



# Consolidated Inspection and Registration System Study

Texas Department of Public Safety  
Texas Department of Motor Vehicles



# Table of Contents

**Table of Contents ..... ii**

**Executive Summary ..... iv**

**1 Vehicle Inspection and Registration in the United States..... 1**

    1.1 In Texas..... 1

    1.2 Outside Texas..... 1

**2 Texas Vehicle Registration Program..... 4**

    2.1 History of Vehicle Registration in Texas ..... 4

    2.2 Vehicle Registration Process..... 5

**3 Texas Vehicle Inspection Program..... 6**

    3.1 History of Vehicle Inspection in Texas..... 6

    3.2 Vehicle Inspection Requirements ..... 6

        3.2.1 Inspection Requirements ..... 6

        3.2.2 Technology ..... 7

        3.2.3 Administration of the Vehicle Inspection Program..... 8

        3.2.4 Additional Programs under the DPS Vehicle Services umbrella ..... 8

        3.2.5 Commercial Vehicles..... 9

            3.2.5.1 Registration ..... 9

            3.2.5.2 Inspection ..... 9

        3.2.6 Exempt Vehicles..... 10

        3.2.7 Enforcement ..... 10

**4 Revenue and Resources ..... 11**

    4.1 Revenue..... 11

    4.2 Fees ..... 11

    4.3 Lost Certificates and Insufficient Fund Transactions..... 12

    4.4 Personnel needs for certificate management ..... 13

    4.5 Certificate/Sticker Comparison: Registration and Inspection ..... 14

**5 Comparison: No Certificate and Single Certificate..... 16**

    5.1 No Certificate Displayed..... 16

        5.1.1 Process ..... 16

        5.1.2 Additional Details..... 19

        5.1.3 Discussion ..... 19

        5.1.4 Opportunity ..... 19

5.1.5	Risk.....	20
5.2	Inspection Certificate Displayed .....	22
5.2.1	Process .....	22
5.2.2	Additional Details.....	23
5.2.3	Discussion.....	23
5.2.4	Opportunity .....	24
5.2.5	Risk.....	25
5.3	Registration Sticker Displayed .....	25
5.3.1	Process .....	25
5.3.2	Additional Details.....	27
5.3.3	Discussion.....	28
5.3.4	Opportunity .....	28
5.3.5	Risk.....	29
5.4	RFID Systems.....	30
5.5	Quick Reference.....	31
<b>6</b>	<b>Appendix 1: Inspection Certificate .....</b>	<b>33</b>
6.1	Inspection Certificate Lifecycle .....	33
<b>7</b>	<b>Appendix 2: Tables .....</b>	<b>35</b>
7.1	Vehicle Inspection Funds Allocation .....	35
7.2	Inspection Certificate Expenditures (to TDCJ) .....	36
7.3	Inspection Certificate Printing Costs .....	37
7.4	TDCJ Wynne Graphics Plant Information .....	37
<b>8</b>	<b>Appendix 3: Comparable Programs.....</b>	<b>38</b>
8.1	State Inspection Programs.....	38
<b>9</b>	<b>Appendix 4: References.....</b>	<b>41</b>
9.1	.....	41

## Executive Summary

During the 82nd Legislative Session, Senate Bill 197 passed, requiring the Texas Department of Public Safety (DPS) and the Texas Department of Motor Vehicles (TxDMV) to conduct a study regarding feasibility and best practices for using an electronic system to consolidate the inspection and registration of motor vehicles in Texas.

Currently, Texas has three agencies that play a role in the registration, inspection and enforcement of motor vehicle registration and inspection laws. Vehicle Registration resides in the TxDMV. Vehicle Inspection resides with DPS, with the Texas Commission on Environmental Quality (TCEQ) having the responsibility for defining the standards for the emissions testing program. Emissions testing programs are a response to Federal Environmental Protection Agency guidelines for air quality.

### The Study

This paper documents the current vehicle inspection and registration systems used by DPS and TxDMV, and provides an overview of systems used in other states. We examine the expenses and revenue in the vehicle inspection and registration programs, and explore the options of a stickerless or a single sticker system. All models are built with the assumption that the programs will continue to be administered by their respective agencies. The three options considered in this report are as follows:

#### **No certificate**

A system without a windshield sticker or certificate would require the vehicle inspection and registration cycles to be synchronized. The registration reminder would also be the inspection reminder. The vehicle's safety and emissions inspections would be due the same month as the vehicle's registration renewal. Inspections would need to be obtained no more than 90 days before registration renewal is due. TxDMV's Registration Web Agent would make a real-time call to the DPS Direct to verify the inspection was passed within the prescribed timeframe. The TxDMV system could then systematically provide for registration denial for no current passing inspection.

The cost of registration would include the state fees currently charged for an inspection certificate. The amount added to registration would differ depending on the county and type of registration (passenger vehicle, commercial, trailer/motorcycle). In counties with a Low Income Repair Assistance Program (LIRAP), these fees could be a separate line item.

**Single certificate is the inspection certificate**

Basic changes to the registration and inspection programs would be necessary for a single certificate system using the inspection certificate. The vehicle inspection and registration cycles would need to be synchronized. The registration reminder would also be the inspection reminder. The vehicle inspection would need to verify that the vehicle's registration is current. Rules governing timeframe would need to be established, such as registration must occur less than 90 days prior to inspection or the registration must have some number of months before expiration for inspection to occur. DPS Direct would make a real-time call to TxDMV's Registration Web Agent to verify the registration falls within the prescribed timeframe. DPS Direct would systematically provide inspection denial for no current registration.

The cost of registration and inspection would be unchanged. In the short term, the consumer may have a shorter initial inspection or registration cycle as the programs synchronize their expiration and renewal processes. There will be no cost impact for the consumer in the long term as the inspection and registration fees remain unchanged.

**Single certificate is the registration sticker**

Registration would include the fees currently charged for an inspection certificate. The vehicle's safety and emissions inspections would be due the same month as the vehicle's registration renewal. Inspections would be required to be obtained no more than 90 days before registration renewal is due. The amount added to registration would differ depending on the county and type of registration (passenger vehicle, commercial, trailer/motorcycle). In counties with a Low Income Repair Assistance Program (LIRAP), these fees would be a separate line item.

Most counties participate in the online payment program. The online payment is processed through Texas.gov, which is also the payment engine used by DPS for payments in the vehicle inspection program. The Registration Web Agent would submit the inspection fees to the appropriate funds through the Uniform Statewide Accounting System (USAS).

The inspection renewal cycle would change to ensure the inspection timeline matches registration renewal. The inspection would need to be passed less than 90 days prior to registration. The Registration Web Agent would need to make a real-time call to DPS Direct to verify the inspection was passed within the prescribed timeframe. WebAgent would systematically provide registration denial for not having a passing current inspection.

## **Recommendation**

The Texas Department of Public Safety and the Texas Department of Motor Vehicles recommend moving to a single certificate system with the registration sticker provided by TxDMV, which would eliminate motor vehicle inspection certificate fraud while reducing costs to the state.

## **Conclusion**

Both DPS and TxDMV's goal is to provide superior customer service by enhancing our current processes and systems, while remaining fiscally responsible. Each of the listed options would require communication between the registration and inspection databases, as well as other agencies affected by any changes made, in order to validate current status and ensure a quality product.

# 1 Vehicle Inspection and Registration in the United States

## 1.1 In Texas

Texas has three agencies that play a role in the registration, inspection and enforcement of motor vehicle registration and inspection laws. Vehicle Registration resides in the TxDMV. Vehicle Inspection resides with DPS, with TCEQ having the responsibility for defining the standards for the emissions testing program. Emissions testing programs are a response to Federal Environmental Protection Agency (EPA) guidelines for air quality.

Each program, registration and inspection, requires a sticker or certificate be affixed to the vehicle. Both of these certificates are affixed to the front windshield of most vehicles.

## 1.2 Outside Texas

Currently 11 states do not require any type of vehicle inspection. The other 39 states have compulsory inspection programs that may be safety only, emissions only, or a combination of safety and emissions. In states with an inspection program, 27 have a single sticker system with the registration sticker being displayed. The ability to register a vehicle in these states is contingent on passing a vehicle inspection, being a new vehicle meeting certain guidelines, or having an inspection exemption due to vehicle age or other defined factors. The inspection data may reside in the same database as the registration information, or may be housed in a separate database. The location where the sticker is affixed also varies by state – some are displayed on the windshield and others on the license plate.

There are 12 states that issue separate stickers for inspection and registration. The majority of these states require a vehicle have a current registration sticker before the vehicle can be inspected. The others require the inspection to be passed and available in their electronic database before issuing a registration sticker or they have no electronic connection between the inspection and registration.

New York has a vehicle inspection program similar to Texas. The NYVIP (New York Vehicle Inspection Program) serves 10 million vehicles per year statewide, with the inspections being conducted

by 40,000 technicians in 10,000 inspection stations (NYVIP, 2012). New York has registration based enforcement in emissions testing areas. This means any vehicle subject to emissions inspection must have been properly inspected within the past 12 months in order to have the vehicle registration renewed. NYVIP combines the annual safety inspection, emissions control device tampering check, and an (onboard diagnostic) OBDII scan for all 1996 and newer model year light duty vehicles (8,500 lbs. GVW and under). Vehicles that are up to two model years old continue to receive the safety-only inspection. For inspection stations, the automated PC-based NYVIP Unit control's the entire inspection process, from verifying the license of the inspector and station, to prompting inspectors through inspections and printing results, and managing the inventory and issuance of certificates (through a barcode identifier). During each inspection, the station PC communicates real-time with SGS Testcom's information management system, which is connected to the TxDMV mainframe registration database (NYVIP, 2012).

Since November 1, 2008, North Carolina's vehicle safety and emissions inspections have been electronically added to the vehicle's registration record. This means windshield inspection stickers are no longer issued by the inspection station. The vehicle's safety and emissions inspections are due the same month as the vehicle's registration renewal. Inspections must be obtained no more than 90 days before registration renewal is due (NCDOT, 2012).

The only state that does not issue any type of sticker is Connecticut. The state issues registration papers which must be kept in the vehicle (CT.gov, 2012). They have an online system allowing customers to verify the validity of their registration, as well as an electronic database for law enforcement to verify registrations. Connecticut does not have a safety inspection program, but does have emissions testing in designated areas. The emissions tests must be done every two years by trained inspectors in a statewide network of auto repair shops, service stations, and car dealers (Connecticut Emissions Program, 2011). Consumers may sign-up online for an email reminder of their inspection due date (CT.gov, 2012). Vehicles that do not pass the emissions inspection have 60 days to repair and retest. A passing inspection is required for registration renewal (CT.gov, 2011). Connecticut allows law enforcement to electronically validate that registration is current. They have also equipped some departments with license plate readers that capture an image of the license plate and verify that the vehicle has a current registration. Connecticut estimated the savings from this change to be \$400,000 per year (CT.gov, 2011). The state has also implemented a program where the registration



card is attached to the renewal notice. The customer is instructed to keep the registration receipt in the vehicle after they have paid the renewal fee, which can be done online or by check (CT.gov, 2012) . Connecticut advertised this change in multiple venues, including press releases, an insert in the renewals, through law enforcement bulletins, on the TxDMV website, on the outside of their envelopes, and in the TxDMV offices.

Bermuda has taken the stickerless system a step further, and requires a Radio Frequency Identification Device (RFID) chip in all vehicles. Bermuda had been losing an estimated \$1.4 million per year due to registration violations. These registration violations were approximately 8 percent of the total vehicles on the island. Approximately half of the non-compliant vehicles registered voluntarily during the period after announcement of the program and during the publicity campaign. The RFID tags were distributed to all four-wheeled vehicles over a year through the registration cycle (ITS, 2012). Vehicles that do not have an RFID tag are easily identified. Bermuda has about 65,000 residents and 47,000 vehicles, with about 25,000 of these having four wheels. In comparison, Texas inspects more than 18 million vehicles per year, and in 2010 had more than 21 million registered vehicles. Bermuda is approximately 26.2 square miles spread over 181 islands, and Texas is 268,820 square miles.

The Connecticut Senate voted on Senate Bill 288 in April 2012. This bill would have required the Connecticut TxDMV to produce a report on implementation of an RFID system for vehicle registration by the end of 2012. The study was projected to cost between \$300,000 and \$500,000 (CGA, 2012). The proposed benefits are two-fold; the first benefit is to ensure that every vehicle conforms to state legislation, and the second benefit is to identify vehicles that are violating Connecticut laws (Lender, 2012). The revenue estimate is more than \$29 million per year with a three-year total of nearly \$80 million, compared to the current collection rate of approximately \$600 thousand in the three-year period. This estimate is based on the issuance of \$100 fines for uninsured drivers during this period (Lender, 2012). In 2010, Connecticut reported slightly less than 3.1 million registered vehicles. The bill failed to collect the required votes for passage.

Most states, even those with electronic connection between the inspection and registration databases, print a written inspection report and give it to the customer at the time of inspection. A table containing information on the programs in all 50 states is in Appendix 3, Table 8.1.

## 2 Texas Vehicle Registration Program

### 2.1 History of Vehicle Registration in Texas

The earliest legislation in Texas relating to vehicle registration is Texas House Bill 93, passed in 1907. This bill required all motor vehicles used on public roads be registered with the county clerk. The vehicles received a number based on the order in which they were registered, leading to duplicate numbers in multiple counties. The owners provided their own plates, which had to be at least six inches high and displayed in a conspicuous place on the vehicle.

The State Highway Department was established in 1917, and one of the duties of this department was vehicle registration. This marked the beginning of the statewide registration program, and also the first issuance of plates from the state. During the 1920's, the state began issuing yearly plates, with the year printed on the plate. The state first issued plates with seven characters in the 1920's also. The depression caused a change in the registration process, allowing 1932 plates to expire on March 31, 1933. This began an April 1 to March 31 registration year which was a standard until 1978. In 1935, the state began producing the plates at the state prison in Huntsville, and the facility is currently at a different prison in the Huntsville area.

In 1975, Texas adopted a multi-year registration system. Plates no longer were replaced annually, but have stickers to indicate the month and year of expiration. In 1978, the state adopted a staggered registration system, allowing for plates to be renewed throughout the year. Throughout the 1980's, 1990's and 2000's, license plate designs changed multiple times. In 2003, House Bill 2971 streamlined the license plate laws. Most plates are now produced using flat digital printing rather than raised numbers and letters. Multiple varieties of affinity and vanity plates are now offered for purchase.

The 81<sup>st</sup> Session of the Texas Legislature created the TxDMV. The department is charged with overseeing motor vehicle services that provide consumer protection, assist motor-vehicle related business and raise revenue for the state. TxDMV registers more than 21 million vehicles per year, credentials buses and large trucks for interstate commerce, regulates automobile dealers and provides grants to law enforcement for enforcement efforts against vehicle related crimes.

## 2.2 Vehicle Registration Process

Texas residents are required to register and annually renew the registration on vehicles owned. Vehicles can be registered in person at the county tax office or an approved substation, by mail with a renewal notice, and online if your county of residence participates in this program. Registration requires proof of financial responsibility (insurance). The base fee for vehicle registration is dependent on the type and weight of the vehicle. The total fee is a combination of the base fee plus \$1 for TexasSure (electronic insurance verification program), \$1 to fund improvements to the registration program and any fees levied by the county of registration.

## **3 Texas Vehicle Inspection Program**

### **3.1 History of Vehicle Inspection in Texas**

The earliest legislation in Texas relating to safety inspections was the headlight test law passed in 1925. The law was administered by the Highway Department. The Highway Department was given the authority to approve types of headlights and other vehicle equipment. This authority was transferred to DPS when it was organized in 1935. Since that time, DPS has administered all vehicle inspection programs. The Legislature adopted House Bill 223 in 1951, establishing a compulsory vehicle inspection program.

### **3.2 Vehicle Inspection Requirements**

#### **3.2.1 Inspection Requirements**

All vehicles registered in Texas are required to receive an annual safety inspection. Additionally, gasoline-powered vehicles that are 2 through 24 years old and registered in counties with an emission program must be emission tested. Emissions testing is not conducted on diesel-powered vehicles or motorcycles. The safety and emission inspections are integrated in counties with emission programs.

DPS and TCEQ partner together to administer the Vehicle Emissions Testing program (Air Check Texas). TCEQ establishes standards for emissions testing equipment, sets emissions test fees, captures and analyzes test data and reports to the EPA on the status of the program. DPS licenses stations, certifies inspectors, conducts overt and covert audits on inspection stations, investigates complaints against stations and inspectors, recommends and takes adverse actions against stations and inspectors when warranted, and provides training and certification of Inspectors.

Each vehicle is inspected for adherence to standards developed by DPS for safety-related equipment generally found on a vehicle in that particular vehicle class. These standards, or points of inspection, are directly linked to a particular safety related system or item of inspection, such as steering, brakes, lighting, tires, wheels, etc. DPS has developed a commercial vehicle inspection standard for those vehicles requiring a commercial inspection certificate as indicated by the vehicles intended

usage. Example; a semi-truck tractor with a gross vehicle weight rating of more than 26,000 lbs. would be subject to a more stringent 30 “point” inspection as compared to a passenger vehicle that does not require a commercial inspection and subject to a 20 “point” inspection. Motorcycles are subject to a 13 “point” inspection, trailers to a 14 “point” inspection and school buses to a 26 “point” inspection.

Inspection data is available by type of inspection certificate issued, but is not broken out by vehicle classification. Since all vehicles receive a safety inspection, vehicles receiving an emission inspection certificate must also have passed the safety portion of the inspection before the certificate is issued. The number of inspections performed in emissions counties has been rising steadily, and exceeded the number of inspections in safety counties in Fiscal Year 2011. The table below provides the total for each of the broad inspection classification: safety only, trailer/motorcycle, commercial vehicle, and emissions inspections.

	<b>Safety Inspections</b>	<b>T/M Inspections</b>	<b>Commercial Inspections</b>	<b>Emissions Inspections</b>	<b>Annual Inspections Performed</b>
<b>FY 2006</b>	8,208,657	247,345	489,775	7,527,613	16,473,390
<b>FY 2007</b>	8,346,906	253,784	499,697	7,759,095	16,859,482
<b>FY 2008</b>	8,542,981	333,607	532,364	7,983,267	17,392,219
<b>FY 2009</b>	8,352,375	318,927	527,518	8,285,576	17,484,396
<b>FY 2010</b>	8,787,331	309,795	528,681	8,764,498	18,390,305
<b>FY 2011</b>	8,768,716	325,176	550,428	8,836,935	18,481,255

### 3.2.2 Technology

A required component of the Vehicle Inspection program is the electronic transmission of inspection data. The Texas vehicle inspection program has two components – safety and emission. Data from all inspections include station and inspector information, inspection results, and vehicle specific information such as year, make, model, VIN, insurance expiration, license plate and odometer reading. If a vehicle passes inspection, the record will also include the certificate number and VI-30 (Out-of-State Verification) number if one was issued.

Regulatory Services is currently developing an enterprise solution that will consolidate the operations of all regulated programs. The enterprise solution is called DPS Direct. The first program to be included in this solution is Vehicle Inspection. The vehicle inspection portion of DPS Direct replaces the current TAVIS system. DPS Direct Vehicle Inspection Connection went live on Sept. 1, 2012. The

system is designed to handle all aspects of the program, including licensing, inventory, certificate sales, compliance audits, enforcement activity, and recording of vehicle inspections.

Counties with safety-only programs use equipment provided by the program to connect to DPS Direct. DPS Direct consists of an Oracle Database, a SOA layer which includes services and communications between systems, uses DPS single sign-on authentication for internal users, and has a web-based interface. The system also supports external users through a service provider (Texas.gov), accessing information through services in the SOA layer of the application. The safety inspection program provides a thin client system, a monitor, keyboard, mouse and a hand-held scanner to the stations, enabling them to record the safety inspections.

Counties with emission programs utilize analyzers purchased or leased from approved vendors to conduct the emission portion of the inspection, to record emission and safety inspection results, and to record vehicle specific information. The analyzers connect to the Texas Inspection Management System (TIMS), which is managed by TCEQ. Stations in the emissions program must purchase the analyzers from vendors approved by TCEQ. The emissions inspection requires the customers be provided with a printed copy of their Vehicle Inspection report, so a printer is part of the analyzer equipment package.

The inspection data from TIMS is transmitted nightly for integration into DPS Direct. Inspection information on both DPS Direct and TIMS are available to DPS users immediately after the inspection is completed. DPS Direct and TIMS both have web application interfaces for DPS user access.

### **3.2.3 Administration of the Vehicle Inspection Program**

DPS provides administration and regulation of Vehicle Inspection. Inspection stations and inspectors must be licensed or certified by DPS. The department provides auditing, compliance and enforcement for the program. The licensing personnel are located at DPS Headquarters, while compliance and enforcement are located throughout the state. TCEQ defines the standards for the emissions testing program, and DPS administers the program in conjunction with the safety inspection program.

### **3.2.4 Additional Programs under the DPS Vehicle Services umbrella**

In addition to Vehicle Inspection, DPS has two programs that are integral to Vehicle Services. These programs are:

- **Recognized Emission Repair Facilities:** Facilities are approved by DPS to perform emission repairs on vehicles failing inspection. These facilities are often part of LIRAP, and repairs performed by these facilities fully qualify for the DPS inspection waiver.
- **Texas On Road Vehicle Emission Testing (TORVET):** This is another dimension of the emission program. It provides for roadside emission detection and enforcement activities for vehicles exceeding emission standards.

### 3.2.5 Commercial Vehicles

#### 3.2.5.1 Registration

Commercial vehicle registration is governed entirely by the state. Commercial vehicles may be registered for up to eight years under Transportation Code 502.0023.

#### 3.2.5.2 Inspection

The commercial vehicle inspection program rules are written by the state, but must comply with federal guidelines. The Federal Government allows states to have a federal equivalent commercial inspection program, or for those that do not, it allows companies to self-certify that their equipment has been inspected in accordance with Federal Commercial inspection requirements. Texas's CMV inspection program was approved and published in the Federal Register on April 14, 1994. The Federal Government has certified that the State inspection decal satisfies the Federal requirement for proof of inspection on the vehicle. Law enforcement officers in any state can easily view the certificate and determine if the vehicle has a current valid inspection. There are currently 24 states with federal equivalent inspection programs. All of these states, with the exception of Massachusetts, require inspection decals to be displayed on the vehicle. Massachusetts provides a vehicle inspection report for commercial trailers, but does not require a decal.

### 3.2.6 Exempt Vehicles

The vehicles that do not require registration and inspection are very similar. The registration rules contain much greater detail than inspection, but generally apply to the same types of vehicles. These vehicles fall into the categories of temporary transit, farm or slow-moving vehicles, and lighter weight trailers. The registration process does have an additional caveat, where the county may refuse registration if the owner owes money to the county or fails to appear in court on a criminal proceeding. The rules are documented in the Texas Transportation Code 548.052 and 502.146

### 3.2.7 Enforcement

DPS enforces violations in both the inspection and registration programs. These violations are observed by viewing the certificates on the vehicle windshield. The table below shows the overall totals for inspection and registration violations recorded by DPS from Fiscal Year 2006 to Fiscal Year 2011.

	Inspection Violations	Registration Violations
FY 2006	29926	30467
FY 2007	43746	31676
FY 2008	43963	31734
FY 2009	44584	36225
FY 2010	45581	36892
FY 2011	48977	37658



## 4 Revenue and Resources

### 4.1 Revenue

Fees related to Vehicle Inspection are found in Texas Transportation Code, Chapter 548, Subchapter H. This legislation contains the amount stations can charge for inspections and the amount to be collected by the state. The fees are assessed per inspection, but collected from the stations in advance through the purchase of the certificate from DPS. Therefore the funding is not dependent on the exact dates of inspection. In Fiscal Year 2010, there were 18,390,305 inspections performed generating gross revenue of \$196,802,126.00. In Fiscal Year 2011, the number rose to 18,481,255 inspections, generating \$288,404,557.00.

Fees related to vehicle registrations are found in Texas Transportation Code, Chapter 502, Subchapter D. The Transportation Code contains the amount of registration fees required to be collected, the optional fees that are permitted to be collected by the county, as well as additional fees collected for specific purposes. Registration fees are collected by the county tax offices via mail, internet, and in person. Counties may also contract with service providers such as grocery stores to process renewals. In Fiscal Year 2012, there were 22,618,153 currently registered vehicles in Texas which is an increase from Fiscal Year 2011 of 21,939,786. In Fiscal Year 2011, registration fees collected was \$1,564,940,137.

### 4.2 Fees

The funds received through Vehicle Inspection are allocated to state, county and vendor.

- State Funds: The state portion of the inspection fee is divided among the Texas Mobility Fund, Texas Mobility – Emission, TCEQ Clean Air, TCEQ Clean Air – Emission, and the Texas Emission Reduction Program (TERP).
- LIRAP Funds- LIRAP funds are collected in designated emission counties. Collected funds are distributed to participating counties to assist low income individuals in repairing or

replacing vehicles that do not pass emissions inspection or replacing vehicles that are at least 10 years old.

- Vendor Funds: Vendor fees for the Vehicle Inspection Application and Program Support are also paid through the certificate sales. The fees collected per certificate are part of the vendor contract, and there is no additional funding from the state for the vendor.

The funds received from registration fees are allocated to state and county.

- State Funds: The portion of the registration fees are deposited to the State highway Fund.
- The Counties receive approximately 33 percent of the registration fees collected to be used for county road maintenance, new road construction, and to pay obligations issued in the construction or improvement of any roads in the county road system.
- The additional TERP and Texas Mobility Fees collected in Fiscal Year 2011 were \$99,111,466.

### **4.3 Lost Certificates and Insufficient Fund Transactions**

Inspection certificate orders are shipped via FEDEX. The program experiences losses related to shipments lost in transit or incorrectly delivered and not recovered. In Fiscal Year 2010, the lost orders amounted to \$64,257.50, and in Fiscal Year 2011, the lost orders totaled \$83,955.00.

The vehicle inspection program also allows stations to order certificates and pay online using their checking account. The program experiences shrinkage due to stations that have received orders even though they have insufficient funds in their checking account to pay for the orders. The stations subsequently close, but DPS is unable to collect the payment. DPS normally refunds the amount the station has paid for any unused certificates, but in these cases the refund is applied toward the insufficient funds. In Fiscal Year 2010, that amount was \$7333, and in Fiscal Year 2011, the total was \$3517.50.

## 4.4 Personnel needs for certificate management

The fulfillment team is responsible for the certificates from contract initiation for certificate creation until the certificates are received at an inspection station. The fulfillment section fills and ships orders to the stations, tracks shipments and is responsible for ensuring payment is received. This team is comprised of one supervisor and five fulfillment specialists.

In addition to the dedicated fulfillment team, certificate audit and compliance is included in the job duties of the field personnel. DPS has 140 auditors, 17 field supervisors and six regional managers who perform functions related to the inspection certificates. Auditors spend approximately 30 percent of their time on certificate activities. Field supervisors and regional managers spend approximately 10 percent of their time on issues relating to certificates.

## 4.5 Certificate/Sticker Comparison: Registration and Inspection

	Registration	Inspection
<b>Printing</b>	3 <sup>rd</sup> Party Vendor	TDCJ
<b>Security Features</b>	Registration stickers are printed specifically for a vehicle – the certificate has the plate number, the county of registration and part of the VIN	<p><b>One-Year Safety, Two-Year Safety, Commercial Windshield:</b> Circle cuts in the center, phosphorus adhesive (glows when with a black light) and Polyolefin film (pearlescent film sheen on the back of the certificate).</p> <p><b>Commercial Decal and Trailer Motorcycle:</b> Circle cuts in the center, white void release stock and phosphorus adhesive.</p> <p><b>Emission Certificates:</b> Heat resistance film (shrinks when heat is applied), circle cuts in the center, tamper evident special adhesive (aggressive glue) and Polyolefin film (pearlescent film sheen on the back of the certificate).</p>
<b>Issuance</b>	Issued by County Tax Assessor or by authorized contractors such as grocery stores	Inspections performed at more than 10,000 stations statewide

<b>Expiration/Renewal</b>	<p><b>New Car:</b> 1 year</p> <p><b>Older vehicles:</b> 1 year, but can prepay for years 2 &amp; 3</p> <p><b>Commercial:</b> 1 year, but can be multi-year</p> <p><b>Trailer:</b> Over 4000 lbs gross weight: 1 year</p> <p><b>Motorcycle:</b> 1 year</p> <p><b>**Allowed 5 business days grace**</b></p>	<p><b>New Car:</b> 2 year</p> <p><b>Older vehicles:</b> 1 year</p> <p><b>Commercial:</b> 1 year</p> <p><b>Trailer:</b> Over 4500 lbs gross weight: 1 year</p> <p><b>Motorcycle:</b> 1 year</p> <p><b>**Allowed 5 calendar days grace**</b></p>
<b>End User</b>	<p>Owner renews in person or by mail. They are given certificate to install</p>	<p>Certificate is installed at time of inspection by DPS authorized inspector</p>
<b>Vehicle Imports and Exports</b>		<p>Mexico now requires a valid emissions inspection report for the vehicle before it can enter the country for an extended stay. This is an effort to implement US emissions reduction standards.</p>
<b>Insurance</b>	<p>Proof of financial responsibility required</p>	<p>Proof of financial responsibility required</p>
<b>New to state</b>	<p>Requires inspection before registration</p>	<p>Requires inspection before registration</p>

## 5 Comparison: No Certificate and Single Certificate

All models in this section are built with the assumption the programs will continue to be administered by their respective agencies. As discussed in the Inspection and Registration section, one state currently issues no windshield certificates, and there are multiple variations on the single certificate model. This section looks first at three options:

- No certificate
- Single certificate is the inspection certificate
- Single certificate is the registration sticker.

There are common elements or activities that must be completed in order to implement any of the options. The first, and most obvious, is the legislative changes that would need to occur. Legislative changes could include changing the expiration or renewal period of inspections or registration, changing the fees for the programs, and the requirement for certificate display.

Each of the options would require communication between the registration and inspection databases in order to validate current status. All law enforcement – city, state, county, federal, and university – must be able to access the systems to validate current inspection and registration status. DPS Direct will provide real-time connection to the Texas Department of Insurance database in order to verify the insurance component required for inspections. In the same way, DPS Direct can be called by TxDMV's WebAgent to verify that a vehicle has received a passing inspection within the specified timeframe. This could also happen the other way – DPS Direct can call WebAgent to verify registration. This would limit the amount of data that would be passed – the systems would use the VIN, plate or certificate number and receive the minimum amount of information to ensure the requirements have been met.

### 5.1 No Certificate Displayed

#### 5.1.1 Process

The vehicle inspection and registration cycles would need to be synchronized. The registration reminder would also be the inspection reminder. The vehicle's safety and emissions inspections are due

the same month as the vehicle's registration renewal. Inspections must be obtained no more than 90 days before registration renewal is due. TxDMV's Registration WebAgent makes a real-time call to DPS Direct to verify the inspection was passed within the prescribed timeframe. The assumption is that both safety and emissions inspection data are available through DPS Direct. The TxDMV could systematically provide for registration denial for no current passing inspection.

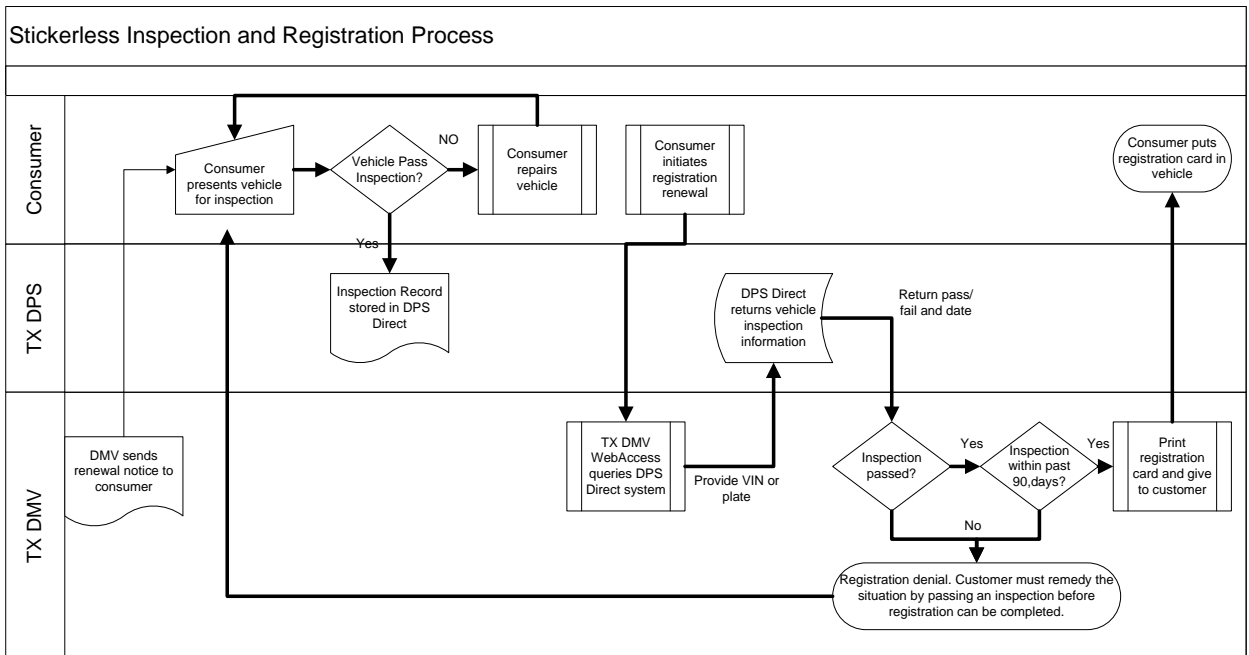
The cost of registration would include the state fees currently charged for an inspection certificate. The amount added to registration would differ depending on county and type of registration (passenger vehicle, commercial, trailer/motorcycle). In counties with a LIRAP, these fees can be a separate line item. The chart below details the additional cost to be added to the registration process.

<b>Inspection Type</b>	<b>Counties</b>	<b>Inspection Cost (maximum)</b>	<b>State Portion</b>	<b>Station Portion</b>
One-Year Safety	Counties except the ones specifically called out in the emissions program	\$14.50	\$7.50	\$7.00
Two-Year Safety (new vehicles)	Statewide	\$23.75	\$16.75	\$7.00
Commercial	Statewide	\$62.00	\$22.00	\$40.00
Trailer/Motorcycle	Statewide	\$14.50	\$7.50	\$7.00
TSI/OBD Safety Emissions	El Paso	\$26.75	\$8.25	\$18.50
TSI/OBD Safety Emissions	Travis, Williamson	\$28.75	\$10.25 (includes \$2 LIRAP)	\$18.50

ASM/OBD Safety Emissions	Brazoria, Fort Bend, Galveston, Harris, Montgomery, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall and Tarrant	\$39.75	\$14.25 (includes \$6 LIRAP on OBD inspections only)	\$25.50
--------------------------	---	---------	--	---------

Most counties participate in the online payment program. The online payment is processed through Texas.gov. This payment engine is also used by DPS for payments in the vehicle inspection program. WebAgent would submit the inspection fees to the appropriate funds through the USAS system.

The process flow for inspections and registration is represented in the following diagram





### **5.1.2 Additional Details**

Inspection stations would be required to print a Vehicle Inspection Report (VIR) for all passed inspections. Only stations in the emissions program currently have printers and produce a VIR which is given to the customer for passed inspections. Printer drivers must be installed on DPS Direct Vehicle Inspection Connection (VIC), and only specific printers may be used. The options are that DPS would provide printers through DPS Direct to the safety stations and require they provide a VIR for passed inspections, or DPS would require the stations to provide their own printer in order to print the VIR. The emissions testing program currently allows consumers to view and print a copy of their VIR through a web interface. DPS Direct will have this feature implemented in a future release.

### **5.1.3 Discussion**

This is an efficient model in the data storage and sharing capability. If WebAgent is not capable of real-time connection and data retrieval, then this model cannot be implemented. TCEQ currently sends registration denial information to TxDMV in cases where vehicles do not meet passing emissions standards. In addition to denial functions, WebAgent must also be programmed to recognize when a vehicle no longer needs to be inspected.

Collecting one payment and distributing the funds through a single payment engine may be feasible. The USAS system may have limitations on the number of funds that a single payment can be assigned. This would need further investigation and testing before implementation.

### **5.1.4 Opportunity**

Inspection records are currently collected in two databases. The records from the emissions inspections will be imported into DPS Direct, making all inspection records available through a single interface. TxDMV can utilize a secure service to access the inspection record database to validate current status. The interface would also be available to law enforcement through TLETS. DPS would continue to collect and maintain the inspection records, and provide a real-time response to queries from the registration system. This efficiently shares only the information needed, avoiding any data transformation issues and ensuring the integrity of the data in the system.

DPS would no longer maintain an inventory for inspection certificates, thereby cutting the cost of purchasing the certificates, order fulfillment, shipping and inventory management functions. The certificates alone would be a direct cost saving of \$2 - 2.5 million per year. This model also allows resource reallocation from inventory management into other areas. DPS would be able to deploy existing resources in the compliance area to allow for additional audit activity since they will gain back the 30 percent of their time that is currently consumed with certificate inventory. There is also no longer a concern about missing or stolen inspection certificates being used in criminal endeavors.

TxDMV and the counties would also benefit from this model. There would no longer be a need for the registration sticker in its current form. The registration sticker could be redesigned much like an insurance card, and could be printed on plain paper. The costs may be further reduced if the TxDMV allows consumers to have electronic notification for registration renewal. The opportunity exists to allow for email notification, electronic insurance and inspection verification, and local registration sticker printing.

The inspection stations benefit from this model as they will not have to purchase certificates in advance of an inspection. This eliminates the cost for inventory (inspection certificates) and the risk of insufficient fund transactions. They would have to purchase consumables (printer paper and ink) and possibly a printer in order to provide inspection reports to the customers.

### **5.1.5 Risk**

As noted in section 2.2.7, DPS issued nearly 49,000 inspection violations and more than 37,000 registration violations in 2011. These violations can be noticed and initiated through direct observation of the certificates on the vehicle. As part of the move to a stickerless system, another method of initiating these violations would need to be implemented. Texas requires vehicles to have both front and rear license plates. DPS and local law enforcement agencies can submit license plates or VIN's to the TLETS system to obtain registration information, and will be able to receive inspection information as part of DPS Direct. The inability to see an expired registration or inspection without submitting a TLETS query will be a change in process for the law enforcement community. This will also impact commercial vehicle traffic moving in and through other states. Radio Frequency Identification Decal (RFID) and Automatic License Plate Recognition (ALPR) technology could be implemented to assist in

compliance monitoring. This technology is truly innovative, expensive and on the scale of a program the size of Texas would be a grand initiative.

The Texas Department of Criminal Justice (TDCJ) would be adversely affected. TDCJ produces the inspection certificates. DPS paid \$2,037,360 in Fiscal Year 2011 and \$2,401,048.50 in Fiscal Year 2012 for inspection certificates. Inspection certificates account for a significant portion of the revenue from TDCJ's Wynne Graphics plant. In 2010, the inspection certificates were 73 percent of sales, rising to 76 percent in 2012. Table 7.2 in Appendix 2 contains the information for payment to TDCJ from Fiscal Year 2006 through Fiscal Year 2012, and table 7.4 contains the detail related to TDCJ sales and production costs. TDCJ would need to replace \$2-2.5 million per year in fees they are currently receiving for certificate production.

Commercial Vehicle Inspection has federal approval that proof of inspection is provided by the inspection certificate. The certificate is visible to anyone, and law enforcement officers in any state can easily see if the vehicle has a current valid inspection. In order to implement a stickerless system, DPS would need to ensure inspection information is available to law enforcement nationwide. While DPS Direct will have a consumer website to view the VIR, this is generally not the most efficient way for law enforcement to view the results. This solution would need to go through the Federal approval process.

In the short term, the consumer may have a shorter initial inspection cycle as the programs synchronize their expiration and renewal processes. Consumers may also have a shorter inspection renewal cycle for the first year after this takes effect as the system get into alignment. There will not be a net cost impact, as the inspection fee would be lowered by the amount added to the registration process. Consumers will also not have the visual reminder of a sticker for either the inspection or registration programs. The stickerless system will need a significant public relations campaign coordinated between the three agencies – TCEQ, DPS and TxDMV – to ensure consumers do have their inspections before renewing their registration. When the program is new, there will be a percentage of consumers experiencing registration denial due to inspection deficiency.

There is some risk around data integrity as inspectors have the ability to manually enter the vehicle data. This could lead to the VIN or plate coming back as out-of-date. The new vehicle inspection system will have greater accuracy due to updated hand-held scanner technology, but this is still a risk. To mitigate this risk, DPS would need to enact rules requiring paper copies of the Vehicle Inspection Report (VIR) to be given to the customer for each passed inspection. DPS currently provides safety

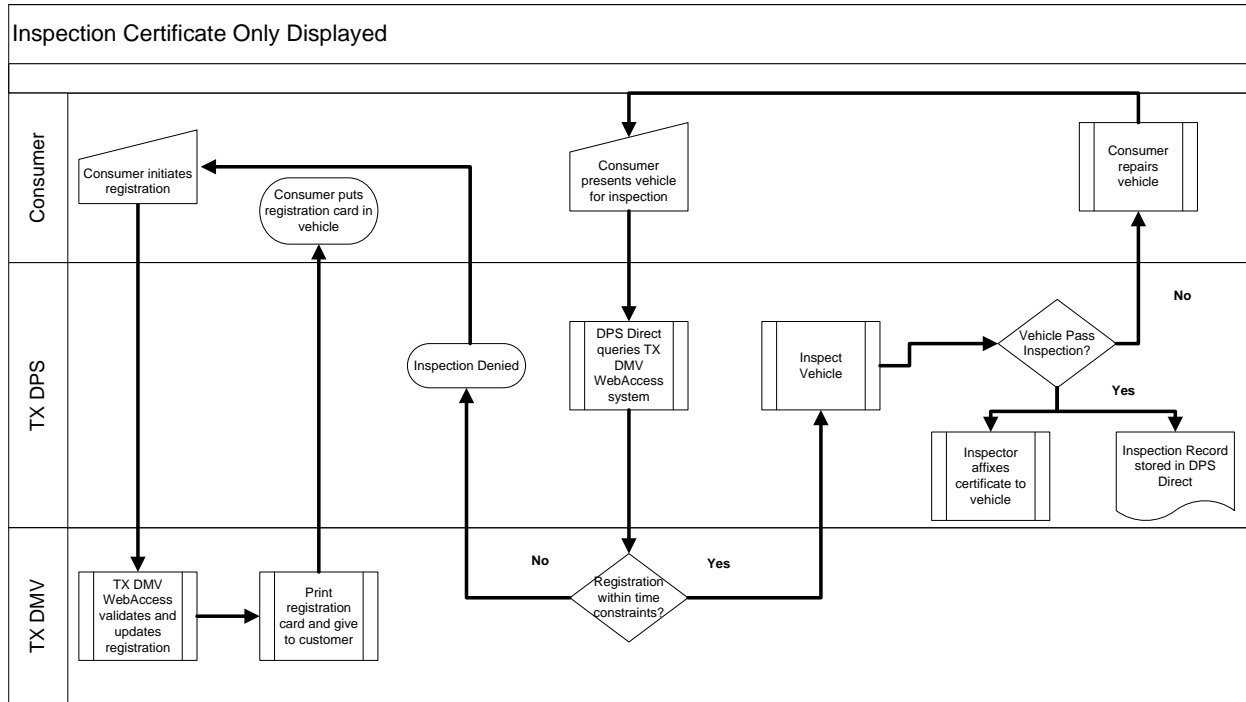
inspection stations with computer systems, and printers would need to be added to the equipment provided. Emissions inspection stations currently have printers as required equipment as the emission inspection program mandates they provide a copy of the VIR to the customer.

DPS Direct will also need a mechanism to capture waivers in the emissions inspection program. Vehicles requiring emission system repairs that represent too costly a burden for certain consumers may receive an inspection waiver that is valid for one year. While currently the review, awarding, and placing a certificate on vehicles granted waivers is a manual process, no change to the system would be necessary as the inspection records from the emissions analyzers stored in TIMS (and subsequently shared with DPS ) contain data fields to recognize and validate waivers issued by DPS. Waivers do result in an inspection certificate being affixed to a vehicle by the DPS employee approving the waiver. To go totally stickerless, the vehicle registration system must be able to validate either current inspection or a waiver.

## 5.2 Inspection Certificate Displayed

### 5.2.1 Process

Displaying only an inspection certificate requires some basic changes to the two programs. The vehicle inspection and registration cycles would need to be synchronized. The registration reminder would also be the inspection reminder. The vehicle inspection must verify that the vehicle's registration is current. Rules governing timeframe would need to be established, such as registration must occur less than 90 days prior to inspection or registration must have some number of months before expiration for inspection to occur. DPS Direct or TIMS would make a real-time call to TxDMV's Registration WebAgent to verify the registration falls within the prescribed timeframe. DPS Direct or TIMS would systematically provide inspection denial for no current registration.



### 5.2.2 Additional Details

The cost of registration and inspection would be unchanged. In the short term, the consumer may have a shorter initial inspection or registration cycle as the programs synchronize their expiration and renewal processes. There will be no cost impact for the consumer in the long term as the inspection and registration fees remain unchanged.

### 5.2.3 Discussion

This option requires no changes in the way the vehicle inspection system performs and records inspections, and the collection of funds remains intact. The programming required to allow the DPS Direct system access to the registration records can be completed in a short amount of time since DPS Direct is in an accelerated development cycle. Programming changes to the emissions inspection system can also be made, requiring both the emissions analyzer hardware and the TIMS software to be updated. This significant change would require a longer timeframe than changes in DPS Direct, and would incur significant costs from the vendor for the enhancement. As with the other options, the system coding would need to occur in the TxDMV application for automated verification, for access and

query of the registration system, and simplifying the registration receipt printing. This option offers the ability to start up in a short time frame, incurs a lower cost, and maintains data integrity which makes it a low risk activity.

One option is to allow the inspection station to register vehicles at the time of inspection. This option would require each inspection station to be deputized by the county tax assessor-collector as a limited service deputy. This would require the posting of a bond and access to TxDMV's subcontractor software. The inspection station would be required to have equipment capable of printing the registration sticker at time of sale. The inspection station would also be required to remit all revenue collections from registration to the tax assessor-collector.

#### **5.2.4 Opportunity**

DPS has developed a new system (DPS Direct) to replace TAVIS. DPS Direct replaced TAVIS in recording safety inspections, and in providing inventory, sales, licensing and enforcement activity. The services needed to allow the Registration System to access inspection data can be incorporated as part of the development process. DPS Direct can be called by the WebAgent to verify that a vehicle has received a passing inspection within the specified timeframe.

This option keeps the inspection certificate, so there will be no need for federal review of the commercial inspection program. The fees will continue to come in through the sale of the certificates, so there will be no impact to the collection of funds. TDCJ will continue to print certificates, therefore no loss of revenue or job training activities.

The inspection certificate is a visual reminder of the expiration date to both the consumer and law enforcement. As noted in section 2.2.7, the Department issued nearly 49,000 inspection violations and more than 37,000 registration violations in 2011. Retaining the inspection certificate provides law enforcement with a visual cue for expired and fraudulent inspections. DPS and local law enforcement agencies can also submit license plates or VIN's to the TLETS system to obtain registration information, and will be able to receive inspection information as part of DPS Direct.

TxDMV or the county will continue to print a registration receipt. This can be a full page or a card. However, there would no longer be a need for a certificate, thus saving the funds that go to the vendor for certificate production.

### **5.2.5 Risk**

TxDMV will require a review of their multi-year registration program which may result in changes in terms or requirements. Vehicle inspection is a yearly requirement, which would require the inspection and registration systems to be programmed to recognize compliance. There would need to be a notification process for vehicles that fall out of compliance.

DPS will continue to incur the costs associated with the certificate inventory process. The direct costs are purchasing certificates, administering the inventory control process, and the order fulfillment process. This cost also includes the time spent enforcing the certificate security process. This is time that could be used to audit other regulated programs or do more in-depth audits of vehicle inspection locations.

Emissions inspections are conducted using specialized equipment that sends the inspection data into TIMS. The programming required for this equipment to communicate with the registration system would take at least two years to implement and may incur significant cost from the vendor.

## **5.3 Registration Sticker Displayed**

### **5.3.1 Process**

Registration would include the fees currently charged for an inspection certificate. The vehicle's safety and emissions inspections are due the same month as the vehicle's registration renewal. Inspections must be obtained no more than 90 days before registration renewal is due.

The amount added to registration would differ depending on county and type of registration (passenger vehicle, commercial, trailer/motorcycle). In counties with LIRAP, these fees can be a separate line item to call attention to them. The chart below details the state fees that would be collected during the registration process.

<b>Inspection Type</b>	<b>Counties</b>	<b>Inspection Cost (maximum)</b>	<b>State Portion</b>	<b>Station Portion</b>
One Year Safety	Counties except the ones specifically called out in the emissions program	\$14.50	\$7.50	\$7.00
Two Year Safety (new vehicles)	Statewide	\$23.75	\$16.75	\$7.00
Commercial	Statewide	\$62.00	\$22.00	\$40.00
Trailer/Motorcycle	Statewide	\$14.50	\$7.50	\$7.00
TSI/OBD Safety Emissions	El Paso	\$26.75	\$8.25	\$18.50
TSI/OBD Safety Emissions	Travis, Williamson	\$28.75	\$10.25 (includes \$2 LIRAP)	\$18.50
ASM/OBD Safety Emissions	Brazoria, Fort Bend, Galveston, Harris, Montgomery, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall and Tarrant	\$39.75	\$14.25 (includes \$6 LIRAP on OBD inspections only)	\$25.50

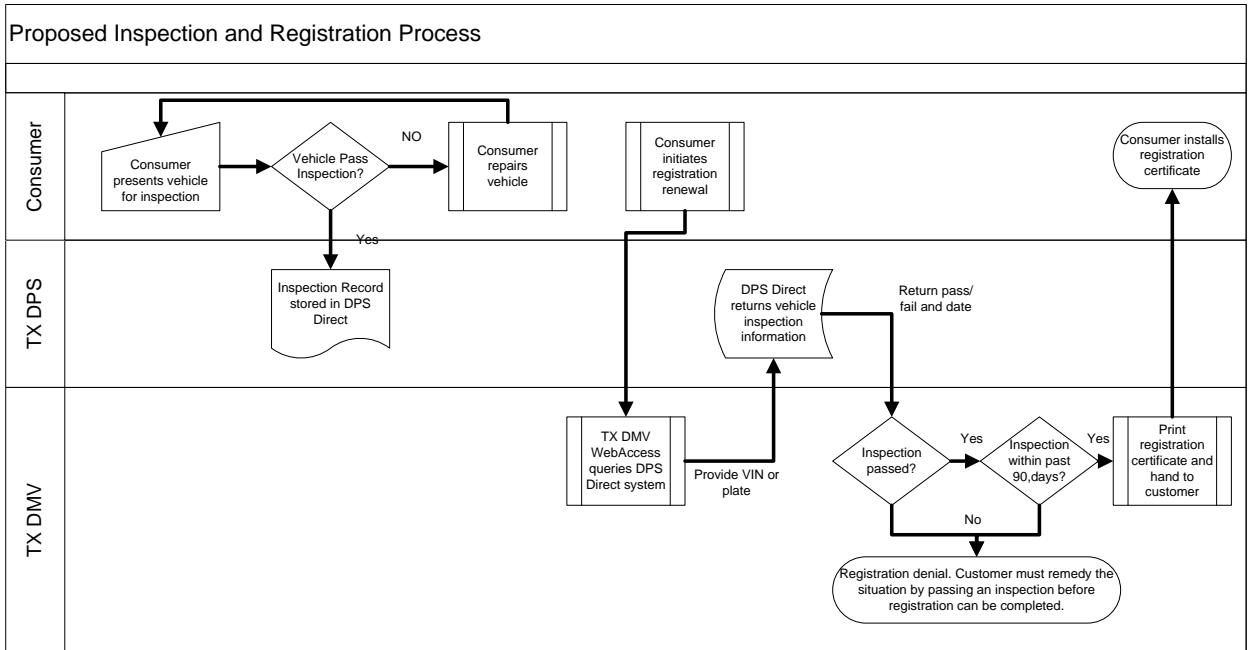
Most counties participate in the online payment program. The online payment is processed through Texas.gov. This payment engine is also used by DPS for payments in the vehicle inspection program. WebAgent would submit the inspection fees to the appropriate funds through the USAS system.

Inspection renewal cycle changed to ensure that the inspection timeline matches registration renewal. The inspection must be passed less than 90 days prior to registration. Registration WebAgent system makes a real-time call to DPS Direct to verify the inspection was passed within the prescribed



timeframe. TxDMV could systematically provide for registration denial for no current passing inspection.

The process flow for inspections and registration is represented in the following diagram.



### 5.3.2 Additional Details

Amount charged for an inspection would be lower than currently charged. The stations currently keep \$7 of the safety inspection fee, which is \$14.50. The state portion, \$7.50, is added to the registration fee.

Only stations in the emissions program currently have printers and produce a VIR, which is given to the customer for passed inspections. Printer drivers must be installed on the Vehicle Inspection program systems, therefore only specific printers may be used. The options are that DPS would provide printers through DPS Direct to the safety stations and require they provide a VIR for passed inspections, or DPS would require the stations to provide their own printer in order to print the VIR.

DPS would inform the Federal Government of the change in the commercial program to show that registration also means the safety inspection has passed.

### 5.3.3 Discussion

This is an efficient model in the data storage and sharing capability. If WebAgent is not capable of real-time connection and data retrieval, then this model cannot be implemented. TCEQ currently sends registration denial information to the TxDMV in cases where vehicles do not meet passing emissions standards. In addition to denial functions, the WebAgent must also be programmed to recognize when a vehicle no longer needs to be inspected.

Collecting one payment and distributing the funds through a single payment engine may be feasible. The USAS system may have limitations on the number of funds that a single payment can be assigned to. This would need further investigation and testing before we could implement this option. Consumers would pay a lower fee for inspection, but the amount would be added to registration, so in the end it would be a wash.

### 5.3.4 Opportunity

Inspection records are currently collected in two databases. The records from the emissions inspections will be imported into DPS Direct, making all inspection records available through a single interface. TxDMV can utilize a secure service to access the inspection record database to validate current status. The interface would also be available to law enforcement through TLETS. DPS would continue to collect and maintain the inspection records, and provide a real-time response to queries from the registration system. This efficiently shares only the information needed, avoiding any data transformation issues and ensuring the integrity of the data in the system.

DPS would no longer maintain an inventory for inspection certificates, thereby eliminating the cost of purchasing the certificates, order fulfillment, shipping and inventory management functions. The certificates alone would be a direct cost saving of \$2-2.5 million per year. This model also allows resource reallocation from inventory management into other areas. DPS would be able to deploy existing resources in the compliance area to allow for additional audit activity since they will gain back the 30% of their time that is currently consumed with certificate inventory. There is also no longer a concern about missing or stolen inspection certificates being used in criminal endeavors.

The inspection stations benefit from this model as they will not have to purchase certificates in advance of an inspection. This eliminates the cost for inventory (inspection certificates) and the risk of insufficient fund transactions. They would have to purchase consumables (printer paper and ink) and possibly a printer in order to provide inspection reports to the customers.

The registration sticker is a visual reminder to both the consumer and law enforcement. As noted in section 2.2.7, DPS issued nearly 49,000 inspection violations and more than 37,000 registration violations in 2011. Retaining the registration sticker provides law enforcement with a visual cue for expired and fraudulent registrations. DPS and local law enforcement agencies can also submit license plates or VIN's to the TLETS system to obtain registration information, and will be able to receive inspection information as part of DPS Direct.

### **5.3.5 Risk**

TDCJ would be adversely affected. TDCJ produces the inspection certificates. DPS paid \$2,037,360 in Fiscal Year 2011 and \$2,401,048.50 in Fiscal Year 2012 for inspection certificates. Inspection certificates account for a significant portion of the revenue from TDCJ's Wynne Graphics plant. In 2010, the inspection certificates were 73 percent of sales, rising to 76 percent in 2012. Table 7.2 in Appendix 2 contains the information for payment to TDCJ from Fiscal Year 2006 through Fiscal Year 2012, and Table 7.4 contains the detail related to TDCJ sales and production costs. TDCJ would need to replace \$2-2.5 million per year in fees they are currently receiving for certificate production.

In the short term, the consumer may have a shorter initial inspection cycle as the programs synchronize their expiration and renewal processes. Consumers may also have a shorter inspection renewal cycle for the first year after this takes effect as the system get into alignment. There will not be a net cost impact, as the inspection fee would be lowered by the amount added to the registration process. Another short term impact to consumers would be the lack of a visible inspection reminder, namely the sticker. There may be some initial registration rejections as vehicles may not have been inspected prior to the consumer submitting the registration renewal.

There is some risk around data integrity as inspectors have the ability to manually enter the vehicle data. This could lead to the VIN or plate coming back as not current. The new vehicle inspection

system will have greater accuracy due to updated hand-held scanner technology, but this is still a risk. To mitigate this risk, DPS would need to enact rules requiring paper copies of the Vehicle Inspection Report (VIR) to be given to the customer for each passed inspection. DPS currently provides safety inspection stations with computer systems, and printers would need to be added to the equipment provided. Emissions inspection stations currently have printers as required equipment as the emission inspection program mandates they provide a copy of the VIR to the customer.

## 5.4 RFID Systems

Any of these solutions could be a precursor of an RFID system for registration and identifying infractions. The full cost of implementing the system would need to be weighed against the estimated revenue and the public opinion cost. RFID has a highly negative connotation, being associated with the idea that “big brother” is watching. This has slowed the adoption of RFID in the public sector. The cost of the RFID tag could be passed to the consumer through the vehicle registration process. Currently Connecticut is conducting a feasibility study of implementing an RFID system. Connecticut has about 3 million registered vehicles. A similar report investigating the opportunity to implement an RFID system was undertaken by Arizona in 2008. The report compared the RFID solution to an Automatic License Plate Recognition (ALPR) system. The report concluded that the RFID solution had a much higher startup cost (\$50 million) compared to ALPR’s cost of \$10 million. Arizona had approximately 4.3 million registered vehicles in 2008. Texas has more than 21 million registered vehicles.

## 5.5 Quick Reference

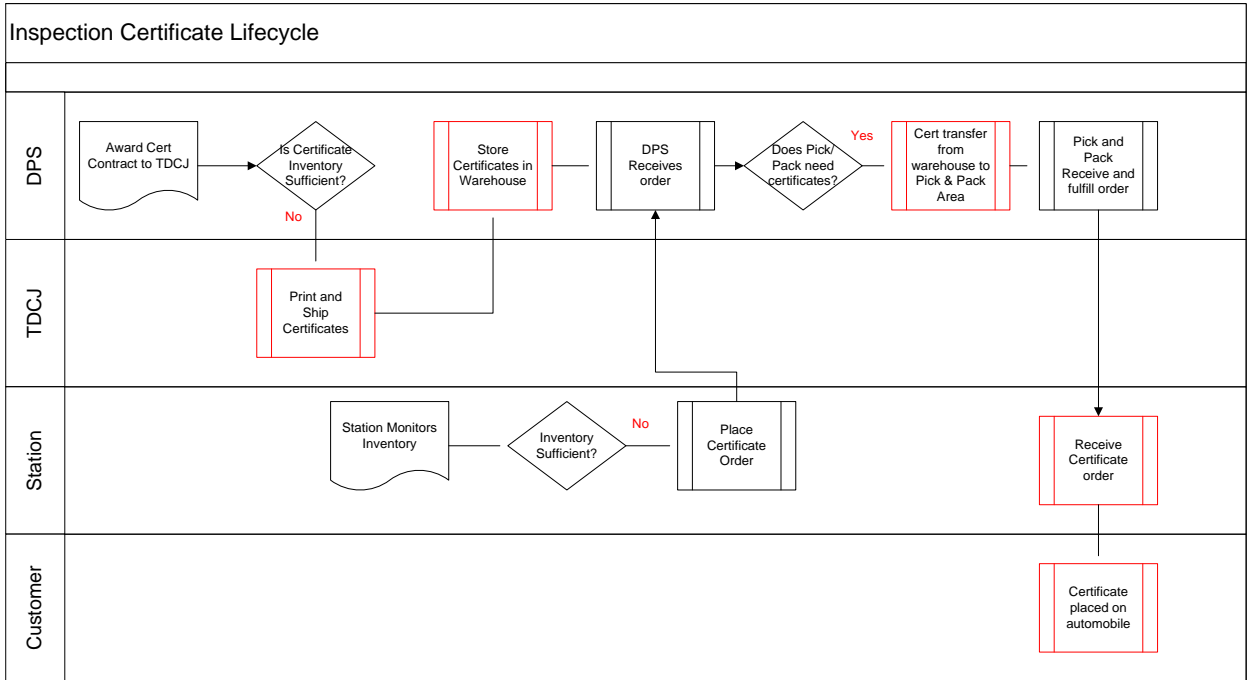
Feature	No Sticker	Inspection	Registration
<b>Infrastructure</b>			
<b>Hardware</b>	Safety stations require printers, already in place for emissions stations	No change necessary	Safety stations require printers, already in place for emissions stations
<b>Software</b>	DPS Direct in development, TIMS no change, Registration WebAgent in place	DPS Direct in development, TIMS software changes, Registration WebAgent in place	DPS Direct in development, TIMS no change, Registration WebAgent in place
<b>Connectivity</b>	Secure tunnel between inspection and registration systems	Secure tunnel between inspection and registration systems	Secure tunnel between inspection and registration systems
<b>Enforcement</b>			
<b>Violations</b>	Electronic verification only	Visual verification of inspection, electronic for registration	Visual verification of registration which requires current passing inspection
<b>Financial Impact</b>			
<b>Fee Collection</b>	State portion through registration system	Current structure: collected through each individually	State portion through registration system
<b>TXDPS</b>	Save \$6m over 2 years Able to re-deploy resources	No net change	Save \$6m over 2 years Able to re-deploy resources
<b>TXDMV</b>	Able to re-deploy resources	Cost savings of printing stickers. Able to re-deploy resources	No net change
<b>TCEQ</b>	Costs for outreach campaign	Costs for analyzer software change and outreach campaign	Cost for outreach campaign
<b>TDCJ</b>	Lose approximately \$5m net revenue over 2 years	No net change	Lose approximately \$5m net revenue over 2 years

Feature	No Sticker	Inspection	Registration
<b>External Resources</b>			
<b>Inspection Stations</b>	Do not have to purchase or secure certificates	Stations must purchase and secure certificates	Do not have to purchase or secure certificates
<b>Registration Locations</b>	Will not have to produce and secure stickers	Will not have to produce and secure stickers	Produce and secure stickers
<b>Consumers</b>			
<b>Initial Deployment</b>	May experience shortened renewal in either program until programs are in sync	May experience shortened renewal in either program until programs are in sync	May experience shortened renewal in either program until programs are in sync
<b>Renewal</b>	No impact for subsequent renewal periods	No impact for subsequent renewal periods	No impact for subsequent renewal periods
<b>Financial</b>	No net impact, lower fee for inspection, higher at registration	No net impact – fees are the same as current	No net impact, lower fee for inspection, higher at registration
<b>Certificates</b>	N/A	Security features include tamper and duplication protection	Vehicle specific details printed by a standard printer on each individual sticker

## 6 Appendix 1: Inspection Certificate

### 6.1 Inspection Certificate Lifecycle

- On a two-year cycle, DPS determines the amount of inspection certificates needed and contracts with TDCJ to print the inspection certificates. (Current contract expired 8/31/2012 and is for \$5.5 million)
- Annually, TDCJ fulfills between 2-3 certificate printing requests made by DPS and immediately ships certificates . (No additional cost for shipping)
- DPS maintains a secured, climate controlled warehouse to ensure the safety and integrity of the certificates.
- As stock becomes low in RSD Fulfillment, certificates are transferred from warehouse inventory to fulfillment inventory.
- As orders are fulfilled, individual books are transferred from DPS to the station.
- Stations issue certificates to vehicles that pass inspection, affixing them to the vehicle at the time of inspection.



\*\*\*NOTE: Certificate physical locations are indicated by the red boxes\*\*\*



## 7 Appendix 2: Tables

### 7.1 Vehicle Inspection Funds Allocation

Fee Name	Fee Comp	Qty per book	Fixed Dollar Amt
<b>One Year Safety Only</b>	Texas Online	50	2.00
	Texas Mobility	50	3.50
	TCEQ Clean Air	50	2.00
<b>Two Year Safety Only</b>	Texas Online	50	2.00
	Texas Mobility	50	10.75
	TCEQ Clean Air	50	4.00
<b>Commercial/Windshield</b>	Texas Online	10	2.00
	Texas Mobility	10	10.00
	T.E.R.P.	10	10.00
<b>Commercial Decal</b>	Texas Online	10	2.00
	Texas Mobility	10	10.00
	T.E.R.P.	10	10.00
<b>Trailer/Motorcycle</b>	Texas Online	10	2.00
	Texas Mobility	10	3.50
	TCEQ Clean Air	10	2.00
<b>TSI Safety Emission</b>	Texas Online	50	0.25
	Texas Mobility	50	3.50
	Tx Mobility -Em	50	2.00
	TCEQ Clean Air	50	2.00
	TCEQ CA - Em	50	0.50
<b>ASM Safety Emission</b>	Texas Online	50	0.25
	Texas Mobility	50	3.50
	Tx Mobility -Em	50	2.00
	TCEQ Clean Air	50	2.00
	TCEQ CA - Em	50	0.50
<b>OBD Safety Emission</b>	Texas Online	50	0.25
	Texas Mobility	50	3.50
	Tx Mobility -Em	50	2.00

Fee Name	Fee Comp	Qty per book	Fixed Dollar Amt
<b>OBD Safety Emission</b>	TCEQ Clean Air	50	2.00
	TCEQ Clean Air - Em	50	0.50
	L.I.R.A.P	50	6.00
<b>TSI/OBD Safety Emission</b>	Texas Online	50	0.25
	Texas Mobility	50	3.50
	Tx Mobility -Em	50	2.00
	TCEQ Clean Air	50	2.00
	TCEQ CA - Em	50	0.50
	L.I.R.A.P	50	2.00
<b>One Year Emission Test Only (ETO)</b>	Texas Online	10	0.25
	Texas Mobility - Em	10	2.00
	TCEQ Clean Air - Em	10	0.50
<b>Dishonored Check Fee</b>	Dishonored Check Fee	1	30.00

## 7.2 Inspection Certificate Expenditures (to TDCJ)

	Certificates:	Numeral Inserts:	Total Cost
FY 2006	\$2,845,500.00	\$146,215.50	\$2,991,715.50
FY 2007	\$1,193,250.00	\$78,324.00	\$1,271,574.00
FY 2008	\$1,973,125.00	\$163,549.50	\$2,136,674.50
FY 2009	\$2,294,250.00	\$189,069.00	\$2,483,319.00
FY 2010	\$1,582,500.00	\$86,670.00	\$1,669,170.00
FY 2011	\$1,986,000.00	\$51,360.00	\$2,037,360.00
FY 2012	\$2,263,500.00	\$137,548.50	\$2,401,048.50

### 7.3 Inspection Certificate Printing Costs

Certificate Type	Cost per Certificate	Cost per Certificate
	FY 09,10,11	FY 06, 07, 08
One and Two Year Safety	\$0.0750	\$0.0700
Trailer/Motorcycle	\$0.1250	\$0.1100
Commercial Decal	\$0.1500	\$0.1400
Commercial Windshield	\$0.0850	\$0.0700
Emissions	\$0.1825	\$0.1825
Emission test Only	\$0.0500	\$0.0400
Numeral Inserts	\$0.0321	\$0.0321

### 7.4 TDCJ Wynne Graphics Plant Information

Fiscal Year	Product Description	DPS Sales	Factory Total Sales	DPS as % of Total Sales	Factory Overhead
Fy2010	Inspection Certificates	\$2,346,625	\$3,230,775	73%	\$821,718
Fy2010	Numeral Inserts	\$105,930			
Fy2011	Inspection Certificates	\$2,022,780	\$2,717,563	74%	\$463,405
Fy2011	Numeral Inserts	\$51,360			
Fy2012	Inspection Certificates	\$2,486,000	\$3,294,536	76%	\$643,808
Fy2012	Numeral Inserts	\$179,278			

## 8 Appendix 3: Comparable Programs

### 8.1 State Inspection Programs

	Safety	Emission	VIN check	No Inspection	Single Sticker: Registration	No Sticker	Dual sticker
Alabama	x (on sale or transfer ownership)				X		
Alaska				x (I/M repealed 2012)	x		
Arizona					x		
Arkansas				x	x		
California					x		
Colorado					x		
Connecticut							
Delaware	x				x		
District of Columbia	X (not on passenger vehicles)						x
Florida			x		x		
Georgia					x		
Hawaii	x						X (registration requires inspection)
Idaho					x		
Illinois					x		
Indiana			x		x (can register/renew at inspection stations)		
Iowa				x (only for motor carriers, not passenger)	x		

	Safety	Emission	VIN check	No Inspection	Single Sticker: Registration	No Sticker	Dual sticker
<b>Kansas</b>			x		x		
<b>Kentucky</b>				x	x		
<b>Louisiana</b>	x						X (inspection part of vehicle record)
<b>Maine</b>	x						X (valid registration required for inspection)
<b>Maryland</b>	x (on sale or transfer ownership)				x		
<b>Massachusetts</b>	x						x (must first be registered, then inspected)
<b>Michigan</b>	x (salvage or rebuilt)				x		
<b>Minnesota</b>				x	x		
<b>Mississippi</b>	x						x
<b>Missouri</b>	x				x (paper cert)		
<b>Montana</b>				x	x		
<b>Nebraska</b>	x (bringing into state)				x		
<b>Nevada</b>					X (registration renewal can be done at participating emission stations)		
<b>New Hampshire</b>	x				x		
<b>New Jersey</b>	X (eliminated 2010 for passenger, commercial only)				x		
<b>New Mexico</b>					x		
<b>New York</b>	x						X (inspection required for registration)
<b>North Carolina</b>	x				x		

	Safety	Emission	VIN check	No Inspection	Single Sticker: Registration	No Sticker	Dual sticker
North Dakota				x	x		
Ohio					x		
Oklahoma				x	x		
Oregon					x		
Pennsylvania	x						X (verify registration or ownership for inspection)
Rhode Island	x						X (valid registration required for inspection)
South Carolina				x	x		
South Dakota				x	x		
Tennessee					x		
Texas	x						x
Utah	x				x		
Vermont	x						X (current registration required for inspection)
Virginia	x						X (inspection required for registration)
Washington					x		
West Virginia	x						X (current registration required for inspection)
Wisconsin					X (can register at inspection stations)		
Wyoming			x		x		

## 9 Appendix 4: References

### 9.1

Connecticut Emissions Program. (2011, May 3). *General Information*. Retrieved May 9, 2012 from <http://www.ctemissions.com/gen-different.html>

Connecticut General Assembly (CGA). (2012, April 13). *S.B 288*. Retrieved May 9, 2012 from [http://www.cga.ct.gov/asp/cgabillstatus/cgabillstatus.asp?selBillType=Bill&bill\\_num=S000288&which\\_year=2012#](http://www.cga.ct.gov/asp/cgabillstatus/cgabillstatus.asp?selBillType=Bill&bill_num=S000288&which_year=2012#)

CT.GOV. (2012, May 16). *TxDMV has a New Registration Document and Renewal Process*. Retrieved May 9, 2012 from <http://www.ct.gov/dmv/cwp/view.asp?Q=466462&A=810>

CT.GOV. (2011, September 1). *Effective August 1, 2010 Connecticut will no longer issue or require vehicle registration stickers*. Retrieved May 9, 2012 from <http://www.ct.gov/dmv/cwp/view.asp?a=810&q=463030>

CT.GOV. (2011, July 1). *Registration and Renewal Compliance Messages and Other Requirements*. Retrieved May 9, 2012 from <http://www.ct.gov/dmv/cwp/view.asp?a=810&q=467088>

ITS International. (2012). *Electronic vehicle registration ensures payment*. Retrieved May 9, 2012 from <http://www.itsinternational.com/sections/cost-benefit-analysis/features/electronic-vehicle-registration-ensures-payment/>

Lender, Jon. (2012, March 17). *Radio Frequency ID Bill: Kin to 'Big Brother?'*, *Hartford Courant*, Retrieved May 9, 2012, from [http://articles.courant.com/2012-03-17/news/hc-lender-column-rfid-0318-20120317\\_1\\_rfid-emissions-testing-cameras](http://articles.courant.com/2012-03-17/news/hc-lender-column-rfid-0318-20120317_1_rfid-emissions-testing-cameras)

NCDOT. (2012). *History of Inspections in North Carolina*. Retrieved May 9, 2012 from

<http://www.ncdot.gov/dmv/vehicle/registration/inspection/#evi>

NYVIP. (2012). *WELCOME to New York State's new state-of-the-art motor vehicle inspection*

*program "NYVIP"*. Retrieved May 9, 2012 from <http://www.nyvip.us/>