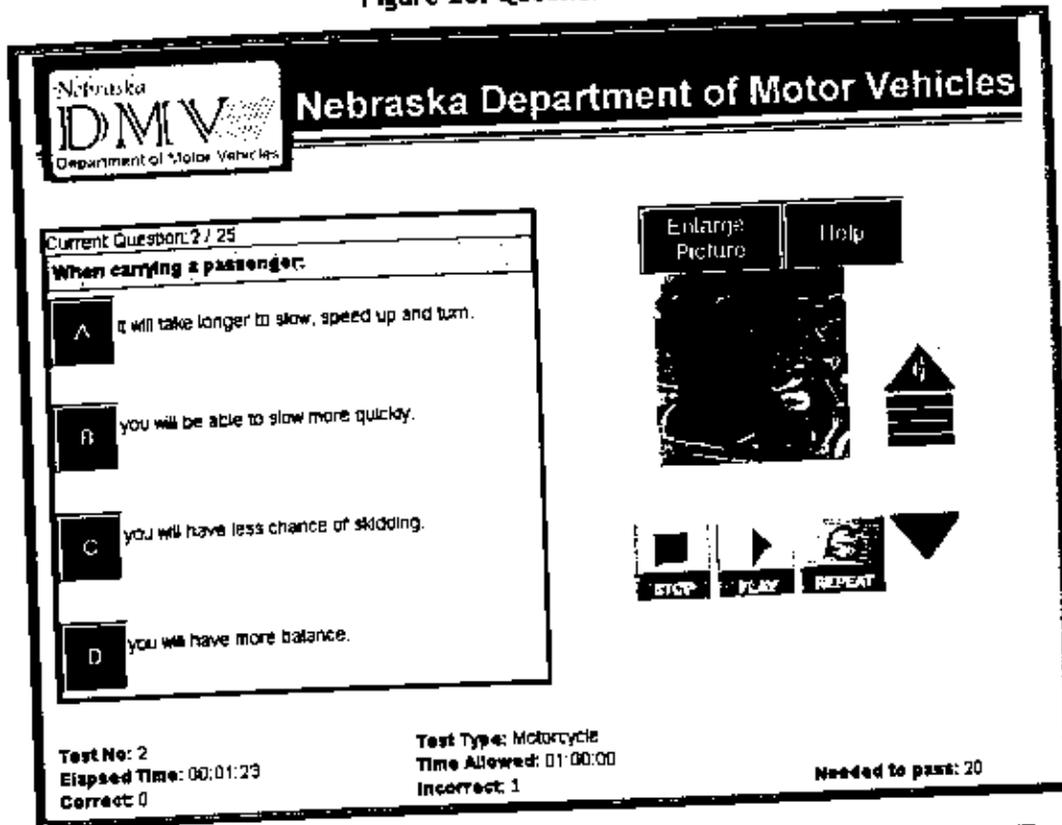


Figure 28: Question Screen

This figure represents a Question screen for the *AutoTest System* Test Stations. This screen displays a question and possible answers. The language, enlarge picture, and help buttons are available near the top of the screen. Controls such as Stop, Play, and Repeat are displayed to allow the user to control audio and/or video elements of the screen. When the user selects an answer, the selected answer will be highlighted, and the remainder of the screen will be faded. The user will have the option to cancel the answer and return to this screen or to confirm the selected answer and proceed to the next question

When the applicant selects an answer, the answer is highlighted on the screen. The rest of the screen display is faded. The applicant is given the option to confirm or cancel the selected answer. (See Figure below.) If the applicant cancels the answer, the screen will return to the full color view with no answer selected, and the applicant is allowed to select another answer. However, if the applicant chooses to submit the answer, the answer is automatically scored. If the applicant chooses the incorrect answer, they are, optionally, given feedback before moving to the next question. The type

Graphic Display/Ease of Use

The **AutoTest System** is designed so that each question may reference corresponding media, including color graphics, photographs, motion-video and animation. All pre-loaded media is high quality and designed to depict the context of the appropriate question and situation. Viisage will provide experienced media specialists to work with DC DMV to select new images for additional questions and tests. Viisage understands that DC DMV has the right of refusal of any image used in the system at its sole discretion.

The **AutoTest System** is designed for intuitive ease of use. The Test Station itself features a sample test to allow the applicant to become familiar with conventions used in throughout a test. Viisage will work with DC DMV to develop acceptable on-screen instructional procedures.

Applicant Identification/System Security

Following the display of instructions to the applicant and prior to starting a test, the Test Station performs a verification procedure in order to help confirm that the applicant is at the correct Test Station. The Test Station presents up to two preliminary questions that are specific to the applicants, asking them to confirm their address, date of birth, social security number, previously issued driver license number, use examiner provided ID Code, etc. The actual verification data utilized will be at the discretion of DC DMV. If a test-taker answers a preliminary question incorrectly, they will be referred back to the Examiner Console for further action. Upon successful verification, the appropriate driver test commences. See Figure below for a sample identity verification screen.

uploaded from the Examiner Console in each local office to the central database on the Administrative Server in an automated process overnight. However, the completed test data may also be immediately uploaded via WAN connection to the central database on the Administrator Console server, if this option is desired by DC DMV and would not produce unacceptable levels of network traffic.

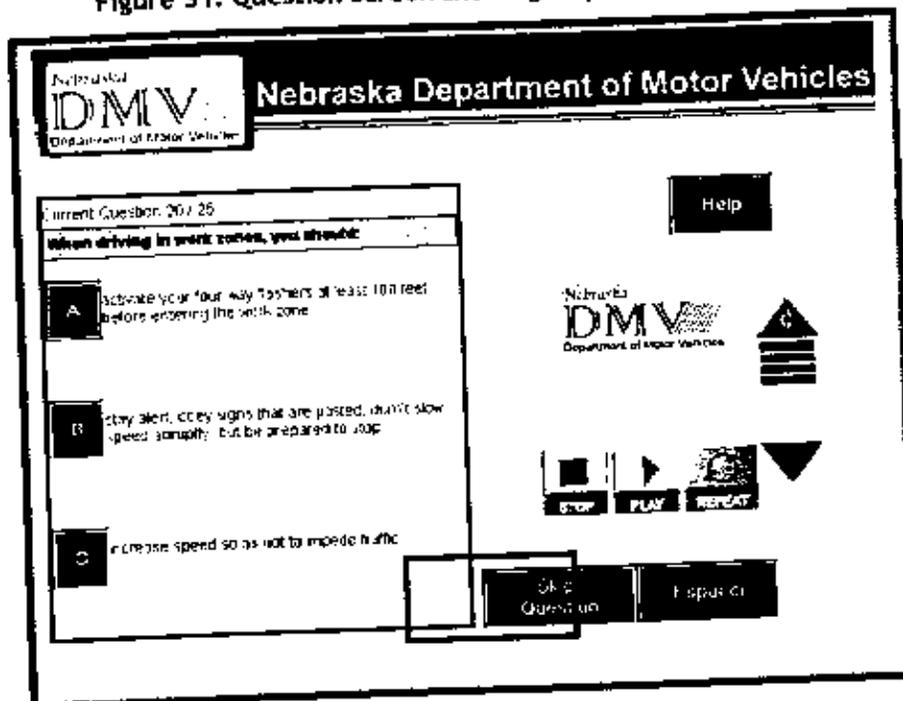
Browser Based System

All components of the **AutoTest System** (Test Station, Examiner Console, and Administrator Console) are browser-based applications. Only **AutoTest** can offer DC DMV all of the following features and benefits:

- **AutoTest eliminates the need to install software on every PC that needs to access the system.** – Our thin-client architecture means that authorized examiners and administrators can perform system functions, such as assign tests, generate reports, and create and modify test questions, from any PC or thin-client device equipped with a web browser and a connection to the DC DMV network.
- **Ease of integration** – The **AutoTest System** was designed and developed with open standards in order to make a more flexible product for integration into multiple environments, both at present and in the future. The system is developed around Microsoft COM technology and uses XML and ODBC technology for data protocols. This development environment allows **AutoTest** to interface with any system capable of providing XML based services such as the J2EE protocol and the Microsoft .Net Framework, as well as any ODBC compatible RDBMS such as Oracle or MS SQL Server. Viisage is watching the state of emerging technologies in order to best determine the next major upgrade path for the product regarding operating environment and protocol. Viisage is constantly adding enhancements and functionality to the system, ensuring backwards compatibility for existing customers.
- **Secure operation** – Authorized personnel only can login to the **AutoTest System** with a username and password. All passwords are encrypted in the database, which provides an extra layer of security and further ensures that unauthorized individuals will be unable to obtain password information. Select administrators assign DC DMV Staff different levels of security clearance as defined by headquarters. The system provides a detailed “audit trail” of all personnel who access the system for whatever purpose.

a specific question can be repeated as well by using the controls on the screen. These controls consist of Stop, Play, and Repeat.

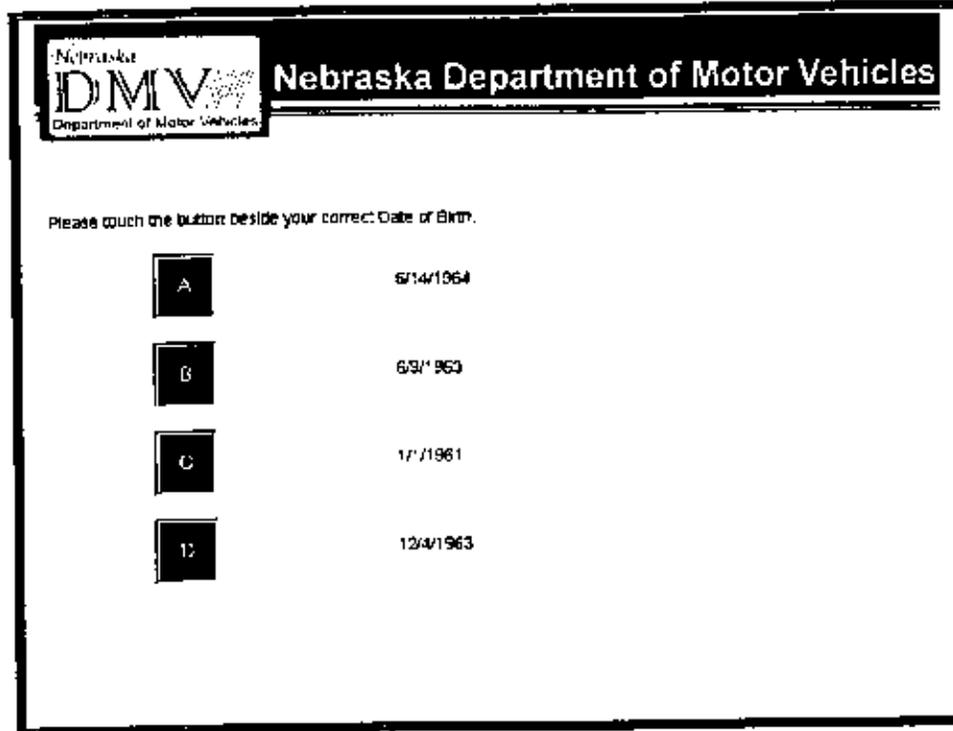
Figure 31: Question Screen showing Skip Question button



When an applicant selects an answer, that answer is highlighted on the screen. The rest of the screen display is faded. The applicant is given the option to confirm or cancel the selected answer. (See Figure) If the applicant cancels the answer, the screen will return to the full color view with no answer selected, and the applicant is allowed to select another answer. However, if the applicant chooses to submit the answer, the answer is recorded and the system provides the appropriate feedback to the applicant. The type of individual question feedback for each test type is configurable by the system administrator from the Administrator Console, with these options:

- **No Feedback** – System moves immediately to next question
- **Answer Feedback** – System informs the applicant if selected answer was correct or incorrect, then moves immediately to next question.
- **Answer Feedback with Correction** – System informs the applicant if selected answer was correct or incorrect. If incorrect, the correct answer is displayed.

Figure 30: Identity Verification Screen



Option	Date of Birth
A	6/14/1964
B	6/31/1963
C	1/7/1961
D	12/4/1963

Optionally, the applicant's signature, a biometric identifier, or a digital photograph may be captured at the Test Station or Examiner Console and stored for future comparison as an anti-fraud measure.

These options may be quoted upon request.

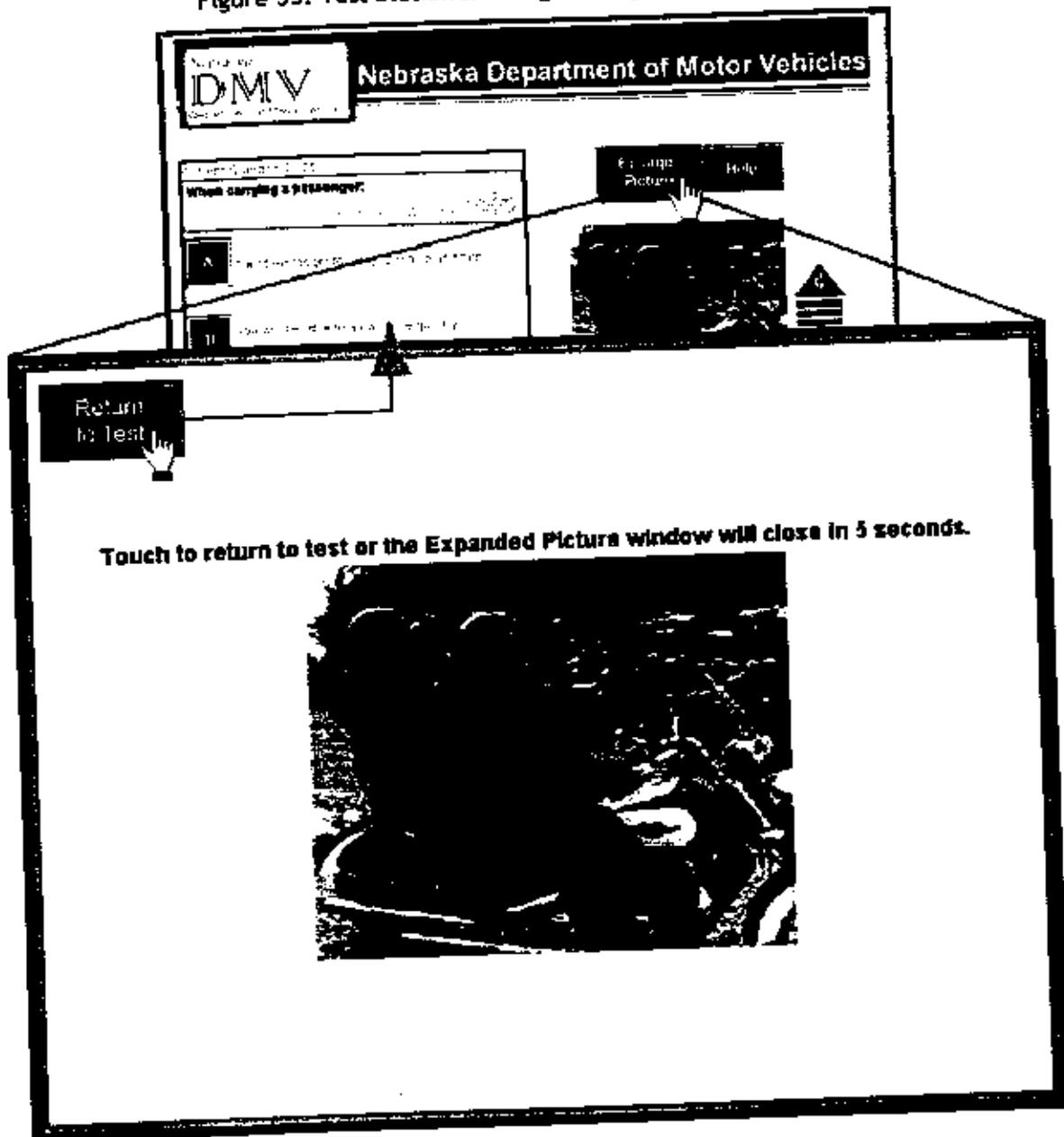
Touch Screen Technology

The **AutoTest** system software utilizes the Test Station's touchscreen as the interface between the applicant and the Test Station. This allows applicants to answer questions and perform other functions during the test simply by touching the appropriate area of the screen.

Applicant Options During Test

The **AutoTest System** allows applicants the option to answer the question, skip the question, or have the question repeated. The applicant can skip a question by touching the "Skip Question" button at the bottom of each question screen (See Figure below). Any question that is skipped will be re-presented to the applicant at the end of the test, unless the applicant has already passed or failed the test under the Quick Pass/Fail feature. Audio for

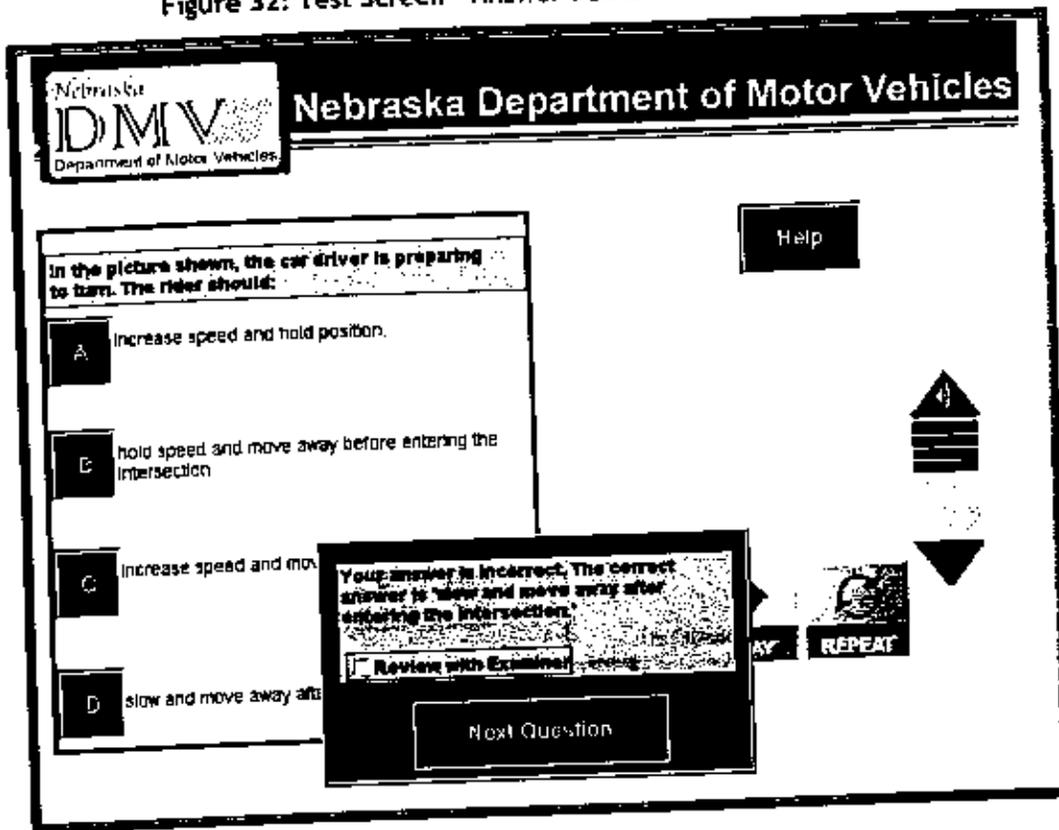
Figure 33: Test Station showing "Enlarge Picture" button



Upon completion of the test, the applicant is shown their score and informed whether they have passed or failed. At this point, they also have the opportunity to review any questions missed by selecting the review button, if this option has been configured by the examiner.

If the test review option has been configured by the examiner for a test, the applicant will have the ability to review any questions answered incorrectly. This option may be exercised by the applicant without any intervention by the examiner. In addition, a complete review of the test, including all test

Figure 32: Test Screen - Answer Feedback with Correction



The Test Station application allows the applicant to enlarge the graphic image or digital video by touching an on-screen control. The Image is enlarged to full screen and may be returned by touching the screen again, or by timer function after five seconds.

browser in the same way without requiring specialized software. This reduces the cost to DC DMV in purchasing software licenses and restricts the use of remote control applications to only those users who require full remote control capability, such as service technicians or help desk personnel.

Version Control

The **AutoTest System** includes an internal tool for tracking version control to ensure versioning integrity during the initial software installation and any upgrade deployments. Each deployment of the **AutoTest System** is comprised of a unique build for the particular customer. A build is comprised of all of the components or modules that make up the core **AutoTest System** as well as any additional customized modules developed for that particular customer. All modules are created and maintained under strict version control by Viisage developers. Each build is uniquely tied to a customer and a license for that customer. The administrator interface features a web-based tool which polls all of the available Examiner and Test Stations as well as the Administrator server itself to generate a report of each build installed on the system. This report is used to validate that each station has the currently installed build consisting of the appropriate modules for that build. Any discrepancies will be immediately noted and corrective action can be taken. Upgrades and patches will be administered through a deployment package will insure that each station will be receiving the proper software build for the licensed customer. Each upgrade deployment will be immediately followed by running the version report to validate the upgrade.

Recovery from System Outage

The **AutoTest System** provides full same-state recovery for both the Test Stations and the Examiner Console in the event of field office power failure. System restoration will occur within a two-minute threshold upon restoration of power. The BIOS of each Test Station and Examiner Console is configured to return to its previous state upon power restoration. This will mean that examiner personnel will not be required to power on the computers manually. At the Test Station level, the test application will also automatically restart and resume any test in progress at the exact point of interruption without any loss of data. At the Examiner Console, once the Examiner logs back on with username and password, all system functions return to normal operation with no loss of functionality or data.

questions, test graphics, answers selected, correct answers and other information may be conducted with the applicant by the examiner from the Examiner Console.

Results Maintenance

All statistical and applicant data is uploaded from all system Examiner Consoles to the Administrator Console central database. This process may be real-time or may be set to occur automatically on a user-defined schedule (e.g., nightly). The primary factor affecting the decision of real-time vs. batch upload is network bandwidth and utilization during the busy daytime business hours. Viisage will work with DC DMV to determine the most advantageous method of transferring data to the Central Database. It should be noted that even if it is preferable to have data transfer take place in a batch process overnight, a small sub-set of test data may be sent real-time from each Examiner Console to the Central Database. This allows examiners in other locations to be alerted if an applicant who has failed a test attempts to re-test at a different location in violation of the rules governing re-test waiting periods.

In addition, test results and other data are always accessible real-time by any authorized user simply by pointing a web browser toward the URL of the Examiner Console desired and logging on with the required security credentials.

Network Communication

The Administrator Console will have a copy of PC Anywhere installed and running on it as a service to allow remote operation of the server and file upload/downloads. It will be configured, with the consent of DC DMV, for NT Domain authentication and high encryption for security beyond what is included with the standard PC Anywhere installation. The Examiner Console and Test Stations will have VNC installed and running on them as a service for remote control access using a password that is approved by DC DMV. Alternatively or in addition to PC Anywhere or VNC, Windows Terminal Services may be installed on the Administrator or Examiner Consoles as another remote control option that uses NT authentication. Any or all of these options are useable by DC DMV or their designated agents to access and maintain the systems for administration and support.

In addition, since the **AutoTest System** is browser-based, any DC DMV user with authorized credentials may access the Administrator Console to add, modify, and delete test questions or perform other administrative tasks without requiring the use of specialized remote control software applications. They may also monitor the various Examiner Consoles using their web

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SECTION 1

REQUEST FOR QUOTATION— REQUIREMENTS

1. GENERAL TERMS AND CONDITIONS

This is a Request for Quotations (RFQ) issued under the small purchase procedures outlined in Title 27, District of Columbia Municipal Regulations, Chapter 18, Section 1802.3. The terms Quote/Quoter and Offer/Offeree are used interchangeably in this RFQ, as are the terms RFQ and solicitation, and the terms submission, quote and proposal, and the terms contract and Purchase Order (PO). Quotations submitted are Offers that the District can accept by issuing a PO. This RFQ is issued to All Open Market Offerors. The District will apply preferences in evaluating submissions from District-certified LDBEs. If you are unable to submit a quote, please so indicate on this form and return it.

The District may award a single contract resulting from this solicitation to the responsible offeror(s) whose offer(s) conforming to the solicitation will be most advantageous to the District, cost or price, technical and other factors specified elsewhere in this solicitation.

1.1 The District may award a contract on the bases of initial offers received, without discussion. Therefore, each initial offer should contain the Offeror's best terms from a standpoint of cost or price, technical and other factors.

L-1/Visage has reviewed and agrees with these terms.

2. PERIOD OF PERFORMANCE AND CONTRACT TYPE

The contract awarded from this solicitation will be a fixed price contract. The period of performance for the base period will be from date of award through twelve (12) months thereafter, with the option to renew for four (4) additional option periods of twelve months each, or successive fractions thereof, by written notice to the Contractor before the expiration of the contract; provided that the District will give the Contractor a preliminary written notice of its intent to extend at least thirty (30) days before the contract expires. The preliminary notice does not commit the District to an extension. The exercise of this option is subject to the availability of funds at the time of the exercise of this option. The Contractor may waive the thirty (30) day preliminary notice requirement by providing a written waiver to the Contracting Officer prior to expiration of the contract. The quoter/offeree shall submit a price for the base period and each option period. If the District exercises this option, the extended contract shall be considered to include this option provision. The price for the option period shall be as specified in the contract. The total duration of this contract, including the exercise of any options under this clause, shall not exceed five (5) years.

L-1/Visage complies with this requirement.

L-1/Visage has provided pricing on the form provided by the DC DMV and included the pricing in a separately sealed envelope. We are open to more in-depth conversation of the District's needs and potential cost saving opportunities and will provide adjusted costs if necessary.

3. CONTRACTING OFFICER (CO)

Contracts will be entered into and signed on behalf of the District, or Purchase Orders issued on behalf of the District, only by Contracting Officers. The name, address and telephone number of the Contracting Officer is:

Annie R. Watkins, CPM, CPPB
Contracting Officer
Office of Contracting and Procurement
OCTO
441 - 4th Street, N.W., 9th Floor
Washington, DC 20001

202/727-5274
202/727-1679 fax
annie.watkins@dc.gov

Website: ocp.dc.gov

L-1/Visage acknowledges this statement.

4. AUTHORIZED CHANGES BY THE CONTRACTING OFFICER

The Contracting Officer is the only person authorized to approve changes in any of the requirements of this contract. The Contractor shall not comply with any order, directive or request that changes or modifies the requirements of this contract, unless issued in writing and signed by the Contracting Officer, or a valid changed PO is issued by the Contracting Officer. In the event the Contractor effects any change at the instruction or request of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any cost increase incurred as a result thereof.

L-1/Visage acknowledges this statement.

5. CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)

The COTR is responsible for general administration of the contract and advising the Contracting Officer as to the Contractor's compliance or noncompliance with the contract. In addition, the COTR is responsible for the day-to-day monitoring and supervision of the contract, of ensuring that the work conforms to the requirements of this contract and such other responsibilities and authorities as may be specified in the contract. The COTR for this contract shall be designated upon award of the contract. The COTR shall not have authority to make any changes in the specifications or scope of work or terms and conditions of the contract. The Contractor may be held fully responsible for any changes not authorized in advance, in writing, by the Contracting Officer; may be denied compensation or other relief for any additional work performed that is not so authorized; and may also be required, at no additional cost to the District, to take all corrective action necessitated by reason of the unauthorized changes.

L-1/Visage acknowledges this statement.

6. ADVISORY AND ASSISTANCE SERVICES

The contract is a "nonpersonal services contract". It is therefore, understood and agreed that the Contractor and/or the Contractor's employees: (1) shall perform the services specified herein as independent Contractors, not as employees of the government; (2) shall be responsible for their own management and administration of the work required to bear sole responsibility for complying with any and all technical, schedule, financial requirements or constraints attendant to the performance of this contract; (3) shall be free from supervision or control by any government employee with respect to the manner or method of performance of the service specified; but (4) shall, pursuant to the government's right and obligation to inspect, accept or reject work, comply with such general

direction of the CO, or the duly authorized representative of the CO as is necessary to ensure accomplishment of the contract objectives.

L-1/Visage acknowledges this statement.

7. DELIVERY OF WORK PRODUCT/INSTRUCTION FROM COTR

7.1 The Contractor shall follow the procedures and rules of the Government of the District of Columbia, and additional instructions that the District COTR may direct. During performance under this contract and/or at completion of work, the Contractor shall provide orderly hand-over of work products and deliverables to the District COTR, including all documentation, electronic or otherwise, created during performance of the contract. All work product produced under the contract is at all times the property of the District.

7.2 In addition, the Contractor shall:

7.2.1 Ensure that all work is performed on District premises, unless otherwise approved in writing by the COTR;

7.2.2 The COTR is responsible for the technical administration of the contract and advising the Contracting Officer (CO) as to the Contractor's compliance or noncompliance with the contract. In addition, the COTR is responsible for the day-to-day monitoring and supervision of the contract, of ensuring that the work conforms to the requirements of the contract and such other responsibilities and authorities as may be specified in writing by the CO. The COTR for this requirement is:

Libby Clapp
Chief Information Officer
Department of Motor Vehicles
95 M Street, S.W.
Suite 304-1
Washington, D.C. 20024

Office: (202) 729-7100
Libby.clapp@dc.gov

7.2.4 It is understood and agreed that the COTR shall not have the authority to make changes in the specifications/scope of work or terms and conditions of the contract.

7.2.5 The Contractor shall be held fully responsible for any changes not authorized in advance, in writing, by the CO, and may be denied compensation or other relief for any additional work performed that is not so authorized, and may also be required, at no additional cost to the District, to take all corrective action necessitated by reason of the unauthorized changes.

7.2.6 The Contracting Officer's Technical Representative (COTR), unless the representative expressly assigns a designee, is responsible for oversight and acceptance on all matters pertaining to the contract performance, other than those reserved to the Contracting Officer.

L-1/Visage acknowledges this statement.

8. INSURANCE

8.1 Contractor shall procure and maintain, during the entire period of performance under this contract, the types of insurance specified below. The Contractor shall submit a certificate of insurance giving evidence of the required coverages prior to commencing work. All insurance shall be written with responsible companies licensed by the District of Columbia's Department of Insurance, Securities and Banking. The Contractor shall require all subcontractors to carry the insurance required herein, or Contractor may, at its option, provide the coverage for any or all subcontractors, and if so, the evidence of insurance submitted shall so stipulate. All insurance provided by the Contractor as required by this section, except comprehensive automobile liability insurance, shall set forth the District as an additional named insured. The insurance shall provide for 30 days' prior written notice to be given to the District in the event

coverage is substantially changed, canceled or non-renewed. If the insurance provided is not in compliance with all the requirements herein, the District maintains the right to stop work until proper evidence is provided.

- (a) Commercial General Liability Insurance: \$1,000,000 limits per occurrence, District added as an additional insured.
- (b) Automobile Liability Insurance: \$1,000,000 per occurrence combined single limit.
- (c) Worker's Compensation Insurance: according to the statutes of the District of Columbia, including Employer's Liability, \$100,000 per accident for injury, \$100,000 per employee for disease, \$500,000 policy limit for disease.

L-1/Viisage complies with this requirement.

L-1/Viisage will provide the District with the required documentation concerning any and all insurance requirements upon award.

9. INVOICE PAYMENT

The District will make payments to the Contractor, upon the submission of proper invoices, at the prices stipulated in this contract, for supplies delivered and accepted or services performed and accepted, less any discounts, allowances or adjustments provided for in this contract. The District will pay the Contractor on or before the 30th day after receiving a proper invoice from the Contractor. The Contractor shall submit proper invoices no more frequently than on a monthly basis or as otherwise specified in the order or by the COTR. Invoices shall be prepared in duplicate and submitted to the agency Chief Financial Officer (CFO) with concurrent copies to the Contracting Officer's Technical Representative (COTR) specified in this solicitation. The address of the CFO is:

Name: OCTO Agency CFO
Accounts Payable Division

Address: 441 4th Street, NW
Suite 930S
Washington, D.C. 20001

Telephone: (202) 727-2277

Fax: 202-727-1216

E-mail: octo.accountspayable@dc.gov

To constitute a proper invoice, the Contractor shall submit the following information:

- (a) Contractor's name and invoice date (Contractors are encouraged to date invoices as close to the date of mailing or transmittal as possible.);
- (b) Contract number and Encumbrance Code (PO Number). Assignment of an invoice number by the Contractor is also recommended;
- (c) Description, price, quantity, dates and the percent (%) of work actually performed;
- (d) The original and two (2) copies of invoices for cost reimbursable expenses, if authorized by the contract;
- (e) Other supporting documentation or information, as required by the Contracting Officer;
- (f) Name, title, telephone number and complete mailing address of the responsible official to whom payment is to be sent;

- (g) Name, title, phone number of person preparing the invoice;
- (h) Name, title, phone number and mailing address of person; and authorized signature.
- (i) Monthly bills must be broken down by rate, person, hours, and task as an attachment to each bill, with approved District timesheets.

L-1/Visage complies with this requirement.

10. EVALUATION FACTORS

10.1 The District intends, but is not obligated, to make more than one award to the responsible Quoter(s) whose quote is most advantageous to the District, based upon the evaluation criteria specified in the solicitation. Thus, while the points in the evaluation criteria indicate their relative importance, the total scores will not necessarily be determinative of the award. Rather, the total scores will guide the District in making an intelligent award decision based upon the evaluation criteria. The Technical Rating Scale is as follows:

<u>Numeric Rating</u>	<u>Adjective</u>	<u>Description</u>
0	Unacceptable	Fails to meet minimum requirements; e.g., no demonstrated capacity, major deficiencies which are not correctable; offeror did not address the factor.
1	Poor	Marginally meets minimum requirements; major deficiencies which may be correctable.
2	Minimally Acceptable	Marginally meets minimum requirements; minor deficiencies which may be correctable.
3	Acceptable	Meets requirements; no deficiencies.
4	Good	Meets requirements and exceeds some requirements; no deficiencies.
5	Excellent	Exceeds most, if not all requirements; no deficiencies.

For example, if a sub factor has a point evaluation of 0 to 10 points, and (using the Technical Rating Scale) the District evaluates as "good" the part of the proposal applicable to the sub factor, the score for the sub factor is 8 (4/5 of 10). The sub factor scores will be added together to determine the score for the factor level.

10.2 Evaluation Criteria

1. Proposals will be evaluated and the system purchased based upon the extent to which the proposed system meets the capabilities requested in this SOW. The proposal must address how the proposed system meets each of the requirements. Additional consideration will be given if the vendor's system includes either of the two optional requirements or if the vendor proposes to provide those optional requirements - **40 points.**

2. The project plan developed by the vendor which indicates how the vendor will implement the system and meets the requirements in this SOW. The plan includes more than a Gant chart. The plan also includes workflows and descriptions of business processes and how they meet DMV's needs as defined in this Statement of Work. The plan shall be judged not only in terms of the implementation schedule feasibility but also in terms of the vendor's overall understanding of the tasks to be accomplished to ensure the system is implemented on schedule - 15 points.
3. Vendor's experience in the delivery of driver knowledge testing systems including number of operational installations. Proposal submissions should include three references of customers with similar knowledge testing system needs. It should also include the resume of the specific project manager proposed to implement this system and any other technical staff that would be involved in the implementation. - 20 points.

L-1/Visage understands the evaluation criteria.

Please refer to **Appendix A – References** for details on L-1/Visage's currently implemented Automated Knowledge Testing Systems.

10.3 PRICE CRITERIA 25 Points

The price evaluation will be objective. The Offeror with the lowest price (base plus options) will receive the maximum price points. All other proposals will receive a proportionately lower total score. The following formula will be used to determine each Offeror's evaluated price score:

Lowest price proposal

----- x 25 = Evaluated price score

Price of proposal being evaluated

The District will evaluate offers for award purposes by evaluating the total price for all options as well as the base period. Evaluation of options shall not obligate the District to exercise them. The District's requirements may change during the option years. Quantities to be awarded will be determined at the time each option is exercised.

10.5 PREFERENCE POINTS (12 Points)

10.6 TOTAL (112 Points)

L-1/Visage understands the price criteria

11.0 PREFERENCES FOR LOCAL BUSINESSES, DISADVANTAGED BUSINESSES, RESIDENT-OWNED BUSINESSES, SMALL BUSINESSES, LONGTIME RESIDENT BUSINESSES, OR LOCAL BUSINESSES WITH PRINCIPAL OFFICES LOCATED IN AN ENTERPRISE ZONE

Under the provisions of the "Small, Local, and Disadvantaged Business Enterprise Development and Assistance Act of 2005" (the Act), Title II, Subtitle N, of the "Fiscal Year 2006 Budget Support Act of 2005", D.C. Law 16-33, effective October 20, 2005, as amended, the District shall apply preferences in evaluating bids or proposals from businesses that are small, local, disadvantaged, resident-owned, longtime resident, or local with a principal office located in an enterprise zone of the District of Columbia.

11.1 GENERAL PREFERENCES

For evaluation purposes, the allowable preferences under the Act for this procurement are as follows:

- 11.1.1 The addition of three points on a 100 point scale for a small business enterprise (SBE) certified by the Small and Local Business Opportunity Commission (SLBOC) or the Department of Small and Local Business Development (DSLBD), as applicable;
- 11.1.2 The addition of five points on a 100 point scale for a resident-owned business enterprise (ROB) certified by the SLBOC or the DSLBD, as applicable;
- 11.1.3 The addition of ten points on a 100 point scale for a longtime resident business (LRB) certified by the SLBOC or the DSLBD, as applicable;
- 11.1.4 The addition of two points on a 100-point scale for a local business enterprise (LBE) certified by the SLBOC or the DSLBD, as applicable;
- 11.1.5 The addition of two points on a 100-point scale for a local business enterprise with its principal office located in an enterprise zone (DZE) and certified by the SLBOC or the DSLBD, as applicable; and
- 11.1.6 The addition of two points on a 100-point scale for a disadvantaged business enterprise (DBE) certified by the SLBOC or the DSLBD, as applicable.

11.2 MAXIMUM PREFERENCE AWARDED

Notwithstanding the availability of the preceding preferences, the maximum total preference to which a certified business enterprise is entitled under the Act for this procurement is twelve (12) points on a 100 point scale for submissions in response to this RFQ.

11.3 PREFERENCES FOR CERTIFIED JOINT VENTURES

When the SLBOC or the DSLBD, as applicable, certifies a joint venture, the certified joint venture will receive preferences as a prime Contractor for categories in which the joint venture and the certified joint venture partner are certified, subject to the maximum preference limitation set forth in the preceding paragraph.

11.4 VENDOR SUBMISSION FOR PREFERENCES

- 11.4.1 Any vendor seeking to receive preferences on this solicitation must submit at the time of, and as part of its bid or proposal, the following documentation, as applicable to the preference being sought:
 - 11.4.1.1 Evidence of the vendor's or joint venture's certification by the SLBOC as an SBE, LBE, DBE, DZE, LRB, or RBO, to include a copy of all relevant letters of certification from the SLBOC; or
 - 11.4.1.2 Evidence of the vendor's or joint venture's provisional certification by the DSLBD as an SBE, LBE, DBE, DZE, LRB, or RBO, to include a copy of the provisional certification from the DSLBD.
- 11.4.2 Any vendor seeking certification or provisional certification in order to receive preferences under this solicitation should contact the:

Department of Small and Local Business Development
ATTN: LSDBE Certification Program
441 Fourth Street, N.W., Suite 970N
Washington, DC 20001

- 11.4.3 All vendors are encouraged to contact the DSLBD at (202) 727-3900 if additional information is required on certification procedures and requirements.

L-1/Visage complies with this requirement.

L-1/Visage has partnered on this project with **Vantix, Inc.**, registered in the Certified Business Enterprise Program as established by the Small, Local, and Disadvantaged Business Development and Assistance Act of 2005. Vantix Inc., is registered by DSLBD as a; Goods and Equipment, General Services, Business Services, Local Business Enterprise, Small Business Enterprise, Disadvantaged Business Enterprise, and Resident Owned Business. A copy of the approved recertification letter as well as a Letter of Intent to Partner, have been included at the

end of this section of the response.

12. ATTACHMENTS

- Statement of Work (Attachment A)
- Tax Certification Affidavit (Attachment B)
- First Source Employment Agreement (Attachment C)
- EEO Compliance Documents (Attachment D)
- Sample Questions (Attachment E)

L-1/Visage complies with this requirement.

13. INSTRUCTIONS

- 13.1 Please submit one (1) original and three (3) copies of both the signed technical and price quotations in separately sealed envelopes (one technical and price) to the Office of Contracting and Procurement, 441 4th Street, NW, Suite 703 (Bid Room), Washington, D.C. 20001. Quoters must also submit with its quote, a sworn Tax Certification Affidavit (Attachment B) and Attachment C. All quotes must be received no later than the date and time stated in block 10 of the RFQ form, page 1 of the solicitation. The District will not accept a facsimile copy or an electronic copy of a bid as an original bid. Technical quotations should include candidate resumes as well as company capability statements and all other information that the District would need for its evaluation.
- 13.2 Issuance of this RFQ does not commit the District to pay any costs incurred in the preparation of the submission of this quotation.
- 13.3 The Offeror selected for award **MUST** provide certificate of insurance as described in Section 8 of this document within (10) ten working days of award. If the Offeror cannot provide the certificate of insurance the District may remove the Offeror from the list of eligible respondents and award to the next most advantageous Offeror.
- 13.4 The Standard Contract Provisions for Use with District of Columbia Government Supplies and Services Contracts, March 2007, are hereby incorporated by reference and made a part of this RFQ and the resultant PO. For a copy, go to OCP's website, <http://ocp.dc.gov>, and click on Solicitation Attachments.
- 13.5 Questions regarding this solicitation should be sent via email to the contact information on cover sheet of this document, and must be received no later than June 9, 2008, by 2:00 PM EST in order to be considered.
- 13.6 Any Amendment to this solicitation will be posted on the Office of Contracting and Procurement website at www.ocp.dc.gov.

L-1/Visage complies with this requirement.



June 10, 2008

L-1 Identity Solutions, Inc.
ATTN: John Corson / Jeremy Kirsch
298 Concord Road, Third Floor
Billerica, MA 01821

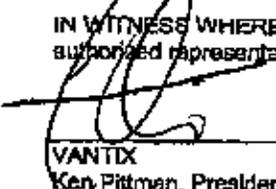
Ken Pittman, President
VANTIX
International Square
1875 I Street, Suite 500
Washington, DC 20006

RE: Letter of Intent to partner for Driver Knowledge Testing System for the District of Columbia Department of Motor Vehicles (DMV) - RFQ_DCTO-2008-Q-0188

This Letter of Intent constitutes an agreement between L-1 Identity Solutions, Inc. (L-1 Identity) and VANTIX and demonstrates a willingness and ability to partner on the above referenced solicitation from the District of Columbia, Department of Motor Vehicles (DMV). The parties intend to partner for the purpose of fulfilling any and all obligations dealing with the delivery of services under solicitation RFQ_DCTO-2008-Q-0188. The parties agree to forming a contractor / sub-contractor relationship with L-1 Identity Solutions acting as the prime contractor, and VANTIX serving as its Certified Business Enterprise (CBE) (Cert# 12200715959) sub-contractor partner to fulfill the LSDBE/CBE subcontractor participation requirement.

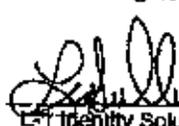
The present mutual intentions of the parties with respect to the agreed upon relationship referenced herein does not contain all matters agreed upon by the parties in order to complete such proposed transactions. Although, this letter shall serve as a memorandum of understanding that the parties shall work in tandem should the team be awarded the proposed opportunity by District of Columbia, Department of Motor Vehicles (DMV). This Agreement may be modified or terminated only by a written instrument executed by the authorized representatives of L-1 Identity Solutions, Inc. and VANTIX.

IN WITNESS WHEREOF, the parties have executed this Agreement by their duly authorized representatives.



VANTIX
Ken Pittman, President

Date 6/25/08



L-1 Identity Solutions.

Date June 25, 2008

Leo J Sullivan

Print Name

International Square 1875 I Street, Suite 500, NW Washington, DC 20006
202.529.3000 / fax 202.318.0487

**GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF SMALL AND LOCAL BUSINESS DEVELOPMENT**

★ ★ ★

[REDACTED]

[REDACTED]

December 17, 2007

Kenya Pittman
Vanix, Inc.
1825 I STREET NW 400
WASHINGTON, DC 20006

Re: L5DR58336122009

Dear Ms. Pittman:

The District of Columbia Department of Small and Local Business Development (DSLBD) on 12/14/2007, approved your application for Recertification and registered your business enterprise in the Certified Business Enterprise Program as established by the Small, Local, and Disadvantaged Business Development and Assistance Act of 2005, effective October 20, 2005 (D.C. Law 16-33; 52 DCR 7503), as amended. The business enterprise is duly registered by DSLBD as a:

Goods and Equipment
General Services (Communications and Media Related Services, Mailing Services, Data Processing/Computer/Programming and Software Services)
Business Services (Consulting Services, Educational Services, Management Services, Computer Management Services)
Local Business Enterprise
Small Business Enterprise
Disadvantaged Business Enterprise
Resident Owned Business

IMPORTANT NOTICE:

D.C. LAW 16-33 MANDATES THE FOLLOWING REQUIREMENTS FOR CERTIFIED BUSINESSES:

1. This Certification of Registration, pursuant to D.C. Law 16-33 Subpart 3 will expire two (2) years from the effective date of approval. Your application for re-certification must be submitted 90 days prior to your expiration date. There will be no other notification.
2. Bidding in accordance with this law shall be limited to the above Industry classification(s), and this letter must be attached to the front of the contractor's sealed bid.
3. All certified businesses must comply with all provisions of D.C. Law 16-33.
4. Pursuant to Section 2363 of D.C. Law 16-33, the Small and Local Business Opportunity Commission (SLBOC) may revoke or suspend the certificate of registration of a business enterprise that is engaged in fraud or deceit in obtaining registration; furnished substantially inaccurate or incomplete ownership or financial information; acted in gross negligence, incompetence, financial irresponsibility or misconduct in the practice or trade or profession.

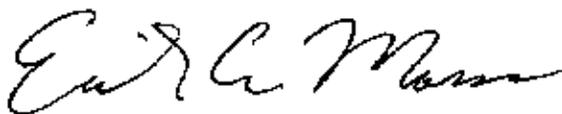
5. If there are any changes in your company or corporation, that may affect your eligibility, you must notify the Department of Small & Local Business Development Office within 30 days.

CERTIFICATION NUMBER: LSDRS8336122009

DATE OF APPROVAL: 12/14/2007

DATE OF EXPIRATION: 12/14/2009

Sincerely,



Erik A. Moses
Director

SECTION 2

STATEMENT OF WORK— (ATTACHMENT A)

Overview

Overview

The District of Columbia desires to purchase a Drivers Knowledge Testing System for commercial driver licenses (CDL) and for non-commercial driver licenses (NCDL). The system shall be installed and operational four months from date of award. The system shall be an in-house driver knowledge testing system but shall have a 'sample' test of 30 questions on the web for customers to practice the test prior to taking the actual test at DMV. (Sample Questions are provided in Attachment E). The system shall include the capability to change the questions on the web as desired (as well as the questions on the knowledge tests in general).

The Drivers Knowledge Testing System shall be web-based to allow deployment to any or all of DMV's four service centers. The DMV has an in-house system for driver licenses and vehicle registration called 'Destiny.' The database shall be centralized and interfaced with the existing Destiny system to allow real-time transfer of test results for issuance of a learner's permit or license. The system shall allow administrators to monitor activity at each site including examiner, tests underway, tests completed, and other operational data as well as cumulative statistical reports by site, by standard time periods (e.g., monthly) as well as by specified time periods (i.e., range of dates), and by pass/fail rates. The system shall be structured to allow monitoring and control by a central console for global management at the executive offices (which is one of the five sites) as well as a site manager console(s) for each site.

The system currently in operation at the DMV involves the capture of the person's photo as the last step in the process when the license card is generated. The DMV is requiring that photo capture become the first step in the process with the implementation of the knowledge testing system. The initial step in the knowledge testing process shall include capture of the person's photo, entry of their date of birth and full name, and verification of the person's Social Security number (SSN) through Destiny. This will require that the knowledge testing system be interfaced with the current in-house system for management of driver licensing and ID cards and the current system for the license and ID card generation or both. For example, the photo taken in the first step and stored in Destiny shall be retrieved by the Knowledge Testing system along with the person's entry data when the person appears at the counter to take their knowledge or skills test. The DMV expects the bid responses to include a proposed business process and the data transfer needed to support this 'photo-up-front' process.

A primary focus of the system shall be business rules and technology considerations that minimize the potential for fraud. The system shall also be configured with failover capability (i.e., redundancy) to ensure minimum outages and no single point of failure.

Document Purpose

The purpose of this document is to provide the Statement of Work (SOW) for the Drivers Knowledge Testing System. In addition to functional capabilities, this document contains technical requirements, specifications, and standards that shall be part of the proposed solution.

Intended Audience

Both the SOW and Technical addendum are intended as a resource for the vendors responding to the District of Columbia of Columbia's request for a new Drivers Knowledge Testing System. Its contents shall be carefully considered and incorporated into proposed solutions.

How The Technical Addendum Is Organized

The technical addendum is organized in sections that identify specific District of Columbia standards, policies, and guidelines deemed critical to the successful integration of the Drivers Knowledge Testing within the District of Columbia's enterprise architecture and support organization.

L-1/Viisage acknowledges this statement.

Overview

The purpose of this section is to provide history, concerns, and technical requirements for a new Drivers Knowledge Testing System. Potential vendors need to understand where the District of Columbia has been with this system and how the District of Columbia would like to build upon this system in the future.

The new system will not only meet current operational needs for the customers but also integrate with the current IT systems, environment and infrastructure to provide an opportunity for the future, not an obstacle to be addressed or circumvented.

L-1/Viisage acknowledges this statement.

System Functionality Requirements

The District of Columbia seeks a custom off-the-shelf (COTS) system (i.e., an existing Drivers Knowledge Testing System) solution that must satisfy a number of specific required operational and technical goals. There are also two optional capabilities that are desired but not required.

The system shall meet the following operational and technical requirements:

L-1/Viisage complies with these mandatory requirements.

Please refer to the **Executive Summary** provided with this response for an overview of the AutoTest Automated Knowledge Testing System. L-1/Viisage is pleased to respond to the below requirements in greater detail.

1. Adheres to District of Columbia architecture guidelines, standards, and policies

L-1/Viisage complies with this mandatory requirement

The L-1/Viisage provided system will adhere to District of Columbia architecture guidelines, standards, and policies.

2. Adheres to District of Columbia standards for Disaster Recovery and redundancy (i.e., no single point of failure) within the application

L-1/Viisage complies with this mandatory requirement

As a leading identity solutions provider in the world, L-1/Viisage has many years of experience in providing mission critical applications and databases that satisfy the demanding high availability and disaster recovery (HA/DR) requirements specified in many of our deployments. For *AutoTest* specifically, a comprehensive and well thought out HA/DR strategy has been developed using redundant, physically separated hardware, SQL Server replication and fast application failover configuration. This strategy has been tested and deployed in the New York *AutoTest* program with much success. The detailed disaster recovery strategy will be customized for DC-DMV in consultation with their technical team, documented and published as part of the project.

3. Provides District of Columbia with full ownership and control of data contained in the system

L-1/Viisage complies with this mandatory requirement

The L-1/Viisage provided system will provides the District of Columbia with full ownership and control of data contained in the system.

4. Provides District of Columbia with business reports and the flexibility to generate ad hoc reports at the discretion of the District of Columbia

L-1/Viisage complies with this mandatory requirement

The AutoTest Automated Knowledge Testing System will be delivered with the standard reports as shown below. Additionally, L-1/Viisage will work with the District's DMV to provide additional reports as deemed necessary.

As required by the RFQ, and with appropriate non-disclosure agreements in place, L-1/Viisage will provide the District's DMV with the full data dictionary for assistance with creating ad-hoc reports as necessary.

AutoTest Reports - Standard

The following section describes each of the 8 standard reports equipped with the AutoTest Automated Knowledge Testing System. Additional reports can be designed in cooperation with the desires of the District's DMV.

1. AutoTest Test Activity Summary Report

The Test Activity Summary provides an overview of test activity at a single location (for local office personnel) or at any/all locations (administrative personnel) for any specified time period. Examiners or system administrators can select, and constrain if desired, report parameters including: test category, test type (automated, audio-assisted, or written), test location, pass/fail/cancelled, or language.

Figure 2-1: Test Activity Summary

Test Activity Summary Details

Office: Birmingham
Report Date: 12/4/2003
Report Period: 11/23/2003 To 11/26/2003

Test Category: all
Test Type: all

Language: All
Audio: all

Test Name	Test Counts	Passed	Average Time	Failed	Average Time	Cancelled
Commercial	8	0	N/A	2	00h 03m 00s	8
Motorcycle	13	2	00h 05m 44s	9	00h 05m 44s	2
Passenger	2	1	00h 14m 29s	0	N/A	1
Test	2	1	00h 06m 57s	0	N/A	1
Total	25	4		11		10

Back Print Close Window

2. Test Log Report

The Test Log Report provides a detailed listing of all tests taken within a particular time period (see Figure 2-2 below). This report can be constrained by date, location, test category, test type, language, and pass/fail/cancelled. Each result gives the following information:

- Report generation date
- Testing location
- Report time period
- Client name and/or ID
- Test date
- Start/end time
- Test Station ID
- Test category
- Test type
- Language
- Test score
- Pass/fail status

Figure 2-2: Test Log Report

Test Date	Start Time	End Time	Applicant No.	Test Station ID	Test Category	Test Type	Language	Score	Status
11/24/2003	00:00	12:26	12-12	1	Commercial	CDL Air Brakes	English	0%	Cancelled
11/24/2003	00:00	12:47	4-1008	2	Commercial	CDL Combination Vehicles	English	0%	Cancelled
11/24/2003	00:00	12:47	4-1008	2	Commercial	CDL Doubles/Triples	English	0%	Cancelled
11/24/2003	00:00	12:47	4-1008	2	Commercial	CDL General Knowledge	English	0%	Cancelled
11/24/2003	08:39	12:27	4-1008	2	Commercial	CDL Combination Vehicles	English	0%	Failed
11/24/2003	08:52	12:47	4-1008	2	Commercial	CDL Air Brakes	English	8%	Cancelled
11/24/2003	10:54	11:01	12-11	1	Motorcycle	Motorcycle	English	4%	Cancelled
11/24/2003	12:18	08:38	4-1008	1	Commercial	CDL Air Brakes	English	12%	Failed
11/25/2003	00:00	15:01	12-24	1	Commercial	CDL Hazar dous Materials	English	0%	Cancelled
11/25/2003	00:00	16:03	12-19	1	Passenger	Passenger D	English	0%	Cancelled
11/25/2003	00:00	16:02	12-22	1	Motorcycle	Motorcycle	German	0%	Cancelled
11/25/2003	17:07	17:09	12-22	1	Motorcycle	Motorcycle	Greek	0%	Failed
11/25/2003	17:13	17:17	12-22	1	Motorcycle	Motorcycle	Arabic	4%	Failed
11/25/2003	17:33	17:33	12-22	1	Motorcycle	Motorcycle	Chinese	4%	Failed
11/25/2003	17:40	17:41	12-22	1	Motorcycle	Motorcycle	Arabic	12%	Failed
11/25/2003	17:47	17:51	12-22	1	Motorcycle	Motorcycle	Farsi	0%	Failed
11/25/2003	17:56	17:58	12-22	1	Motorcycle	Motorcycle	French	12%	Failed
11/25/2003	18:13	18:14	12-22	1	Motorcycle	Motorcycle	Spanish	12%	Failed
11/26/2003	00:00	09:27	12-1	1	Test	My New Test	English	0%	Cancelled

Total Tests: 19

3. Applicant (Customer) History Report

The Applicant (Customer) History Report allows retrieval of test history and results for individual applicants. The report is generated by input of applicant name or identifier (i.e. DL number or other unique identifier). Report information for each applicant includes the following information:

- Applicant name and ID
- Test names for all tests taken
- Test type (automated, audio-assisted, written)
- Test start/end times
- Test location
- *Test Station ID*
- Language for each test taken
- Total number of questions for each test
- Total number of questions answered correctly
- Score for each test (%)
- Final status for each test

Figure 2-3: Customer History Report

AUTOTEST EXAMINER
Automated Driver Knowledge Testing

Customer History Thursday, December 24, 2003

Customer No: 12-1
Name: Mr. Daniel Smith
D.O.B: 09/17/1978

341 Wakefield Road
Bryant, AL, 36875
Phone# -

Test Date	Start Time	End Time	Location	Station ID	Test Type	Mode	Audio Language	Total Questions	Correct Answers	Score Status
11/24/2003	N/A	N/A	Birmingham		My New Test	Paper	No English	10	0	0%
11/24/2003	N/A	N/A	Birmingham		My New Test	Paper	No English	10	0	0%
11/26/2003	10:01	10:02	Birmingham 1		Motorcycle	Computer	No Spanish	25	0	0% Failed
11/26/2003	10:21	10:22	Birmingham 1		Motorcycle	Computer	No Spanish	25	1	4% Failed
11/26/2003	00:00	09:27	Birmingham 1		My New Test	Computer	No English	10	0	0% Cancelled
11/26/2003	09:29	09:32	Birmingham 1		My New Test	Computer	No English	10	8	80% Passed
11/26/2003	11:38	11:45	Birmingham 3		Motorcycle	Computer	No English	25	20	80% Passed
11/26/2003	11:45	11:53	Birmingham 3		Passenger D	Computer	No English	30	24	80% Passed
12/1/2003	10:18	10:21	Birmingham 1		My New Test	Computer	No English	11	9	82% Passed
12/1/2003	12:58	12:59	Birmingham 1		CDL Passenger Transport	Computer	No Spanish	20	1	5% Failed
12/1/2003	10:44	10:45	Birmingham 1		CDL Doubles/Triples	Computer	No Spanish	20	3	15% Failed
12/1/2003	10:48	10:50	Birmingham 1		CDL General Knowledge	Computer	No Spanish	50	2	4% Failed
12/1/2003	00:00	10:50	Birmingham 1		CDL Passenger Transport	Computer	No Spanish	20	0	0% Cancelled
12/22/2003	10:02	10:06	Birmingham 1		Motorcycle	Computer	No French	25	4	16% Failed

Print Close Window

4. Individual Session Analysis

The *Individual Session Analysis Report* allows users to search for test sessions by date and applicant name (first and/or last) and display test session information including the following:

- Date
- Test Type
- Test ID
- Applicant Number
- First Name
- Middle Name
- Last Name
- Test Status

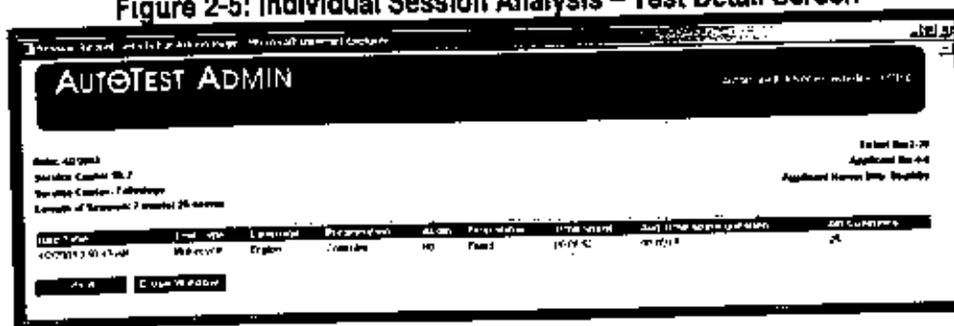
Once a test session is displayed, users can click the test ID to display details. (See Figure 2-4 and Figure 2-5 below.)

Figure 2-4: Individual Session Analysis – Search Screen

The screenshot shows the 'AUTOTEST ADMIN' interface for 'Individual Session Analysis'. It includes search filters for 'Date Range' (from 1/1/2007 to 12/31/2007) and 'Applicant Name' (from A to Z). Below the filters is a table of test sessions. The table has the following columns: Test ID, Test Type, Test #, Applicant #, First Name, Middle Name, Last Name, and Test Status. The data in the table is as follows:

Test ID	Test Type	Test #	Applicant #	First Name	Middle Name	Last Name	Test Status
AC00001	Preceptor D	170	414	Chase			Pass
AC00002	Preceptor D	228	96	Adge			Pass
AC00003	Preceptor D	228	410	Lee			Pass
AC00004	Preceptor D	228	410	Dee			Pass
AC00005	Preceptor D	228	87	Carl			Fail
AC00006	Preceptor D	228	412	Way			Fail
AC00007	Preceptor D	228	47	Tom			Pass
AC00008	Preceptor D	228	418	Milly			Pass
AC00009	Preceptor D	228	411	Travis			Pass
AC00010	Preceptor D	228	45	Sasha			Fail
AC00011	Preceptor D	228	88	Ann			Pass
AC00012	Preceptor D	228	44	Drum			Pass
AC00013	Preceptor D	228	47	Mia			Pass
AC00014	Preceptor D	228	46	Die			Pass
AC00015	Preceptor D	228	41	Tray			Pass
AC00016	Preceptor D	228	48	Wig			Pass
AC00017	Preceptor D	228	47	Carl			Pass
AC00018	Sample Test	432	42	Paul			Pass
AC00019	Preceptor D	228	411	Mia			Pass
AC00020	Sample Test #	432	42	Drum			Pass

Figure 2-5: Individual Session Analysis – Test Detail Screen

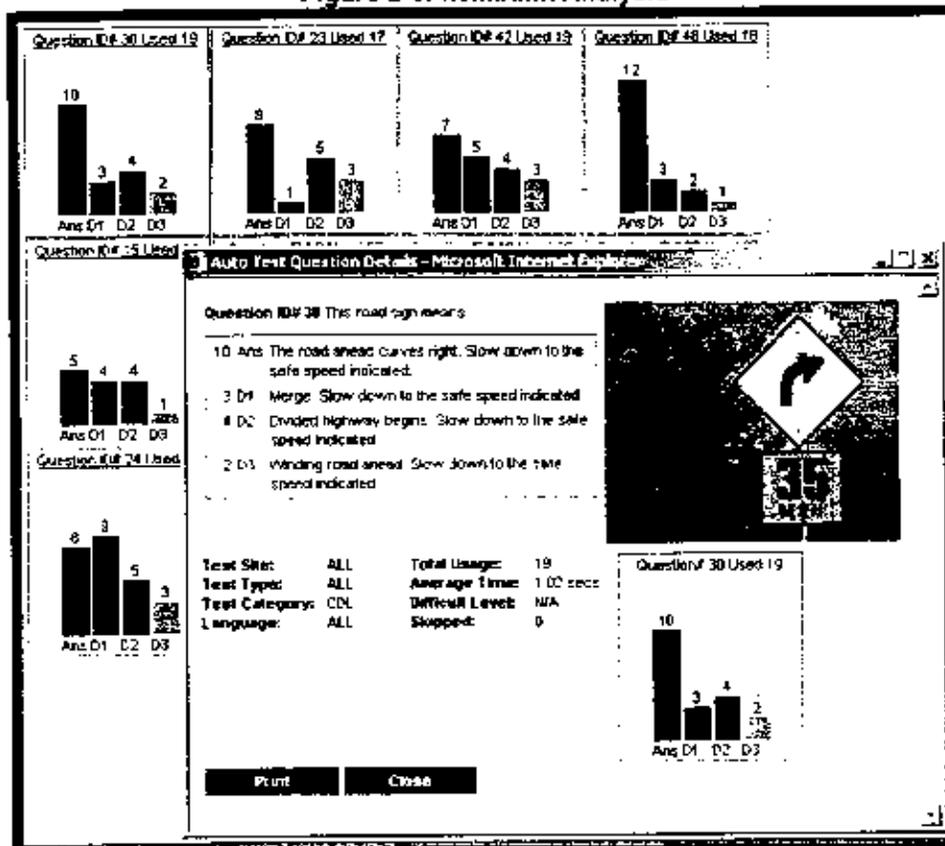


5. Itembank Analysis Report

The Itembank Analysis Report provides detailed analysis of the question pool and allows administrators to identify and correct problems related to faulty relationships between items within the same Knowledge Domain, unclear or misleading accompanying graphics and other trends. Reports can be generated for individual questions, for all questions within any Knowledge Domain, or for all questions that make up any previously administered test. Report information includes the following information:

- Question ID
- Display of associated visual
- Total question usage
- Number of times selected for each answer and each distracter
- Average time taken by applicants to answer question
- Number of times question has been skipped by applicants

Figure 2-6: Itembank Analysis



6. Examiner Audit Report

The Examiner Audit Report allows administrators to produce an audit log of all activity on the AutoTest System for a specific user (examiner, supervisor or admin user) or all users. The report can be constrained by date range, user ID and/or testing location.

Figure 2-7: Examiner Audit

Test Log Report Details

Report Date: 4/13/2008
Report Period: 1/10/2008 To 1/13/2008

Examiner: jowright
Service Center: Kearney

Examiner ID	Log Date	Detail	Action Description	Service Center
onglic	1/11/2008 5:00:07 PM	Inserted Test Status In TestSummary	Update applicant	Kearney
onglic	1/11/2008 5:01:47 PM	From In Progress to In Progress	Update applicant	Kearney
onglic	1/12/2008 4:57:02 PM	From In Progress to In Progress	Update applicant	Kearney
onglic	1/12/2008 4:57:07 PM	From In Progress to Completed	Update applicant	Kearney

Back Print Close Window

7. Cancelled Test Analysis

The Cancelled Test Report allows administrators to search for and view test sessions cancelled by examiners by office, date range, test category, and/or test type and display information including the following for each cancelled test:

- Date
- Start Time
- End Time
- Applicant Number
- Applicant Name
- Test Category
- Test Type
- Reason for cancellation

Figure 2-8: Cancelled Test Report

AUTOTEST EXAMINER
Automated Driver Knowledge Testing

Cancelled Test Report Details

Office: Birmingham
Report Date: 4/14/2004
Report Period: 4/6/2004 To 4/14/2004

Test Category: all
Test Type: all
Audio: all

Test Date	Start Time	End Time	Applicant No	Applicant Name	Test Category	Test Type
4/0/2004	13:25	13:56	A15	Br, Lock ton	Commercial	CCL Air Brake
4/14/2004	13:23	13:43	15	Abn, Lincoln	Motorcycle CBT	Motorcycle CBT

Total Tests: 2

Back Print Close Window

8. Quantity Exception Analysis

The Quantity Exception Report allows administrators to search for and view information on available itembank content for each test type. Information displayed includes the following for each test type:

- Lists all knowledge domains for each test
- Shows number of questions required from each knowledge domain for that test type
- Shows number of questions actually contained in database for each knowledge domain
- If test is available in multiple languages, show number of items available for each knowledge domain in all specified languages
- Any discrepancies will be highlighted in red (*ex: If seven questions are required from a particular knowledge domain, but only six questions are actually in the domain this will show up in red.*)

Figure 2-9: Quantity Exception Report

Test Type	Domain	Language
ASL Sign - Diagram	Road Signs - 201	ENG (2)
CDL Air Brakes	Air Brakes - Commercial 1-17	ENG (2)
	Air Brakes - Commercial 1-17	ESR (2)
CDL Tanker	CDL Tanker - Commercial 1-17	ENG (4)
	Tanker - Commercial 1-17	ESR (4)
	Tanker - Commercial 1-17	ESR (4)
Military Hummer	Air Brakes - Commercial 1-17	ENG (2)
		ESR (2)
		ENG (2)
		ESR (2)
Military Jeep	Air Brakes - Commercial 1-17	ENG (2)
		ESR (2)
		ESR (2)
Military Truck	Air Brakes - Commercial 1-17	ENG (2)
		ESR (2)
		ESR (2)
Motorcycle	Motorcycle 1-17	ENG (2)
		ESR (2)
Motorcycle CBT	Motorcycle 1-17	ENG (2)
		ESR (2)
		ESR (2)
My Moto CBT	Motorcycle 1-17	ENG (2)
		ESR (2)
		ESR (2)

5. Provides flexibility for the District of Columbia to add or change questions if regulations are enacted before the periodic updates are available. This includes the capability to add the question in each of the language requirements standard to the District of Columbia.

L-1/Visage complies with this mandatory requirement

ITEMBANK/TEST ADMINISTRATION OVERVIEW

The *AutoTest* Administrator Console provides authorized DMV users an intuitive process to create and modify tests and test items, assign corresponding audio and graphics, and set global

test parameters, without Viisage intervention. The following discusses the various elements of an *AutoTest* test, and how tests are created and modified.

AutoTest tests are comprised of four elements:

1. Test Items – Questions and answers
2. Tests (e.g., Combination Vehicles, Doubles/Triples, Hazardous Materials, etc.) – Individual Tests (made up of Knowledge Domains)
3. Test Categories (e.g., CDL, Regular Operator, Motorcycle, Vessel, etc.) – Made up of tests
4. Knowledge Domains (e.g., Road Signs) – Groups or sections of similar questions (made up of Test Items)

Authorized personnel can set global parameters for tests including, but not limited to:

- Number of questions
- Pass/fail threshold
- Time limit
- Test cycle (re-test rule)
- Quick Pass/Fail options
- Domains (knowledge areas) used for test
- Number of questions from each domain
- Specify fixed questions, if any, for a test
- Language options
- ID verification option

The test elements reside in a central database on the Administrator Console.

Test Administration

New tests are created through the *Create New Tests* interface accessed by authorized users at the Administrator Console or from any approved workstation with an appropriate browser. See *Figure 2-10*.

Figure 2-10: Create New Test Screen

The screenshot shows a web browser window displaying the 'AUT@TEST ADMIN' interface. The page title is 'Create New Test'. The form contains the following fields and options:

- Test Name: Admin Training Evaluation
- Test Category: Training
- Number of Questions: 30
- Test Cycle: 0 days 0 - no restriction
- Time Limit: 30 minutes
- Quick Pass/Fail Option: Enabled
- Passing Type: Pass
- Passing Level: 80
- Feedback Type: None
- Review Type: None
- Display Status: Yes
- Choose Languages: Arabic, Chinese, Hindi, French, German (13 Available) and English (1 Selected)

Buttons at the bottom include 'Save', 'Cancel', and 'Back'.

Once a new test name has been created, AutoTest Administrator interface/wizard walks users through the process of building the test, which includes assigning Knowledge Domains (see *Figure 2-11*).

Figure 2-11: Administrator – Build Test screen

Build Test: Doubles/Triples		
Number of Questions: 40		
Domain	Add	Percent
Accidents (4)	<input type="text" value="1"/>	2.5
Alcohol (7)	<input type="text" value="2"/>	5.0
Doubles/Triples - Domain 1 (32)	<input type="text" value="15"/>	40.0
Doubles/Triples - Domain 2 (23)	<input type="text" value="12"/>	30.0
Freeway/Highway Driving (6)	<input type="text" value="1"/>	2.5
General Driving Behaviors (54)	<input type="text" value="1"/>	2.5
Laws & Rules (39)	<input type="text" value="2"/>	5.0
Passing (2)	<input type="text" value="1"/>	2.5
Railroad (2)	<input type="text" value="1"/>	2.5
Right of Way (7)	<input type="text" value="1"/>	2.5
Seat Belts (6)	<input type="text" value="1"/>	2.5
Signs With Graphics (13)	<input type="text" value="1"/>	2.5
Permanently Assigned Questions	<input type="text" value="0"/>	0.0
Total	40	100.0

The number in parentheses indicates how many questions are available in that knowledge domain.

Item Administration

AutoTest Administrator provides complete tools to manage the question and answer itembank.

- a. Add item – When an item is added to the system, the *AutoTest System* will automatically assign a unique item number to the question, though users can manually specify a second item number. The Question text is entered and question parameters are assigned including: type of question (T/F, multiple choice), number of possible answers, Knowledge Domain(s), difficulty level (optional), source in manual (optional), and associated media files including audio. The item can be added as active, or the administrator can select an active date for the question. The administrator can also select an inactive date, if s/he wishes the question to expire at a certain date/time (see).

Figure 2-12: Add Question Screen

AUTOTEST ADMIN
Automated Driver Knowledge Testing

[Manage Users](#) | [Manage Tests](#) | [Manage Service Centers](#) | [Reports & Data](#) | [Help](#) | [Logout](#)

Question Details

Question Text	<input type="text" value="Who is responsible for safely transporting a hazardous material shipment without delay and keeping the shipping papers in the right place?"/>
Type of Question	<input type="text" value="Multiple Choice"/>
Number of Answers	<input type="text" value="3"/>
Knowledge Domain	<input type="text" value="HZMAT - Domain 4"/>
Difficulty Level	<input type="text" value="2"/>
Item Number	<input type="text"/>
Source in Manual	<input type="text"/>
Activate Question Immediately	<input checked="" type="checkbox"/>
Never Expires	<input checked="" type="checkbox"/>

Activate Question Immediately	<input type="checkbox"/>
Never Expires	<input type="checkbox"/>
Active Date	<input type="text" value=""/> / <input type="text" value=""/> / <input type="text" value=""/>
Inactive Date	<input type="text" value=""/> / <input type="text" value=""/> / <input type="text" value=""/>

After the Question, Question Parameters, and Question Media have been entered, a screen prompts users to enter the correct answer and distracters along with the corresponding answer media references (See Figure 2-13 below).

Figure 2-13: Admin Console – Answers Screen

Answers

Question: Who is responsible for safely transporting a hazardous material shipment without delay and keeping the shipping papers in the right place?

Correct Answer

A the driver

B the shipper

C the carrier

Always present the answers in a random order

- b. Edit item – Users can modify any existing question (see Figure 2-14), including question/answer text and graphics, as well as all parameters and associations. Administrative personnel can search for items by ID number, Knowledge Domain, associated media type, language or by active/inactive status. When edits are made, the original item, as well as all revisions are maintained in the database. All revisions are maintained in the audit log and are keyed to an operator ID.

Figure 2-14: Edit Question Screen

Question 1026

Who is responsible for safely transporting a hazardous material shipped without delay and keeping the shipping papers in the right place?

1 The driver

2 The shipper

3 The carrier

Knowledge Domain

HZMAT - Domain 4

Question 1026 Properties

Image

Audio

Video

Report Image

Answer Audio Files

Answer

Answer

Answer

Active

Active Date

Inactive Date

Difficulty Level

Item Number

Source in Manual

Related Questions

Other Languages	Missing Language
	ARB
	CHN
	ESP
	FAR
	FRN
	GER
	GRI
	JPN
	KOR
	RUS
	THA
	VIN
	ZZZ

- c. Delete item – This function deletes a question, including all language versions, from the system. If the item has been used on previous tests for which test results are still in the system, the question cannot be deleted from the system, however, it can be made inactive and removed from a test.
- d. Edit domains – Users may add or delete Knowledge Domains (categories) to which individual test questions may be assigned.
- e. Add languages – New language options may be added through the Administrator Console. As language options are added, administrators have the ability to select all active questions and add the appropriate language translation for each, as well as associate any required voice or other media files. If a revision is made to an English language question, the system will prompt the user if other language translations of that question exist. This helps to prevent the

user from revising English language questions, which are not also applied to all other language versions.

- | | |
|----|--|
| 6. | Interfaces with the DMV's driver license system, Destiny, to store test results in the associated customer record. |
|----|--|

L-1/Viisge complies with this mandatory requirement

L-1/Viisage's *AutoTest* is fully capable of real time, bidirectional communication with external systems such as your driver record system.

L-1/Viisage, through its Drivers License Issuance and *AutoTest* business, has developed an extensive expertise in interfacing with disparate systems as every contract implemented by the company requires interfacing to the computer systems of the contracting State agency no two of which are alike. This includes several systems that communicate in real time with the mainframe for retrieving and updating driver records and other data.

The following table lists some of the states for which L-1/Viisage has designed interface to the mainframe computer.

Table 2-A: L-1/Viisage Experience in Interfacing to Mainframe Computer

State	Types of Data Transmitted to with Mainframe	Interface Details
Mississippi DPS	Vista 3270 IBM 3270 terminal emulator; Screen Scrape	Receive customer data from Mainframe for subsequent image capture and credential issuance
Mississippi DPS (Central Printing)	FTP	Receive print request & customer data from Mainframe for subsequent centralized credential production
Pennsylvania (Central Printing)	FTP	Receive print request & customer data from Mainframe for subsequent centralized credential production
Pennsylvania (Dup WKS)	MQ series 5.2	Receive print request & customer data from Mainframe for subsequent duplicate credential issuance
Connecticut	MQ series 5.1	Receive customer data from Mainframe for subsequent image capture and credential issuance
Kentucky	MQ series 5.1	Process Requests from Mainframe for the retrieval of images from the L-1/Viisage CIS Database
North Carolina	Mainframe printer emulation; Unix printer services for Windows	Receive customer data from Mainframe for subsequent image capture and credential issuance
North Carolina	MQ Series	Process Requests from Mainframe for the retrieval of Images from the L-1/Viisage CIS Database
Wisconsin	Mainframe printer emulation; Unix printer services for Windows	Receive customer data from Mainframe for subsequent image capture and credential issuance
Kentucky	Mainframe printer emulation; Attachmate	Receive customer data from Mainframe for subsequent image capture and credential issuance
Oklahoma	Mainframe printer emulation; Attachmate	Receive customer data from Mainframe for subsequent image capture and credential issuance
Rhode Island	Mainframe printer emulation; NI Print	Receive customer data from Mainframe for subsequent image capture and credential issuance

The table clearly shows L-1/Viisage's experience in implementing different types of interfaces using a variety of techniques.

In summary, L-1/Viisage has experience interfacing with the mainframe through the following methods:

- 3270 terminal emulation through programs such as Attachmate
- Screen scraping
- Passing XML documents using messaging middleware such as webMethods, Websphere MQ or MSMQ.
- File sharing through mapped drives
- FTP and Secure FTP
- XML/Web services
- Print stream
- netPrint

In general, L-1/Viisage's state agency customers have different methods of providing requests and demographic information to L-1/Viisage workstations and application servers. L-1/Viisage has capability, experience and flexibility to receive and process data from State/Provincial agency mainframes.

Several critical factors play into choosing an appropriate method of interacting with the mainframe. In addition to the cost and time to implement, these factors include:

- network configuration and bandwidth availability
- existing communication interface protocols, tools and platforms, if any
- security requirements
- available skills and resources

While there are several techniques for interfacing with the driver records system, the final interface cannot be determined without detailed discussions and input from DC-DMV. As shown in the above table, L-1/Viisage can work with DC-DMV on any of the many protocols that DC-DMV particularly prefers, and this can be negotiated during design discussions. L-1/Viisage understands that DC-DMV has specified SeeBeyond's eGate ICAN Suite for Enterprise Application Integration. The eGate ICAN suite includes tools for application integration through both messaging and web services, which is exactly the type of interface that L-1/Viisage believes is most suitable for DC-DMV. Based on discussions with DC-DMV, L-1/Viisage would finalize the integration approach and implement it.

7. Meets all language requirements standard to the District of Columbia including: English, Spanish, Korean, Vietnamese, Amharic, Chinese and French both for the non-commercial driver licenses (NCDL) test questions and for the motorcycle test questions. The attached appendix includes a list of the current questions for the NCDL and motorcycle tests. The vendor is responsible not only for obtaining translations of the current test questions but also translation in all languages for up to ten changes or new questions per year for the duration of the contract.

L-1/Viisage complies with this mandatory requirement

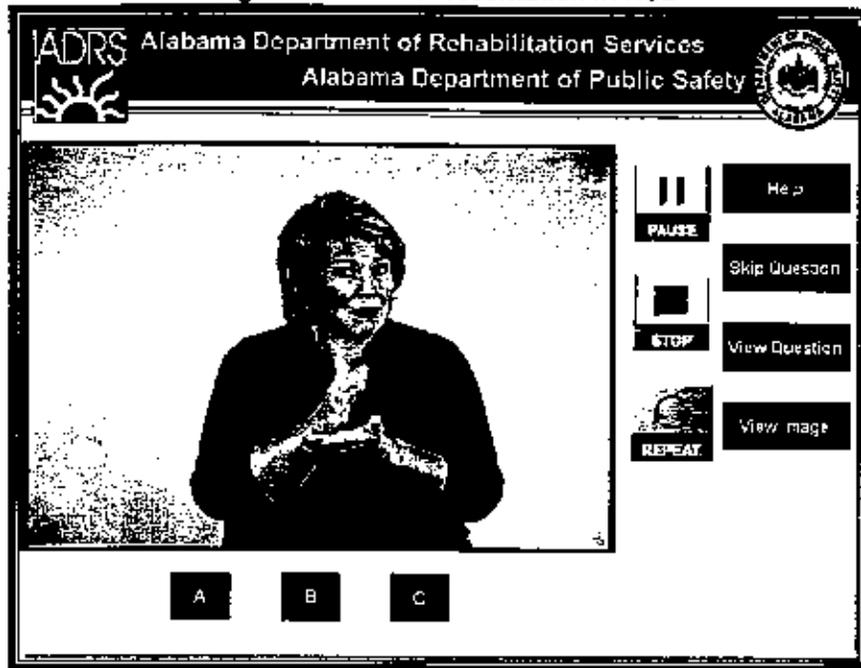
The *AutoTest System* is capable of test presentation in any language. All applications are Unicode compliant, which enables the display of any character set, including those utilizing non-Roman fonts. The Administrator console features a complete set of utilities for the addition of new language options, or DCDMV may elect to have L-1/Viisage add the new translation content.

The *AutoTest System* will be delivered to the DCDMV with the latest version of the FMSCA/AAMVA CDL question pool of over 600 questions in American English with audio and associated graphics such as traffic signs, symbols, photographs, etc., installed and ready to deploy. A Spanish version of the CDL question pool will be delivered with the system as well.

Non-CDL and Motorcycle tests will be delivered in all languages specified by the DMV. Our price quote includes the translation of non-CDL test questions into the languages specified in this requirement however the Motorcycle test questions will need to be quoted separately, when the number of Motorcycle questions is revealed to L-1/Viisage. Our quote also includes translation into all required languages for the first 10 changes each year. Additionally, if DMV desires additional changes or language options in the future, translation services may be provided by L-1/Viisage or contracted for separately by DMV. L-1/Viisage quotes translation services on a per word basis for the required content. Per word charges for language translation and voiceover narration are provided in the Cost Proposal.

Optionally, the *AutoTest System* also has the ability to deliver test content in American Sign Language and is the only system currently providing this capability to U.S. driver service agencies. Utilizing the system's multimedia capabilities, *AutoTest* presents a sign language interpreter in a video window signing all questions and answer choices (see *Figure 2-15*). This unique feature allows hearing-impaired applicants to test in the standard testing environment, without any other special accommodations.

Figure 2-15: Test Presentation in ASL



Typically, the digital video content required for ASL testing is stored on the local hard drive of one or more testing machines in the local office environment. This allows faster playback of the video files, while eliminating the drain on network bandwidth produced by streaming the larger digital video files over the Wide Area Network.

8. Provides the standard eight tests for commercial driver licenses (CDL) in two languages: English and Spanish. The CDL questions shall be obtained by the vendor based on Federal requirements. If federal guidelines and questions change, the vendor is responsible for upgrading the CDL test within the federally required time period, including having the test available in Spanish as well as English.

L-1/Viisage complies with this mandatory requirement

The *AutoTest System* will be delivered to the DCDMV with the latest version of the FMSCA/AAMVA CDL question pool of over 600 questions in American English with audio and associated graphics such as traffic signs, symbols, photographs, etc., installed and ready to deploy. A Spanish version of the CDL question pool will be delivered with the system as well.

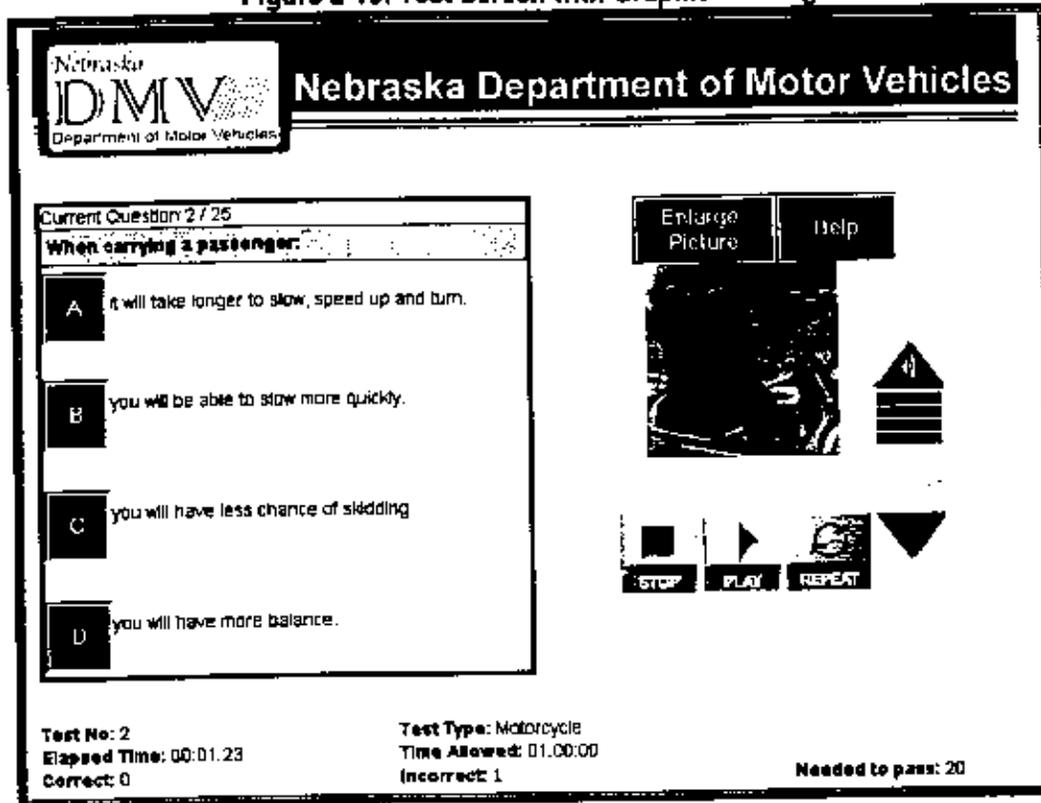
9. Every question in the NCDL, CDL, and motorcycle test shall be accompanied by a picture/photo or graphic. The images shall be high quality. The system shall provide the capability for the DMV to change images if desired as well as modifying or adding questions with images.

L-1/Viisage complies with this mandatory requirement

The *AutoTest System* is designed so that each question may reference corresponding media, including color graphics, photographs, motion-video and animation (Please See Figure 2-16 below.). All pre-loaded media is high quality and designed to depict the context of the appropriate question and situation. Viisage will provide experienced media specialists to

work with DMV to select new images for additional questions and tests. Viisage understands that DMV has the right of refusal of any image used in the system at its sole discretion. Corresponding still graphics are saved in a .jpg, .gif or .bmp format, and are typically 50 x 50 pixels and 15kb – 25kb.

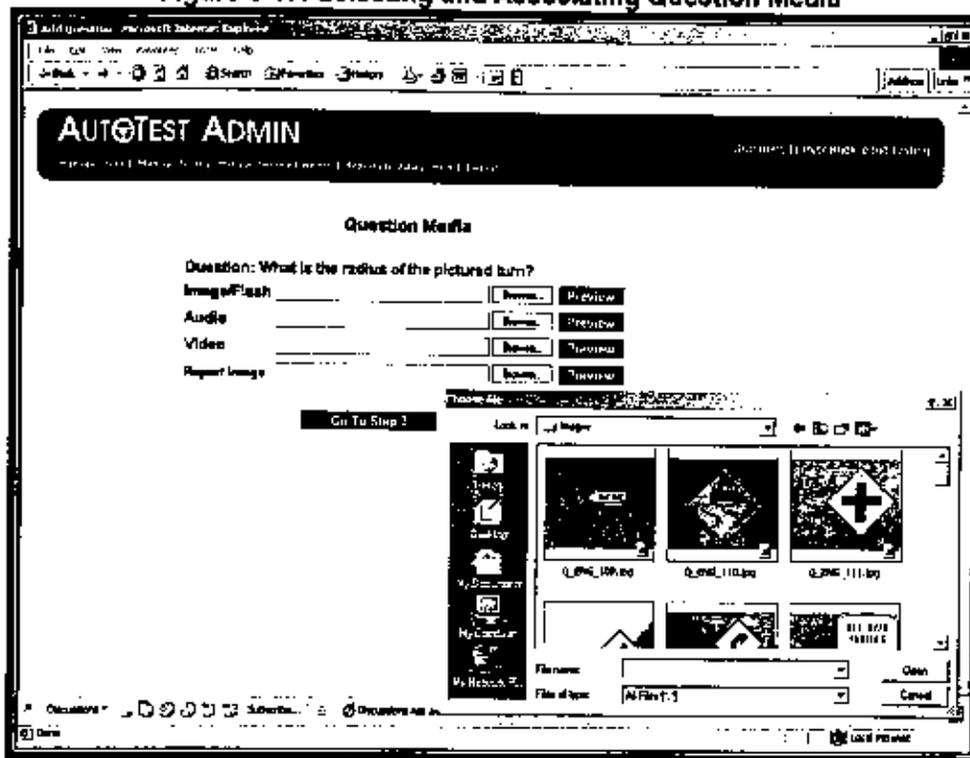
Figure 2-16: Test Screen with Graphic Viewing



New photographs or other media may be added to the *AutoTest System* using simple tools available through the Administrator Console. The new graphic or other media files are first saved to a folder on the Administrative Server in either “.jpg”, “.gif”, or “.bmp” format.

The system administrator may then use the Administrator Console application described above in the System Functionality Requirements to browse to that folder and associate, or change the appropriate graphic with any question. Please See Figure 3-17 below.

Figure 3-17: Selecting and Associating Question Media



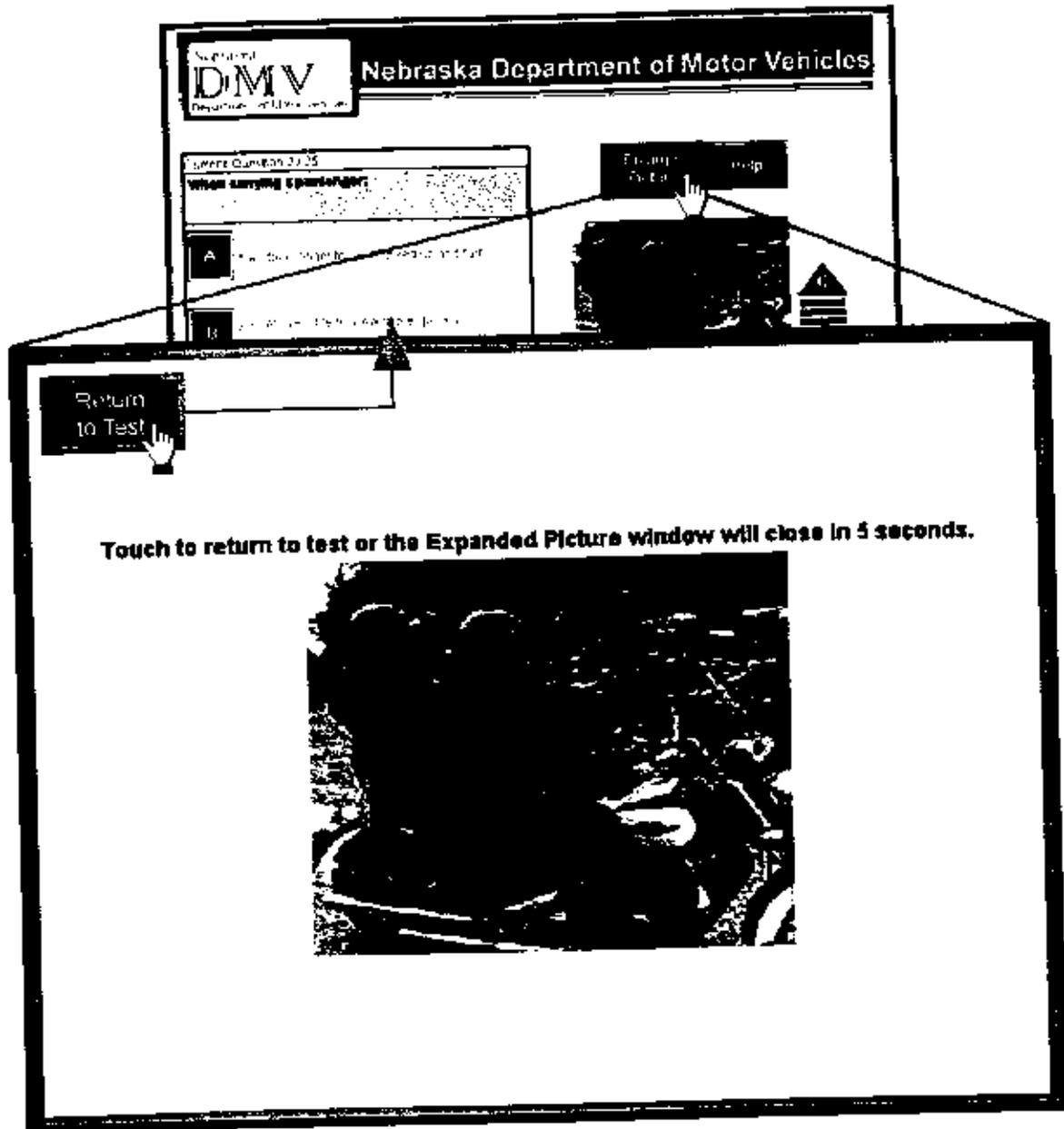
The *AutoTest Administrator* application will automatically copy the selected file to the appropriate location on the Administrator Console. It renames the graphic with the appropriate identifier and updates the database with the reference so that it will be linked to the correct question.

If desired, one graphic may be linked to more than one question in the database by repeating this process with each applicable question.

10. Provide the capability for customers to zoom in on the image if they want to see it in a larger format.

L-1/Visage complies with this mandatory requirement

The Test Station application allows the applicant to enlarge the graphic image or digital video by touching an on-screen control. The image is enlarged to full screen and may be returned by either touching the screen or timer function. For example, after five seconds the screen will automatically return to the normal size.

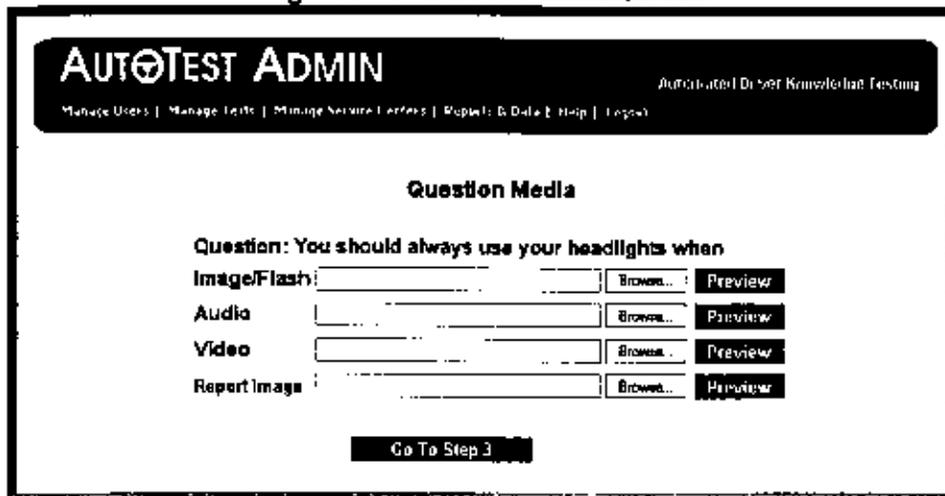


11. Provide a customer controllable audio capability for presentation of the test questions for persons who have challenging reading skills.

L-1/Visage complies with this mandatory requirement

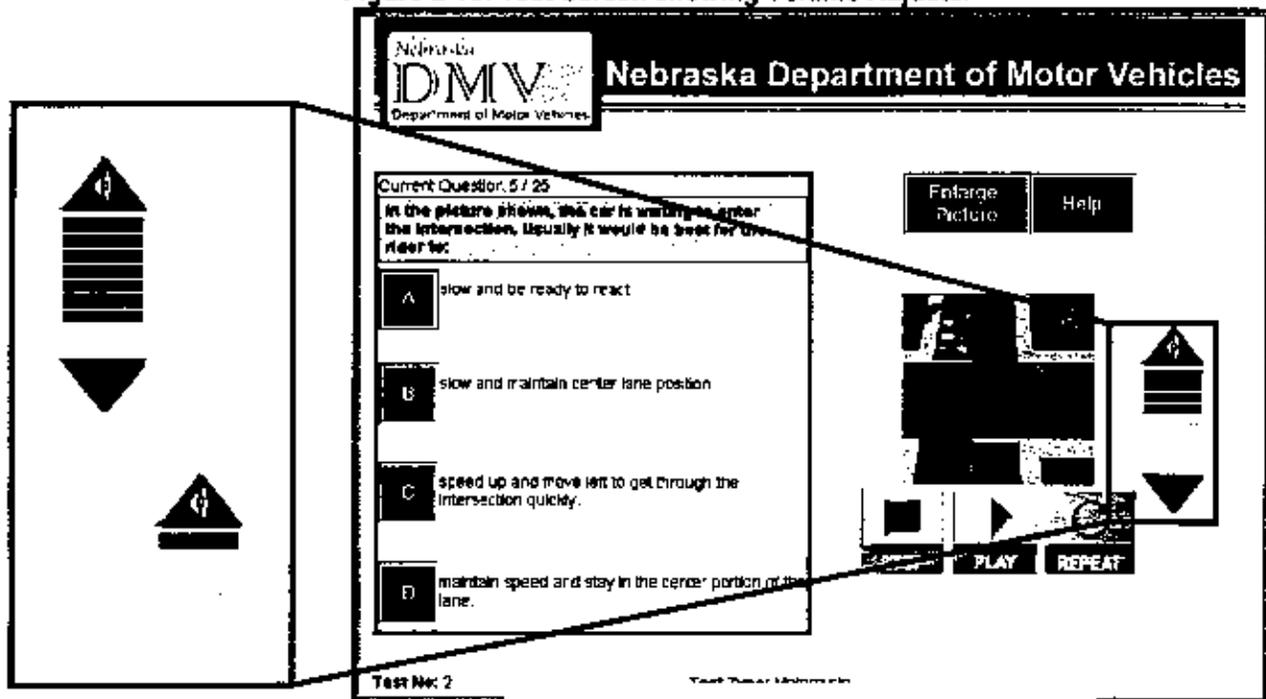
Applicants have the option of having the test presented orally, in all languages in which an on-screen test is available. Each test question and answer will have a corresponding audio file that can be accessed by the examinee via handset or headphones provided at the test station. L-1/Visage will deliver *AutoTest System* to DMV with required audio already input in the system. Audio files can be created or modified via the *AutoTest Administrator*.

Figure 2-18: Question Media Screen



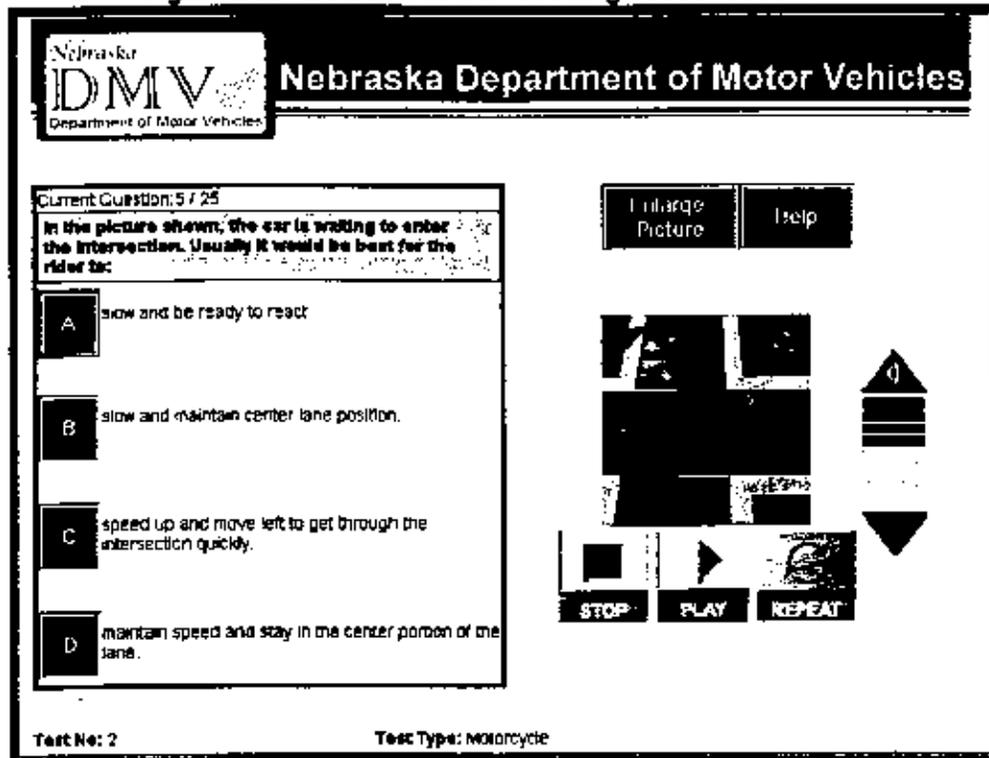
The audio level of each Test Station can be adjusted by using an on-screen volume adjuster. The volume level can be adjusted up or down at the discretion of the applicant at any time during the testing process by simply touching the appropriate location on the screen. Upon completion of the test, the Test Station audio will be automatically reset to a median audio level in preparation for the next applicant. This ensures that the audio level set by one applicant will not be uncomfortable for subsequent applicants.

Figure 2-19: Test Screen showing Volume Adjuster



The applicant will also have the ability to repeat question and answer choices by touching the "Repeat" button on the screen. The applicant may also Stop or Resume (Play) audio. Please see *Figure 2-20*.

Figure 2-20: Question Screen showing control buttons



12. Provide the test questions in the largest font possible given the screen limitations and space needed for images, instructions, and selection 'buttons'.

L-1/Visage complies with this mandatory requirement

We will work with the DMV to configure the interface and questions for maximum readability. Font size and type may be determined and approved by the District DMV. Some foreign language translations (if desired) such as German, Thai, and others, typically involve a significantly higher number of characters for each question/answer field. These languages may require a smaller font size in order to fit on the screen.

The system will accommodate font sizes from 1 point to 1638 points. These are configurable and can be modified just like any web page. The system will support any font style that is supported by a Windows environment, including Embedded OpenType (TrueType or OpenType) and TrueDoc (TrueType or Postscript Type 1). Fonts that reference Unicode are supported to display languages that utilize non-Roman characters.

Questions and Answers

For questions and answers, by default, the system uses Arial, Helvetica, and Sans-serif for languages other than Thai and Vietnamese, which use Angsana New and Vni-Helvetica.

respectively. The system currently allows font sizes from 9 to 32 pixels, however, point sizes over 24 pixels are recommended only for the Angsana New because it is a very small font face. Any of these parameters can be adjusted as needed within the limits stated above (1 to 1638 points for any font supported by a windows environment).

System Text

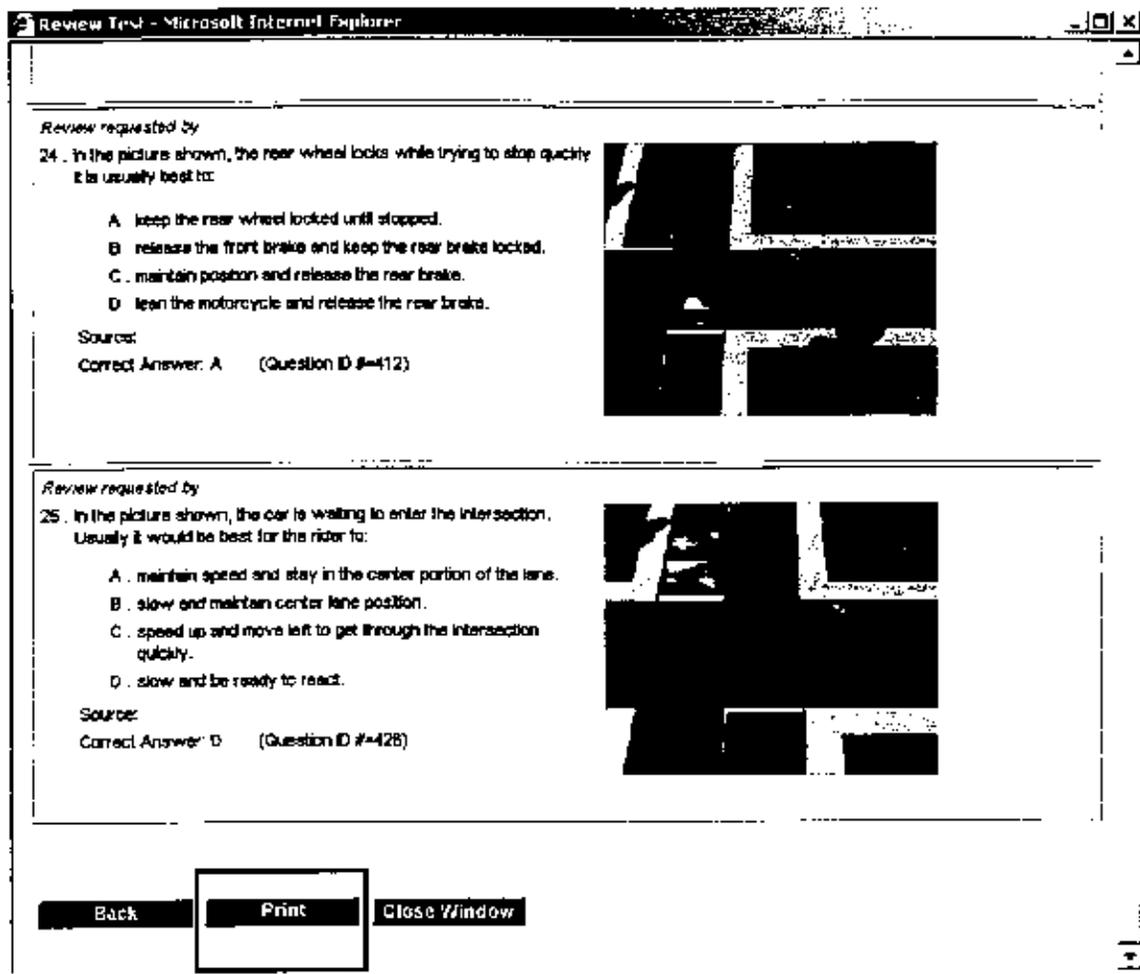
System text is generally displayed in the Arial font, sizes 9 to 14 pixels. If the State prefers different font faces and/or sizes, the system can be adjusted as needed within the overall limits stated above (1 to 1638 points for any font supported by a windows environment).

13. Provide capability for DMV staff to print test results.

L-1/Visage complies with this mandatory requirement

Test results may be viewed and printed by authorized DMV personnel. Examiners may choose to view/print summary statistics on an individual test, or may choose to review the entire test, including the questions on the test (in the exact order and representation as seen by the applicant), the answer chosen by the customer, the correct answer, a page reference/source reference for the section of the driver's manual that each question was drawn from, and the ID number of each question.

Any test completed in a language other than English includes an English version for the convenience of the examiner.



14. Provide various levels of security ranging from logon IDs and passwords to override capabilities for managers and administrators.

L-1/Visage complies with this mandatory requirement

Authorized DMV personnel log in to the *AutoTest* Examiner Console and Administrator Console with a username and password. The system has customizable security levels that can be assigned to all functions of the Examiner and Administrator interfaces. Passwords and user IDs can be assigned to examiners, supervisors, maintenance personnel, and others as configured – each category with different groups of accessible functions. Only those functions for which a user is authorized will be visible on the menu bar when the individual logs in. For example, the supervisor may have access to all functions including report generation, while an examiner may have access only to the functions required for normal testing. The AutoTest system includes full audit capabilities for all users and activities performed within the system.

L-1/Visage will work with DMV to define and implement the appropriate levels of security during the design phase. Currently, the default security levels are as follows:

Administrator Console Access Levels

Administrator – Has access to all features and functions of the Administrator Console (includes password administration, managing service centers, report generation, and test creation and modification).

Editor – Only has clearance to create and modify tests via the Administrator Console.

Examiner Console Access Levels

Supervisor – Has total access to the Examiner Console (includes examiner and password administration, adding applicants and assigning tests, and reviewing tests and accessing test histories). Has no access to the Administrator Console.

Examiner – Same as Supervisor but does not have the ability to add and delete examiners to/from the system or administer passwords other than their own.

Administrative functions such as username and password maintenance can be easily done from a simple menu-driven interface in the Administrator or Examiner Console (see following figure). Each individual user will have the ability to change his or her password, but not someone else's. Only users with the appropriate security authorization (administrator level) can change other employee's passwords, if needed. These users will also have the ability to add, modify, or delete users from the *AutoTest System*.

Figure 2-21: Change Examiner Password

The screenshot shows a web interface for 'AUTOTEST EXAMINER' with the subtitle 'Automated Driver Knowledge Testing'. The main heading is 'Change Your Password'. The form contains the following fields and controls:

- User Name: johnson
- Old Password: [text input] (max 25 chars)
- New Password: [text input] (max 25 chars)
- Confirm New Password: [text input] (max 25 chars)
- * required field
- Buttons: Submit, Clear Form, Cancel

- | |
|---|
| 15. Provide the capability to store customer's answers on each question and whether it was correct or not (although only pass/fail information will be sent to the Destiny system along with the customer information). |
|---|

L-1/Viisage complies with this mandatory requirement

The AutoTest system stores detailed information on each test attempted/completed in the AutoTest database, including the answer selected by the customer for each question and whether it was correct. Attempted/completed test information for any individual customer is always accessible to authorized DMV personnel. L-1/Viisage will work with the DC DMV to configure the central server with enough storage to maintain all test data for the desired, or regulated, length of time. The system can be configured to automatically purge test data at the time the required storage elapses.

- | |
|---|
| 16. Provide the capability to terminate the test automatically once the person answers a question incorrectly that puts them at the failure level for the test. |
|---|

L-1/Viisage complies with this mandatory requirement

The *AutoTest System* provides for "quick pass/fail" termination of tests which may be turned on or off at MVC's discretion. If the quick pass/fail option has been set to "Disabled" then the applicant will be required to complete the entire test, regardless of whether they have reached a pass/fail threshold.

As each test category (i.e. CDL General Knowledge, hazmat endorsement, etc.) is created at the Administrator Console, the author of the test may set quick pass/fail status as a global parameter for all tests of that type delivered through the system (see Figure 2-22 below).

Figure 2-22: Administrator Console – Setting Quick Pass/Fail as a Global Test Parameter

The screenshot shows a web browser window titled "AUTOTEST ADMIN" with the subtitle "Automated Driver Knowledge Testing". The main heading is "Edit Test". The form contains the following fields:

- Test Name: CDL Tanker
- Test Category: CDL
- Number of Questions: 20
- Test Cycle: 10 days (0 = no restrictions)
- Time Limit: 60 minutes
- Quick Pass/Fail Option: Enabled (highlighted with a red box)
- Passing Type: Disabled
- Passing Level: 80
- Feedback Type: None
- Review Type: None
- Display Status: Yes
- Choose Languages: Arabic, Chinese, Farsi, French, German (1 Available); English, Spanish (2 Selected)

Buttons at the bottom include "Submit", "Reset", "Cancel", and "Full Test Domain".

From the Examiner Console, the examiner may choose to accept or over-ride the global quick pass/fail setting for each individual test. This choice is made as the examiner enters the applicant into the testing queue and selects the type of test to be taken.

If the quick pass/fail option is enabled, the applicant's test will be interrupted when the pass/fail threshold for the test type has been reached. The Test Station will display the results of the test and give the applicant instructions on what to do next. These instructions are configurable through the Examiner Console. If the Review option has been enabled by the examiner, the applicant may choose to review the test questions he/she answered incorrectly by touching the "Review" button.

3. The examiner inserts the answer sheet into a scanner (optional), which automatically grades the test and sends the appropriate applicant and test result data to the Examiner Console. This option would require purchasing a scanner and bubble-sheets.

18. If the customer has selected one of the foreign languages available for any test, provide a 'button' to show a question in English. When the customer moves to the next question, it would again be shown in the selected language. Any time it is desired that the question be shown in English, the 'Show in English' button must be selected.

L-1/Visage complies with this mandatory requirement

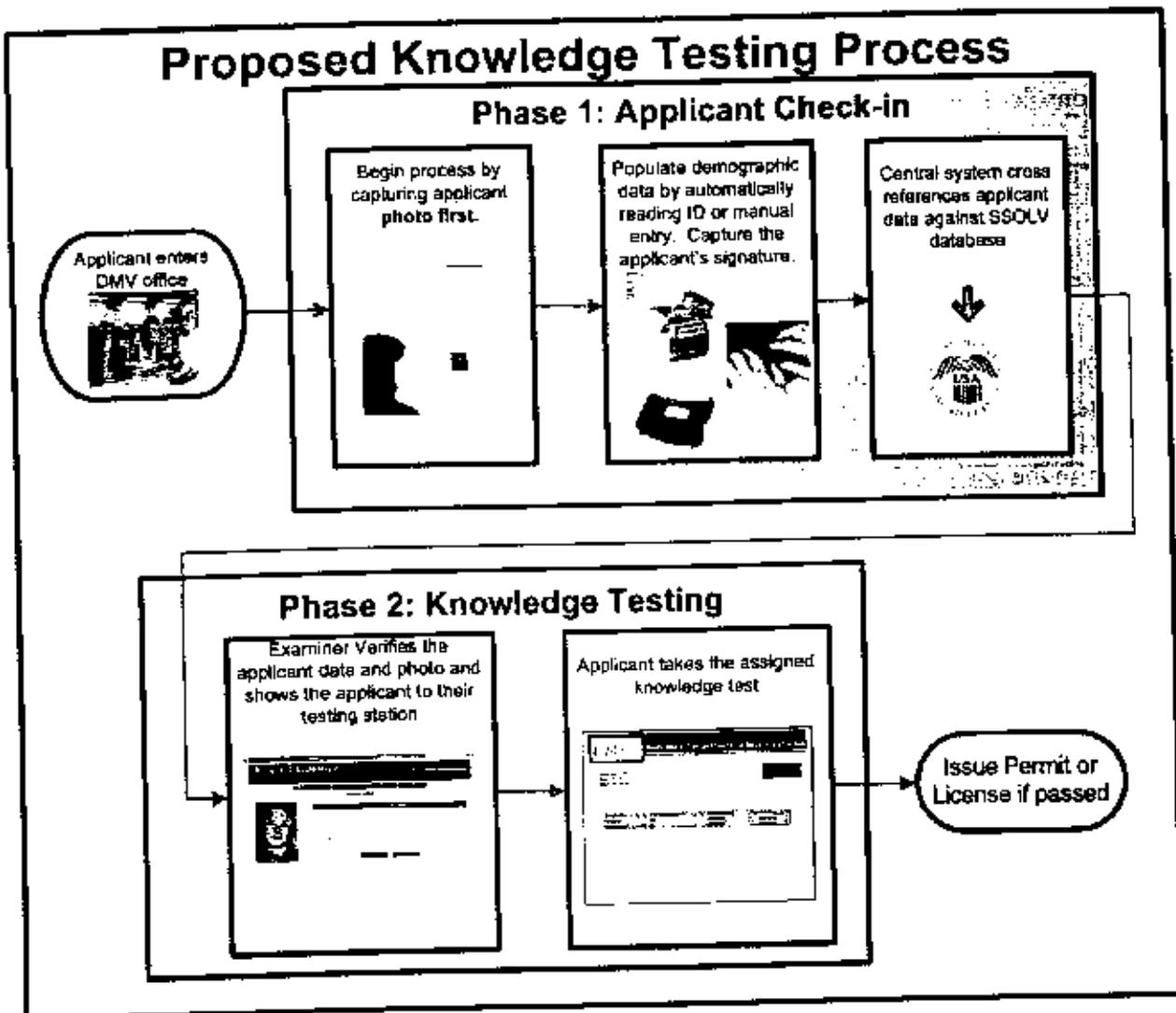
When a test is taken in a language other than English, the AutoTest System provides a toggle button for the user to switch back and forth from the language of their choice, to English and back. This feature also helps an English only speaking examiner to assist with any inquiries from the applicant.

If requested by the user, a review of any test that was taken may be reviewed at the examiner station. For tests that were taken in a language other than English, the review of the exam is also available in the language chosen by the applicant, as well as English.

19. Interface with Destiny for validation of the SSN, date of birth and photo image to ensure the correct person is taking the test. When assigning the person to a test machine, provide the person's image on the administrator's workstation as an additional security feature. It should be noted that the process shall involve taking the customer's photo as the first step in the process. At that time, the SSN check is accomplished through Destiny as well as verification that the person does not have an existing license in the District of Columbia. As the person moves to the testing system, the SSN, date of birth, name, and photo would be passed to the testing system for viewing by the test examiner. Once the examiner is satisfied that the photo and identification provided by the person matches the information obtain from Destiny, the administrator would assign the person to a console to take the test in question.

L-1/Visage complies with this mandatory requirement

The AutoTest Automated Knowledge Testing System, with its' open end design and modular approach, can be integrated and employed in any area associated with the lifecycle of an applicant's visit to the DC DMV. As shown in the figure below, the applicant process will include moving the current process to "photo up front", meaning that the capture of the applicants' image will be moved to the beginning of the process. Once captured, the image, and any other applicable biographical data can be transferred into Destiny, where the SSN verification and other potential verification processes will take place. Once verified, the image and data can be transmitted back into the AutoTest system and displayed for verification purposes at any point in the testing procedures. This would include at the Examiner Station where the applicant is assigned to a Test Station by an authorized AutoTest Administrator, and/or to the test station itself as part of the Applicant Verification screen.



20. Allow customers to take the test only once per day but provide an override capability for special circumstances.

L-1/Viisage complies with this mandatory requirement

Prior to delivery of the AutoTest System, L-1/Viisage will meet with the District DMV and go over the system parameters as desired. Figure 2-23 below shows a list of the parameters set in the AutoTest System.

One such parameter is the "Test Cycle". By including a Test Cycle in the system parameters, the DMV may choose to have an applicant wait a certain number of days after a failed test before they are permitted to take the exam over. If an applicant attempts to take another test **at the same or different location**, the system will alert the Examiner that a test has already been taken within the allotted time frame. At that point, the Examiner may choose to inform the applicant that they must wait the proper amount of time, or assign the test, overriding the warning generated by the AutoTest System.

If desired, the Test Cycle can be set to a different length for each test type (CDL, Motorcycle...etc.) offered by the system.

Figure 2-23 - System Parameters

Edit System Parameters

Time to Store Test Information (minimum)	<input type="text" value="100"/>	Days
Time to Store Applicant Information (minimum)	<input type="text" value="55"/>	Days
Test Summary Sync Time	<input type="text" value="0"/>	Minutes
Question Timeout	<input type="text" value="600"/>	Seconds
Test Timeout	<input type="text" value="600"/>	Seconds
Audio Path	<input type="text" value="C:\Media\audio\"/>	
Images Path	<input type="text" value="../at_teststation3/content/Media/images/"/>	
Video Path	<input type="text" value="C:\Media\video\"/>	
Quick Pass/Fail	<input checked="" type="checkbox"/>	
Time Allowed	<input type="text" value="60"/>	Minutes
Passing Type	<input type="text" value="Percent"/>	
Passing Level	<input type="text" value="80"/>	
Feedback Type	<input type="text" value="None"/>	
Review Type	<input type="text" value="None"/>	
Repeats Allowed	<input type="text" value="2"/>	
Test Cycle	<input type="text" value="7"/>	Days

21. Although tests may be taken at four different service centers, provide a central repository for all test results and a single interface with Destiny for transferring the test results to Destiny.

L-1/Visage complies with this mandatory requirement

As discussed in the Executive Overview above, the AutoTest System is comprised of three "Consoles" each designed for different levels of access and control. The Administrator Console serves as the central repository for all activity that has occurred within the system itself. Each night, or on demand if desired, all information relating to activity that took place at each DMV Location (Examiner Station) and each Test Station is either "pushed" or "pulled" into the Administrator Console. The Administrator Console provides one location for data storage, reporting and/or transferring data into the DMV's backend system, in this case, Destiny. L-1/Visage will work with the District DMV to ensure the proper data flow processes are in place prior to delivery of the AutoTest System.

22. Provide the capability to terminate the test automatically once the person exceeds the time set by DMV to complete a test (i.e. 30 minutes for NCDL and 60 minutes for CDL tests). Warning message should be displayed 5 minutes prior to terminating the test. If test is terminated before completion, the test results should be displayed as failed.

L-1/Visage complies with this mandatory requirement

The AutoTest system allows Administrators to apply a time limit to applicants taking the test. This time limit can be easily set and changed to the DC DMV's desired testing time. There are several display options available on the system with regard to time remaining for the test, including a warning at the desired interval. L-1/Visage will work with the DC DMV to setup this function as desired.

23. Applicants shall be limited to three knowledge test examinations within a twelve month period. If the applicant fails the third examination, no further knowledge test examination shall be given until a period of twelve months has elapsed from the date of the first knowledge test examination failed.

L-1/Visage complies with this mandatory requirement

As shown above, the Examiner Console advises a test administrator as to the number of tests an individual applicant has taken over what period of time. This warning to the test proctor does allow for an override, if desired, or can be configured to simply forbid the applicant from being assigned a re-test. L-1/Visage will work with the DC DMV to configure this and all requested functionality to deliver the system that best fits the business rules of the DC DMV. Most, if not all, of the items discussed above are configurations readily available within the system itself, and do not require code changes.

Functional Specification Summary

As you can see, the AutoTest Automated Knowledge Testing System easily meets or exceeds all Functional Specification Requirements as described above. Having been deployed in more than 12 Jurisdictions, the AutoTest System has been developed over time using the experience and requirements of our clients.

L-1/Visage's success is based on the success of its clients. As needs change and grow, AutoTest maintains the flexibility to change and grow along with them. We look forward to bringing the value of our experience to the DC DMV.

The following technical and operational capabilities are optional requirements:

- A. Provide an optional quote for the ability to interface with the existing customer queuing system is desired for efficient processing of large number of applicants for the knowledge test. If the proposed system already includes this capability in the bid price, please note it in the bid response.
- B. Provide an optional quote for voice recognition capability for persons to verbally take the exam. If this is already a component of the system being bid, please note it in the bid response.

L-1/Viisage complies with these optional requirements.

- A. L-1/Viisage's *AutoTest* is fully capable of real time, bidirectional communication with external systems, including queuing systems.

L-1/Viisage, through its Drivers License Issuance and *AutoTest* business, has developed an extensive expertise in interfacing with disparate systems as every contract implemented by the company requires interfacing to the computer systems of the contracting State agency no two of which are alike.

L-1/Viisage is currently working with the DC DMV named queuing vendor on interfacing for another jurisdiction. However, while L-1/Viisage is confident in the ability to integrate *AutoTest* with the current DC DMV queuing system, greater detail in the design and technical specifications of the current queuing system configuration is required in order to provide an accurate price quote for accomplishing this integration. L-1/Viisage will be happy to provide the DC DMV with firm pricing within 5 days of a required technical specification meeting with the DC DMV, and preferably its' current queuing vendor. L-1/Viisage has provided an hourly rate for system development in its' pricing proposal included in a separately sealed envelope.

- B. Viisage's *AutoTest* system already has functionality that enables the use of audio files for each question and all answers. Simply by setting a flag, each question can be read to the applicant, followed by each answer, including the letter associated with that answer ("a", "b", etc.).

Although the system currently does not accept voice commands from the applicant, an interface can be created that would enable the applicant to speak a letter (to answer the question) or certain words (such as "Repeat" to hear the question and answers again). Currently, the applicant would have to use the touch screen interface to touch the letter ("a", "b", etc.) associated with each answer. We have provided the quote in our pricing details worksheet.

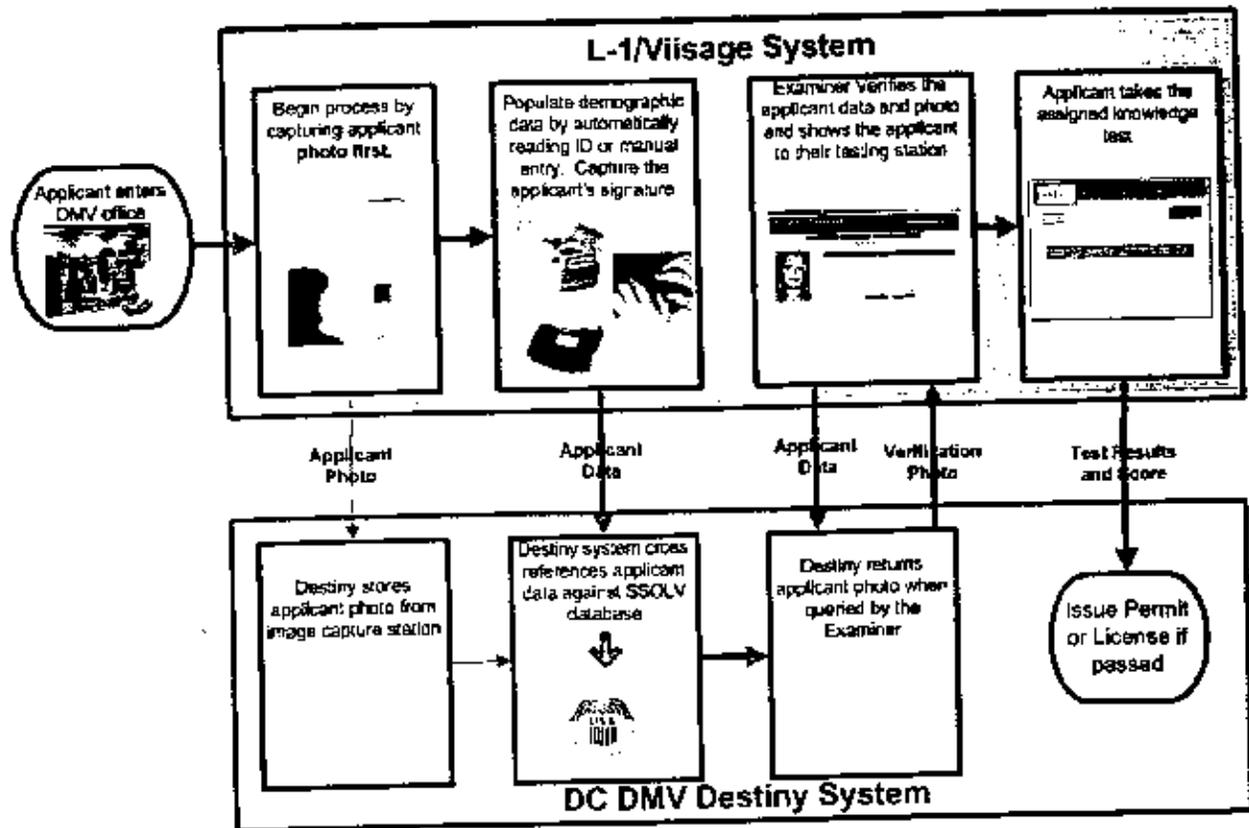
Business Process Requirements and Interfaces

The District of Columbia requires a system that allows the photo to be captured as the first step in the process. Eventually this will also be the first step in the licensing process as well as the knowledge test process. In response to this statement of work the bidder shall include a workflow and description of how they propose to implement a 'photo first' capability given that the District currently has an in-house driver licensing and ID system that obtains photo images through a separate license card generation system. The in-house system, Destiny, and the license card generation system share an image server. The photo, however, is currently taken at the end of the licensing process. This process is open to fraud and difficult to control as there is no photo during the knowledge testing or licensing process against which to verify that the person at the counter is the same person who initially requested the service.

If the photo is taken as the first step in the process, it is assumed that the basic information (SSN, date of birth and full name) will be entered into Destiny as it already contains a SSN verification process. When the person arrives in the knowledge testing area, it is envisioned that the examiner would enter the information provided by the person (i.e. SSN, date of birth and full name), and access Destiny to verify the information and the license card generation system (or image server) to obtain the photo. If the person passes the test, information would then be passed back to Destiny indicating the successful completion of the knowledge test. The person can then obtain through Destiny either their learner's permit or driver license, whichever is appropriate. This is, however, only a brief overview of the process. In the bidder's response, DMV is requesting a more detailed description of the process including workflow, interface requirements, and an estimate of the development support required to make proposed changes in Destiny.

L-1/Visage complies with this requirement.

The AutoTest Automated Knowledge Testing System, with its' open end design and modular approach, can be integrated and employed in any area associated with the lifecycle of an applicant's visit to the DC DMV. As shown in the figure below, the applicant process will include moving the current process to "photo up front", meaning that the capture of the applicants' image will be moved to the beginning of the process. Once captured, the image, and any other applicable biographical data can be transferred into Destiny, where the SSN verification and other potential verification processes will take place. Once verified, the image and data can be transmitted back into the AutoTest system and displayed for verification purposes at any point in the testing process. For instance, the Examiner Station where the applicant is assigned to a Test Station by an authorized AutoTest Administrator, can display the image on the screen in order to verify the correct person will take the test. Additionally, the image of the applicant may be displayed on the Test Station, most likely applicable on the ID Verification Screen.



Additional technical information is provided in the Technical addendum below.

Technical Addendum

Architecture

District of Columbia requires that the system shall have the flexibility to increase the testing volume and additional enforcement types such as foreign language additions, and allow for flexibility within the application for any future changes required by the District of Columbia. The selected vendor's application shall follow the guidelines provided below.

Application

Applications architecture defines the application required to support the District of Columbia's functions and to manage its information. The application's architecture contains high-level descriptions of the capabilities and benefits of all the applications that support the District of Columbia. It identifies the functions supported by the applications, the data created, updated, or referenced by the applications, and the current applications affected.

The purpose of the applications architecture is to provide an organized application that will improve the District of Columbia's overall effectiveness and productivity, from a business, and customer service perspective. This will provide strategic and differentiated customer services to improve operational and cost advantages.

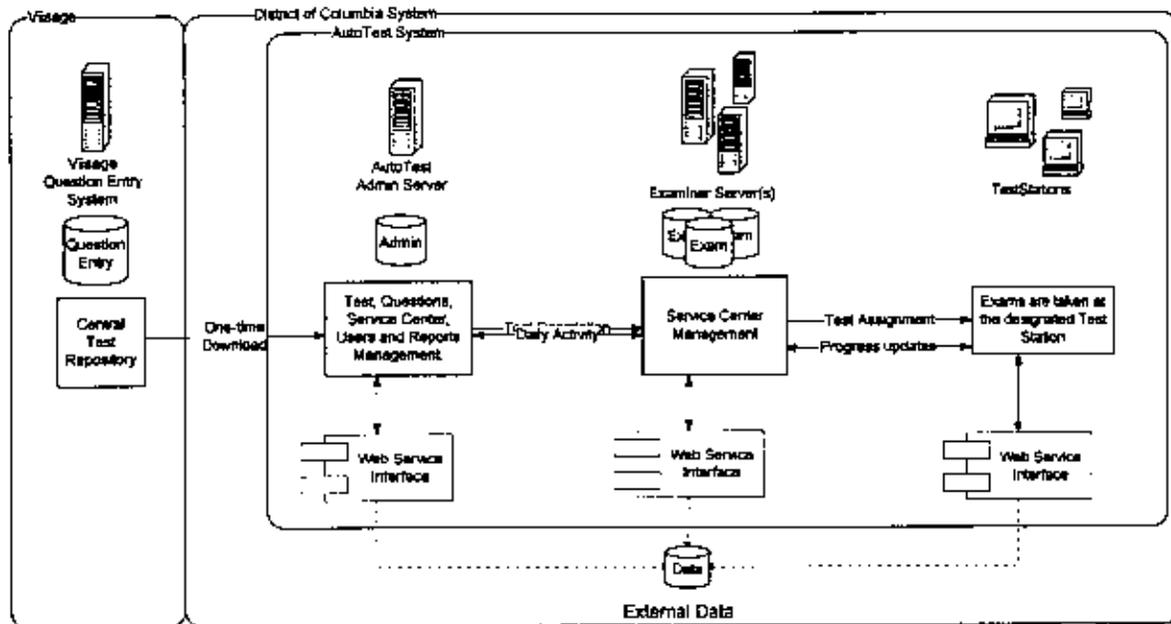
Quality	Architectural Requirements
Scalable	<ul style="list-style-type: none"> • Number of clients shall be able to grow significantly with a linear increase in network and server load • Amount of data shall be able to increase substantially without degradation of performance and response time
Flexible	<ul style="list-style-type: none"> • Application logic shall be table-driven and meet system and business performance requirements • Programs easily support changing business rules • Programs are structured and well documented • Programs shall be designed for ease of maintenance and impact analysis • New service technologies shall be accommodated as per District of Columbia requirements and standards.
Modular	<ul style="list-style-type: none"> • Well-structured and organized programs minimize impact on other modules • Programs are organized to maximize the use of re-usable or common logic • Business processes flow quickly
Client/Server	<ul style="list-style-type: none"> • The vendor shall provide the application infrastructure that is based on the client/server model. This model shall also follow the software/hardware standards approved by OCTO.
Production Volume Proven	<ul style="list-style-type: none"> • Applications shall have a satisfactorily high-volume production performance history • Applications shall be stress tested to prove performance capacity well above that observed or predicted for normal production use
Application Adaptability	<ul style="list-style-type: none"> • Applications shall be able to be quickly transformed to support the District of Columbia's direction
Redundancy	<ul style="list-style-type: none"> • Application shall be designed with fault tolerance in mind at an overall application architecture level.

L-1/Visage complies with these requirements.

The *AutoTest System* was designed and developed with open standards in order to make a more flexible product for integration into multiple environments, both at present and in the future. The system is developed around Microsoft COM technology and uses XML and ODBC technology for data protocols. This development environment allows *AutoTest* to interface with any system capable of providing XML based services such as the J2EE protocol and the Microsoft .Net Framework, as well as any ODBC compatible RDBMS such as Oracle or MS SQL Server. L-1/Visage is watching the state of emerging technologies in order to best determine the next major upgrade path for the product regarding operating environment and protocol. L-1/Visage is constantly adding enhancements and functionality to the system, ensuring backwards compatibility for existing customers.

AutoTest System Flow and Architecture

The AutoTest System offers a variety of alternative configurations balancing the needs for a robust testing system with a high communication fault tolerance against the needs of a streamlined, fast minimalist architecture for the least complexity and ease of management. Each configuration option offers the following standard data flow elements:



Tests are defined, questions and answers are entered and media files are created in the Question Entry System from a large tests repository at L-1/Visage. This repository includes the CDL tests and is hosted, owned and managed by L-1/Visage. These questions can be imported to a customer's AutoTest Central Administration database. This download is typically used for the initial setup of the database to avoid exhaustive test descriptions for standardized CDL tests.

The AutoTest Administrator System is used to manage test descriptions, setting up users and service centers and manage custom messaging for all of the centers. This central server is

responsible for the configuration and management of the system in total. In addition to test descriptions from L-1/Visage, a full array of custom test descriptions is available for locally defined tests.

Once set up the configuration information is pushed through data replication to the Examiner servers throughout the District of Columbia. As the information is updated throughout normal use, these updates are continuously pushed out to all of the Examiner servers in the network.

The Examiner Console Servers are a series of servers placed in service centers throughout the District to allow for the most scalable management of Testing by Service Center, allowing autonomous testing in each service center without requiring a persistent connection to the central Administrative Server. From this point, the AutoTest Examiner server is used to add and update candidate information. Tests are then assigned to the applicants and the test information is sent to a designated Test Station. Throughout testing, the progress can be monitored by an examiner by logging into the Examiner's console – a web interface into the application.

When the test is assigned to a Test Station, a description of the complete test session is sent to that station. This information, including languages, test profile, applicant authentication, and custom behaviors, are sent through a web interface automatically.

When the applicant approaches, they simply touch the screen and are prompted to confirm their identity through a Date of Birth verification process. Throughout the testing process, results are regularly reported back to the Examiner and the Test Station checks for suspend and cancellation messages from the Examiner. At any time while the applicant is taking the test, the Examiner can review test progress, respond to requests for assistance, or suspend or even cancel a test.

Once test progress is completed, the final outcome is reported back to the Examiner server. These results are regularly reported back to the central AutoTest Administrator server where it is made available to other service centers for reporting and fraud prevention.

Additional interfaces to the system, using existing web services or custom developed data exchanges can provide a full integration with existing production systems to meet requirements.

AutoTest Platform, Scalability and Performance

The AutoTest system is designed to scale without performance compromises as the installed base of testing offices and test stations expands. Each office has its own local data store and test management system to allow the day-to-day processing of tests to occur within the office and not be reliant on connectivity to a central server to issue and score tests. By distributing the processing to a local server, testing can occur more or less autonomously and only the resultant data is transferred to a central data repository. The performance of the system as a whole is therefore not affected as new offices go online. Additional test stations may be added to offices also without affecting the system as a whole. Testing response times for the applicant are therefore rapid, which shortens the time the applicant spends waiting for tests and completing their test experience. AutoTest is based on the industry-standard Windows 2000/XP/2003 platform and is migrating to the latest software versions on that platform. There are no known issues with the AutoTest application regarding platform, scalability, or performance presuming the minimum hardware and software specifications are met.

AutoTest Communication Overview

Common Communication For All Systems:

Each computer is part of a domain. User credential validation, DNS resolution, etc. are done just as other systems in the current network use these services. If the *AutoTest* solution is configured as its own domain, or as a child domain to an existing master domain, traffic may be localized to a great extent between the Test Stations and the Examiner Consoles.

Communication Methods Between the Examiner Console and the Administrator Console:

The Administrator Console is the authoritative repository for all application files and media support files used by the Examiner Consoles and Test Stations throughout the installation. It is also the authoritative data repository for database tables relating to questions and answers, as well as applicant data and other data common to the Administrator and Examiner Consoles. The Administrator Console maintains synchronization of the databases using SQL replication, DTS packages, and custom services and applications. These communicate over port 1433, the normal SQL port. This port may be changed if the current requirements dictate.

Application and media support files may be replicated between the Administrator Console and the Examiner Consoles over authenticated FTP. This operates over port 21. If another file transfer method is used, appropriate ports will be identified.

Some installations use the Administrator Console as a central anti-virus locus for current data files. These updated anti-virus files may be distributed to the Examiner Consoles and/or Test Stations via FTP or over a network share (UNC name).

If the *AutoTest* System is configured as its own domain, then appropriate ports to support normal domain traffic should be allowed. If the *AutoTest* System is configured as part of an existing domain, appropriate port traffic between *AutoTest* member systems and the current domain controllers should be allowed. DNS should be allowed in both cases.

Scheduling of Communications Between the Examiner Console and the Administrator Console:

Application and media support files are typically scheduled to replicate via FTP or some other transfer operation at some time when the traffic will minimally influence normal network operations. This is normally at some after-hours time late in the evening or early in the morning. This may be scheduled at any time that is convenient and sensible for the network.

Application and media support files may also be distributed on demand. The *AutoTest* administrative application allows for these files to be sent out via a trigger on a web page. This will impact overall network traffic during office hours and may be used when an urgent need arises to correct a file that has been previously deployed. Note that Test Stations will not receive files sent in this manner until their next reboot.

Database replication and data exchange may also be scheduled at a time that is not during normal business hours. Updates to the question database will be retained and sent out at some time that is agreeable to the District of Columbia. For purposes of fraud prevention, data such as applicant data and summary test data may be scheduled to replicate either throughout the day at some regular interval or as soon as the data is entered into the system. This requires more network overhead to maintain a synchronous data library across all Examiner Consoles and the Administrator Console but allows all Examiner Consoles to "know" what each other Examiner Console knows as to applicant testing history. If active fraud prevention is not a desired requirement of the system, this data may be scheduled for low-traffic times.

Communication Methods Between the Examiner Console and Local Test Stations:

The Examiner Console acts as the local authoritative repository for application and media support files for the Test Stations in the office. Each morning the Test Stations reboot; at startup time, they copy the current version of the necessary files for the AutoTest test application to their drive. This is done via a UNC network share on the Examiner Console. If desired, the Test Stations will also update their virus signature files from the Examiner Console at this time or at whatever time they are scheduled to do so.

Individual testing data is created on the Examiner Console by the actions of the intake personnel. Once the test is generated, it is assigned to an open Test Station. At the moment of assignment, an XML file is posted over port 80 to a local web server application running on the Test Station. As the test progresses, changes in the test results at the Test Station are posted back to the Examiner Console, also over port 80. The examiner posts all testing data to the local instance of SQL running on itself. In the event that the Test Station's state should be changed by the examiner (such as suspending, moving, or canceling a test), the Examiner Console posts the change to the XML file on the Test Station, also via port 80 and updates the local database instance. If the applicant on the Test Station requires assistance, the Test Station posts a request to the Examiner Console to alert the intake stations to the need for help.

Scheduling of Communications Between the Examiner Console and Local Test Stations:

No communications between the Examiner Console and Test Stations are scheduled. All communications are done on demand. Communications between the Test Stations and the Examiner Consoles within an office are usually over the local 10/100 BaseT Ethernet network and bandwidth limitations and scheduling are not considered to be a problem. It is possible to schedule file downloads to the Test Stations on a timed basis if there is such a need in a particular installation. Test Stations are scheduled to reboot each day at a specific time; after the reboot, any updated files available on the Examiner Console's file repository are transferred to the Test Station and old files are purged.

Information and Data

Information architecture identifies the major kinds of data that support management functions. Good data architecture has minimal changes over time, has sound fundamental data definitions, and remains flexible with respect to market changes and business perspective.

To achieve this flexibility, data is defined independently of who uses it, where it is used or stored, when it is used, the sequence in which it is used, and which applications and technologies manage it.

A sophisticated data architecture that supports change brings the advantages of accelerating communication flow and of improving management decision-making and control functions. Equally important, robust data architecture has powerful potential to increase service quality levels and shorten service delivery timelines.

Quality	Architectural Requirements
Data Model	<ul style="list-style-type: none"> • Allows services to be maintained as distinct entities and to be related in accordance with the District of Columbia's information requirements • Is developed and maintained rigorously • Links to the business objectives and integrates with the relational database and dictionary • Contains all data required to support the current business and the defined strategy to incorporate new service offerings • Efficiently and effectively enhances business productivity and application performance • Data is normalized to eliminate the occurrence of redundant data
Relational Database	<ul style="list-style-type: none"> • Uses an industry-wide accepted standard • Requires minimal de-normalization for performance considerations • Exploits hardware capabilities • Maintains critical data rules • Demonstrates performance under high volume

L-1/Visage complies with these requirements.

L-1/Visage has reviewed the above requirements. The AutoTest system meets or exceeds each of the requirements above. Please review the **Executive Summary and Console Overviews** provided at the beginning of this response for additional details.

Network	
Quality	Architectural Requirements
Topology	<ul style="list-style-type: none"> • Compatible with TCP/IP for all data communication • Accommodates standard and emerging technologies with support standards such as T1, T3, frame relay, ATM, and ISDN, 802.11a/b/g/x
Scalability	<ul style="list-style-type: none"> • Network shall be scalable and allow for growth • Able to add platforms and specialize their use (such as establishing separate servers for each location that will connect with a central server without performance degradation) • Able to position systems geographically with the ability to reallocate/redesign placement of hardware without performance degradation
Open Standard Protocol	<ul style="list-style-type: none"> • Protocols shall be open standard. • OCTO has selected TCP/IP as its standard

L-1/Visage complies with these requirements.

Hardware Requirements

The District of Columbia has recently purchased touch screen monitors at all sites for knowledge testing. The inventory is:

General Knowledge Testing Inventory as of 5 February 2008

Southwest Service Center:	20 Operational touch screen testing units 1 Test Administrator Work Station
Brentwood Service Center:	05 Touch screen testing units 1 Test Administrator Work Station
Brentwood Road Test Center:	07 Touch screen testing units
Penn Branch Service Center:	05 Touch screen testing units 01 Test Administrator Work Station
Georgetown Service Center:	05 Touch screen testing units 01 Test Administrator Work Station

Although this inventory (as well as any new equipment purchased under this contract) will remain the property of the District of Columbia, the successful vendor shall assume maintenance responsibility for all existing equipment as well as replacement of any equipment that can no longer reasonably be repaired or replaced under warranty. Additionally, the vendor shall maintain at least 2 spares/site to ensure all hardware failures can be resolved within four hours.

Six administrator consoles shall be provided by the successful vendor. The consoles shall be implemented at the Penn Branch, Georgetown, Southwest, Brentwood 1205 and Brentwood 1233 service centers. The sixth administrator console shall be installed in the Service Integrity office. The consoles shall adhere to District of Columbia technical requirements and reflect the type/model computers and monitors used in the testing workstations. To ensure continuity of service, at least two spare administrator consoles shall be configured to replace any broken console with minimum downtime.

The contractor shall also provide servers that will be tasked with supporting these workstations. This contractor shall install the equipment on the Department of Motor Vehicles Network and shall meet all requirements and standards as required. The vendor shall recommend a configuration that ensures optimum availability at all sites. The servers shall include a 3-year maintenance agreement (Gold Support with 4 hour onsite response time) and an optional quote for warranty responsibility.

L-1/Visage complies with these requirements.

Software Requirements

The contractor shall provide operating systems for the knowledge testing stations (touch screens) and for the servers along with current software and drivers at the time of installation, and the software required for full functionality with the contractor's application. The contractor shall provide a maintenance agreement that ensures support for system problems and updates as the system is enhanced by the vendor either as a result of adding new functionality or as a result of changes required by technology changes within the industry (e.g., moving from Windows XP to Windows Vista, Server 2003 to Server 2008, SQL 2005 to SQL 2008 etc). The annual maintenance cost shall be included as a separate line item in the quote for the five years of operation. The vendor shall also provide a Help Desk or a technical contact person for resolution of system problems during the following hours:

- Monday through Saturday from 6 a.m. until 8 p.m. local time.

The maintenance agreement shall describe the technical support to be provided including an escalation process for problems. The escalation process shall contain names, titles, contact numbers and the person's location.

This software shall meet the District of Columbia's Office of the Chief Technology Officer requirements as defined in this document.

L-1/Visage complies with these requirements.

Support Overview

The annual maintenance agreement for the *AutoTest System* will provide support for system problems and system updates that result from enhancement and added functionality made by Viisage or as a result changes required by technology changes such as OS updates/upgrades.

Support will be provided by Viisage during normal business hours and can be accessed via one of the following three methods:

- **Toll free support hotline** – DC can call a toll free number to access the support hotline Monday through Saturday during the hours stated in the RFQ. After hours, weekends and holidays, callers can either leave a message for low-priority calls, or have the system page an on-call support technician. The on-call technician will return the call within one hour for non-emergency calls, and within thirty (30) minutes for emergency calls.

When requesting support, DC personnel should be prepared to offer: customer ID (assigned by Viisage), name, location, and description of the problem/question. The support technician who answers the call will enter the problem using Viisage's help desk software so that progress and resolution can be tracked. The technician will then determine the nature and severity of the problem and either attempt resolution or escalate it to Level 2. Special triggers will allow a Level 1 ticket to be automatically escalated to Level 2 after a specified period of time. If, during the troubleshooting process, the problem is thought to be hardware or network-related, the Viisage support technician will alert the appropriate DC personnel and will dispatch the appropriate personnel for maintenance.

Upon resolution of the problem, the appropriate information is entered into Viisage's help desk software. An Incident Report can be either e-mailed or faxed to the specified DC personnel as desired.

- **Internet help desk** – Viisage's online help desk is accessible via the Internet (See below). DC personnel must enter a customer ID and password to gain access and submit the support request. The online help desk is the Internet interface to the software used by Viisage to manage all trouble tickets. DC personnel can submit a trouble ticket, review existing issues, add information to those issues, and change the status of issues. The user will be able to assign a priority or severity level to each trouble ticket submitted.

Based on the information submitted by the user, the trouble ticket will be routed to the appropriate personnel. Special triggers will allow a Level 1 ticket to be automatically escalated to Level 2 after a specified period of time.

All trouble ticket resolutions will be documented and added to the searchable knowledgebase. This allows both customers and help desk personnel to access previous solutions and fixes. An Incident Report is generated as per the process described above under telephone support.

AutoTest Internet Help Desk

The screenshot shows the 'autotest' login interface. At the top, there are links for 'Submit Request', 'Track Request', and 'Knowledge Base'. Below these is a prompt: 'Please log in to your WebDesk account below, or create an account.' The login form includes fields for 'Username' and 'Password', a 'Remember Me' checkbox, and a 'Login' button. To the right, there is a 'Login Help?' section with the text 'If you have forgotten your support password, please click below.' and a '[Lost Password]' link. At the bottom, there are language selection options: English, Swedish, Norwegian, Spanish, French, and German.

AutoTest Online Support - Enter New Call

The screenshot shows the user dashboard for 'autotest'. At the top, there is a navigation menu with links: 'MAIN | SUBMIT NEW REQUEST | OPEN REQUESTS | CLOSED REQUESTS | EDIT PROFILE | LOG OUT AutoTest User'. Below the menu, a welcome message reads: 'Welcome, AutoTest User! Thanks for logging in to the WebDesk AutoTest User. Any unresolved requests are displayed below. You have a total of 0 unresolved tickets.' To the right of the message is 'PAGE: [1]'. Below the message is a table with columns: 'Call ID', 'Status', 'Priority', 'Subject', and 'When Logged'. The table currently shows '0 Request' and 'Displaying 0-0 of 0 results'. At the bottom, there is an 'Announcement' section with a checkbox and the text 'AutoTest Launches New WebDesk Support System' dated '7-3-2008-3:46'.

E-mail – DC can submit a question or trouble ticket via e-mail. The software support technician who receives the e-mail will enter the request into the help desk software and determine the appropriate means of response (i.e. return e-mail, telephone call, etc.). Escalation procedures and Incident Report procedures are the same as stated above. Viisage will respond to all service requests within thirty (30) minutes during normal business hours.

Product Support

This product is one of our core offerings and we continuously invest in it to ensure that it serves the needs of both current and future customers. We are committed to remaining compatible with industry standard technology platforms such as windows and SQL as they evolve.

Issues Management

Issues may be introduced at any time in the project. L-1/Visage's Project Manager is directly responsible for capturing and including these issues into our tracking system. Regardless of the level at which an issue resides, the issue will be tracked in the system. This application will allow issues or action items to be searched by a number of fields such as issue owner, priority, overdue issues, etc. DC DMV will have access to current information about issues. We will work directly with DC DMV to tailor this tool to meet the needs of the project.

Resolving an issue within the project team is always preferable to escalation to upper management. The process enables organizational teaming, builds project ownership, and preserves the spirit of the partnership. However, we realize that certain issues (such as a major legal question or organizational conflict of interest) need to be addressed outside the immediate project team environment.

The proposed rules for escalation are shown in the following figure.

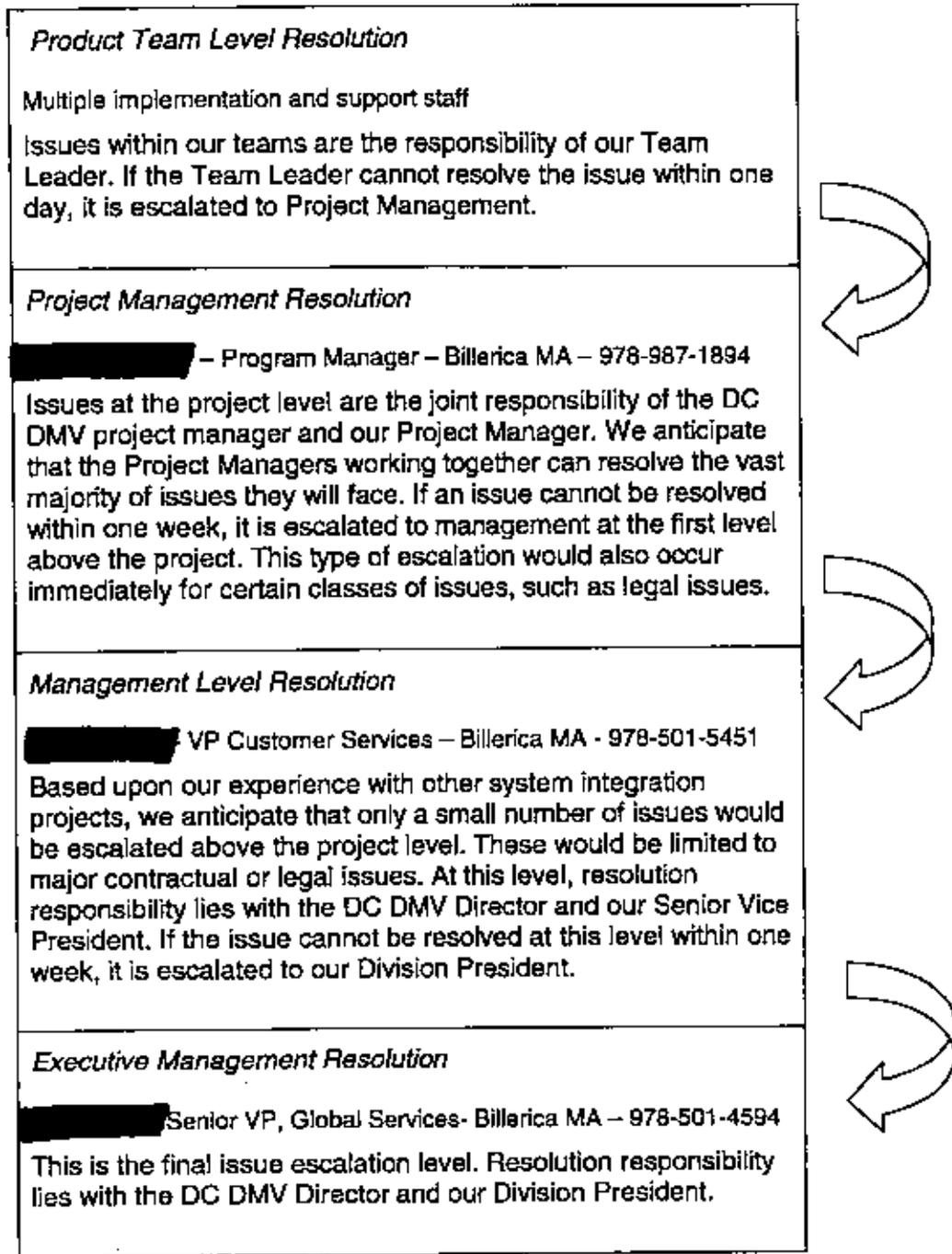


Figure 2-25: Issue Escalation Process

L-1/Visage has provided the resumes and contact information for in the Key Personnel section below.

R(a)(2)

Performance Requirements

The contractor shall guarantee the following system performance levels, in addition to any which may appear in the statement of work.

- (a) On-line system availability level of 99.99 percent in any calendar month. To ensure this availability, the vendor shall provide redundant system components with no single point for failure for real-time failover for business continuity.
- (b) An average system response time at each workstation of 2 seconds or less over a one week period;

L-1/Visage complies with these requirements.

(a) As indicated in our response, L-1/Visage intends to provide a HA/DR (High Availability/Disaster Recovery) solution to this program. This is achieved through the judicious use of redundant hardware, real time replication of data in the central repository (SQL Server) and automatic, real time application failover to the backup system. This ensures that business continues uninterrupted in the face of any problems with the primary Central Admin Server.

In the field offices, there are usually many Test Stations and only one Examiner Station. Many examiners can use the Examiner Station however, by using their own computer and pointing the browser to the URL of the Examiner Station. In the event of a problem with the Examiner Station, a previously selected and configured Test Station can be promoted as a Backup Examiner Station. Since the Examiner application is browser based, the Backup Examiner can both function as a Test Station and host the Examiner application for other PCs. It must also be noted that data is never lost and applicants can be assured that their test results will be accurate and complete. Currently allocated tests at the Test Stations can continue to be taken without interruption and the results stored while the Backup Examiner is brought online.

(b) The *AutoTest System* is based on tried and true web and database technology to provide robust operation while allowing wide latitude in the way tests are presented to applicants. This is just one example of the software design that permeates the *AutoTest System* to provide continued operation and resumption of the testing process even when an unexpected system fault occurs.

The system response time at each workstation to any user action will be under an average of 2 seconds when evaluated over any one week period. Since the AutoTest system interacts with the host server over the DMV provided network infrastructure, the availability and performance of the network must be maintained at a high level to support this requirement.

Service Level Reporting

The contractor shall guarantee the following system performance levels, in addition to any which may appear in the statement of work:

- (a) Online and on demand availability and delivery of regular production management reports
- (b) Repair or replace within four hours or the end of the business day on which notification from the District of Columbia was received, whichever occurs first, any server hardware component that fails to perform at its intended level

L-1/Visage complies with these requirements.

L1/Visage guarantees the system performance as discussed above.

- a) Management Production Reports – Please see the Reports section of this Statement of Work above. The AutoTest System, as a web based application, allows authorized DC DMV personnel to access the system from any authorized workstation to obtain any necessary production reports. The system can be configured to run reports automatically, at predetermined intervals, for delivery to Administrators or other users. Reports can be generated as well using the intuitive reporting function.
- b) As depicted in the Service Level Agreement included with this Statement of Work, L-1/Visage and its subcontractor, agree to meet the repair/replace requirements as stated above.

Security

Security features shall include login IDs and passwords for all test administrators who shall have the basic rights needed to administer the knowledge test. An additional level of rights will be provided for managers and supervisors who can override certain capabilities (such as the restriction to take only one test per day). A final level of rights shall be provided for the system administrator which shall include everything needed to function as system administrator including loading updates and system changes from the vendor.

L-1/Visage complies with this requirement.

Authorized DMV personnel log in to the *AutoTest* Examiner Console and Administrator Console with a username and password. The system has customizable security levels that can be assigned to all functions of the Examiner and Administrator interfaces. Passwords can be assigned to examiners, supervisors, maintenance personnel, and others as configured – each category with different groups of accessible functions. Only those functions for which a user is authorized will be visible on the menu bar when the individual logs in. For example, the supervisor may have access to all functions including report generation, while an examiner may have access only to the functions required for normal testing.

L-1/Visage will work with DMV to define and implement the appropriate levels of security during the design phase. Currently, the default security levels are as follows:

Administrator Console Access Levels

Administrator – Has access to all features and functions of the Administrator Console (includes password administration, managing service centers, report generation, and test creation and modification).

Editor – Only has clearance to create and modify tests via the Administrator Console.

Examiner Console Access Levels

Supervisor – Has total access to the Examiner Console (includes examiner and password administration, adding applicants and assigning tests, and reviewing tests and accessing test histories). Has no access to the Administrator Console.

Examiner – Same as Supervisor but does not have the ability to add and delete examiners to/from the system or administer passwords other than their own.

Administrative functions such as username and password maintenance can be easily done from a simple menu-driven interface in the Administrator or Examiner Console (see following figure). Each individual user will have the ability to change his or her password, but not someone else's. Only users with the appropriate security authorization (administrator level) can change other employee's passwords, if needed. These users will also have the ability to add, modify, or delete users from the *AutoTest System*.

Definitions

"Services" as used in this clause includes services performed, workmanship, and material furnished or utilized in the performance of services.

L-1/Visage acknowledges this requirement.

Inspect and Test

The District of Columbia has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The District of Columbia shall perform inspections and tests in a manner that will not unduly delay the work.

L-1/Visage acknowledges this requirement.

Inspection Failure

If any of the services do not conform to the contract requirements, the District of Columbia may require the Contractor to perform these services again in conformity with contract requirements, at no increase in contract amount.

L-1/Visage acknowledges this requirement.

Defects

When the defects in services cannot be corrected by performance, the District of Columbia may require the Contractor to take necessary action to ensure that future performance conforms to contract requirements at no cost to the District of Columbia.

L-1/Visage acknowledges this requirement.

Failure to Comply

If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance is in conformity to contract requirements, the District of Columbia may (1) by contract or otherwise, perform the services and charge the Contractor any cost incurred by the District of Columbia that is directly related to the performance of such services, or (2) terminate the contract for default.

L-1/Visage acknowledges this requirement.

Quality Assurance

The Project strategy for quality assurance will be to focus on the quality of the documentation, coding standards, deliverables, and Business Continuity Plan as well as the management of the project schedule and the priority of achieving system response times that adequately support the District of Columbia's workflow. Additionally, the application, inclusive of all its components, will ensure that all the related documented standards are enforced. Quality assurance activities provide an ongoing assessment of these factors. This involves evaluating progress against requirements and the review of deliverables. In addition, quality assurance activities will interact closely with and support risk identification, on-going risk monitoring, and contingency planning. Quality assurance will also ensure that the application and database allow for the future growth.

The Contractor shall be required to develop and acquire the District of Columbia's approval for a comprehensive test plan. The test plan shall include provisions for automated regression and load testing scenarios using tools such as Mercury Interactive's WinRunner and LoadRunner, respectively.

L-1/Visage complies with these requirements.

Upon award, L-1/Visage will work closely with DC DMV to customize and deliver an acceptable detailed project plan. Below, we have included an outline of our normal project plan starting point, including our commitment to Quality Assurance at each step in the process. As each client requires varying needs, this document will be worked into the acceptable document that L-1/Visage and DC DMV will work off of during the project implementation.

Project Management

Our project management/system testing and integration plan pays close attention to properly managing the following key areas that make programs successful:

1. Project Methodology
2. Quality Management
3. Project Communication
4. Project Documentation
5. Change Management
6. Risk Management
7. Security Methodology

Each of the components required for a successful project are discussed in detail in the following pages.

1. Project Methodology

This section describes how we propose to accomplish the defined scope of work. L-1/Visage employs a controlled approach to the project's lifecycle and uses management methodology and tools that have helped guide us into being a major provider of Driver License/ID Card and AutoTest Systems. Given the critical nature of the project schedule and project control, functions will be executed in an efficient manner to facilitate the progress of the critical path activities.

A major component of our Methodology is our project development plan, which indicates the overall controlled steps from design and development through to delivery, implementation, testing, and maintenance of the AutoTest system.

A comprehensive project plan will be developed after contract award and after initial project planning meetings with the DC DMV. The detailed project plan will set forth the various phases of the project and give initiation, milestones and completion dates of each phase. It will identify L-1/Visage's Project Team members and/or proposed subcontractor(s) who have primary responsibility for each phase and provide an estimate of the person hours of work required to complete each phase. The Project Plan will address site preparation, hardware installation, systems analysis and design, coding, unit and system testing, implementation, training, documentation, hardware maintenance, and on-going support, as necessary. L-1/Visage's Project Manager will be responsible for updating the Project Plan on a bi-weekly basis, and critical sections more frequently.

Upon contract award, we will prepare a final Project Plan document, which will address, at a minimum, the following:

- Project management
- Nature and scope of work
- Project life-cycle model (ex. Waterfall, spiral, homebrewed)
- Schedule and deliverables
- Methodology for completing each of the major project tasks
- Assumptions and constraints
- Risks
- Issues management

- Tracking and control
- Project artifacts
- Resource requirements
- Organization and staffing
- Interface with DC DMV staff
- System requirements acceptance and approval
- Functional specification
- Configuration management
- Integration testing
- Acceptance testing
- Training
- User and training manuals
- Quality assurance
- Deployment
- Operations and maintenance

2. Quality Management

Our management is unequivocally committed to World Class Quality in all aspects of our business. Every employee and vendor is committed to customer satisfaction through Quality Management. Each person or group in the organization is provided with whatever means required to produce and maintain World Class Quality systems, processes, products and services.

Our Quality Management approach to Project Management is, simply put, to ensure that every opportunity for system, process, or product improvement is formally documented and fed back to the appropriate team for consideration. Training, implementation, and success are measured using standard industry practices.

We will provide the DC DMV with a team unmatched in commitment to quality. We are committed to customer satisfaction and 100% mission success. We understand that the success of our business is tied directly to delivering the highest possible quality of products and services to our customers. To ensure these standards of performance, we employ proven standard processes,

quantitative management techniques, and continuous process improvement. These processes and techniques will be leveraged to their fullest extent to ensure the high quality delivery of the AutoTest System.

We assure optimum quality with a closed loop method of proactive assertions, with responses designed to improve the quality of the process involved. Charts, metrics, designed improvements and training, are the four areas that ensure continuous improvement toward zero defects.

To meet the standard of performance, the system must operate in conformance with:

- Technical requirements set forth in the RFQ
- Technical specifications set forth in this proposal
- Functionality specified in system specifications
- Mutually agreed upon test criteria

Our Quality Control Philosophy

We have adopted a quality philosophy to ensure an optimum level of project performance. Too often, quality is not an apparent feature in a development effort until the testing phase of the project. Our philosophy demands a shift in quality culture from focusing on the end of the development cycle to being present through all phases of the project. This approach ensures quality is designed into our product. It also provides earlier measurement and awareness of product quality in project performance through each process phase. The approach also enables us to review risks, implement analysis and corrective action projects sooner in the development cycle.

We follow a quality assurance process that is similar to accordance with ISO 8402 and ISO 9000 series standards. The quality model defines three main processes:

Quality definition: Specification of quality standards for the development process as well as for the solution.

Quality management: Defining, maintaining, and executing the Quality Plan to meet the requirements of Customer.

Quality assessment: Reviewing and measuring the project at any time against the quality requirements

Quality Plan

The Quality Plan defines the quality requirements and standards for both the solution and the development process. The plan outlines the activities and resources required for verifying and

validating that the quality requirements and standards are being met. The Quality Plan is the key instrument for managing quality in a program. The Program Manager uses this document to manage the quality of both the solution being developed and the processes used to develop that solution. Similar steps are taken at the project level.

Solution quality is defined (in accordance with the ISO 9000 series standard) as the totality of features and characteristics of a solution provided to the customer that bear on its ability to satisfy customer requirements.

Quality is not goodness in itself, but rather a measurement of how well a solution meets predefined requirements. These requirements cover different areas, such as business goals, user needs, organization aspects, and technology requirements. Quality, however, can only be delivered if it can be measured.

Process quality is normally expressed in terms of standards. Some of these standards, for example, explain how a solution should be designed and developed - such as how a specific document should be produced and which techniques should be used for design. Another class of standards covers program and project management, such as the use of a standard life cycle, reporting requirements, and reviews.

The Quality Plan accomplishes the following:

- Identifies the customer's requirements for solution quality and, when a developed solution will result from the effort, the functionality by which quality requirements will be met

- Describes the standards that will be applied to ensure quality, both in relation to the solution to be created and the program processes used to create that solution

- Outlines the quality assurance activities necessary to evaluate how those requirements and standards are being met

- Documents quality assurance resource requirements and responsibilities

- Provides criteria to measure total solution quality, as well as the processes to ensure the achievement of that level of quality

- Provides a vehicle for evaluating the performance of the solution provider's quality system

- Ensures that quality is incorporated in the organizational and business aspects of the program, as well as in the technical facets

Quality Requirements

The objective of the Quality Requirements is to provide an exact and measurable definition of Quality for the project. This definition will be stated in terms of both Customer-oriented and system-oriented quality requirements. The functionality through which the solution will meet these quality requirements is described in the Functional Specifications.

Each quality requirement will have an associated quality metric - A gauge to determine the presence or absence of each quality requirement. As much as practical, metrics are expressed in quantitative and measurable terms. (For example, Mean-Time-to-Defect should not be less than 3.25 days). However, this is not always possible. In some cases, metrics are subjective evaluations resulting from the judgment of a qualified reviewer. (For example, functional specifications comply with user requirements). In other cases, the metrics are simply the presence of some features in the solution. (For example, availability of online help)

The following table shows a list of some of the Quality requirements that we have considered and built in to our system and processes to provide a robust, well tested low risk solution that is implemented in several of our programs.

Table 2-B: Quality Requirements Matrix

Quality Requirements
Access Audit -The degree to which the system logs the access (who, when, from where).
Access Control -The degree to which the system restricts the access properly.
Accessibility -The ease with which the system can be accessed.
Accuracy -The precision of computations and control.
Auditability -The ease with which conformance to standards can be checked.
Communication Commnality – The degree to which standard interfaces, protocols, and bandwidth are used.
Communicativeness - The ease with which the system can be used.
Completeness - The degree to which full implementation of a required function has been achieved.
Conciseness - The compactness of the program in terms of lines of code.
Consistency - The use of uniform design and documentation techniques throughout the software development project.
Correctness - The extent to which a program satisfies its specifications and fulfills the customer's mission objectives.
Data Commonality -The use of standard data structures and types throughout the program
Efficiency - The amount of computing resources and code required by a program to perform its function.
Error Tolerance - The damage that occurs when the program encounters an error.
Execution Efficiency - The run-time performance of a program.
Expandability - The degree to which architectural, data, or procedural design can be extended
Flexibility - The effort required to modify an operational program
Generality - The breadth of the potential application of program components.
Hardware Independence - The degree to which the software is decoupled from the hardware on which it operates.
Human Engineering - The extent to which the application is build for human interaction (user friendly).
Input/Output Volume - Amount of data which is passed to the user
Instrumentation - The degree to which the program monitors its own operation and identifies errors that do occur.
Integrity - The extent to which access to software or data by unauthorized persons

Quality Requirements
can be controlled.
Interoperability - The effort required to couple one system to another.
Legibility - The degree to which the documentation is easy to read.
Maintainability - The effort required to locate and to fix an error in a program (defects).
Modifiability -The effort to change the application (enhancements).
Modularity - The function independence of program components.
Operability - The ease of operation of a program.
Portability - The effort required to transfer the program from one hardware and/or software system environment to another.
Reliability - The extent to which a program can be expected to perform its intended function with the required precision.
Reusability -The extent to which a program (or parts of a program) can be reused in other applications.
Security - The availability of mechanisms that control or protect program and data.
Self-Descriptiveness - The degree to which the source code provides meaningful documentation.
Simplicity - The degree to which a program can be understood without difficulty.
Software System Independence - The degree to which the program is independent of nonstandard programming language features, operating system characteristics, and Other environmental constraints.
Storage Efficiency - The efficient usage of storage media.
Testability - The effort required to test a program to ensure that it performs its intended function.
Traceability - The ability to trace a design representation or actual program component back to requirements.
Training - The degree to which the software assists in enabling new users to apply the system
Understandability -The level of complexity of the modules and the application.
Usability -The effort required to learn, operate, input, and interpret the output of a program.

Quality Standards

The task of defining how required quality should be delivered can be greatly simplified by referring to a set of existing quality standards. These standards have known characteristics; therefore, when they are followed, a standard level of quality will be delivered. We will incorporate a standard life cycle; standard formats for documents, and standard design techniques as specified in our methodology. Because standards should be established for each program in advance, our Program Methodology provides a set of standards for program and project management as well as for the development of solutions for our customers' business needs.

3. Project Communication

L-1/Visage will ensure that the project is progressing as intended by regularly monitoring progress and assessing status. The processes are integrated so that the design takes place concurrently, where required, to ensure all aspects of the development are considered up-front to avoid additional effort and risks later in the project. As part of the process, periodic reviews and/or reports are used to permit project and technical management to monitor progress, assess status, ensure all products meet functional and performance requirements as outlined in the requirements documentation, and achieve results. The DC DMV will participate in these formal reviews.

We hold internal reviews to verify development status and conclude with periodic assessments of performance. The periodic assessments provide feedback concerning the operational and technical status of the AutoTest system. The feedback provides a vehicle for verifying the system is meeting user needs, as well as a means for identifying enhancements to further increase user effectiveness. We will tailor this process based on each task order's requirements as the systems evolve from its configuration to its full capability.

The following table describes the preliminary schedule for project reviews/meetings. All meetings that are required throughout the project will be documented and minutes distributed after the meeting.

Table 2-C: Project Reviews/Meetings

Type	Schedule	Description
Project Kick-Off	At the initiation of the project	Meeting with the DC DMV team to establish mutual management ground rules on issues such as formal project management control system, project reporting system, formal and informal project communications, format and content of deliverables, acceptance criteria and the documentation formats.
Status Meetings	Weekly, or as Required	Includes our project manager and key team members with the DC DMV project manager and staff. If DC DMV prefers, any of these meetings may be held by videoconference or teleconference, as deemed necessary. We have a Polycom ViewStation videoconferencing unit that is able to hold a videoconference with any other system that is ISDN-based.
Project Phase Reviews	At the end of each project phase/before continuing to next phase	<p>Purpose of these reviews is to evaluate completed project deliverables and determine to proceed to the next phase.</p> <p>Project Phase Reviews include:</p> <ul style="list-style-type: none"> • Design Validation • Acceptance Test Readiness • Training Readiness • Implementation Readiness

4. Project Documentation

An aspect of project control includes well-defined plans and procedures that are understood by both L-1/Visage and the DC DMV. Detailed design meetings will assess requirements and fine-tune the elements of design. We will follow standard practice for providing written design specifications and documentation prior to coding. All design documentation will be produced according to schedule.

Some of the various types of documentation, that L-1/Visage will develop include: Master Schedules, Task (Project) Plans and Schedules, System Requirements Documentation, Design Review documentation, Testing Acceptance Criteria, Test Plans, Change Control Plans, Risk Mitigation Plans, Implementation Plans, and other key documentation required by the project.

In addition, we typically produce a number of the following project documents for our customers. The final documents required will be developed in agreement with DC DMV.

- Communications Plan
- Functional Specifications & Screen Layouts
- Recovery and Backup Procedures
- Systems Communications and Network Topology
- Pilot Acceptance Test Plan and Procedures
- Site Survey Plan
- Site Survey Results and Installation Plan
- Training Plan
- Training Manuals and Materials
- Installation Plan and basic procedures
- Help Desk Response Procedures and Escalation Process
- Technical Updates and Communication With Field Staff/Technicians
- Applicant Satisfaction Surveys

The following table describes the preliminary schedule for project reports.

Table 2-D: Project Reports

Type	Schedule	Description
Status Report	Weekly, or as required	Provided by our Project Manager to the IADOT project manager to report the status of development, testing, training, implementation, support and critical items.
Status Report	Monthly	Provided by our Project Manager to the IADOT project manager to include: <ul style="list-style-type: none"> • Progress made including tasks and activities underway or completed, milestone status • Schedule of planned activities covering equipment installation and training activities • Problems encountered and resolved, basis of the problem, recommended solution, impact on project • Action Items • Updated GANTT chart showing the project's progress and dates, and deviations from the original schedule • Change Orders • Other noteworthy items

We envision that after initial design documentation is produced and submitted, DC DMV will provide comments within a timely manner. We will then incorporate those comments and re-submit the final document for approval. Following the approval of the design documentation, any changes will be managed as change orders.

Project Documentation Management

L-1/Visage's methodology for project management is based upon proven techniques and procedures that ensure all requirements are fully met and that all requirements are met on schedule. We will apply this methodology using Microsoft Project's project management tools, supplemented by our own tools.

The acceptance process for each delivered document is as follows:

1. DC DMV will provide comments on each document submitted for review. Depending on the document, each review will require two to five business days for the review cycle. We will submit an initial draft for review with comments, followed by a final draft for review and sign-off. Requested modifications shall be submitted to the Project Manager in writing.
2. Our Project Manager will review any subsequent requests for modification. With DC DMV concurrence, these modifications will be incorporated. We will be responsible for addressing each specific written comment either by incorporating the requested change or providing an explanation of why it is not being incorporated.

5. Change Management

A change is an alteration to the project scope, deliverables, or milestones that affects or has potential to affect the project cost, schedule, quality or conformance of deliverables to the Project. Our Project Manager has overall responsibility for the change process. Any change required due to incorrect, incomplete, or new information will constitute change and will be addressed via this change procedure.

A change control team will be identified and included in the project plan. The team consists of project sponsors and a technical representative (one each) from DC DMV and our company. This team reviews the change and its technical scope and schedule impact.

DC DMV may request a quotation at any point during the project for an out-of-scope item. We will respond as soon as possible with the desired quotation, but we cannot commit to a definite reply period because requests may vary in scope/size and we may be required to seek quotations from outside sources. However, all requests will be handled in a prompt and efficient process to enable timely decisions.

L-1/Visage will only implement functional changes that are approved in writing by the DC DMV, as indicated by an authorized signature on the Change Request Form. If any additional funding is required, it must be allocated.

Additionally, after the DC DMV has approved/accepted a design document and coding has commenced, any requested change will constitute a change order that may impact the cost and/or schedule. Since we are following a process that involves the production and approval of specific functional specifications, we do not anticipate major change orders and will cooperate with DC DMV to accommodate their requirements as best as can be done without incurring cost or schedule impact.

However, some changes may be such that cost or schedule impact will require DC DMV approval. All change orders will be sequentially logged and submitted to DC DMV for review and approval. We request that the DC DMV review and make change order decisions in a prompt fashion.

When a change is desired, L-1/Visage or DC DMV will complete a Change Request Form detailing the change and the justification for the change. The following figure provides an example of a Change Request Form.

Change Order Request Report Form

Change Order #:	Requested By: Company (State/Title)
Date:	Requestor:
Priority: Low Medium High	Change Type:
Financial Impact: Yes No Maybe	Schedule Impact: Yes No Maybe
Target Quote Date:	Actual Quote Date:
Target Review Date:	Actual Review Date:
Target Quote Price:	Actual Quote Price:
Final Disposition:	
Approval: (requires (Title) signature)	
Description of Request:	
Contract References:	
Proposed Solution:	
Final Cost & Schedule Impact:	

Figure 2-24: Example of Change Order Form

When the Project Manager receives a change request, he or she performs the following procedure:

1. Logs and files the Change Request Form, noting the date the change was received.
2. Acknowledges in writing acceptance of the Change Request to the requester in 2-business days of receipt of form.
3. Reports the status of Change Request in the status report.
4. Determines impact to the project schedule and any cost resulting from an assessment of the Change Request. The assessment impact is recorded on the Change Request Form and presented to the Project Manager.
5. If the assessment of the Change Request will have an effect on the project milestones or budget, the DC DMV Project Manager obtains additional funding approval before proceeding with assessment.
6. Directs the assessment of effort with appropriate resources. This assessment results in an impact statement (with cost, schedule and resource requirements), technical feasibility and desirability of implementing the Change Request. The change will be classified as one which:
 - Can be done with no impact on project cost or delivery schedule
 - Can be done but will impact cost or delivery schedule
 - Is recommended as a follow-on project
 - Can not be done due to technical limitations (explanation provided).
7. If the assessment indicates the change will have no effect on the cost and/or the schedule of the project, our Project Manager makes the final decision on the disposition of the request. The disposition can be to unconditionally accept the request for change, conditionally accept (subject to management approval), reject the request or ask for more information.
8. If the assessment reveals that the change will impact the cost and/or schedule of the project and/or compliance with the Functional Specifications, our Project Manager quantifies the impact.
9. The Change Request Form is then returned to the requester and our Project Manager for review and acceptance. Our Project Manager and the DC DMV signatures on the Change Request Form will signify acceptance of any change. We will revise the

contract/purchase orders as necessary.

10. The DC DMV Project Manager and L-1/Viisage's Project Manager will make their best effort to mutually and satisfactorily resolve any project issues at their level. If agreement cannot be reached, the issue will escalate to the DC DMV for further discussion and resolution and/or to our Program Management, the L-1/Viisage Account Executive, our Senior Vice-President of Services, Senior Vice-President of Sales, or CEO level for quick resolution.

6. Risk Management

To increase the probability of program success, our project team will identify potential risk items, assess their probability of occurrence and significance of consequence, and determine suitable mitigating response. We will perform risk management throughout the entire system and project life cycle starting with the proposal phase.

Our risk management methodology consists of six steps as follow:

Develop a Risk Management Plan: The Project Risk Management Plan may be a section of the Project Plan or a separate document referenced by the Project Plan.

Identify Risks: Identify risks associated with the program, taking into account processes to be implemented and products to be delivered. Determine the risk items and the potential consequences (risk-consequence pairs). Document the risk items and associated consequences and maintain them in a program risk repository.

Assess and analyze risks: Rate the probability of occurrence for each risk item, and rate the significance of the consequence for each risk. Consider cost, schedule, and technical performance impacts. Analyze risks relative to each other to determine dependencies. Compute relative importance of each risk. Document the risk assessment and priority.

Plan and implement mitigation: Plan the mitigation activities and determine the impact (cost) of each mitigation plan. Develop a recommendation for each risk. The recommendation will be one of the following: approve mitigation plan, approve contingency mitigation plan to be implemented if a defined threshold is exceeded, or accept the risk and perform no action. Implement the approved risk mitigation plans.

Track: Track execution of the plans to ensure that desired results are achieved. Modify the plan as required to achieve desired results. Monitor defined thresholds on a regular basis, and implement contingency mitigation plan if threshold is exceeded. As a risk's probability of occurrence or consequence is eliminated or becomes insignificant, the risk should be eliminated (no longer tracked).

Monitor and control the effort: Provide status on risks and risk management on a periodic basis.

Perform risk analysis on a periodic basis to identify any new risks.

We will employ Risk Management for proactive decision-making and actions. This process will continuously identify what can go wrong, assess which risks are important, and implement strategies to minimize those risks.

We will develop a formal plan for dealing with risk mitigation. Using the risk mitigation process, we will compile a repository of risks that will be posted on our web site. Risks will be reviewed at each major review and the risk list will be worked in person with our Project Manager at every status meeting.

The following table lists key risk categories.

Table 2-E: Risk Categories

Risk Category	Description	Plan to Mitigate Risk
Scheduling Risk	Does the vendor have the ability to meet the rigorous project schedule?	We have a dedicated, seasoned, and well-tenured team with a history of delivering projects on time – and even before time! We have even delivered systems six months ahead of schedule, at the request of the customer.
Technology Risk	Does the vendor have state-of-the-art technology and printing facilities?	We have installed systems in many of the major states in the U.S. and have a wealth of experience in operating platforms, databases, and interfacing with a host of legacy systems..
Decision Making	Does the vendor have a streamlined decision making process that fosters fast track implementation?	The relationship between our Project Manager and engineering design team – as well as immediate input from top management – facilitates an environment crucial to keeping a fast track project on schedule.
Data Security	Does the vendor implement design procedures intended to safeguard and backup key customer data?	We employ a variety of techniques – including mirroring, encryption, security devices, and passwords – to ensure the operational and physical security of key customer data.
Audit Trail Capability	Does the vendor have a means to assist and provide key data to investigative sources in audit situations?	Our standard system design includes safeguards and parameters designed to assist in any audit situation.

Risk Category	Description	Plan to Mitigate Risk
Workstation Down Time	Does the vendor implement processes and procedures to minimize downtime and inconvenience to customers?	Our systems are designed with remote control software capability for immediate access by our Help Desk; software fixes [corrupt file replacement, etc.] and changes can be implemented remotely in short order from our Help Desk, without having to dispatch a field technician.
Litigation	Has the vendor been involved in any legal action in which the vendor sued a customer?	We have never litigated any of our customers. We stand behind our primary corporate value, which is to make our customers successful.

Lessons Learned in Risk Mitigation

Having been in business since 1993, we have learned many lessons in dealing with risk management. The lessons below will be incorporated into the Risk Management plan for DC DMV to best ensure success:

- Include all team members in the identification of risks and development of risk mitigation plans.
- Develop standard definitions for probability of occurrence and significance of consequence to facilitate understanding and relative prioritization.
- When planning the mitigation actions, begin with the highest-priority risks first.
- Ensure that risk mitigation actions address the true source of risk and not just the potential effects (i.e., if the source is design complexity, address this complexity and not just the potential effect it may have on the schedule).
- Use consistent method for prioritizing all risks through the entire life cycle.
- Identify a lead individual for managing the risk process.

Successful, on-time implementation of this project is of paramount importance to both the DC DMV and our company. We will not cause Dc DMV to suffer from negative outcomes such as delayed implementation schedule, poor software, customer dissatisfaction, or unfavorable publicity.

To that end, we pledge to diligently work and assign any additional resources as required to maintain schedule and meet expected performance standards. DC DMV must similarly pledge to review documents in a timely fashion within the agreed upon timeframe, to provide answers to technical/business answers promptly, and to similarly assign any additional resources as needed

to enable us to fulfill our contractual requirements.

Both organizations agree to open communications with complete and full disclosure. In the spirit of partnership and teamwork, potential problems will be openly addressed early with the goal to reach an early solution and to avoid schedule slippage.

Issues Management

Issues may be introduced at any time in the project. L-1/Visage's Project Manager is directly responsible for capturing and including these issues into our tracking system. Regardless of the level at which an issue resides, the issue will be tracked in the system. This application will allow issues or action items to be searched by a number of fields such as issue owner, priority, overdue issues, etc. DC DMV will have access to current information about issues. We will work directly with DC DMV to tailor this tool to meet the needs of the project.

Resolving an issue within the project team is always preferable to escalation to upper management. The process enables organizational teaming, builds project ownership, and preserves the spirit of the partnership. However, we realize that certain issues (such as a major legal question or organizational conflict of interest) need to be addressed outside the immediate project team environment.

The proposed rules for escalation are shown in the following figure.

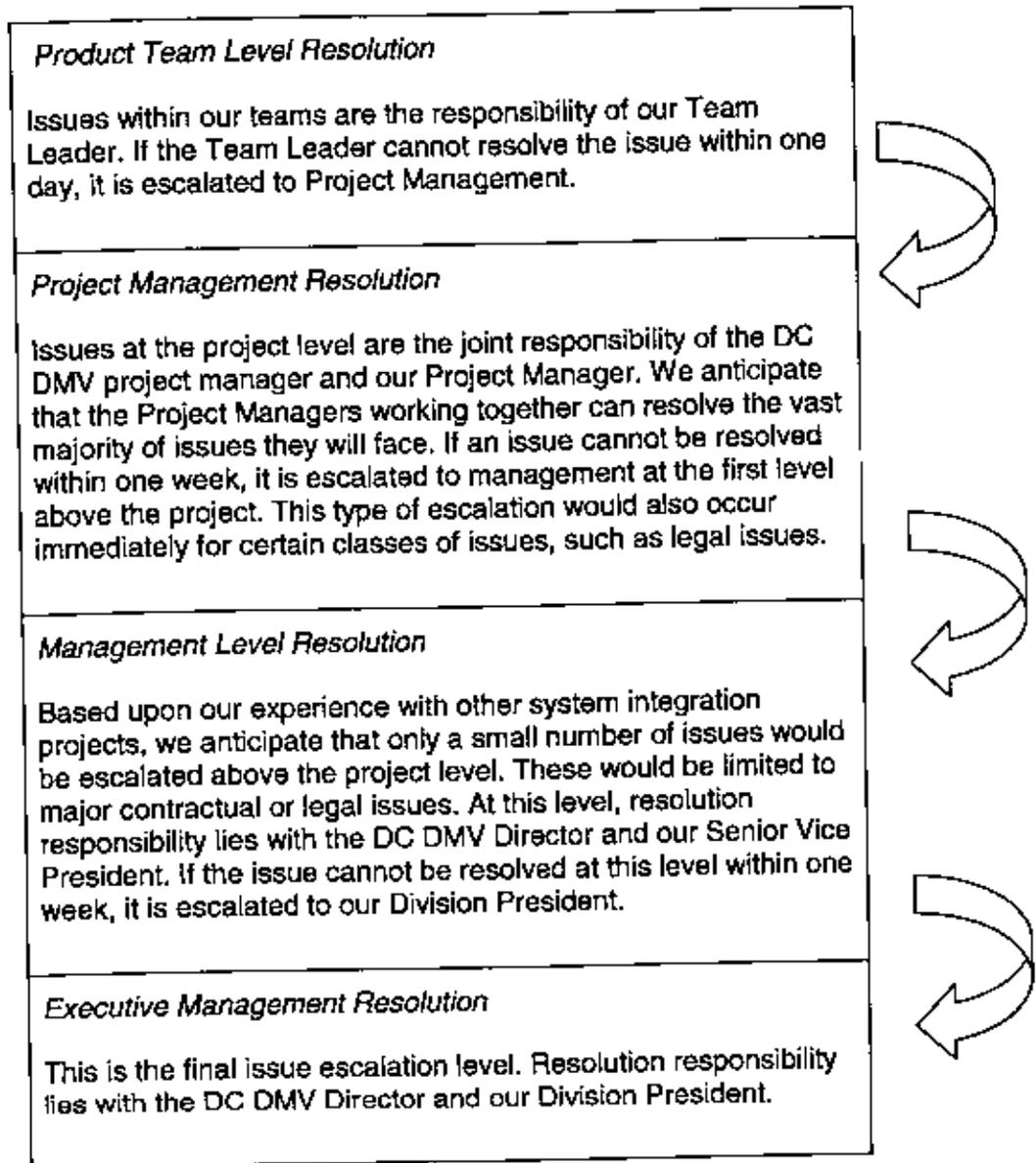


Figure 2-25: Issue Escalation Process

7. System Security

As a company with a stated mission to provide identity solutions, L-1/Visage is extremely sensitive about protecting the safety, security and the privacy of customer data and information in its systems. For this reason, L-1/Visage's philosophy towards data security takes a multidimensional approach to insure that customer data remains safe from the hands of prying eyes. As L-1/Visage follows the standards and initiatives from security industry organizations such as SANS, US-Cert and CIS, L-1/Visage's security model reflects the best practices of security conscious businesses anywhere. This model relies on identifying the digital assets, the potential threats and attacks and ways to manage them, while providing access control and trust in a secure way in every project.

Security Methodology Elements

Digital Assets: These are the desktops, laptops, networks, databases, database servers, application servers and web servers. While most of these digital assets are inside a trusted network environment, the digital assets such as desktops and laptops may be outside the network also.

Potential threats and attacks: Threats and attacks to information security come from both human and non-human sources. Human based threats include hackers, crackers, partners, insiders and others. Non-human based threats include all types of natural disasters, which cause the loss of data or service or breach of security. These attacks can take many forms including denial of service, viruses, worms, adware, malware, theft or destruction of information, etc. One of the more significant threats is the "insider threat" whereby trusted people such as employees, consultants and vendors themselves causing breach of security either intentionally or unintentionally. Of special significance are the people with privileges.

Vulnerability Assessment: Once the digital assets and the threats are identified, the next step is to a thoroughly assess the vulnerabilities. Several off the shelf tools are available to do the vulnerability assessment of the servers, desktops and network equipment. After the vulnerabilities of the digital assets come to light, appropriate solutions need to be designed to mitigate the risks.

Access Control & Trust: As mentioned earlier, most threats to the digital assets have a human origin. "Insider threat" or "trusted path exploitation" is in fact acquiring major visibility these days in both corporate and government sectors. An Identity Management System has to identify the job functions and roles of different people, with special attention to those with privileges. In addition to a detailed, biometric based background screening that the people are required to pass before being authorized to work on this project (trust), their access to the various digital assets need to be authenticated using strong two-factor authentication mechanism that ensures that only trusted people are able to access the systems. Network access control also involves strong authentication of the equipment on the network, to prevent trusted users from accessing the

systems using non-trusted equipment.

Based on the strong, industry leading security philosophy as briefly described above, L-1/Visage will take the following concrete steps to secure the digital assets.

Security Solution Elements

Physical Security: The servers are to be physically located in a secure facility provided by DC DMV. The rack mount servers are locked at all times except during maintenance, with the keys in the custody of personnel authorized by the state.

Operating System Security: Microsoft Windows 2003 (or client preferred) operating system will be secured in the following manner:

- All disk partitions would be formatted with NTFS, so as to provide fault-tolerant, optimized disk storage space and advanced security.
- Administrator account would be re-configured and strong password policies would be set.
- Strong password policies would be set with regard to password length, password history, password age and account lockout on failed attempts for users.
- The registry would be protected from anonymous access.
- Access to public Local Security Authority (LSA) information would be restricted.
- For checking and monitoring the server, users would be created with lesser privileges than with administrative privileges.
- All unnecessary accounts like guest would be either disabled or deleted.
- All unnecessary services would be disabled.
- The last logged-in user name would be prevented from being displayed
- Auditing would be enabled to track various events like operator logon, logoffs, object access, etc
- Permissions would be set on the security event log to allow access only to administrators and system accounts.
- E-mail clients, office productivity tools, or utilities would not be installed.
- Latest security related service packs and patches would be installed.

- Paging File would be cleared at shutdown so as to clear the memory and cache of any sensitive data.

In addition to the above, all servers and workstations are hardened by closing unnecessary ports, applications and services, including the internet access. Operating system patches released by Microsoft are systematically applied throughout the life of the contract to ensure against vulnerabilities that are discovered post implementation and brought to light. Industry standard antivirus protection and routine updates are applied to the workstations to prevent trojan horse and other viruses from infecting the system and compromising data security. These OS patches and anti-virus/anti-spyware updates are first tested on select machines to ensure that the application of patches do not affect system or application stability/performance, and then the updates are rolled out in a phased manner across all the systems. L-1/Visage also works closely with its customers network personnel if they wish to process a security scan using tools such as ISS Internet Scanner at any time to conduct vulnerability assessment. Desktops/laptops also have a firewall to prevent unauthorized access.

L-1/Visage's system configuration includes a test/development environment comprising of relevant database instances, application services and client workstations. All application software upgrades including bug fixes and application enhancements will first be developed and tested in the test environment, before being migrated to the production environment. This development-testing-staging-production cycle will be closely coordinated with the relevant DC DMV personnel to ensure that there are no surprises.

Database Security: Data is vulnerable at many points in any database system and various security techniques need to be implemented to safeguard the data. Confidentiality, integrity, and availability are the hallmarks of database security. The database would be secured in the following manner:

- User profiles and roles would be created for Supervisor and Non-supervisor users and access to data would be defined by the roles assigned. This ensures table/row security at the level of Data Manipulation Language and Data Dictionary Language operations.
- Views would be created so as to limit access to selected columns of the base table and provide value-based security for the information in a table.
- Data access to applications would be through procedures and functions that execute with the definer's privileges. This restricts operations that users can perform on the database and prevents data from being manipulated in any way i.e. users do not have direct access to the tables.
- Data Integrity would be ensured so that the data adheres to certain business rules, as determined by the application requirements.
- Certain sensitive data would be encrypted using data encryption algorithms.

- All unused accounts would be locked.
- All default passwords would be changed after installation.
- Data dictionary protection would be enabled.
- All user access to the database is audited and this audit log may be reviewed periodically to make sure that there are no anomalies.

Application Security: This applies to shrink-wrapped applications such as PC Anywhere and other L-1/Visage's applications, which will be installed on the server. These shrink-wrapped applications would be secured as follows:

- All applications would be password protected.
- Auditing would be enabled on all applications to audit the type of operations performed.
- Access to applications will be defined and appropriate privileges granted.
- Applications such as PC anywhere provide various encryption methods, which allow data to be transmitted securely.

Network Security: The servers are secured by one or more firewalls, which would allow access only from specific static IP addresses that have been authorized by DC DMV. Only ports that are necessary for the functioning of the system will be allowed to remain open.

End User Security: All personnel who need to access the systems have already completed detailed background checks for various projects already completed or under way.

Strong authentication of personnel authorized to work on this project may be provided either through a PKI based two factor authentication scheme or a combined biometric/password authentication scheme or both.

Auditing & Tracking: Extensive auditing capabilities are built into L-1/Viisage's applications and tools. The various reports are available for authorized personnel to review and take corrective action as appropriate.

Technology Refresh: The latest released version of AutoTest along with the latest patches for the Windows operating systems (i.e. Windows Server 2003, Windows XP Pro) and any required 3rd party software will be installed. If minor versions or application enhancements of L-1/Viisage or vendor supplied applications should become available during the contract period, the current system will be upgraded appropriately as soon as possible, but only after thoroughly testing in the test environment. If major versions of L-1/Viisage's applications should become available, they may also be available for the upgrade. However, additional equipment and services might become necessary.

In addition, L-1/Viisage agrees to the following:

- L-1/Viisage will safeguard and maintain the confidentiality of all data information and/or images accessed during the fulfillment of this project. All data and/or images the contractor receives, exchanges, or accesses from DC DMV will stay at the facility and will only be used only in its official capacity performing automated driver testing.
- Protect and maintain the confidentiality and security of drivers' license information received from the DC DMV in accordance with applicable law.
- Information and/or images exchanged by electronic means will be stored in a place physically secure from access by unauthorized persons.
- Access to the information and/or images exchanged will be protected in such a way that unauthorized persons cannot review or retrieve the information.
- All personnel with access to the information and/or images exchanged under the terms of this project will be instructed of the confidential nature of the information.
- All personnel with access to the information and/or images will be instructed of the criminal sanctions specified in state law for unauthorized use of the data.
- All personnel with access to the information and/or images may be required to sign a non-disclosure agreement provided by DC DMV.
- L-1/Viisage will immediately notify the Department of any information and/or images that may have been compromised by any unauthorized access, distribution, use, modification, or disclosure.

L-1/Viisage's AutoTest can work on a dedicated network supplied by DC DMV. This network should be provided with anti-virus software and firewall capabilities. Access to the internet or an FTP site will be necessary at certain times to acquire software patches and various utilities.

Testing

The successful vendor shall be required to develop and acquire District of Columbia's approval on a comprehensive test plan and regression test scenarios, including but not limited to -

1. Loading and update of knowledge tests
2. Network Architecture
3. Platform portability
4. Hardware/servers portability
5. Disaster Recovery / Application continuity
6. Interfaces (bi-directional) with Destiny and through Destiny to AAMVA for SSN validation
7. Error handling
8. Reporting (routine application reports as well as ad hoc reporting capability)
9. Printing
10. Additional required hardware
11. Additional required software

The Contractor shall describe a comprehensive approach, method, and lifecycle for all testing. Testing shall not be limited to the executable system. Rather, testing shall be built into all systems integration and test development lifecycle phases. Testing of interfaces and data exchanges shall be coordinated with the systems in question.

The project implementation plan including the testing plan and schedule shall not exceed four calendar months in duration. The vendor shall, however, maintain a business analyst and technical support person on site for an additional month to ensure all system capabilities function as required and are accurate and reliable.

L-1/Visage complies with these requirements.

Upon award, L-1/Visage agrees to work with the DC DMV to develop an approved project plan including the list of deliverables as shown above. As shown in the included Project Plan (Gantt Chart) L-1/Visage agrees to implement the project to the DC DMV's approval within 4 months.

The L-1/Visage Test Plan shall include, but is not limited to the following tests. These tests encompass all of your required scenarios.

- System Stress Test – Verification that the system will maintain normal testing at and beyond current testing levels.
- Integration Test – Verification that the system meets DC DMV requirements for "conversation" with the Destiny system as described in this Statement of Work.
- Software/Interface Test – Verification that the system complies with all third party software/hardware involved in the implementation process.

- **User Acceptance Test** – Will be developed in conjunction with the DC DMV. This test, considered the most important, includes DC DMV personnel sign off on the fact the L-1/Visage has delivered the AutoTest System that completely meets all requirements as described in this Statement of Work.

Documentation

The vendor shall provide three levels of documentation for the following audiences:

1. **Systems staff responsible for administering the system.** This documentation shall include information on the system architecture, functions, database, installation, and any other tasks normally required of a system administrator.
2. **Users of the system that includes DMV staff responsible for administering the tests and monitoring the results.** This documentation shall include a workflow of the system functionality and a brief description of all reports that may be obtained from the system. Instructions and a user guide are also required for the ad hoc reporting capability.
3. **All users.** A Quick Guide is requested. This shall include updateable wallpaper on administrative consoles as well as a one-page, laminated 'cheat sheet' with major functions and process flows identified for training and reference purposes.

L-1/Visage complies with these requirements.

Documentation described above will be delivered to the DC DMV offices upon award. L-1/Visage has included with its response, a separate binder with a copy of the **Administrator User Manual (1)**, **Examiner User Manual (2)** and **laminated quick start guides (3)** to meet these requirements.

Acceptance Criteria

For each implementation deliverable, the vendor and the District of Columbia will define and agree upon specific acceptance criteria. Additionally, the first 30 days of the implementation will be considered a pilot phase. This is to further ensure the conformance to the requirements and the District of Columbia's quality standards. All the pre-determined transactions, as defined by the vendor and the District of Columbia, need to be successfully executed prior to the completion of the pilot phase. Contractor is expected to coordinate and ensure the completion of the Pilot Phase. For this Pilot Phase, the District of Columbia will provide final acceptance for the successful execution of all pilot scenarios and transactions prior to the final implementation of ticket processing system

The vendor shall provide a documented and approved Rollback and Contingency plan prior to the end of the pilot phase.

L-1/Visage complies with these requirements.

L-1/Visage will work with the District of Columbia to agree on specific acceptance criteria, beginning with the kick-off meeting to occur within 2 weeks of award. L-1/Visage will document all aspects of the project lifecycle for approval by the DC DMV.

Deliverables

1. **Project Plan:** In their proposal, the vendor shall include a comprehensive project plan addressing how they intend to meet the requirements in this SOW. The project plan shall include milestones, support required of the District of Columbia, training plan, and any other components that serve to demonstrate the vendor's familiarity and competence with system implementations.
2. **Service Level Agreement:** The vendor shall include a service level agreement and maintenance agreement as part of their bid. This information will not only serve as a basis for evaluating the vendor's experience with similar projects but will also be implemented if the bidder is successful.
3. **User and System Documentation:** As defined in the relevant section of this SOW.
4. **Testing Plan:** Required within the first 30 days of the implementation
5. **Database Dictionary:** Required within first 60 days of the project. Primary use is for developing ad hoc reports and for system troubleshooting.
6. **Rollback and Contingency Plan:** As defined in relevant section of this SOW.
7. **Questions loaded in all languages must be available for testing.** The District of Columbia will consider a pilot phase of the project depending upon the vendor's need, justification and plan for a proposed pilot.

L-1/Visage complies with these requirements.

L-1/Visage has included all documentation requirements to be met prior to award in the applicable sections of this Statement of Work. Additionally, L-1/Visage agrees to meet the guidelines and timeframes for document delivery after award.

1. **Project Plan:** Please see the Project Management Plan in the Quality Assurance section above. A proposed Gantt chart has been included in **Appendix B – Project Plan**. This Gantt chart is offered as a starting point to complete this project in a timely manner. Details as to the project will be co-designed by L-1/Visage and the DC DMV, for their approval.
2. **Service Level Agreement:** A proposed service level agreement has been included in the applicable section of the SOW as shown below. Again, this SLA is a living document and can be altered to the needs of the DC DMV prior to contract signing.
3. **User and System Documentation:** All required documentation will be presented to the DC DMV upon award. For your review, L-1/Visage has included with its response, a separate binder which includes an Administrative Guide, Examiner User Manual, and a laminated Quick-Start Guide.
4. **Testing Plan:** A proposed testing plan has been included in the applicable section of this SOW. L-1/Visage will work with the DC DMV to develop this plan according to the needs of the DC DMV.
5. **Database Dictionary:** With the proper non-disclosure agreement in place, L-1/Visage will provide the DC DMV with the AutoTest database dictionary within 60 days of

implementation.

6. Rollback and Contingency Plan: L-1/Visage will provide the necessary plans as required and have provided preliminary rollback and contingency plans in the applicable section of this SOW.
7. Questions: Questions in all languages will be loaded into the system and available for testing. Depending on time restrictions, L-1/Visage may ask the DC DMV to consider a pilot using English for the non-CDL tests, and add additional languages as they become available. L-1/Visage will deliver the CDL tests in both English and Spanish for the pilot phase of this project.

Table 1.1
OCTO Software Standards

Application Type	Mfg	Product	Summary
Desktop Applications			
Desktop Antivirus	McAfee	McAfee VirusScan	All District of Columbia of Columbia workstations will use McAfee VirusScan software to protect the District of Columbia Wide Area Network (DCWAN) from malicious code. New computers should have the VirusScan software installed and configured prior to being deployed. More Info: http://www.mcafee.com
Office Automation	Microsoft	Office XP Standard Office XP Professional	All new purchases will be Office XP Standard. If a user requires Microsoft Access, the agency can purchase Office XP Professional. This standard applies to office automation only. OCTO has not approved Office as an application development platform. The District of Columbia supports the use of Excel and Word macros; however, it has not sanctioned complete applications using Access. OCTO is evaluating the best solution for low-end application development. The use of Access as that platform is not recommended until the evaluation has been completed. More Info: Http://www.microsoft.com

Application Type	Mfg	Product	Summary
Desktop Operating System (OS)	Microsoft	Windows XP	Windows XP Professional is the preferred operating system for all new PC purchases. The District of Columbia has standardized on Intel based personal computers. Apple computers can only be purchased upon approval by OCTO. More info: Http://www.microsoft.com
Web Browser	Microsoft	Internet Explorer 6.0 w/128-bit encryption	Internet Explorer 6.0 is the browser standard for all new Windows PCs. Note that other devices, such as PDAs, may have embedded browsers. This standard does not address these devices nor does it address non-Windows platforms. Note that other features embedded within Internet Explorer, such as the email client, are not supported. The intent of this recommendation is to establish a standard for web browsing. More Info: http://www.microsoft.com
Media Player – Desktop	Microsoft	Media Player 10.0	Microsoft Windows Media Player is a full-function media player that comes bundled with new PC operating systems. The District of Columbia has standardized on Media Player for their web infrastructure. More Info: http://www.microsoft.com
Forms Generator	Lake Companies ICM America Cardiff	JetForms OmniForms Liquid Forms	All are COTS product that allow for management of paper or electronic documents.
Server Applications			
Server Operating System – File/Print	Microsoft	Windows 2003 Server Windows 2003 Advanced Server	OCTO recommends Windows 2003 Server and Advanced Server platforms for file and print servers. Most agencies will deploy Windows 2003 Server rather than Advanced Server. Windows 2003 Advanced Server, with its additional scalability and clustering features, will mainly be deployed in the centralized OCTO data centers. More Info: http://www.microsoft.com

Application Type	Mfg	Product	Summary
Server Antivirus Application	McAfee Sybari Trend Micro	Netshield – Win2000 Antigen - Exchange Solaris – Unix (SUN)	The previously mentioned products are the recommended virus protection software for the various server platforms. Antivirus software must be installed on all servers regardless of their use and location. The software must be kept up to date with both current versions and the newest virus signature files.
Enterprise Application Integration (EAI)	SeeBeyond	EGate InSight	The District of Columbia has standardized on SeeBeyond for enterprise-level integration. Where there is a need for high-volume and reliable integration between many disparate systems, Seebeyond should be used. The benefits of EAI are only realized when the number and complexity of the interfaces is relatively high. Therefore, not all interfaces should be built using Seebeyond. Contact OCTO for assistance in designing the optimal solution for a particular interface need. www.seebeyond.com
Directory Services	Microsoft	Windows 2003 Active Directory	Microsoft Active Directory (AD) is the standard for directory services. Initially OCTO has deployed AD for email authentication and as a white pages directory (to include user name, email address, and phone number). In the future, the directory will be enhanced with additional attributes and will become the central authentication engine for applications and network services. More Info www.microsoft.com
Web Server	Microsoft	IIS 6.0	Microsoft IIS 6.0 is the sanctioned standard for all web server requirements including Internet, intranet, and extranet applications. The product provides: <ul style="list-style-type: none"> • Infrastructure to store and deliver HTML pages; • Scripting services for dynamic content and simple business logic; • Application platform for robust application logic. The sanctioned application development platform for web applications is COM+ (either with or without MTS services) and .NET on an IIS server. A complete description of the web infrastructure used in the District of Columbia is included elsewhere in this document.

Application Type	Mfg	Product	Summary
			OCTO does not sanction the user of Apache nor personal web servers even for development purposes. The OCTO web configuration includes development, quality control, and production servers. These servers should be used for all web requirements. More Info: www.microsoft.com
Internet Content Filtering – Server	Websense	Websense Enterprise	Content filter prevents access to web sites that are deemed “inappropriate” in a business environment, such as pornography and racial sites. Websense is the standard product to provide Internet access restrictions. The product will be deployed at the central OCTO entry points to the ISP’s.
Database Applications			
Relational Database Management	IBM Microsoft Oracle	DB2/MVS V8 SQL Server 2005 Oracle 9x	OCTO supports three separate relation database management products based upon the platform and functionality required by the user. More Info: http:// www.microsoft.com http://www.oracle.com http://www.ibm.com
Database Modeling	Computer Associates Microsoft Sybase	Erwin Visio PowerDesigner	Database modeling tools are used by systems analysts and developers to visually view data, data attributes, and their relationships. Erwin Modeler is the standard database modeling tool for the District of Columbia and has been for the past three years. Besides developing the visuals of the data, Erwin can also be used to generate the physical database, stored procedures, and triggers for SQL Server, DB2, and Oracle. Erwin is an excellent “middle of the road” product for modeling databases and systems.
Database Dictionary	Microsoft Oracle	SQL Servers’ Dictionary Oracle Data Dictionary	Products serves a reference source for database support and development. More Info www.oracle.com Http://www.microsoft.com
Asset Management	Magic Solutions BMC Software	Magic Service Desk Remedy	Is a utility software tool that allows IT professionals to track and manage enterprise assets – and their changing relationships – throughout the entire asset lifecycle. These are both COTS products

Application Type	Mfg	Product	Summary
		Asset Management	www.magicolutions.com www.remedy.com
Report/Query Tool	Crystal Business Objects	Crystal Reports 8.0 Business Objects	These products that have selected by OCTO as the Standard for the District of Columbia. These are both COTS products. They both offer the ability to perform report writing and queries.
Utility and Management Applications			
Web Authoring	Macromedia Microsoft	Home Site FrontPage	For the creation of static web content, Microsoft FrontPage 2002 and Macromedia HomeSite 4.5 are the recommended products. These products provide WYSIWYG (what you see is what you get) HTML development capabilities. JavaScript and VBScript can also be incorporated into page development using these tools. More Info: http://www.macromedia.com http://www.microsoft.com
Web Reporting	Webtrends	Analysis Suite	Webtrends is the standard tool to report on web site activity. The product provides information on many web site statistics including visitor activity, link analysis, and site errors. More Info: http://www.netig.com/products/was/default.asp
PC Utilities	Symantec	Norton Utilities 2002	Norton Utilities provides a suite of utilities for the maintenance of a PC including: <ul style="list-style-type: none"> • Registry check and problem correction • Hard drive performance optimization • Hard drive error detection and repair • Recovery of deleted files • Permanent and secure deletion of files <p>The typical user will not require Norton Utilities. Norton Utilities will usually be used by PC technicians to diagnose and correct issues with the desktop. However, OCTO recommends Norton Utilities for users that must permanently and securely delete files.</p> <p>More Info: http://www.symantec.com</p>
Remote Host Application	LANDesk	N/A	This product is a COTS product. It designed for Remote Host control of remote systems. More Info

Application Type	Mfg	Product	Summary
Compression Utility	WinZip	WinZip Version 8.0	WinZip is the recommended product for compressing individual files either to reduce disk usage or to improve performance when sending the file as an email attachment. WinZip provides a much more robust set of compression utilities than other products. More Info: http://www.winzip.com
WEB Application Development	Microsoft	Visual Studio Suite (InterDev, VB, C++)	The District of Columbia's web environment is Microsoft centric, relying upon Microsoft's IIS, MTS, and SQL Server products. As such, the District of Columbia has sanctioned the Microsoft development framework for web application development. Specifically server applications will rely upon ASP and COM+. www.microsoft.com/catalog/display.asp?site=737&subid=22&pg=1
Business Tier Applications			
Help Desk	REMEDY		Has been selected as the Standard for Helpdesk, problem management software. It is an Industry leader and COTS product.
High end Statistical Analysis	SAS SPSS		SAS and SPSS are supported on both the OS/390 and PC platforms. Even though not currently implemented, users who require a non-S/390 server based solution should utilize SAS. Excel is also supported for data analysis but the product does not provide the high-end analysis features in SAS. However, many users will find the capabilities of Excel sufficient for their needs. More Info: http://www.sas.com http://www.spss.com
Wireless Email Cingular Goodlink	Verizon Cingular Corporate Email Server Goodlink Corporate Messaging Software Treo 650 Tro 700M		OCTO has approved Palm and Windows OS for the wireless email device for all users of the OCTO Exchange backbone. The OCTO provided service is Cingular Corporate Email Service. The Goodlink software is the standard wireless email application.

L-1/Visage complies with these requirements.

Table 1.2
OCTO Hardware Standards

Type of Device	Mfg	Description	Summary
Computing – Desktop			
Desktops I - Normal User	IBM compatible (Dell, IBM Compaq, Toshiba)	Internet Ready Touch Screen Kiosk's Intel® Core™ 2 Duo Processor E6750 (2.66GHz, 4M, VT, 1333MHz FSB) , 1GB Memory, 80 Gig HD, 100/1000 Network Card, 128 MB Video Card, 16 Bit Sound Card, 12x10x52 CDRW, 16X DVD Reader, 19" Flat Panel Monitor	This unit is for new purchases only. This unit has been adopted by the District of Columbia as a Standard for the next 12 months when it will be evaluated again. <u>More Info</u> http://www.dell.com
Computing - Server			
Server (Application)	IBM compatible (Dell, IBM Compaq, Toshiba)	Two-Quad Core Intel® Xeon® L5310, 2x4MB Cache, 2.0GHz, 1066MHz FSB Processors, 4-8GB Memory, 3-5 146GB 10,000 RPM Serial Attached SCSI 3GBps Hard Drive, 2.5-inch, Hot Plug, 16 MB Video, 101 Key Keyboard, 2 button Mouse, 16x DVD ROM, Integrated SAS/SATA RAID 10, PERC 5/i Integrated, Dual Power Supplies, 2 USB 2.0 Ports, 2 PS2 Ports, 1 Firewire port, 1 Parallel Port, Video Port, 100/1000 NIC, 17" Flat Panel Monitor, Rack Chassis w/Sliding Rapid/Versa Rails and Cable Management Arm, Universal	This unit is for new purchases only. This unit has been adopted by the District of Columbia as a Standard for the next 12 months when it will be evaluated again. <u>More Info</u> Http://www.dell.com

Type of Device	Mfg	Description	Summary
Server (Database)	IBM compatible (Dell, IBM, Compaq, Toshiba)	Two - Quad Core Intel® Xeon® L5310, 2x4MB Cache, 2.0GHz, 1066MHz FSB Processors, 16GB Memory, 5 146GB 10,000 RPM Serial Attached SCSI 3GBps Hard Drive, 2.5-inch, Hot Plug, 16 MB Video, 101 Key Keyboard, 2 button Mouse, 16x DVD ROM, Integrated SAS/SATA RAID 10, PERC 5/i Integrated, Dual Power Supplies, 2 USB 2.0 Ports, 2 PS2 Ports, 1 Firewire port, 1 Parallel Port, Video Port, 100/1000 NIC, 17" Flat Panel Monitor, Rack Chassis w/Sliding Rapid/Versa Rails and Cable Management Arm, Universal	This unit is for new purchases only. This unit has been adopted by the District of Columbia as a Standard for the next 12 months when it will be evaluated again. <u>More Info</u> http://www.dell.com

L-1/Viisage complies with these requirements.

L-1/Viisage has reviewed the OCTO Software Standards, including those for desktop applications, server applications, database applications, utility and management applications, and business tier applications. L-1/Viisage understands and complies with this requirement.

Service Level Agreement

Service Level Agreement

The District of Columbia expects a service level agreement (SLA) that ensures optimum system availability and a reasonable service response. The offeror's response shall include a proposed service level agreement including not only system performance but also maintenance and replacement schedules and criteria. The maintenance agreement shall contain an option for new releases as well as information on the past software release schedules.

L-1/Viisage complies with this requirement.

Support and Maintenance (Software)

Support Overview

The annual maintenance agreement for the *AutoTest System* will provide support for system problems and system updates that result from enhancement and added functionality made by L-1/Viisage or as a result changes required by technology changes such as OS updates/upgrades.

Support will be provided by L-1/Viisage during the required hours as stated in this RFQ and can be accessed via one of the following two methods:

- ***Toll free support hotline*** – DC personnel can call a toll free number to access the support hotline Monday through Saturday during the stated hours. After hours, weekends and holidays, callers can either leave a message for low-priority calls, or have the system page an on-call support technician. The on-call technician will return the call within one hour for non-emergency calls, and within thirty (30) minutes for emergency calls.

When requesting support, DC personnel should be prepared to offer: customer ID (assigned by L-1/Viisage), name, location, and description of the problem/question. The support technician who answers the call will enter the problem using L-1/Viisage's help desk software so that progress and resolution can be tracked. The technician will then determine the nature and severity of the problem and either attempt resolution or escalate it to Level 2. Special triggers will allow a Level 1 ticket to be automatically escalated to Level 2 after a specified period of time. If, during the troubleshooting process, the problem is thought to be hardware or network-related, the L-1/Viisage support technician will alert the appropriate business partner (sub contractor, vendor...etc.) and will assist as necessary to resolve the problem.

Upon resolution of the problem, the appropriate information is entered into L-1/Viisage's help desk software. An Incident Report can be either e-mailed or faxed to the specified DC personnel as desired.

- ***E-mail*** – DC can submit a question or trouble ticket via e-mail. The software support technician who receives the e-mail will enter the request into the help desk software and determine the appropriate means of response (i.e. return e-mail, telephone call, etc.).

Escalation procedures and Incident Report procedures are the same as stated above. L-1/Visage will respond to all service requests within thirty (30) minutes during normal business hours.

Support and Maintenance (Hardware)

L-1/Visage and its subcontractor, Vantix, agrees to meet the requirements as stated in this Statement of Work, including repair or replacement of faulty hardware within 4 hours of notification of the issue.

As stated in the requirements, the price proposal included in a separate sealed binder includes pricing to maintain the following spares.

- 2 Spare Test Stations per testing location

- 2 Spare Examiner Consoles – to be stored at a central location for easy deployment if replacing the server becomes necessary at any location.

The distributed model of the AutoTest system as proposed in this Statement of Work, allows for testing to continue at each testing location, even if the Central Administrator Console loses connectivity, or is down for maintenance or any other reason. The Central Administrator Console as proposed is designed with full redundancy in order to minimize any downtime that may occur at that level. As stated, testing at the local offices will continue and transfer of resulting data will occur automatically when connectivity is restored.

The following terms and conditions further discuss the agreement terms associated with L-1/Visage's commitment to its customers.

License and Services Terms – Software

These License and Services Terms (“Terms”), together with L-1/Visage’s invoices to Licensee and any statements of work, schedules or exhibits to which these Terms are attached, constitute the entire agreement concerning Licensee’s use of the Software and the support services to be provided by L-1/Visage in connection with the Software (“Support”).

- 1. License.** Subject to these Terms and the statement of work to which these Terms are attached, L-1/Visage grants Licensee a limited, non-transferable, non-exclusive license to use the Software.
- 2. License Fees.** Licensee shall pay the fees for the Software license and for the Support described in Section 8 below as stated in the L-1/Visage invoices presented to Licensee.
- 3. Restrictions on Use.** The Software may be used only by Licensee’s employees and only in connection with the internal operations of its business. Licensee may not transfer, sell, assign, or sublicense the Software to any person. Licensee may not disclose the Software or any part of the Software to any other person or use it for any other person’s benefit. Licensee shall ensure that each of its employees who has access to the Software has entered into a confidentiality agreement with Licensee that protects confidential information including the Software. Licensee may not copy the Software, except that Licensee may make one (1) copy of the Software (but not the user documentation) for backup or archival purposes. Licensee may not alter, obscure or remove any L-1/Visage or product identification, copyright, trademark, patent or other notices or proprietary restrictions from the Software or the backup copy. Licensee may not modify, reverse-engineer or decompile the Software. Notwithstanding the foregoing, subject to these Terms, Licensee may contract with L-1/Visage or others to develop, or Licensee may itself develop, applications for the Software, to be used for its own internal business purposes only. All uses of the Software, including use in connection with applications, must be in accordance with L-1/Visage’s product documentation as may be provided from time to time.
- 4. Ownership.** L-1/Visage is and shall remain the sole owner of all right, title and interest in and to the Software and any related patents, copyrights, trademarks, service marks, and trade secrets. Licensee has no rights of any kind in the Software other than the license granted under these Terms. Licensee shall own applications developed on its behalf for the Software (but Licensee shall not own any portion of the Software) and Licensee may use such applications in conjunction with the Software for its internal business purposes, but not for any other purpose, and Licensee may not transfer, sell, assign or sublicense such applications to any other person without L-1/Visage’s prior written consent.
- 5. Termination.** L-1/Visage may terminate the statement of work to which these Terms are attached if Licensee (i) is in default in any payment; (ii) violates any other material term or condition of these Terms or the statement of work to which these Terms are attached and fails to cure its violation within thirty (30) days of L-1/Visage’s written notice of violation; or (iii) becomes insolvent. Termination of the statement of work to which these Terms are attached, or of Support pursuant to Section 8 below, shall not affect Licensee’s obligation to pay any fees due to L-1/Visage. Upon termination of the statement of work to which these Terms are attached, Licensee must cease using the Software and destroy or delete all copies of the Software.
- 6. Infringement Claims.** L-1/Visage will, at its own expense, defend and hold Licensee harmless from and against any action brought against Licensee by a third party to the extent that such action is based on a claim that the Software, used as authorized under the statement of work to which these Terms are attached, infringes a United States patent, copyright, or other intellectual property right of a third party existing as of the date of the statement of work to which these Terms are attached, provided that Licensee promptly notifies L-1/Visage in writing of such claim and provides all necessary and required information and reasonable assistance regarding such claim. L-1/Visage will have sole authority to defend, negotiate or settle the claim. With regard to Software found to be infringing, L-1/Visage may at its option obtain for Licensee the right to continue using the Software, replace or modify the Software so that it is no longer infringing, or if neither of the foregoing remedies is commercially feasible, terminate the license for the infringing Software and refund the license fees Licensee paid for that Software, prorated over a three year term from the date of the applicable order. L-1/Visage will have no obligation under this Section 6 to the extent the alleged infringement arises from (i) the use or combination of the Software with other products, devices or software not supplied by L-1/Visage if such infringement would have been avoided by the use of the Software without such other products, devices or software; or (ii) the use of a superseded or modified release of the Software (except for modifications made by L-1/Visage or under L-1/Visage’s direction) if such infringement would have been avoided by the use of a current unaltered release of the Software. THE

FOREGOING STATES L-1/VIISAGE'S SOLE OBLIGATION FOR ANY THIRD PARTY INFRINGEMENT CLAIM UNDER THE STATEMENT OF WORK TO WHICH THESE TERMS ARE ATTACHED.

7. **Limited Warranty.** L-1/Viisage warrants that the Software, when installed and used in accordance with the user documentation, will operate in all material respects in conformity with the specifications stated in the user documentation for a period of sixty (60) days from the date of Licensee's receipt (the "Warranty Period"). If it does not, Licensee's sole remedy and L-1/Viisage's total liability for such material nonconformity in the Software will be repair of the Software or refund of the license fee paid, at L-1/Viisage's option. Licensee must notify L-1/Viisage during the Warranty Period of any problems that Licensee experiences with the Software. L-1/Viisage will have no liability for any nonconformity of which Licensee fails to notify L-1/Viisage prior to the expiration of the Warranty Period. This warranty shall not apply to (i) Software which has been used in a manner other than as authorized under than as authorized under these Terms and the statement of work to which these Terms are attached; (ii) Software that has been modified by Licensee or any party other than L-1/Viisage or which has been improperly installed to the extent such modification or improper installation caused the breach of warranty; (iii) failures caused by accident, neglect, failure to maintain a suitable operating environment, tampering, or any other event other than ordinary use.

L-1/VIISAGE AND ANY THIRD PARTY FROM WHOM L-1/VIISAGE HAS LICENSED SOFTWARE DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

8. **Services.** During the Warranty Period, Licensee will receive maintenance and support services for the Software, including telephonic and electronic support, debugging and updates not otherwise priced separately (referred to herein as "Support"), at no additional charge. Licensee has the option to purchase annual Support from L-1/Viisage, the initial term beginning after the Warranty Period has expired and continuing for consecutive 12-month terms thereafter (each such twelve month period a "Support Contract Period"). The annual Support fee is subject to change by L-1/Viisage and Licensee will be notified prior to each anniversary of the Warranty Period expiration date of any such change. If Licensee chooses to purchase annual Support, L-1/Viisage will issue an invoice to Licensee sixty (60) days prior to the beginning of each Support Contract Period and payment will be due as stated in the statement of work to which these Terms are attached. Licensee's agreement to purchase Support will renew automatically each year unless Licensee notifies L-1/Viisage in writing to the contrary at least sixty (60) days prior to the end of the then-current Support Contract Period. L-1/Viisage is obligated to provide Support only to current versions of the Software. Licensee may also contract for additional professional services from L-1/Viisage relating to the System on an additional fee basis, which shall be subject in each case to these Terms and which shall be invoiced in accordance with L-1/Viisage's standard terms. Licensee agrees to provide L-1/Viisage with any information reasonably required by L-1/Viisage to perform services, and L-1/Viisage may rely on the accuracy and completeness of such information. L-1/Viisage warrants that all services provided under these Terms and the statement of work to these Terms are attached will be performed in a professional manner conforming to generally accepted industry standards. This warranty shall be valid for thirty (30) days from delivery of the applicable service. For any breach of this warranty, Licensee's exclusive remedy and L-1/Viisage's entire liability shall be (i) re-performance of the services or (ii) if L-1/Viisage is unable to perform the services as warranted, recovery of the fees paid to L-1/Viisage for such deficient services.

9. **LIMITATION OF LIABILITY.** EXCEPT AS PROVIDED IN SECTION 6, L-1/VIISAGE'S LIABILITY FOR DIRECT DAMAGES UNDER THE STATEMENT OF WORK TO WHICH THESE TERMS ARE ATTACHED SHALL IN NO EVENT EXCEED THE AMOUNT PAID BY LICENSEE TO L-1/VIISAGE FOR THE SOFTWARE OR THE SERVICES AS TO WHICH THE CLAIM AROSE. IN NO EVENT SHALL L-1/VIISAGE BE LIABLE FOR INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST DATA OR LOST PROFITS, HOWEVER ARISING, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THE SOFTWARE IS DESIGNED AS AN AID TO LICENSEE AND ITS EMPLOYEES AND AGENTS IN MAKING DETERMINATIONS REGARDING THE IDENTITY OF PERSONS, THE VALIDITY OF CERTAIN IDENTIFICATION DOCUMENTS AND/OR RELATED DETERMINATIONS. LICENSEE AND ITS EMPLOYEES AND AGENTS ARE SOLELY RESPONSIBLE FOR MAKING ALL SUCH DETERMINATIONS, AND IN NO EVENT SHALL L-1/VIISAGE BE RESPONSIBLE OR OTHERWISE LIABLE FOR ANY ERRORS, DAMAGES, LOSSES, INACCURACIES OR OMISSIONS ARISING FROM SUCH DETERMINATIONS.

10. **Government End Users.** The Software and documentation are provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraphs (c)(1) and (2) of the Commercial Computer Software – Restricted Rights clause at 48 CFR 52.227.19, as applicable. Manufacturer is L-1 Identity Solutions Acting Through Its Viisage Secure Credentialing Division, 296 Concord Road, Third Floor, Billerica, MA 01821.

11. **Governing Law.** These Terms shall be governed by the laws of the Commonwealth of Massachusetts. Licensee agrees that any dispute arising under the statement of work to which these Terms are attached shall be subject to the sole jurisdiction of the courts of the Commonwealth of Massachusetts or federal courts located in Massachusetts.

Training

Training

The proposal shall include a proposed training program not only for implementation but also for periodic review, especially for any enhancements or version releases. Training shall occur onsite and may be a combination of classroom and hands-on instruction.

L-1/Viisage complies with this requirement.

L-1/Viisage places great value on its training programs. Again, your success is our success. Therefore we work hard to make sure that our customers have in depth knowledge of the systems that we deliver.

Typically, L-1/Viisage works with each individual client to develop and deliver a training program that meets the needs and desires of each individual client. The program depicted below is proposed as a starting point for this particular program. This can be altered to fit the District DMV's needs, or delivered as written.

On-going training is provided throughout the life of the maintenance and support agreement and generally performed as upgrades and new releases of the AutoTest System are delivered.

Typical Training Program

L-1/Viisage has trained over 4,000 individuals on the use and maintenance of L-1/Viisage systems (hardware and software) over 15 years. We provide complete training that is tailored to the audience – be it administrative, managerial, operational, or technical. Our training materials and presentations are geared to address system administration, system operation, and diagnosis / correction of “typical” problems.

Our extensive experience training AutoTest users includes successful training at the Nebraska Department of Motor Vehicles, Colorado Dept. of Revenue, Motor Vehicle Business Group, and New York Department of Motor Vehicles and more. (*For a complete set of references, please refer to Appendix A - References of this response*). In each application, we have customized the training delivery to meet the unique needs of the customer.

L-1/Viisage will fully train the following roles:

- Operations Supervisor
- System Administrator
- Test Administration
- Test Examiner

Each of the above roles possesses unique job skills used to perform their jobs. The experience L-1/Viisage has gleaned over the past 15 years will be used to create training materials, and class room curriculums tailored to meet the needs of each role.

Viisage will provide comprehensive training on the use, administration, support, and instruction of the AutoTest Knowledge Testing System ("AKTS") at a location designated by the DC DMV. Each type of training will ensure that users will be able to perform their particular job duties associated with the AKTS. Training will be conducted by qualified instructors and will be presented in a user-friendly format that will include practical and technical information at a level appropriate to the topic and audience.

L-1/Viisage will provide:

- An experienced trainer
- On-site "targeted" training sessions
- All necessary training materials
- Trainee competence assessment (if desired)

Prior to training, L-1/Viisage will work with the DC DMV to identify what personnel will be responsible for the various elements of the AKTS testing process. Based on these identified responsibilities, L-1/Viisage will develop a final training plan that will educate personnel according to their exact system duties, which will ensure the best use of personnel training time.

Training sessions will include both traditional instructor-led and hands-on training. L-1/Viisage will provide User Manuals used during classroom training sessions, as well as providing each student a Quick Start Guide for easy reference. Following classroom training sessions, users will participate in guided hands-on training and will have the opportunity to engage in unguided use of the system. The trainer will be available after training sessions have been completed to answer any questions.

During classroom training, L-1/Viisage will utilize "Experiential Learning" or "Learning by Doing." This is a process that focuses on the learner and allows maximum learner involvement. This level of involvement promotes understanding, which leads to a successful transfer of learning back to the workplace. Experiential activities fulfill a variety of needs:

- Improves communication
- Assesses personal and group goals/performance
- Enhances problem solving through sharing of information

L-1/Visage has developed nine comprehensive training modules that address the different aspects of the AKTS necessary to assure an effective program launch and ongoing operation:

AKTS- Training Modules	
Module 1	Length: 30 minutes
<ul style="list-style-type: none"> • Test Station Overview • System Startup and Shutdown • Daily Tasks • Applicant Instruction • Taking Tests • Typical applicant questions and problems • Documentation 	<ul style="list-style-type: none"> • Examiner Console Overview • System Startup and Shutdown • Daily Tasks • Security Features • Signing On • Changing Your Password • Adding Applicants to the System • Assigning Tests & Managing the Queue • Printing and Scoring Written Tests • Oral Tests • Randomizing • Monitoring Tests and Test Sessions • Suspending and Canceling Tests • Retrieving and Reviewing Test Results • Retrieving and Printing Reports (if applicable) • Handling Power Failures • Simple Trouble Shooting • Using the Backup Examiner • Preventive Maintenance • User Manual • Support Procedures • Documentation
Module 2	Length: 2 hours

AKTS- Training Modules

Module 3 Length: 30 minutes

- Security Features Detail
- Creating New Users
- Editing User Profiles
- Troubleshooting Detail
- Retrieving & Printing Reports (if applicable)
- System Settings
- Training New Users
- Support Procedures

Module 4 Length: 30 minutes

- Administrator Console Overview
- Security Features
- System Startup and Shutdown
- Daily Tasks
- Signing On
- Changing Your Password
- Support Procedures/Troubleshooting
- Preventive Maintenance
- Documentation

Module 5 Length: 30 minutes

- Overview
- Security Levels
- Adding New Users
- Assigning Passwords
- Editing Users
- Deleting Users
- Changing Passwords

Module 6 Length: 3 hours

- Overview
- Creating Test Categories
- Creating Tests
- Creating Knowledge Domains
- Creating Questions
- Working with Multimedia
- Working with Different Languages
- Modifying and Deleting Tests
- Setting Test Defaults
- Downloading Tests

Module 7 Length: 90 minutes

- Overview
- Adding Service Centers
- Adding Network Details
- Creating and Managing Custom Messages
- Managing Screen Elements

Module 8 Length: 90 minutes

- Overview
- Reports Detail
- Creating Reports
- Printing Reports
- Interpreting Reports

AKTS- Training Modules

Module 9 Length: 1 hour

- Overview
- Understanding the Test Database
- Understanding the Statistical Database
- Backing Up the Database
- Backup Recovery Procedures
- System Updates

This list of training modules may be altered to meet the needs of each individual customer and their staff. While these training sessions may not be required for all DC DMV Personnel, L-1/Viisage has recommended the following sessions for each personnel type.

Recommended Training by Personnel Types

State Personnel	Required Modules	Training	Total Classroom Training Time
Test Examiner	Using the Test Station Using the Examiner Console		2.0 hours
Operations Supervisor	Using the Test Station Using the Examiner Console Managers Using the Examiner Console		2.5 hours
Personnel that need to understand the entire AKTS (e.g., Help Desk, Trainers, Select IT, etc.)	All Modules		6.5 hours
Test Administration	Using the Test Station Administrator Console Overview Creating and Managing Tests		4.0 hours
System Administration, IT	Various		Various

L-1/Viisage will provide comprehensive training in the operations and maintenance of the AKTS to DC DMV personnel in a classroom environment, with written documentation and handouts provided by L-1/Viisage. L-1/Viisage will provide this training with Viisage-certified trainers at the locations of the staff. Generally this falls into two (2) location groups, they are:

1. The office where the central server has been installed. Generally this training will encompass System Administration and System Operations staff.
2. The DC DMV field locations where testing is administered. This training will be designed to Test Administration and Test Examiners.

L-1/Viisage will work with DC DMV after contract award to determine locations, timeframe, class size, etc. Central Server training is envisioned to occur at the time of installation of equipment. DC DMV field location training will occur as AKTS systems are installed per the approved installation project plan. L-1/Viisage is willing to schedule training at the convenience of the DC DMV – so as to not impact production operations.

Additionally, L-1/Viisage will provide refresher training immediately after installation to operators. Viisage will work with the DC DMV to schedule installation in a manner that is convenient to the DC DMV, and has minimal or no impact upon production operations. L-1/Viisage will provide AKTS training in modules for training the following roles:

- Operations Supervisor
- System Administrator
- Test Administration
- Test Examiner

Key Personnel**DIVERSION, REASSIGNMENT AND REPLACEMENT OF KEY PERSONNEL**

The offeror shall set forth in its proposal the names and reporting relationships of the Key Personnel that the offeror will use to perform the work under the proposed contract. Their resumes shall be included. The key personnel specified in the contract are considered to be essential to the work being performed hereunder. Prior to diverting any of the specified key personnel for any reason, the Contractor shall notify the Contracting Officer at least thirty calendar days in advance and shall submit justification, including proposed substitutions, in sufficient detail to permit evaluation of the impact upon the contract. The Contractor shall obtain written approval of the Contracting Officer for any proposed substitution of key personnel.

L-1/Viisage complies with this requirement.

Below, L-1/Viisage has provided a list of key personnel to be associated with this project. Should any L-1/Viisage personnel need to be replaced on this project, L-1/Viisage will notify the Contracting Officer thirty days in advance for approval of substitution of personnel.

Key Project Personnel	Job Title	Job Functions
[REDACTED]	Program Manager	Central point of contact for DC DMV. Responsible for all aspects of the project from project kickoff to final sign-off.
[REDACTED]	Account Executive	Pre sales point of contact and post sales coordinator of contract changes and change orders as needed.
[REDACTED]	Technical Lead	Responsible for managing all software modifications needed to meet customer requirements.
[REDACTED]	Solutions Architect	Responsible for managing any interface development to a mainframe system should this be required.
[REDACTED]	Lead Software Engineer	Responsible for all programming changes needed to make the knowledge testing software compliant to customer requirements.
[REDACTED]	Software Engineer	Responsible for all programming changes needed to make the web services and web interfaces compliant with the customers requirements.
[REDACTED]	Lead Hardware Engineer	Responsible for specifications and qualification of all hardware required to implement the system per the requirements.
[REDACTED]	Hardware Purchasing	Responsible for all purchasing related to the

		execution of the program
[REDACTED]	Training Manager	Responsible for handling all aspects of customer training.
[REDACTED]	Installation/Maintenance Manager	Responsible for managing the installation and deployment process as well as post deployment maintenance and support.
[REDACTED]	Quality Assurance Engineer	Responsible for testing all software prior to deployment on customer site.

Management Support	Job Title	Job Function
Senior Vice President, Global Services	[REDACTED]	Responsible for corporate guidance and support and to provide any corporate level resources should they be required at any time during the execution of the project.
Vice President, Professional Services	[REDACTED]	Responsible for all functional guidance and support and to provide and reschedule engineering resources as needed to meet the program objectives and schedules.
Vice President, Customer Support Services	[REDACTED]	Responsible for overseeing the delivery of all support and maintenance and support related matters.
Director Installation of Services	[REDACTED]	Responsible for ensuring necessary installation resources are available to complete the installation on schedule.

R(a)(2)

SECTION 3

TAX CERTIFICATION AFFIDAVIT— (ATTACHMENT B)

The following page contains the L-1/Visage Tax Certification Affidavit for the Government of the District of Columbia.

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GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE CHIEF FINANCIAL OFFICER
OFFICE OF TAX AND REVENUE



TAX CERTIFICATION AFFIDAVIT

THIS AFFIDAVIT IS TO BE COMPLETED ONLY BY THOSE WHO ARE REGISTERED TO CONDUCT BUSINESS IN THE DISTRICT OF COLUMBIA.

Date: June 16, 2008

Name of Organization/Entity: Viisage Technology Inc.

Address: 296 Concord Road, Billerica, MA 01821

Business Telephone No.: (978) 932-2200

Principal Officer:

Leo Sullivan, President

Federal Identification No.:

Contract No.: RQ258377

Unemployment Insurance Account No: 82-787360

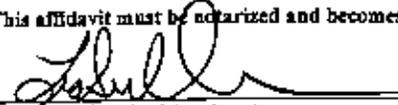
I hereby certify that:

- I have complied with the applicable tax filing and licensing requirements of the District of Columbia.
- The following information is true and correct concerning tax compliance for the following taxes for the past five (5) years:

	Current	Not Current	Not Applicable
District: Sales and Use	(X)	()	()
Employer Withholding	(X)	()	()
Ball Park Fee	(X)	()	()
Corporation Franchise	(X)	()	()
Unincorporated Franchise	(X)	()	()
Personal Property	(X)	()	()
Real Property	(X)	()	()
Individual Income	()	()	(X)

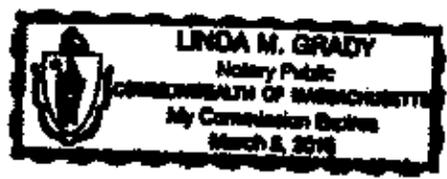
The Office of Tax and Revenue is hereby authorized to verify the above information with the appropriate government authorities. The penalty for making false statements is a fine not to exceed \$5,000.00, imprisonment for not more than 180 days, or both, as prescribed by D.C. Official Code § 47-4106.

This affidavit must be notarized and becomes void if not submitted within 90 days of the date notarized.


 Signature of Authorizing Agent
 Leo J Sullivan
 Print Name

President
 Title

Notary: DISTRICT OF COLUMBIA, ss:
 Subscribed and sworn before me this 16th day of June, 2008 Month and Year
 Notary Public: Linda M. Grady
 My Commission Expires: March 5, 2015



R(a)(6)

SECTION 4

FIRST SOURCE EMPLOYMENT AGREEMENT—(ATTACHMENT C)

The following page contains the L-1/Visage First Source Employment Agreement for the Government of the District of Columbia.

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FIRST SOURCE EMPLOYMENT AGREEMENT

Contract Number: DCTO-2008-Q-0188

Contract Amount: \$289,312

Project Name: Drivers Knowledge Testing System

Project Address: _____ Ward: _____

Nonprofit Organization with 50 Employees or Less: (Yes) _____ (No)

This First Source Employment Agreement, in accordance with D. C. Law 14-24, D.C. Law 5-93, and Mayor's Order 83-265 for recruitment, referral, and placement of District of Columbia residents, is between the District of Columbia Department of Employment Services, hereinafter referred to as DOES, and L-1 Identity Solutions Operating Company, Inc., Acting through its Viisage Secure Credentialing Division, hereinafter, referred to as EMPLOYER. Under this Employment Agreement, the EMPLOYER will use DOES as its first source for recruitment, referral, and placement of new hires or employees for the new jobs created by this project and will hire 51% District of Columbia residents for all new jobs created, as well, as 51% of apprentices employed in connection with the project shall be District residents registered in programs approved by the District of Columbia Apprenticeship Council.

I GENERAL TERMS

- A. The EMPLOYER will use DOES as its first source for the recruitment, referral and placement of employees.
- B. The EMPLOYER shall require all contractors and subcontractors, with contracts totaling \$100,000 or more, to enter into a First Source Employment Agreement with DOES.
- C. DOES will provide recruitment, referral and placement services to the EMPLOYER subject to the limitations set out in this Agreement.
- D. DOES participation in this Agreement will be carried out by the Office of the Director, with the Office of Employer Services, which is responsible for referral and placement of employees, or such other offices or divisions designated by DOES.

- E. This Agreement shall take effect when signed by the parties below and shall be fully effective for the duration of the contract and any extensions or modifications to the contract.
- F. This Agreement shall not be construed as an approval of the EMPLOYER'S bid package, bond application, lease agreement, zoning application, loan, or contract/subcontract.
- G. DOES and the EMPLOYER agree that for purposes of this Agreement, new hires and jobs created (both union and nonunion) include all EMPLOYER'S job openings and vacancies in the Washington Standard Metropolitan Statistical Area created as a result of internal promotions, terminations, and expansions of the EMPLOYER'S workforce, as a result of this project, including loans, lease agreements, zoning applications, bonds, bids, and contracts.
- H. For purposes of this Agreement, apprentices as defined in D.C. Law 2-156, as amended, are included.
- I. The EMPLOYER shall register an apprenticeship program with the D.C. Apprenticeship Council for construction or renovation contracts or subcontracts totaling \$500,000 or more. This includes any construction or renovation contract or subcontract signed as the result of, but is not limited to, a loan, bond, grant, Exclusive Right Agreement, street or alley closing, or a leasing agreement of real property for one (1) year or more.
- J. All contractors who contract with the Government of the District of Columbia to perform information technology work with a single contract or cumulative contracts of at least \$500,000, let within any twelve (12) month period shall be required to register an apprenticeship program with the District of Columbia Apprenticeship Council.
- K. The term "information technology work" shall include, but is not limited to, the occupations of computer programmer, programmer analyst, desktop specialist, technical support specialist, database specialist, network support specialist, and any other related occupations as the District of Columbia Apprenticeship Council may designate by regulation.

II. RECRUITMENT

- A. The EMPLOYER will complete the attached Employment Plan, which will indicate the number of new jobs projected, salary range, hiring dates, and union requirements. The EMPLOYER will notify DOES of its specific need for new employees as soon as that need is identified.

- B. Notification of specific needs, as set forth in Section II.A. must be given to DOES at least five (5) business days (Monday - Friday) before using any other referral source, and shall include, at a minimum, the number of employees needed by job title, qualification, hiring date, rate of pay, hours of work, duration of employment, and work to be performed.
- C. Job openings to be filled by internal promotion from the EMPLOYER'S current workforce need not be referred to DOES for placement and referral.
- D. The EMPLOYER will submit to DOES, prior to starting work on the project, the names, and social security numbers of all current employees, including apprentices, trainees, and laid-off workers who will be employed on the project.

III. REFERRAL

DOES will screen and refer applicants according to the qualifications supplied by the EMPLOYER.

IV. PLACEMENT

- A. DOES will notify the EMPLOYER, prior to the anticipated hiring dates, of the number of applicants DOES will refer. DOES will make every reasonable effort to refer at least two qualified applicants for each job opening.
- B. The EMPLOYER will make all decisions on hiring new employees but will in good faith use reasonable efforts to select its new hires or employees from among the qualified persons referred by DOES.
- C. In the event DOES is unable to refer the qualified personnel requested, within five (5) business days (Monday - Friday) from the date of notification, the EMPLOYER will be free to directly fill remaining positions for which no qualified applicants have been referred. Notwithstanding, the EMPLOYER will still be required to hire 51% District residents for the new jobs created by the project.
- D. After the EMPLOYER has selected its employees, DOES will not be responsible for the employees' actions and the EMPLOYER hereby releases DOES, and the Government of the District of Columbia, the District of Columbia Municipal Corporation, and the officers and employees of the District of Columbia from any liability for employees' actions.

V. TRAINING

DOES and the EMPLOYER may agree to develop skills training and on-the-job training programs; the training specifications and cost for such training will be mutually agreed upon by the EMPLOYER and DOES and set forth in a separate Training Agreement.

VI. CONTROLLING REGULATIONS AND LAWS

- A. To the extent this Agreement is in conflict with any labor laws or governmental regulations, the laws or regulations shall prevail.
- B. DOES will make every effort to work within the terms of all collective bargaining agreements to which the EMPLOYER is a party.
- C. The EMPLOYER will provide DOES with written documentation that the EMPLOYER has provided the representative of any involved collective bargaining unit with a copy of this Agreement and has requested comments or objections. If the representative has any comments or objections, the EMPLOYER will promptly provide them to DOES.

VII. EXEMPTIONS

- A. Contracts, subcontracts or other forms of government-assistance less than \$100,000.
- B. Employment openings the contractor will fill with individuals already employed by the company.
- C. Job openings to be filled by laid-off workers according to formally established recall procedures and rosters.
- D. Suppliers located outside of the Washington Standard Metropolitan Statistical Area and who will perform no work in the Washington Standard Metropolitan Statistical Area.

VIII. AGREEMENT MODIFICATIONS, RENEWAL, MONITORING, AND PENALTIES

- A. If, during the term of this Agreement, the EMPLOYER should transfer possession of all or a portion of its business concerns affected by this Agreement to any other party by lease, sale, assignment, merger, or otherwise, the EMPLOYER as a condition of transfer shall:
 - 1. Notify the party taking possession of the existence of the EMPLOYER'S Agreement.
 - 2. Notify the party taking possession that full compliance with this Agreement is required in order to avoid termination of the project.

3. EMPLOYER shall, additionally, advise DOES within seven (7) business/calendar days of the transfer. This advice will include the name of the party taking possession and the name and telephone of that party's representative.
- B. DOES shall monitor EMPLOYER'S performance under this Agreement. The EMPLOYER will cooperate in DOES' monitoring effort and will submit a Contract Compliance Form to DOES monthly.
- C. To assist DOES in the conduct of the monitoring review, the EMPLOYER will make available payroll and employment records for the review period indicated.
- D. If additional information is needed during the review, the EMPLOYER will provide the requested information to DOES.
- E. With the submission of the final request for payment from the District, the EMPLOYER shall:
 1. Document in a report to the Contracting Officer its compliance with the requirement that 51% of the new employees hired by the project be District residents; or
 2. Submit a request to the Contracting Officer for a waiver of compliance with the requirement that 51% of the new employees hired by the project be District residents and include the following documentations:
 - a. Material supporting a good faith effort to comply;
 - b. Referrals provided by DOES and other referral sources; and
 - c. Advertisement of job openings listed with DOES and other referral sources.
- F. The Contracting Officer may waive the requirement that 51% of the new employees hired by the project be District residents, if the Contracting Officer finds that:
 1. A good faith effort to comply is demonstrated by the contractor;
 2. The EMPLOYER is located outside the Washington Standard Metropolitan Statistical Area and none of the contract work is performed inside the Washington Standard Metropolitan Statistical Area;

The Washington Standard Metropolitan Statistical Area includes the District of Columbia, the Virginia Cities of Alexandria, Falls Church, Manassas, Manassas Park, Fairfax, and Fredericksburg; the Virginia Counties of Fairfax, Arlington, Prince William, Loudoun, Stafford, Clarke, Warren, Fauquier, Culpeper, Spotsylvania, and King George; the Maryland Counties of Montgomery, Prince Georges, Charles, Frederick, and Calvert; and the West Virginia Counties of Berkeley and Jefferson.

3. The EMPLOYER enters into a special workforce development training or placement arrangement with DOES; or

4. DOES certifies that insufficient numbers of District residents in the labor market possess the skills required by the positions created as a result of the contract.

G. Willful breach of the First Source Employment Agreement by the EMPLOYER, or failure to submit the Contract Compliance Report, or deliberate submission of falsified data, may be enforced by the Contracting Officer through imposition of penalties, including monetary fines of 5% of the total amount of the direct and indirect labor costs of the contract.

H Nonprofit organizations with 50 or less employees are exempted from the requirement that 51% of the new employees hired on the project be District residents.

I. The EMPLOYER and DOES, or such other agent as DOES may designate, may mutually agree to modify this Agreement.

J. The project may be terminated because of the EMPLOYER'S non-compliance with the provisions of this Agreement.

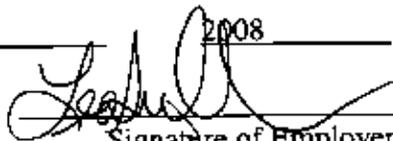
IX. Is your firm a certified Local, Small, Disadvantaged Business Enterprise (LSDBE)?
YES NO
If yes, certification number: _____

X. Do you have a registered Apprenticeship program with the D.C. Apprenticeship Council?
 YES NO
If yes, D.C. Apprenticeship Council Registration Number: _____

XI. Indicate whether your firm is a subcontractor on this project: YES NO
If yes, name of prime contractor: _____

Dated this 18th day of June 2008

Signature Dept. of Employment Services



Signature of Employer

L-1 Identity Solutions Operating Company, Acting Through Its Viisage Secure Credentialing Division
Name of Company

296 Concord Road, Suite 302, Billerica MA 01821
Address

Phone: (978) 932-2200 / Fax: (978) 932-2225
Telephone

lsullivan@L1id.com
E-mail

EMPLOYMENT PLAN

NAME OF FIRM L-1 Identity Solutions Operating Company,
Acting Through Its Viisage Secure Credentialing Division

ADDRESS 296 Concord Road, Suite 302, Billerica MA 02141

TELEPHONE NUMBER (978) 932-2200 FEDERAL IDENTIFICATION NO. [REDACTED]

CONTACT PERSON Leo Sullivan TITLE Division President

E-mail: lsullivan@l1id.com TYPE OF BUSINESS: Secure Credentialing

A
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ORIGINATING DISTRICT AGENCY Office of Contracting and Procurement

CONTRACTING OFFICER: Veronica Dhaness TELEPHONE NUMBER: (202) 727-8704

TYPE OF PROJECT Drivers Knowledge Testing System FUNDING AMOUNT \$289,312

PROJECTED START DATE 07/14/2008 PROJECT DURATION 10/20/2008

NEW JOB CREATION PROJECTIONS (Attach additional sheets, as needed.) Please indicate the new position(s) your firm will create as a result of this project.

	JOB TITLE	# OF JOBS F/T P/T	SALARY RANGE	UNION MEMBERSHIP REQUIRED NAME LOCAL#	PROJECTED HIRE DATE
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					

SECTION 5

EQUAL EMPLOYMENT OPPORTUNITY (EEO) COMPLIANCE DOCUMENTS— (ATTACHMENT D)

The following page contains the L-1/Visage EEO Compliance Documents for the Government of the District of Columbia.

This page has been intentionally left blank.

EQUAL EMPLOYMENT OPPORTUNITY (EEO) POLICY STATEMENT

L-1/VISAGE SHALL NOT DISCRIMINATE AGAINST ANY EMPLOYEE OR APPLICANT FOR EMPLOYMENT BECAUSE OF RACE, COLOR, RELIGION, NATIONAL ORIGIN, SEX, AGE, MARITAL STATUS, PERSONAL APPEARANCE, SEXUAL ORIENTATION, FAMILY RESPONSIBILITIES, MATRICULATION, POLITICAL AFFILIATION, OR PHYSICAL HANDICAP.

L-1/VISAGE AGREES TO AFFIRMATIVE ACTION TO ENSURE THAT APPLICANTS ARE EMPLOYED, AND THAT EMPLOYEES ARE TREATED DURING EMPLOYMENT, WITHOUT REGARD TO THEIR RACE, COLOR, RELIGION, NATIONAL ORIGIN, SEX, AGE, MARITAL STATUS, PERSONAL APPEARANCE, SEXUAL ORIENTATION, FAMILY RESPONSIBILITIES, MATRICULATION, POLITICAL AFFILIATION, OR PHYSICAL HANDICAP. THE AFFIRMATIVE ACTION SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: (A) EMPLOYMENT, UPGRADING, OR TRANSFER; (B) RECRUITMENT OR RECRUITMENT ADVERTISING; (C) DEMOTION, LAYOFF, OR TERMINATION; (D) RATES OF PAY, OR OTHER FORMS OF COMPENSATION; AND (E) SELECTION FOR TRAINING AND APPRENTICESHIP.

L-1/VISAGE AGREES TO POST IN CONSPICUOUS PLACES THE PROVISIONS CONCERNING NON-DISCRIMINATION AND AFFIRMATIVE ACTION.

L-1/VISAGE SHALL STATE THAT ALL QUALIFIED APPLICANTS WILL RECEIVE CONSIDERATION FOR EMPLOYMENT PURSUANT TO SUBSECTION 1103.2 THROUGH 1103.10 OF MAYOR'S ORDER 85-85; "EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS IN CONTRACTS."

L-1/VISAGE AGREES TO PERMIT ACCESS TO ALL BOOKS PERTAINING TO ITS EMPLOYMENT PRACTICES, AND TO REQUIRE EACH SUBCONTRACTOR TO PERMIT ACCESS TO BOOKS AND RECORDS.

L-1/VISAGE AGREES TO COMPLY WITH ALL GUIDELINES FOR EQUAL EMPLOYMENT OPPORTUNITY APPLICABLE IN THE DISTRICT OF COLUMBIA.

L-1/VISAGE SHALL INCLUDE IN EVERY SUBCONTRACT THE EQUAL OPPORTUNITY CLAUSES, SUBSECTION 1103.2 THROUGH 1103.10 SO THAT SUCH PROVISIONS SHALL BE BINDING UPON EACH SUBCONTRACTOR OR VENDOR.

LEO SULLIVAN - DIVISION PRESIDENT
AUTHORIZED OFFICIAL AND TITLE


AUTHORIZED SIGNATURE

L-1 IDENTITY SOLUTIONS OPERATING COMPANY,
ACTING THROUGH ITS VISAGE SECURE
CREDENTIALING DIVISION (L-1/VISAGE)
FIRM/ORGANIZATION NAME

JUNE 18, 2008
DATE

EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER INFORMATION REPORT

GOVERNMENT OF THE DISTRICT OF COLUMBIA DC Office of Contracting and Procurement Employer Information Report (EEO)	Reply to: Office of Contracting and Procurement 441 4 th Street, NW, Suite 700 South Washington, DC 20001
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Instructions:
 Two (2) copies of DAS 84-404 or Federal Form EEO-1 shall be submitted to the Office of Contracting and Procurement.
 One copy shall be retained by the Contractor.

Section A - TYPE OF REPORT

1. Indicate by marking in the appropriate box the type of reporting unit for which this copy of the form is submitted (MARK ONLY ONE BOX)

Single Establishment Employer (1) <input type="checkbox"/> Single-establishment Employer Report	Multi-establishment Employer: (2) <input type="checkbox"/> Consolidated Report (3) <input type="checkbox"/> Headquarters Report (4) <input checked="" type="checkbox"/> Individual Establishment Report (submit one for each establishment with 25 or more employees) (5) <input type="checkbox"/> Special Report
---	--

1. Total number of reports being filed by this Company. _____

Section B - COMPANY IDENTIFICATION (To be answered by all employers)

1. Name of Company which owns or controls the establishment for which this report is filed L-1 Identity Solutions Operating Company, Acting Through Its Visage Secure Credentialing Solutions					a.
Address (Number and street) 296 Concord Road, Suite 302	City or Town Billerica	Country USA	State MA	Zip Code 01821	b.

b. Employer Identification No. [REDACTED]

2. Establishment for which this report is filed.					OFFICIAL USE ONLY
--	--	--	--	--	-------------------

a. Name of establishment L-1 Identity Solutions - Visage Secure Credentialing Solutions					c.
Address (Number and street) 296 Concord Rd	City or Town Billerica	Country USA	State MA	Zip Code 01821	d.

b. Employer Identification No. [REDACTED]

3. Parent of affiliated Company				
a. Name of parent or affiliated Company L-1 Identity Solutions Operating Company		b. Employer Identification No. [REDACTED]		

Address (Number and Street) 177 Broad Street 12 th Floor	City or Town Stamford	Country USA	State CT	Zip Code 01821
--	--------------------------	----------------	-------------	-------------------

Section C - ESTABLISHMENT INFORMATION

1. Is the location of the establishment the same as that reported last year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Did not report last year <input type="checkbox"/> Report on combined basis	2. Is the major business activity at this establishment the same as that reported last year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No report last year <input type="checkbox"/> Reported on combined basis	OFFICIAL USE ONLY
---	--	-------------------

2. What is the major activity of this establishment? (Be specific, i.e., manufacturing steel castings, retail grocer, wholesale plumbing supplies, title insurance, etc. Include the specific type of product or service provided, as well as the principal business or industrial activity. Secure Credentialing	e.
--	----

3. MINORITY GROUP MEMBERS: Indicate if you are a minority business enterprise (50% owned or 51% controlled by minority members).

Yes No

R(9)(6)

DEPARTMENT OF HUMAN RIGHTS AND LOCAL BUSINESS DEVELOPMENT
CONTRACT COMPLIANCE UNIT

SUBCONTRACT SUMMARY FORM

This SUMMARY form is to be completed by the PRIME contractor.

BID NO.: DCTO-2008-Q-0188	OCB NUMBER: _____	1 of 1 pages
*NOTE: The standard for minority subcontracting is 25% of the TOTAL contract dollar amount to be subcontracted.	AMOUNT OF PRIME CONTRACT: \$ 289,312	
	AMOUNT OF ALL SUBCONTRACTS: \$ 33,000	equals 11.5 % OF THE PRIME CONTRACT.
NAME OF PRIME CONTRACTOR: L-1 Identity Solutions Operating Company Acting Through Its Vantage Secure	ADDRESS: 236 Concord Road, Suite 302 Billerica, MA 01821	
TELEPHONE NO.(978) 932-2200 Credentialing Division		
PROJECT NAME: Drivers Knowledge Testing System	PROJECT DESCRIPTIONS: Deliver hardware, software, services and related maintenance for a new automated testing system for DMV	
ADDRESS:	WARD NO.: _____	

SECTION II LIST ALL SUBCONTRACTORS THAT WILL BE UTILIZED ON THE ABOVE PROJECT		
1. NAME OF SUBCONTRACTOR 2. ADDRESS 3. CONTACT PERSON 4. MBOC CERT. NO.	1. IS THIS A "MINORITY SUB?" YES NO 2. TRADE OR BUSINESS PRODUCT THAT SUB WILL PROVIDE.	1. \$ AMOUNT OF SUBCONTRACT equals (=) 2. _____ % (percent) OF TOTAL PRIME CONTRACT.
1. VANTIX 2. 1875 I Street, Suite 500 NW 3. Washington, DC 20006 4. _____ 5. (202) 539-3030	1. MINORITY SUBCONTRACTOR YES <input checked="" type="checkbox"/> NO	1. \$ 33,000 equals (=) 2. 11.5 %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %
1. _____ 2. _____ 3. _____ 4. _____ 5. _____	1. MINORITY SUBCONTRACTOR YES _____ NO	1. \$ _____ equals (=) 2. _____ %

TOTAL DOLLAR AMOUNT SUBCONTRACTED TO *MINORITY BUSINESS ENTERPRISES. \$ 33,000
PERCENT OF PRIME CONTRACT. 11.5 %

*D.C. LAW 1-95, as amended, defines a MINORITY BUSINESS ENTERPRISE as a business of which more than 50% is owned by members of a minority, and of which more than 50% of the net profit or loss accrues to members of a minority.

PROJECTED GOALS AND TIMETABLES FOR FUTURE HIRING

MINORITY GROUP EMPLOYES GOALS								TIMETABLES	
JOB CATEGORIES	MALE				FEMALE				
	BLACK	ASIAN	AMERICAN INDIAN	HISPANIC	BLACK	ASIAN	AMERICAN INDIAN	HISPANIC	
OFFICIALS & MANAGERS									
PROFESSIONALS									
TECHNICIANS									
SALES WORKERS									
OFFICE AND CLERICAL									
CRAFTSMANS (SKILLELD)									
OPERATIVE (SEMI-SKILLED)									
LABORERS (UNSKILLED)									
SERVICE WORKERS									
TOTALS									
NAME OF AUTHORIZED OFFICIAL: Leo Sullivan				TITLE: Division President				SIGNATURE: 	
FIRM NAME: L-1 Identity Solutions Operating Company, Acting Through Its Viisage Secure Credentialing Division					TELEPHONE NO: (978) 932-2460			DATE: June 18, 2008	
INDICATE IF THE PRIME UTILIZES A "MINORITY FINANCIAL INSTITUTION"									
_____ Yes <input checked="" type="checkbox"/> No									
NAME:									
ADDRESS:									
TYPE OF ACCOUNT/S:									

APPENDIX A

REFERENCES

The following Customer References provide the required information about comparable automated driver testing contracts that L-1/Visage has performed. While driver testing technology and services are provided to all referenced clients, it should be noted that in many of the jurisdictions L-1/Visage provides end-to-end systems encompassing additional services including appointment scheduling, automated document authentication, biometric technologies, and centralized or over-the-counter production of the driver's license credential.

Remainder of page intentionally left blank.

Reference #1

Customer/account name: Alabama Dept. of Public Safety
Street Address: 301 South Ripley
City, State, Zip Code Montgomery, AL 36130
Contact Name/Title: Capt. Terry Chapman
Phone #: 334.353.9081
E-Mail: terry.chapman@dps.alabama.gov
System description: Automated Driver License Testing System
Description of sw installed: *AutoTest* Test Station, Examiner, and Administrator
Hardware platform: Dell PCs and Servers, Elo SAW touch monitors
Software platform: Windows 2000
Communications platform: State of Alabama Wide Area Network
Number of users: Approx. 150 examiners; 12 administrative
Time period of project Jan 2003-Mar 2003 (expansions in late 2003, 2004, 2005, 2006)



The Driver's License Division of the Alabama Department of Public Safety chose *AutoTest* for its implementation of a statewide automated driver license testing system. A total of 160 *Test Stations* are deployed at 31 different driver examination sites across the state. Each site has its own *Examiner Console* server, which serves multiple examiners (a total of twenty-eight (28) examiners at one location) and houses a duplicate of the questions and answers contained in the central itembank. The central *Administrator Console* and SQL itembank are located at DMV headquarters in Montgomery. In addition, 37 DPS travel teams are

equipped with *AutoTest* tablet PC wireless testing equipment. Testing is provided in English and 12 additional languages.

Alabama DPS is also in the process of implementing Viisage's *RoadTest* system for automation of the skills testing component of its driver testing program.

Reference #2

Customer/account name:	Nebraska Department of Motor Vehicles
Street Address:	301 Centennial Mall
City, State, Zip Code	Lincoln, NE 68508-2529
Contact Name/Title:	Sara O'Rourke, Driver License Administrator
Phone #:	402.471.2670
E-Mail:	sorourke@notes.state.ne.us
System description:	Automated Driver License Testing System
Description of sw installed:	<i>AutoTest</i> Test Station, Examiner, Administrator & Scheduler
Hardware platform:	Dell PCs and Servers, Elo SAW touch monitors,
Software platform:	Windows 2000
Communications platform:	State of Nebraska Wide Area Network
Number of users:	Approx. 250 examiners; 10 admin and technical
Time period of project	January 2005 - ongoing



Viisage was awarded a contract and began working with the Nebraska DMV in January 2005 to implement the *AutoTest System* at 95 driver testing locations statewide.

The automated testing system is fully integrated with the DMV's interactive driver license system via a Web services interface. The *AutoTest* portable testing solution is used for testing by travel teams who serve part-time testing locations in six districts. Viisage provided all software, kiosks, translation services, installation teams and training services for the project.

Reference #3

Customer/account name: Colorado Dept. of Revenue, Motor Vehicle Business Group

Street Address: 1881 Pierce Street

City, State, Zip Code Lakewood, CO 80214-0000

Contact Name/Title: Jan Welling, Field Operations Manager

Phone #: 303.205.5667

E-Mail: jwelling@spike.dor.state.co.us

System description: Automated Driver License Testing System

Description of sw installed: *AutoTest* Test Station, Examiner and Administrator

Hardware platform: Compaq PCs and Servers, Elo SAW touch monitors

Software platform: Windows 2000

Communications platform: State of Colorado Wide Area Network

Number of users: Approx. 75 examiners; 10 admin and technical

Time period of project Jan 2004-Feb 2004 Phase I; May 2006-June 2006 Phase II



Viisage was awarded a contract in 2003 to deploy the *AutoTest System* for the Colorado Dept. of Revenue, Motor Vehicle Business Group.

Phase I rolled out the system to an initial five locations around the State of Colorado. This phase has been in place with all locations operational since February 20, 2004.

Phase II of the project, completed in June 2006, rolled out the *AutoTest System* to an additional twelve Driver Services offices throughout the state.

The State received CDL Program Improvement Grants from FMCSA to fund both Phase I and Phase II of the project.

Viisage provides a turnkey project with all software, hardware, services and maintenance/support included.

Reference #4

Customer/account name: Mississippi Dept. of Public Safety
Street Address: P.O. Box 958
City, State, Zip Code Jackson, MS 39205-0000
Contact Name/Title: Rene Morris, Testing System Supervisor
Phone #: 601.987.1279
E-Mail: rmorris@mdps.state.ms.us
System description: Automated Driver License Testing System
Description of sw installed: *AutoTest* Test Station, Examiner and Administrator,
AutoTest Scheduler
Hardware platform: Dell PCs and Servers, Elo SAW touch monitors
Software platform: Windows 2000
Communications platform: State of Mississippi Wide Area Network
Number of users: Approx. 200 examiners; 10 administrative/technical
Time period of project Dec 2003-Feb 2004 Phase I; February 2006-March 2006 Phase II



Viisage was selected by the State of Mississippi in a competitive bidding process to deploy the *AutoTest System* statewide for both CDL and State operator testing. Testing is delivered in both English and Spanish. Viisage delivered the system on time and on budget. The system is deployed in twenty-eight (28) locations. DPS also has equipped fourteen travel teams with *AutoTest* portable tablet PC testing equipment. The portable equipment includes tablet PC test stations, which are easy to transport and set up, connected to an *Examiner* laptop via wireless LAN.

In addition, DPS is utilizing the *AutoTest* Scheduler module to allow citizens to make appointments for knowledge and skills tests either by calling a customer service representative or self-service through the Internet, and

RoadTest for automated scoring and GPS tracking of all practical skills testing.

DPS has also recently implemented the *AutoTest* Digital Fingerprint Capture software option, along with LiveScan capture hardware, to fifteen (15) offices as part of the compliance plan for U.S. Patriot Act provisions requiring fingerprinting of CDL Hazmat endorsement holders and applicants. Viisage provided a turnkey installation, including all training required for DPS driver license examiners.

Additional Services Provided: DL Production, Facial and Fingerprint biometrics, document authentication

Reference #5

Customer/account name:	Kentucky State Police
Street Address:	919 Versailles Road
City, State, Zip Code	Frankfort, KY 40601
Contact Name/Title:	Lt. Adam Whitlock, CDL Coordinator
Phone #:	502.226.7404
E-Mail:	Adam.whitlock@ky.gov
System description:	Automated Driver License Testing System
Description of sw installed:	<i>AutoTest</i> Test Station, Examiner, Administrator & Scheduler
Hardware platform:	Dell PCs and Servers, Elo SAW touch monitors, NCS Pearson optical scanners
Software platform:	Windows 2000
Communications platform:	State of Kentucky Wide Area Network
Number of users:	Approx. 60 examiners; 10 admin and technical
Time period of project	October 2004-ongoing

Viisage and *AutoTest* were selected by the Kentucky State Police, Driver Testing Section to provide a state-of-the-art driver testing system.

Viisage is implementing the system as KSP completes previously scheduled electrical/network upgrades at the driver testing sites. The automated testing system will communicate with the State of Kentucky's Driver Information System through Web services, and will pass applicant demographic data, digital photo and test score data to the central system in real-time.



AutoTest is used to generate unique, randomized printed tests for applicants in some locations. Two high volume optical scanners are used at the central office to scan answer sheets. Result information from printed tests is then automatically transferred to the *AutoTest* database.

Scheduling of CDL road tests is accomplished through *AutoTest* Scheduler. Appointments are currently made by applicants in an assisted mode via the KSP operator. However, KSP plans to offer Web self-service scheduling in the near future. KSP examiners use the *AutoTest System* to view scheduled appointments and applicant information on a daily basis.

Additional Services Provided: DL production, Facial biometrics

Reference #6

Customer/account name:	New York Department of Motor Vehicles
Street Address:	6 Empire State Plaza
City, State, Zip Code	Albany, New York 12228-0137
Contact Name/Title:	Joseph Crisafulli, Director of Field Operations
Phone #:	518.473.7254
E-Mail:	jcris@dmv.state.ny.us
System description:	Internet Driver License Testing Services
Description of sw installed:	No software installed at client site(s); AutoTest software hosted by Viisage
Description of hw installed:	No hardware installed; existing school computer labs used
Hardware platform:	N/A
Software platform:	N/A
Communications platform:	Internet
Number of users:	More than 200 high schools across the state
Time period of project	January 2006 - ongoing



The New York DMV selected Viisage as their partner to launch a first-of-its-kind project to bring automated testing to teenagers in New York high schools via the Internet.

In this ground-breaking project, students who need to take the knowledge exam for their learner's permit are able to take the test in their own school's computer lab, with the school's driver's ed instructor acting as the test proctor. Viisage hosts the Web-based **AutoTest** software at its own secure hosting facility as an application service provider. NYDMV has complete control of all testing activity, including the issuance of secure credentials to school employees who supervise testing on the DMV's behalf.

The Internet testing program allows students to take a test on the school's Internet-enabled computer and, if passed, receive a bar-coded receipt which may be brought to a DMV office to complete the permit issuance process. This brings an exceptional level of convenience to students and parents, as well as relieving congestion in DMV offices. Please see the NYDMV's promotional brochure below for more information.



Online Knowledge Test Application

What is Online Knowledge Test Application?

The New York Department of Motor Vehicles' Online Knowledge Test Application (OKTA) is a first-of-its-kind program designed to allow high school students to take the driver's license knowledge test in their own school via the Internet, and drastically reduce the time spent by students and parents at the DMV office. High school students age 15 and older are eligible. The tests would be offered in English and Spanish.



This unique program depends on a partnership between the DMV and participating high schools across the state.

What High Schools can expect from NY DMV?

High schools can expect DMV to:

1. Provide access to the application
2. Provide all of the necessary training material at no cost to the schools or students
3. Work closely with high school administrators to implement the program

What High Schools are Expected to Do?

Each school participating in the program must provide:

1. Personal computers with Internet access, and at least one printer connected to those computers
2. One local administrator, who would be responsible for managing the program at the high school, and be the liaison to DMV. The local administrator supports and maintains lists of test proctors administering the tests
3. Test proctor(s) would check proof of identity presented by each student, collect a limited amount of student information, load it into the test application, provide students with log-in passwords to the tests, and monitor the students while they take the tests

There is no cost to the school for participating in the Online Knowledge Test Application program.

How Does OKTA Work?

The Online Knowledge Test Application is Internet-based and easy to use. For the local administrator or proctor, the testing process consists of a few simple steps for each student:



1. Identify student and check birth document
2. Enter the student's basic information
3. Print the student's system access code and give it to the student
4. Monitor testing activity to make sure students do not discuss answers or use prohibited materials
5. Print receipt as proof of passed test for student to take to DMV office

For students, the testing process is just as easy. From any internet computer in the testing room, the student will:

1. Enter their system access code
2. Provide a few requested pieces of information
3. Read each test question presented on-screen and select the answer they think is correct

Scoring the Tests

The system automatically scores each test and displays the result on-screen to the student.

There is no manual test scoring for local administrators.

If the test has been passed, the system will print a test receipt which the administrator will give to the student. This receipt can be presented at any DMV office to complete the process of receiving the learner's permit. If a student does not pass, s/he would have to take the test again at no charge.

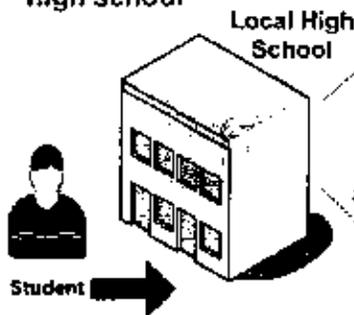
It's that easy! And think of the savings in time and money for the families of your students. We hope you'll join us in providing this valuable service.



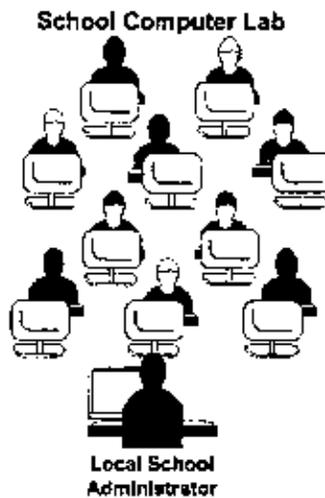


Online Knowledge Test Application

1.) Student applies for testing at local high school



2.) Local administrator logs into web system and administers test



3.) Student uses internet-capable computer for testing

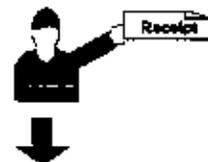
6.) Student receives test receipt to present at DMV office

4.) Web server processes test data

Online Knowledge Test Application central web-server



Test Results



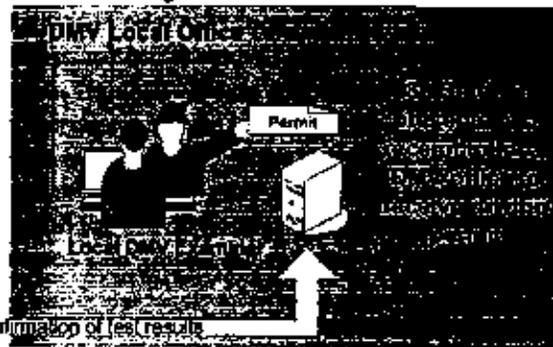
7.) Student takes receipt to local DMV to receive driving permit

DMV Central Office



System Administrator

5.) DMV Central office receives web server test data



What Is the Next Step?

Interested schools will be contacted by the DMV Web coordinator. The designated Local Administrator will be sent a package with information to get started. For more information on Online Knowledge Test Application contact:

Reference #7

Customer/account name:	Arkansas State Police
Street Address:	1 State Police Plaza Drive
City, State, Zip Code	Little Rock, AR 72209
Contact Name/Title:	Monty Pride, Testing Supervisor
Phone #:	501.618.8810
E-Mail:	Monty.pride@asp.arkansas.gov
System description:	Automated Driver License Testing System
Description of sw installed:	<i>AutoTest</i> Test Station, Examiner, Administrator
Hardware platform:	Dell PCs and Servers, Elo SAW touch monitors, Canon digital cameras
Software platform:	Windows 2000 and XP
Communications platform:	State of Arkansas Wide Area Network
Number of users:	Approx. 25 examiners; 5 admin and technical
Time period of project	July 2006 - Ongoing



The Arkansas State Police selected Viisage as its partner to bring automated testing to the state for the first time. The project not only allows the administration of fully randomized, automated tests, but also provides the capability to capture the applicant's photograph and print it on the permit given to each applicant who passes a test. The permit is presented at a separate driver's license office for production of the permanent credential. Previously, there was no way for staff at the driver's license office to be sure that the individual presenting a permit was indeed the same individual who took and passed the knowledge or skills test. ASP uses *AutoTest's* digital image capture feature to take and store the applicant's photograph, which may then be viewed

onscreen by ASP examiners and printed on the applicant's permit. This capability will significantly reduce the opportunity for fraud in the testing and licensing process.

Additional services provided:DL Production/ Fingerprint and Facial Biometrics

Reference #8

Customer/account name:	Government of Bermuda, Transport Control Department
Street Address:	11 North Street
City, State, Zip Code	Hamilton HM17, Bermuda
Contact Name/Title:	David Burt, Project Manager
Phone #:	441.292.1271 x2108
E-Mail:	dgburt@gov.bm
System description:	Automated Driver License Testing System
Description of sw installed:	AutoTest Test Station, Examiner and Administrator
Hardware platform:	Dell PCs and Servers, Elo SAW touch monitors
Software platform:	Windows 2000
Communications platform:	Government of Bermuda Wide Area Network
Number of users:	Approx. 7 examiners; 5 admin and technical
Time period of project	July 2004-August 2004



TRANSPORT CONTROL DEPARTMENT
HAMILTON, BERMUDA



The Government of Bermuda, Transport Control Department uses the *AutoTest System* for all driver testing on the island. Both commercial and non-commercial licensing tests are delivered in English and Portuguese. Examiners use a standard web browser to connect to the AutoTest software and perform all necessary testing functions. Digital cameras are incorporated into each touchscreen testing kiosk to capture each applicant's photograph for added protection against fraud and abuse.

TCD is also in the process of implementing a new web-based driver and vehicle information system. The AutoTest web architecture will enable seamless integration with this new system at the appropriate time.

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APPENDIX B

PROJECT PLAN

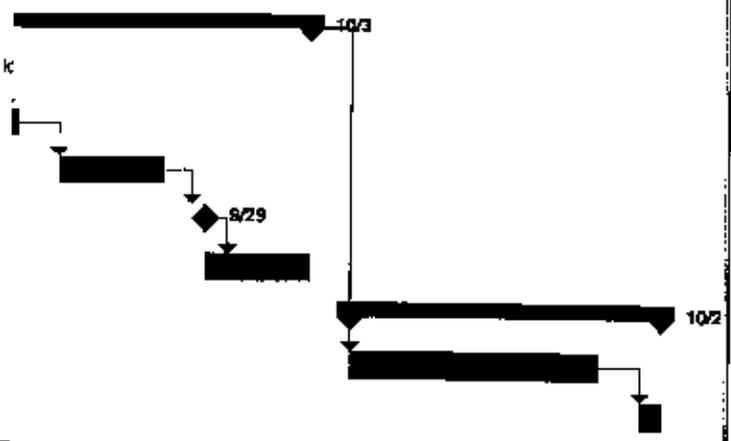
The project plan presented within the next few pages represents a standard plan based on our experience. With each project, the plans tend to require some manipulation in order to meet the needs of the jurisdiction. With that in mind, please consider the attached Gantt Chart to be a starting point where the DC DMV and L-1/Visage will; work together to finalize a mutually agreeable project plan.

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DCTO-2008-Q-0188 Project Plan

ID	Task Name	Duration	Start	Finish
1	Washington DC AKT RFG DCTO-2008-Q-0188	70 days	Mon 7/14/08	Mon 10/20/08
2	Project Planning	12 days	Mon 7/14/08	Wed 7/30/08
3	Program Inception	2 days	Mon 7/14/08	Wed 7/16/08
4	Contract Effective Date (ASSUMED)	0 days	Mon 7/14/08	Mon 7/14/08
5	Kickoff Meeting at DC DMV Location	2 days	Tue 7/15/08	Wed 7/16/08
6	Program Management Plans	10 days	Thu 7/17/08	Wed 7/30/08
7	Prepare and Submit detailed PM Plans	5 days	Thu 7/17/08	Wed 7/23/08
8	Review Detailed PM Plans	5 days	Thu 7/24/08	Wed 7/30/08
9	Approve PM Plans	0 days	Wed 7/30/08	Wed 7/30/08
10	Implementation	45 days	Thu 7/17/08	Wed 9/17/08
11	Site Preparation	35 days	Thu 7/17/08	Wed 9/3/08
12	Site Surveys	5 days	Thu 7/17/08	Wed 7/23/08
13	Resolve Deficiencies	30 days	Thu 7/24/08	Wed 9/3/08
14	Hardware Acquisitions	31 days	Mon 7/28/08	Mon 9/8/08
15	Order and Receive Servers	21 days	Mon 7/28/08	Mon 8/25/08
16	Order Spare Test Stations	21 days	Mon 7/28/08	Mon 8/25/08
17	Build and ship servers to DC location	10 days	Tue 8/26/08	Mon 9/8/08
18	System Development and Test	17 days	Tue 8/26/08	Wed 9/17/08
19	Build Test Station Image/Exam Console Images	4 days	Tue 8/26/08	Fri 8/29/08
20	Test Images with Itembank	3 days	Mon 9/1/08	Wed 9/3/08
21	Validate Images	5 days	Thu 9/4/08	Wed 9/10/08
22	Pre-Image All Machines (optional)	5 days	Thu 9/11/08	Wed 9/17/08
23	Knowledge Test Development	25 days	Mon 7/28/08	Fri 8/29/08
24	Obtain all Questions from DC DMV	5 days	Mon 7/28/08	Fri 8/1/08
25	Establish Custom Messages	5 days	Mon 8/4/08	Fri 8/8/08
26	Translate Questions and acquire Images	10 days	Mon 8/4/08	Fri 8/15/08
27	Build Itembank, Record Audio	10 days	Mon 8/18/08	Fri 8/29/08
28	Pilot Installation	12 days	Thu 9/18/08	Fri 10/3/08
29	Install admin servers and pilot test stations at desired location	1 day	Thu 9/18/08	Thu 9/18/08
30	Training	1 day	Fri 9/19/08	Fri 9/19/08
31	User Acceptance Testing	5 days	Mon 9/22/08	Fri 9/26/08
32	Go Live	0 days	Mon 9/29/08	Mon 9/29/08
33	Pilot Test	5 days	Mon 9/29/08	Fri 10/3/08
34	System Rollout - Districtwide	11 days	Mon 10/6/08	Mon 10/20/08
35	Install and train at all remaining locations	10 days	Mon 10/6/08	Fri 10/17/08
36	System Acceptance	1 day	Mon 10/20/08	Mon 10/20/08

ID	Task Name	Sep 21, '08					Sep 28, '08					Oct 5, '08					Oct 12, '08					Oct 19, '08									
		S	S	M	T	W	F	S	S	M	T	W	F	S	S	M	T	W	F	S	S	M	T	W	F	S	S	M	T	W	
1	Washington DC AKT RFQ DCTO-2008-Q-0188																														
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14	Hardware Acquisitions																														
15	Order and Receive Servers																														
16	Order Spare Test Stations																														
17	Build and ship servers to DC location																														
18	System Development and Test #17																														
19	Build Test Station Image/Exam Console Images																														
20	Test Images with Itembank																														
21	Validate Images																														
22	Pre-Image All Machines (optional)																														
23	Knowledge Test Development																														
24	Obtain all Questions from DC DMV																														
25	Establish Custom Messages																														
26	Translate Questions and acquire Images																														
27	Build Itembank, Record Audio																														
28	Pilot Installation																														
29	Install admin servers and pilot test stations at desired k																														
30	Training																														
31	User Acceptance Testing																														
32	Go Live																														
33	Pilot Test																														
34	System Rollout - Districtwide																														
35	Install and train at all remaining locations																														
36	System Acceptance																														



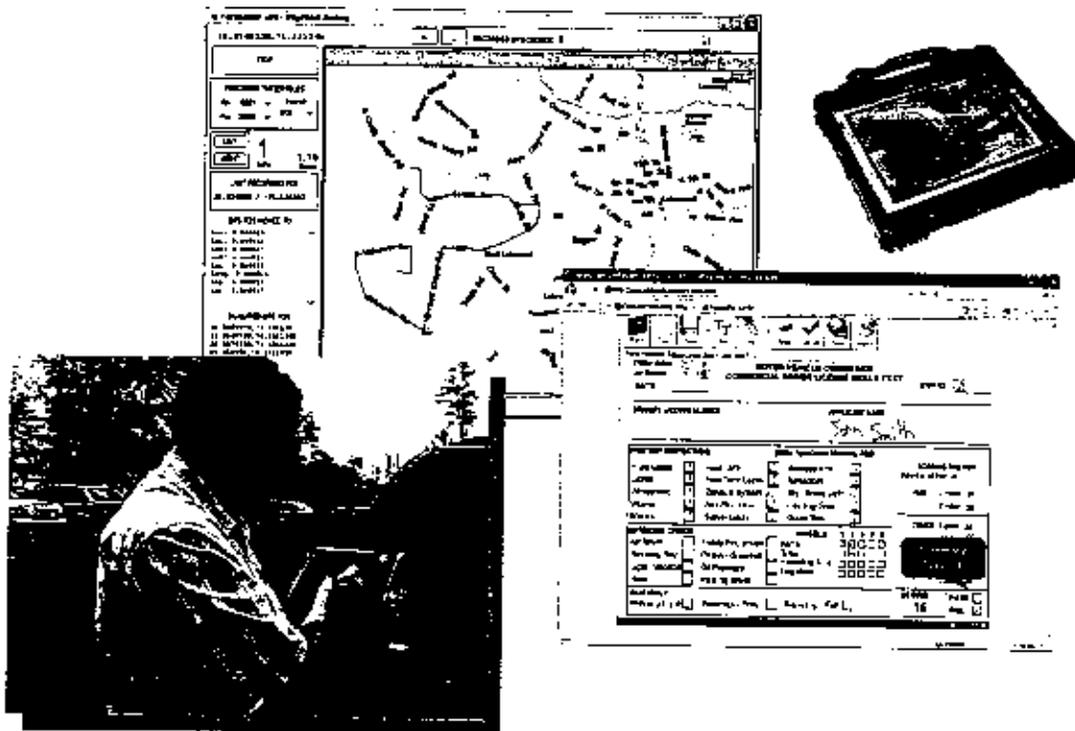
APPENDIX C

ROADTEST

The following pages provide a description of the **RoadTest Skills Testing Application** that has been offered in a free 90 pilot for the DC DMV if chosen as the successful vendor.

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RoadTest™ Automated Driver Skills Testing System



The following displays some of the capabilities of the RoadTest system in full deployment. For the purposes of this response, L-1/Viisage has offered 2 standalone tablet stations for use in a location of your choice.

RoadTest™ is the combination of Viisage's industry-leading AutoTest™ suite of driver testing solutions, and sub-contractor Tabletsoft's user-friendly mobile electronic forms solution. Together, we have produced a best-of-breed solution that replaces the current paper-based process for scoring driver skills tests, pre-trip inspections and recording road test infractions. RoadTest™ utilizes electronic forms on lightweight, portable tablet PCs to automate the required processes, and wireless technology for real-time communication of test data to a central database.

RoadTest™ provides the following benefits and features:

- **Increased Efficiency** – RoadTest reduces the time and labor costs associated with re-keying data in enterprise systems and costs of physically distributing copies across the organization. Testing data is sent electronically via wireless technology (or may be batch uploaded, if preferred) and may be accessed immediately by system users.
- **Increased Accuracy** – Our advanced handwriting recognition algorithms allow examiners to capture hand-written notes and signatures, and yields highly accurate

automatic handwriting recognition results. Business rules may also be programmed into the e-forms and applied at the point and time of data capture to ensure that information is consistent and complete.

- Integration with AutoTest™ Automated Testing System** – Viisage’s AutoTest and RoadTest systems allow driver service agencies who utilize both systems to capture and store applicant data and test result data in a common central database. This allows skills testing examiners to pre-populate applicant data on skills testing e-forms from the knowledge testing database, saving time and improving accuracy. DC DMV administrators may also use the extensive reporting capabilities provided with both systems to produce statistical analysis of both knowledge test and skills test data, or produce a detailed, integrated testing record for an individual applicant.
- Ease of Use** – The RoadTest electronic forms are designed with the look and feel of familiar paper forms, ensuring a painless transition from paper to digital for examiners. The powerful, pen-based data capture engine is integrated with intelligent form elements such as checkboxes, dropdown lists, date/time selections, text areas, number areas, special signature fields, and much more.

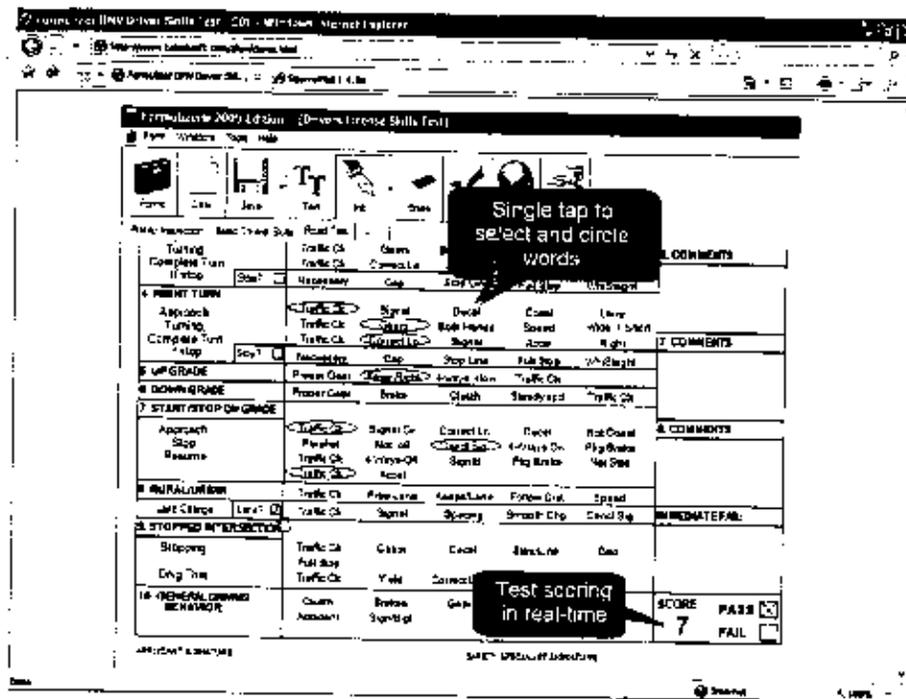
**MOTOR VEHICLE COMMISSION
 COMMERCIAL DRIVER LICENSE SKILLS TEST**

DATE: EMP ID: 28

DRIVERS LICENSE NUMBER: 12345 67890 12345 APPLICANT NAME: John Smith

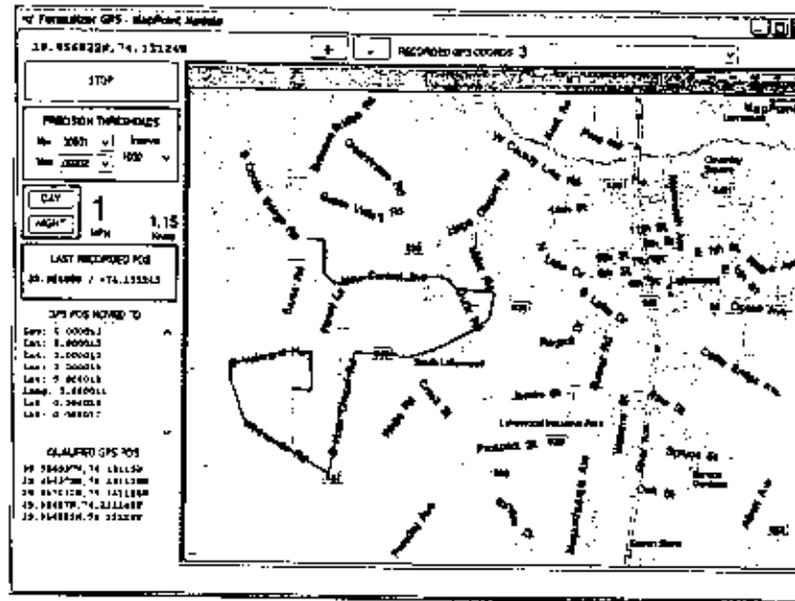
PRETRIP INSPECTION: (Give Applicant Mastery Aid)

Fluid Leaks <input checked="" type="checkbox"/>	Fuel Tank <input checked="" type="checkbox"/>	Release Arm <input checked="" type="checkbox"/>	SCORING PRETRIP PASS # SCORE BUS 3 miles 26 7 miles 22 TRUCK 3 miles 24 3 miles 21 TRACTOR 3 miles 26 TRAILER 4 miles 20 5 miles 24 SCORE: 21 PASS: <input checked="" type="checkbox"/> FAIL: <input type="checkbox"/>
Lights <input checked="" type="checkbox"/>	Fuel Tank Leaks <input checked="" type="checkbox"/>	Reflexors <input checked="" type="checkbox"/>	
Windshield <input checked="" type="checkbox"/>	Exhaust System <input checked="" type="checkbox"/>	Sig. Brake Light <input checked="" type="checkbox"/>	
Wipers <input checked="" type="checkbox"/>	Air / Elec Lines <input checked="" type="checkbox"/>	Landing Gear <input checked="" type="checkbox"/>	
Mirrors <input checked="" type="checkbox"/>	Safety Latch <input checked="" type="checkbox"/>	Door Ties <input checked="" type="checkbox"/>	
INTERIOR CHECK			
Air Brake <input type="checkbox"/>	Safety Equipment <input type="checkbox"/>	WHEELS 1 2 3 4 6	
Steering Play <input type="checkbox"/>	Clutch / Gearshift <input type="checkbox"/>	Rims <input checked="" type="checkbox"/>	
Light indicators <input type="checkbox"/>	Oil Pressure <input type="checkbox"/>	Tires <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
HMW <input type="checkbox"/>	Parking Brake <input type="checkbox"/>	Adj/Hub Seals <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
		Lug Nuts <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
BUS ONLY			
Warning Lights <input type="checkbox"/>	Passenger Entry <input type="checkbox"/>	Passenger Exit <input checked="" type="checkbox"/>	



- Increased Test Security** – RoadTest helps eliminate fraud in the skills testing process with features including GPS tracking capability and photo capture. The optional GPS tracking allows full route tracking, real-time interactive GPS map display for each road test, with the addition of a small, GPS receiver attached to the tablet PC. GPS data and map image may be saved with the electronic document, providing documented evidence of the road test for later use.

RoadTest also provides optional digital photo capability to capture a photo of the applicant or document vehicle problems/violations. Images may be saved along with the test record. Biometrics may also be incorporated for examiner log-on and/or applicant identity verification.



- **Electronic Forms Archiving** – RoadTest not only captures and retains all data from each individual skills test attempt, it also stores the electronic test form itself in exactly the form it was originally completed. All hand-written notations and signatures are retained, and the entire test form is reproducible and printable in PDF format. Authorized DC DMV users may use the Enterprise Server interface to perform a search for a test form based on any data field within a stored test.
- **Integration with DMV Systems** – RoadTest’s flexible .NET architecture simplifies the process of integrating with other DC DMV software systems. And, if DC DMV elects to utilize both AutoTest and RoadTest, the built-in integration between our products will simplify the amount of custom integration work required.
- **Experienced Implementation Team** – Both Viisage and our subcontractor, Tabletsoft Corp., have extensive experience in architecting, building and implementing solutions for the DMV market. Viisage is the only company to bring all the components of an end-to-end solution for DMVs under one roof, with offerings for:
 - Card security/production
 - Image capture
 - Biometrics – finger, face, iris
 - Document authentication
 - Appointment scheduling and resource management
 - Automated knowledge testing

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