THE UNIVERSITY OF TEXAS AT AUSTIN
CENTER FOR TRANSPORTATION RESEARCH

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GLOSSARY

AAMVA	American Association of Motor Vehicle Administrators
ABEST	Automated Budget and Evaluation System of Texas
AIS	Automated Information Services
AWS	Amazon Web Services
BCS	Biometric Capture System
BIT	Business Intelligence Team (also abbreviated BI Team or B.I.T. in reports)
BRE	Biennial Revenue Estimate
CAPPS	Cost Appropriations Process
CAT	Control and Analysis Tool, or Computer Aided Technology, or Computer Assisted Training
CDL	Commercial Driver License
CDLIS	Commercial Driver License Information System
CPA	Comptroller of Public Accounts
CRM	Customer Relations Management (a type of software)
CSC	Customer Service Center
CSMM	Communication and Social Media Manager
CSTIMS	Commercial Skills Test Information Management System by AAMVA
CTR	Center for Transportation Research (at the University of Texas – Austin)
CTS	Certified Technology Specialist, or Computer Technology Services
DBITS	Deliverables Based Information Technology Services
DBQ	Database Query, or Document Based Query
DCS	Distributed Control System
DHR	Driver History Record
DHS	Department of Homeland Security
DIR	Department of Information Resources
DL	Driver License
DLC	Driver License Compact
DLD	Driver License Division
DLIP	Driver License Improvement Plan
DLO	Driver License Office
DLS	Driver License System
DPS	Texas Department of Public Safety
EIR	Exceptional Item Request
ETG	Expert Task Group
FAQ	Frequently Asked Questions
FedRAMP	Federal Risk and Authorization Management Program
FMCSA	Federal Motor Carrier Safety Administration
FTE	Full Time Employee
GAA	General Appropriations Act
GSA	General Services Administration
EVVE	Electronic Verification of Vital Events
FIFO	First In First Out (method for processing customers or data – first in, first served)
H.B.	House Bill
HQ	Headquarters

ID	Identification Card
IDO	Innovation and Data Office
IRB	Institutional Review Board
ISO	International Organization for Standards
IT	Information Technology
IVR	Interactive Voice Response
JAVA	Just Another Virtual Accelerator (a computer programming language)
LAR	Legislative Appropriations Request
LBB	Legislative Budget Board
LPS	License and Permit Specialist
MOF	Method of Finance
MPR	Monthly Progress Report
mDL	Mobile Driver License (a digital driver license or ID card)
MSA	Metropolitan Statistical Area
NAPHSIS	National Association for Public Health Statistics and Information Systems
NCIC	National Crime Information Center
NEMO-Q	A queuing system used by DLD to provide customers with service tickets prior to the appointment system implementation in May, 2020
NHTSA	National Highway Traffic Safety Administration
NPM	New Public Management
NPRM	Notice of Proposed Rulemaking
OEO	Object of Expenditure or Object of Expense
OMB	Office of Management and Budget
PAAS	Platform as a Service
PCLS	Prioritization of Cybersecurity and Legacy Systems Projects (performed by DIR)
PDPS	Problem Driver Pointer System
PII	Personally Identifiable Information
PIO	Public Information Office or Public Information Officer
PSM	Public Service Motivation
PTO	Personal Time Off
QAT	Quick Access Toolbar, or Quick Assist Technology, or Quality Acceptance Test, or Quality Action Team
QCM	Quality Call Monitoring
QM	Quality Management
RFI	Request For Information
RFO	Request For Offer
RFP	Request For Proposal
S2S	State to State (by AAMVA)
S.B.	Senate Bill
SAAS	Software as a Service
SAO	State Auditor's Office
SAVE	Systematic Alien Verification for Entitlements, via Department of Homeland Security
SMS	Short Message Service (text message)
SOW	Statement of Work
SQL	Structured Query Language (software developed for accessing a relational database)
SSN	Social Security Number
SSOLV	Social Security Online Verification

StateRAMP	State Risk and Authorization Management Program
STS	Shared Technology Services
TCIC	Texas Crime Information Center Database
TDC	Texas Demographic Center (Located at Texas State University)
TPS	Toyota Production System
TPST	Third Party Skills Testers
TxDMV	Texas Department of Motor Vehicles
TxGOV	Texas.Gov (a service platform managed by DIR)
TXR	Variation of the TX-RAMP acronym with the same meaning
TX-RAMP	Texas Risk and Authorization Management Program
TxT	Texas by Texas (a service platform managed by DIR)
UB	Unexpended Balance
UCCE	Cisco Unified Contact Center Enterprise
USTA	U.S. Travel Association
UX	User Experience
USCIS	U.S. Citizenship and Immigration Services
WFM	Workforce Management
XML	Extensible Markup Language (a computer programming language)

Chapter 1. Introduction and Background

In 2023, the 88th Texas State Legislature passed House Bill 1, the 'General Appropriations Act,' including Rider 51, 'Driver License Services Efficiency Study,' to be directed by the Department of Public Safety (DPS). Rider 51 requires DPS to examine the deficiencies of the Driver License Division (DLD) and how to increase DLD effectiveness, including: 1) Improving customer service; 2) Reducing wait times through information technology to modernize customer facing services; and 3) Incentivizing online transactions. Based on Rider 51, DLD commissioned a study containing objectives including:

Table 1 Major Study Objectives

Objective 1	The efficiencies that would be advanced by improving customer service
Objective 2	The efficiencies that would be advanced by reducing wait times
Objective 3	The efficiencies that would be advanced by procuring additional information technology
Objective 4	The efficiencies that would be advanced by incentivizing online transactions
Objective 5	The challenges in reference to items 1 – 4 above
Objective 6	Proposed timeline needed for all items 1 – 4 above
Objective 7	Potential alternatives or additional insights
Objective 8	Recommendations regarding the management and operating structure of DLD
Objective 9	Recommendations for methods of incentivizing online renewals for eligible individuals

At the project initiation meeting, the DLD Expert Task Group (ETG) and the Study Team members agreed that the Study Team would examine the deficiencies of the DLD division and make recommendations on how to increase DLD effectiveness and efficiency. DLD management and the Study Team agreed to use the DPS Strategic Plan definitions of *efficient* and *effective*:

- **Efficient** such that maximum results are produced with a minimum waste of taxpayer funds, including through the elimination of redundant and non-core functions.
- **Effective** in successfully fulfilling core functions, measuring success in achieving performance measures, and implementing plans to continuously improve.

1.1. Identifying Operational and Enterprise Deficiencies

As the Study Team began to identify a structure to develop a final report that assessed effectiveness and efficiency measures, these were broken into two levels within the DLD: operational and enterprise.

- **Operational-level measures** focus on the day-to-day activities and processes that directly impact customer service and wait times at Driver License Offices (DLOs) and the Customer Service Center (CSC).

- **Enterprise-level measures**, on the other hand, examine broader organizational functions at headquarters (HQ) that affect DLD's abilities to improve customer service, reduce wait times, procure additional information technology, and incentivize online transactions.

By examining effectiveness and efficiency at both levels, the Study Team identified deficiencies at the DLO-level and across the entire DLD structure.

1.1.1. Categorizing and Analyzing Deficiencies

Next, the Study Team developed effectiveness and efficiency measures based on DPS Strategic Plan official measures, measures identified in data analysis, interviews, and survey metrics aligned with customer service, wait times, procuring additional information technology, and incentivizing online transactions. Operational insights informed the analysis and evaluation of the enterprise level performance and vice versa. The Study Team broadly categorized deficiencies into major pillars under the operational and enterprise umbrellas (Figure 1).

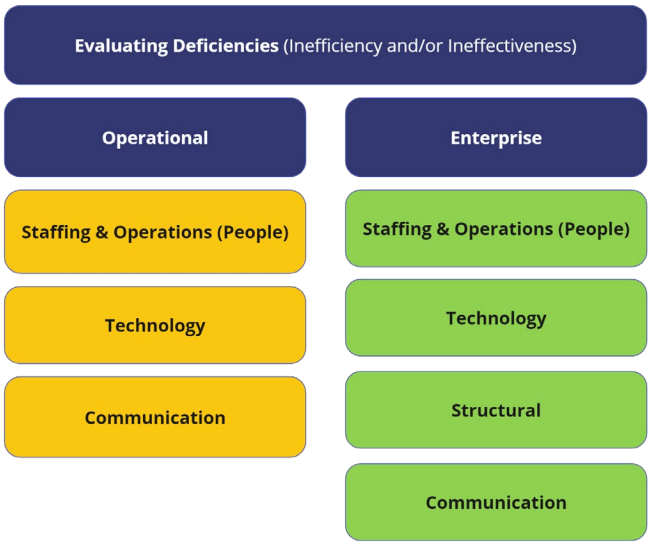

Figure 1 Evaluating Deficiencies: Operational and Enterprise

The Study Team developed a list of potential root causes of the deficiencies. They include causes both in and out of DLD's control, but most root causes are in fact outside of DLD control. For example, root causes can include statutory limitations, lack of technology, poor communication, or lack of funding. The Study Team developed recommendations from deficiency identification and root cause analysis.

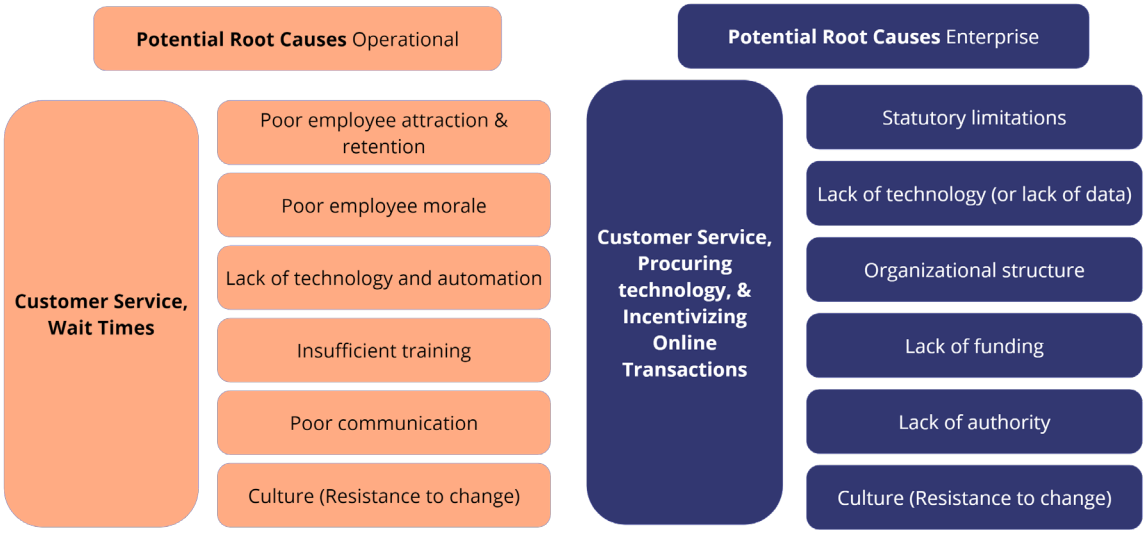

Figure 2 Root Causes at Operational and Enterprise Levels

The Study Team then developed recommendations from deficiency identification and root cause analysis. Table 2 outlines key effectiveness and efficiency elements considered at the Operational and Enterprise level that guided analysis, findings, and recommendations.[1]

Table 2 Enterprise and Operational Effectiveness and Efficiency Considerations

Thematic Area	**Effectiveness:** *Assess an agency's effectiveness in serving its customers and in achieving its mission, goals, and objectives.*	**Efficiency:** *Quantifiable indicator of productivity expressed in unit-costs, units of time, or other ratio-based units.*
Potential Operational Effectiveness and Efficiency Measures		
In-Person Operations	• Customer satisfaction with process • Appointment availability • In-person transaction service times • First-visit resolution rate • Percentage of original driver licenses and ID cards completed within 45 minutes • Percentage of DL/ID card duplicates or renewals completed within 30 minutes	• Processing times for in-person transactions • Number of transactions per staff hour • Number of customers served per day • Number of transactions in DLO • Wait time in office • Cost of recruitment, onboarding, and training • Number of unplanned PTO days taken
Remote Operations	• Customer satisfaction with process • Net promotor score for online renewals	• Number of clicks in online renewal process • Completion time for mail renewals • Completion time for phone renewals • Abandonment rate
Customer Service Center Operations	• Number of inbound calls answered • Number of calls dropped	• Abandonment rate • Number of calls answered per employee
Communication	• Customer engagement metrics with website and social media	• Percentage of abandoned in-person visits due to lack of proper documentation
Potential Enterprise Effectiveness and Efficiency Measures		
Leadership & Direction	• Achievement of goals and objectives • Positive organizational reputation • Employee morale and engagement	• Number of initiatives implemented • Cost of training employees • Employee turnover rate

[1] Effectiveness and Efficiency definitions were taken from the 2022 State Auditor's Office Guide to Performance Measure Management https://sao.texas.gov/Reports/Main/23-314.pdf and the 2012 State Guide to Performance Measure Management 314.pdfhttps://www.lbb.texas.gov/Documents/Instructions/Performance_Measures/Guide%20to%20Performance%20Measure%20Management.pdf

Program Oversight & Planning	• Policy development & implementation • Achievement of goals/objectives • Customer satisfaction	• Cost of oversight /evaluation and time spent collecting/analyzing data
Communication	• Public awareness and understanding of requirements • Number of messages published in social media/website • Percent of employee comments acknowledged • Level of employee understanding and compliance with policies • Inter-agency awareness and collaboration	• Average time to respond to public inquiries • Average time to create and distribute information • Number of employee comments acknowledged per unit time
Resource Management	• Employee recruitment and retention • Employee satisfaction • Budget adherence and variance analysis • Utilization and upgrades of technology • Use of capital project carry forward authority • Number of riders in LAR for technology procurement • Number of resource-related bottlenecks or delays	• Employee Turnover Rate • Employee Absenteeism Rate • Recruitment and training costs • Time spent budgeting • Cost of acquiring and maintaining human and technology resources • Time spent with resources down/out of service
Procurement Contracting	• Identification of resources needed • Quality/reliability of goods/services procured • Compliance with regulations • Number of exemptions requested	• Cost of conducting technology business analysis • Time spent on the contracting and procurement process • Time to Implement new technologies
Performance Measure Analysis	• Accuracy of data collected • Timeliness of reporting • Identification of performance gaps • Use of data in decision-making	• Cost of data collection and analysis • Time spent reporting
Risk Management	• Number/severity of risks avoided	• Time spent identifying and assessing risks

1.1.1.1. Identifying Deficiencies and Potential Actions

The Texas Department of Public Safety – Driver License Division (DLD) comprises approximately 2,906 Full Time Employees (FTEs), of which 2,483 work at one of the 233 DLOs located statewide. The remaining approximately 423 employees work at DPS headquarters and the DLD Customer Service Center in Austin and include senior management, subject matter experts and support personnel [DPS 2023]. The DLD FY 24 – 25 budget comprises over $473.8 million which is primarily funded through General Revenue [LBB 2024].

The ability of DLD to meet Goals and achieve performance measures which DLD sets in collaboration with the Legislative Budget Board (LBB), and are reviewed and approved by the Legislature, is vital to its funding. Strategic planning is an important part of fiscal planning for state agencies. DPS performance measures are developed as a part of DPS strategic planning, and these performance measures can affect the amount DPS is appropriated by the legislature. In order to be effective in its mission, DPS must be successful in fulfilling its core functions, and must measure its success in achieving performance measures and implementing plans to continuously improve service for the fee- and the taxpayers of Texas. Successfully funding and meeting internal DLD Operations and Enterprise goals is also vital in meeting DPS performance measures, which

are directly related to the resources DLD receives including 1) funding, 2) additional employees, 3) increased office capacity, and 4) new technologies.

Based on visits by DLD to other state driver license agencies, and the CTR Study Team's interviews, new technologies have the greatest potential for reducing wait times and transaction times, as well as increasing successful transaction rates and improving the customer experience in the shortest implementation timeframe. Adequate funding, employees and office capacity are also essential to provide excellent customer service and to address increased transaction capacity; however, new technology may offer more immediate advantages.

Though DLD management and employees work to provide excellent service to their customers, certain aspects of operations and enterprise activities may include deficiencies. These deficiencies may be related to structural issues or caused by constraints that currently cannot be managed by DLD directly, but nevertheless affect its ability to meet performance measures and goals. Other deficiencies can be anticipated and controlled by DLD, with additional resources. Other deficiencies may involve innovation or improvement in either Operations or Enterprise Management. Identifying and addressing Operational and Enterprise Activity deficiencies will result in improved customer service, optimum use of taxpayer dollars, increased employee morale, and the ability to meet and exceed Goals and performance measures.

Table 3 lists factors that DLD can plan for, but cannot directly control. Table 4 lists factors that can be planned for and controlled.

Table 3 Factors that DLD Can Plan for but Cannot Directly Control which Affect Operating and Enterprise Activities

Refr. Number	Factors that DLD Can Plan for but Cannot Control directly
1	Texas population growth rates and thus future increased need for driver licenses and ID cards
2	Federal or State Laws, Policies and Procedures that impact DLD functions (e.g. REAL ID, unfunded mandates)
3	Approval of Requested funding for Exceptional Item Requests and other budget increases
4	Priority assigned to DLD Technology Projects
5	Direct Management of the online driver license system

Table 4 Factors that DLD Can Plan for and Can Directly Control Which Affect Operating and Enterprise Activities

Refr. Number	Factors that Can be Planned for and Controlled by DLD directly
1	Number of Published Appointments at each DLO contingent on capacity (staffing, #BCS systems, work hours)
2	Number of Appointments Published after DLO opens and throughout the day due to 'no-shows'
3	Use of Manual Ad Hoc messaging and emails to remind customers of impending Appointments
4	Percentage of short- and long-transactions booked on future dates
5	Ability to adjust number of road tests conducted pending in-office wait times

Note: # of BCS system (number of Biometric Capture Systems used for Customer transactions) work hours = office hours and staffing allocations throughout the day.

The Texas State Demographer has forecast the future Texas population growth using different migration rates. Figures 3 and 4 provide data about Texas population growth [TDC 2022]. DLD has determined that population growth is the single most significant factor for predicting future DLO transaction demand [DPS 2023].

Note that, based on Figure 4, the DFW metroplex population surpasses Houston as the most populated region in Texas.

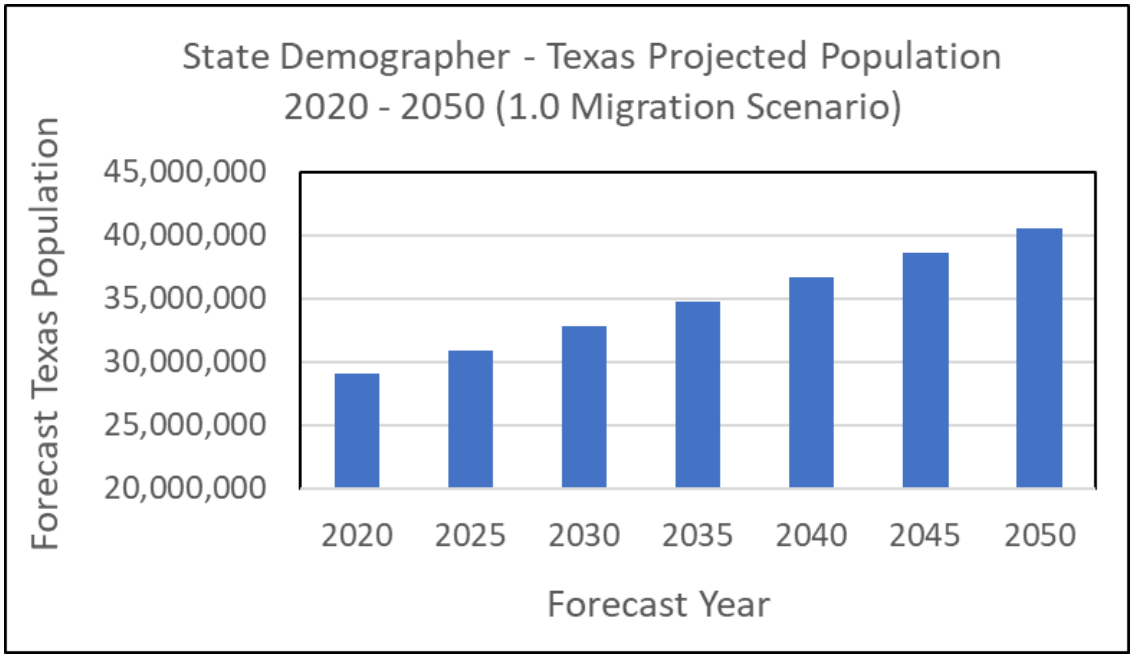

Figure 3 Texas Projected Population 2020 – 2050 (1.0 Migration Scenario*)

*Note: 1.0 migration scenario assumes migration rates will continue at the same rate experienced in 2010 – 2020. Migration results in increases in population that are not related to births minus deaths.

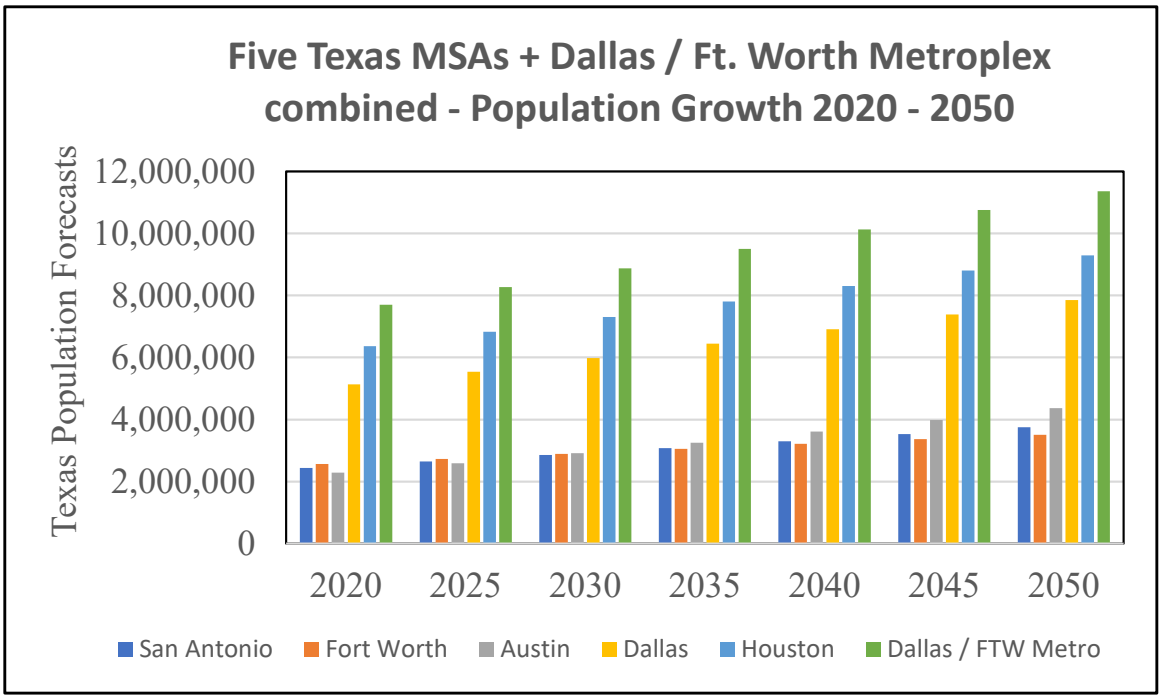

Figure 4 Forecast Population Growth in Five Texas Metropolitan Statistical Areas + Dallas / Fort Worth Combined Metroplex 2020 – 2050 (Texas State Demographic Center data)

Current projections indicate the demand for online transactions is expected to increase at a higher rate though many factors can affect these predictions. Figures 5 and 6 show heat maps of the relative numbers of actual online transactions by zip code for the Austin MSA in 2017 and 2023. Darker colors relate to larger numbers of online transactions for those zip codes.

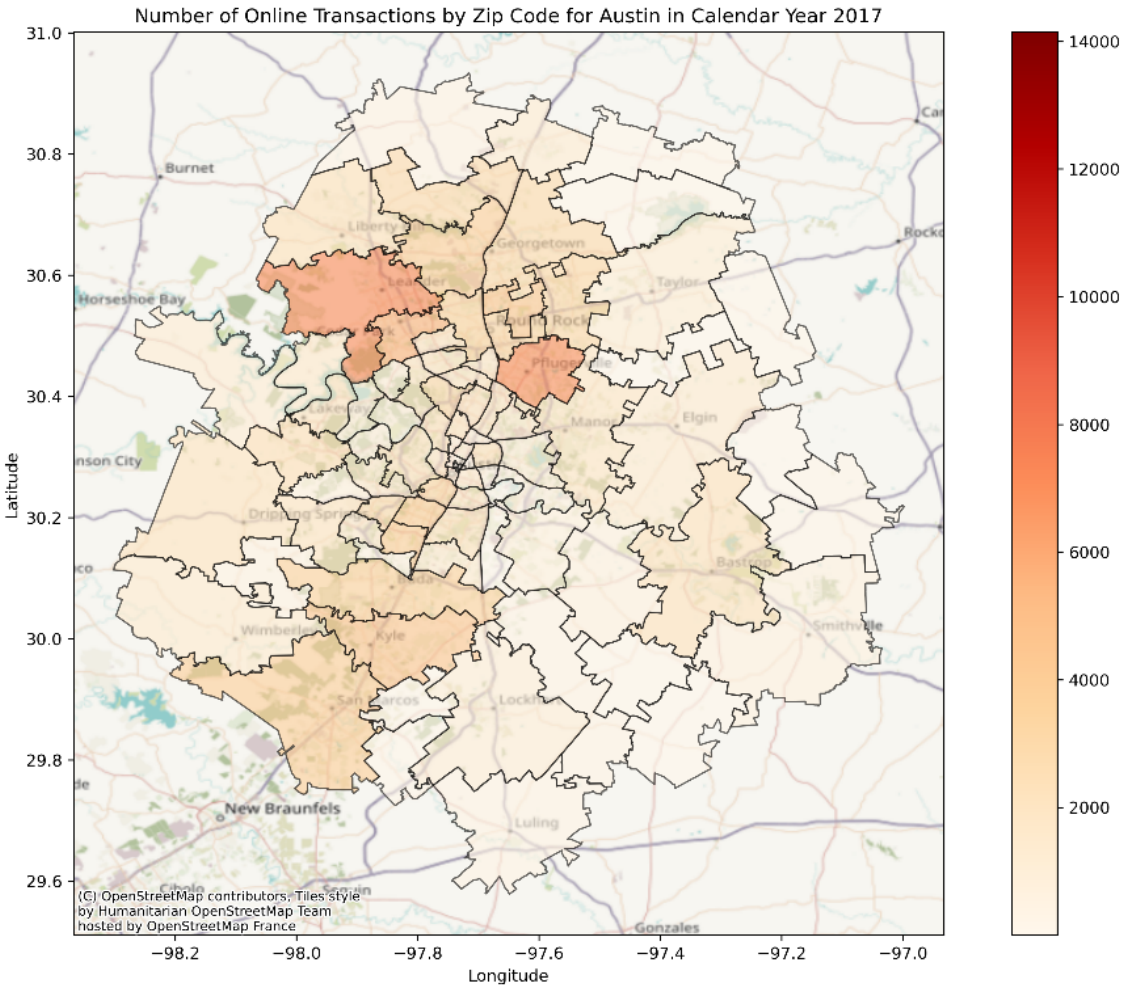

Figure 5 Austin MSA heat map of online transactions by zip code 2017 (148,090 online transactions)

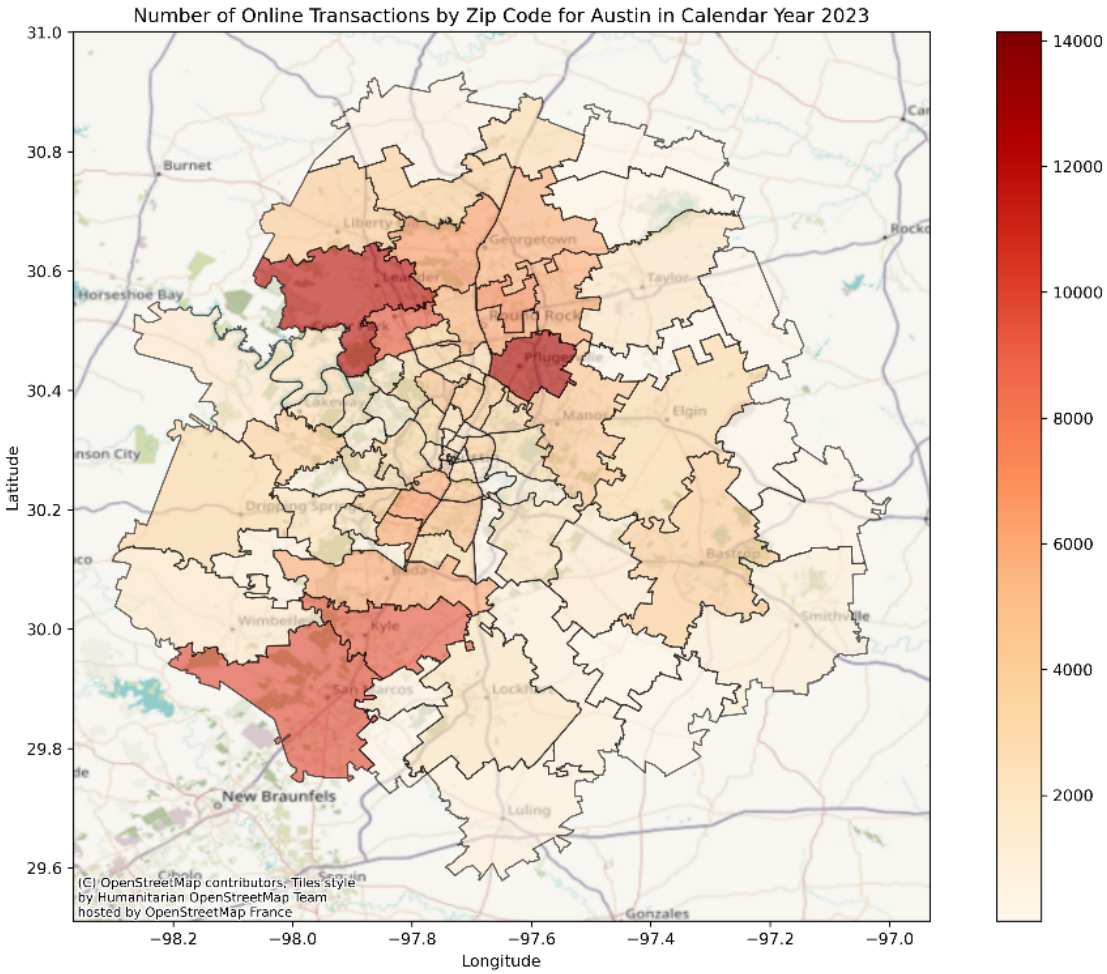

Figure 6 Austin MSA heat map of online transactions by zip code 2023
(264,728 online transactions)

As can be seen, the number of online transactions for the Austin MSA increased by approximately 116,638 between 2017 – 2023, or approximately 78%.

Additional types of paperless transactions could significantly improve customer service, reduce wait times, decrease the use of paper, and significantly decrease the amount of retyping of information provided on paper forms. Currently, customers enter the DLO, use the kiosk to obtain a ticket and then obtain a form to fill out at the DLO for processing of their transaction. The form is then handed to the LPS performing the transaction and must be retyped into the database system. This process could be replaced with a DLD website online digital form application that would allow customers to select the correct form, fill it out online, and have the form vetted by online spell-checkers and/or other applications to ensure the form is properly filled out. The customer could then send the form to the DLO which the customer plans to visit and can then be pulled up by the LPS when the transaction starts. The LPS could make a final check of the completeness and accuracy of the form and proceed with the transaction. This type of cloud-based online website application could save money, time, paper, scanned document storage and improve customer

satisfaction. Other types of Operational and Enterprise activities are listed in Tables 5 - 8. These activities will be discussed in more detail in later sections of the Report. The tables are summarized according to the following five categories that are identified in H.B. 1 Rider 51 [H.B. 1 - 2023] and by DLD as areas for potential improvement of efficiency and effectiveness.

1. Improve Customer Service
2. Reduce Wait Times
3. Implement new, customer facing technologies
4. Incentivize online transactions
5. Evaluate the Management and Operating Structure of DLD

In order to address efficiency and effectiveness, it is first necessary to identify the specific Deficiencies that exist. Each pair of Tables lists a Deficiency and possible improvements to one or more of the five improvements listed above.

Table 5 Operational and Enterprise Activities – Actions and Effects - Improve Customer Service

Reference Nr.	Operational Level Activity - Improve Customer Service	
	Action	Effect
1	Increase community awareness of the Home Visitation Program for ID Cards	Improves service to all customer types including elderly, ADA, sick or disabled
2	Improve training of DLO employees so all customers receive the same information	Reduce customer confusion, customers prepared with correct documents, reduce extra transactions
3	Accept Optometrist eye exams for Driver License use	Reduce transaction times, eye exams by a professional which elminate eye chart tests at DLO
4	Incorporate modern options for in-office payment	Improves customer service through use of modern card / phone technology available to customers
5	Manage Allocation of high numbers of Appointments to Shelters and similar groups	Reduce no-shows, improve management of daily Published and Booked Appointments

Reference Nr.	Enterprise Level Activity - Improve Customer Service	
	Action	Effect
1	Implement a performance merit increase plan that increases salary and retirement	**Increased employees = higher customer satisfaction**, reduce turn-over rates, attract more applicants
2	Reduce Licensed Permit Specialist (LPS) II high turnover rates	Reduce wait times, increase Appointments, improve customer service and satisfaction
3	Increase number of foreign languages supported by online, forms, interpreters	Increase customer service to sectors of Texas population not currently served in their native language
4	Develop methods to help illiterate customers who might be unaccompanied	Improves service to all customer types, reduce customer wait and transaction times

Note: Reference numbers are not related to the priority of a listed item in terms of implementation strategy or the ability to improve overall operations and enterprise activities.

Table 6 Operational and Enterprise Activities – Actions and Effects for New Customer Facing Technology

Reference Nr.	Operational Level Activity - New Customer Facing Technology	
	Action	Effect
1	Increase paperless tranactions using online form completion and other methods	Reduce customer paperwork / LPS re-typing of information, reduce paper use and waste
2	Provide information to online customers if unable to conduct a transaction	Reduce customer frustration, customer more prepared at DLO with needed information
3	Improve the layout and usability of the DLD Website	Use Artificial Intelligence to improve information retrieval and reduce reading workload
4	Increase the reliability of Biometric Camera System equipment	Provide alternatives to employees fixing failed equipment. Document equipment failures each time
5	Incorporate modern options for in-office payment	Improves customer service through use of modern card / phone technology available to customers
6	Incorporate an interactive AI chat bot function on DLD website	Improve customer access to tailored information as they browse the DLD website

Reference Nr.	Enterprise Level Activity - New Customer Facing Technology	
	Action	Effect
1	Improve Reliability of DLD IT Systems by moving system and database to the Cloud	Improved citizen approval of state services and the Driver License Division
2	Provide the Ability to grow DLD IT Processing Capacity quickly	Reduce risk of systems failure and loss of Appointments through ^Cloud-based system
3	Increase the capacity of the Call Center and number of calls answered	Replace with modern Contact Center with phone, email, text, social media and other services
4	Increase Customer Use of Online transactions	Reduce number of customers physically visiting a DLO, improve customer service for others
5	Replace the current DLD legacy Website with a modern Cloud-based system	Eliminate constraints imposed by the legacy website, improve customer experience, add new features

Table 7 Operational and Enterprise Activities – Actions and Effects – Incentivize Online Transactions

Reference Nr.	Operational Level Activity - Incentivize Online Transactions	
	Action	Effect
1	Provide information to online customers if not permitted to conduct a transaction	Reduce customer frustration, customer more prepared at DLO with needed information
2	Ensure that customers who receive an online transaction letter are eligibile	Reduce customer frustration, increase on line transaction use
Reference Nr.	**Enterprise Level Activity - Incentivize Online Transactions**	
	Action	**Effect**
1	Reduce the cost for online transactions	Online transactions currently have a higher cost that in Office transactions, Lower cost = more attractive
2	Use computer(s) at the DLO so that customers can perform online transactions ^	Allows customers to skip the lines and LPS interactions, Customer can ask for help with online transaction
Note: Potentialy use the same computers for in office Driver Tests to perform online transactions. Numbers of computers could be managed to ensure both activities could be performed.		

Table 8 Enterprise Activities – Actions and Effects – Management and Operating Structure

Reference Nr.	Enterprise Level Activity - Management and Operating Structure	
	Action	Effect
1	Increase DLD Chief Management visits to Megacenters and other DLOs	Increase employee morale, allows DLO managers, supervisors, and LPSs to share ideas with Management
2	Achieve direct management and operational control of the online renewal system	Provides DLD with ability to redesign and upgrade online driver license and ID card transaction website
3	Examine ratio of management and supervisor to number of Call Center Employees	Twenty managers / supervisors and 61 +/- employees. M/S do not answer calls, this could increase service
4	Examine Potential differences in DLD and LBB* performance measures	Realign Goals and performance measures to better meet citizen and legislature expectations
5	Improve Exceptional Item Request preparation to increase support and approval	Increase short- and long-term budget and staffing requests to meet DLD Enterprise Planning

1.2. Statutory and Administrative Requirements Impacting DLD

As part of the identification of deficiencies, and developing recommendations to improve effectiveness and efficiencies, the Study Team also reviewed federal and state statutory and administrative requirements that impact DLD operations and activities. Multiple statutes and regulations govern the issuance of driver licenses and identification cards, along with requirements to adhere to statutes that govern:

- Compliance
- IT utilization and cybersecurity
- Criminal information and warrants
- Non-citizen identification
- Interstate compacts for example sharing driver license information and traffic violation records with other states

1.2.1. REAL ID Deadline and Federal Law Related to Driver License Program

The REAL ID federal law has established minimum national standards for DL/ID issuance which include standards for identification documents, proof of social security number (SSN), proof of US citizenship or lawful presence, and proof of residency. Maintaining state compliance will require future DLD administrators to monitor future legislative changes to Chapters 521[2] and 522[3] and other relevant laws to ensure the changes continue to correspond to the minimum federal REAL ID requirements.

In addition to REAL ID, DLD is tasked with ensuring compliance with federal statutes and Federal Motor Carrier Safety Administration (FMCSA) regulations concerning commercial driver licenses (CDL), issued for the operation of commercial motor vehicles. In particular, 49 CFR Part 383[4] is vital to state compliance requirements which include the penalty for non-compliance – withholding of federal highway money.

The electronic DLD Verification Systems involving REAL ID and CDL require ongoing technology adaptation and management from DLD staff. The variety of databases, image verification and document verification systems that DLD staff must utilize for REAL ID driver license and ID issuance requires many resources and special training.

[2] Texas Transportation Code, Ch. 521, https://statutes.capitol.texas.gov/Docs/TN/htm/TN.521.htm
[3] Texas Transportation Code, Ch. 522, https://statutes.capitol.texas.gov/Docs/TN/htm/TN.522.htm
[4] 49 C.F.R. Pt. 383, Commercial Driver's License Standards, https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-383 (the state DLD participates in endorsements for CDL's)

DPS determines driver and ID eligibility in accordance with State and federal law with the help of several national databases, such as SSOLV (Social Security Online Verification), SSNs, (§521.044), Commercial Driver's License Information System (CDLIS), State 2 State and driver history, by the American Association of Motor Vehicle Administrators (AAMVA)[5], Commercial Skills Test Information Management System (CSTIMS) (managed by AAMVA)[6], Problem Driver Pointer System (PDPS) enforcements, via AAMVA and the National Highway Traffic Safety Administration (NHTSA)[7], Texas Crime Information Center Database (TCIC) and the National Crime Information Center (NCIC)[8], and Systematic Alien Verification for Entitlements (SAVE) via Department of Homeland Security (DHS), for lawful presence verification, by AAMVA/DHS).[9]

Federally imposed requirements and data systems require extensive IT support to implement and integrate into the DLD Driver License System (DLS). Continued IT support, management, and training, as well as staff support, will be needed to adapt to legal changes and data exchanges critical to full REAL ID compliance. Challenges associated with compliance, new procedures, and/ or rulemaking, as well as DLD interactions with DHS, AAMVA, the State Department, and other entities, will need more effective and modern procedures. Rulemaking continues as DHS modernizes REAL ID implementation. New efficiencies in verifying identity and updating DLS as the verification processes evolve may require adaptive strategy, training, and processes to be in place at DLD.

1.2.1.1. REAL ID Law - Background

The REAL ID Act of 2005 (P.L. 109-13)[10] establishes minimum security standards for state-issued driver licenses and identification cards, with a primary goal of improving the reliability and accuracy of state-issued identification documents, making them more secure and less susceptible to fraud. The REAL ID Act prohibits Federal agencies from accepting State-issued driver licenses or identification cards for any official purpose - defined by the Act and regulations as boarding commercial aircraft, accessing federal facilities, or entering nuclear power plants - unless the license or card is issued by a State that meets the requirements set forth in the Act.[11]

The REAL ID regulations, which DHS issued in January 2008, establish the minimum standards that States must meet to comply with the Act.[12] These REAL ID regulations contain the

[5] CDLIS, https://www.aamva.org/technology/systems/driver-licensing-systems/cdlis
[6] CSTIMS, https://cstims.aamva.org/
[7] PDPS ON AAMVA, https://www.aamva.org/technology/systems/driver-licensing-systems/pdps
[8] Texas Crime Information Center ,https://www.dps.texas.gov/section/crime-records/texas-crime-information-center-tcic
[9] Verification of Lawful Presence on AAMVA, https://www.aamva.org/technology/systems/verification-systems/vls
[10] REAL ID Act of 2005, Public Law 109-13, Title II of Division B, codified at 49 U.S.C. 30301 note, https://www.govinfo.gov/content/pkg/PLAW-109publ13/pdf/PLAW-109publ13.pdf
[11] REAL ID Act of 2005, Public Law 109-13, Title II of Division B, codified at 49 U.S.C. 30301 note, https://www.govinfo.gov/content/pkg/PLAW-109publ13/pdf/PLAW-109publ13.pdf
[12] Minimum Standards for Driver's Licenses and Identification Cards Acceptable by Federal Agencies for Official Purposes; Final Rule, 73 FR 5272 (Jan. 29,2008); codified at 6 C.F.R. part 37 (2008 final rule)

requirements for presentation and verification of documents to establish identity and lawful presence status, standards for document issuance and security, and physical security requirements for driver license production facilities.[13] In addition to the 2008 regulations, DHS subsequently issued six other final rules and interim final rules amending the regulations, including changes to compliance deadlines and State extension submission dates.[14] Any DMV (Dept. of Motor Vehicles)/DLA (Driver License Agency)[15] must keep track of the latest federal rulemakings as they affect operations.

1.2.1.2. REAL ID Implementation Deadlines and Implications for DLD

The implementation of the REAL ID Act has been phased in over many years to allow states time to adjust their procedures accordingly. This phase-in has arguably helped the public gain more acceptance; however, there is still much ignorance about precise REAL ID legal requirements for the public, which can lead to driver frustrations being taken out on DLD staff.[16] The final phase of enforcement by the -DHS- requires that all driver licenses and identification cards issued by states comply with REAL ID standards by May 7, 2025.[17] This deadline has been extended several times.[18] Upon this date, individuals will need a REAL ID-compliant driver license or identification card, or another acceptable form of identification, to board domestic flights and enter certain federal facilities.

As the REAL ID federal deadline of May 7, 2025 for state compliance nears[19], DLD may be tasked with more in-person visits required under federal law and its regulations.[20] The time-consuming physical scanning and retention of source documents that LPS's must do during the applicant's visit to a Driver License Office (DLO) can create efficiency and effectiveness challenges for both DLD and drivers. Customers may miss excess time from work or school with long or *multiple*

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https://www.federalregister.gov/documents/2008/01/29/08-140/minimum-standards-for-drivers-licenses-and-identification-cards-acceptable-by-federal-agencies-for

[13] AAMVA, REAL ID, https://www.aamva.org/topics/real-id#?wst=d5a5f5751f7474b62a5bb2b374692b61

[14] See 74 FR 49308 (Sep. 28, 2009), 74 FR 68477 (Dec. 28, 2009) (final rule, stay), 76 FR 12269 (Mar. 7, 2011), 79 FR 77836 (Dec. 29, 2014); 84 FR 55017 (Oct. 15, 2019); 86 FR 23237 (May 3, 2021). In addition to final rules, DHS also published two Information Collection Requests in the Federal Register in 2016 and 2022. See 81 FR 8736 (Feb. 22,2016) and 87 FR 23878 (Apr. 21, 2022).

[15] DMV and DLA are interchangeably used terms for the purposes of this study, as we are not concerned with vehicle registration here. Texas DPS only handles drivers, and not vehicle registrations, unlike some other states. Utah DLD is also a DPS /Driver License Agency (DLA).

[16] See this study, DLD employee survey results, as well as on site DLO visit reports.

[17] DHS, Final Rule, Minimum Standards for Driver's Licenses and Identification Cards Acceptable by Federal Agencies for Official Purposes; Extending Enforcement Date, 84 Fed. Reg. 15624 (Mar. 9, 2023), https://www.federalregister.gov/documents/2023/03/09/2023-04496/minimum-standards-for-drivers-licenses-and-identification-cards-acceptable-by-federal-agencies-for

[18] Among others, Pub. L. 116-136, div. B, title VI, § 16006, Mar. 27, 2020, https://www.govinfo.gov/content/pkg/PLAW-116publ136/pdf/PLAW-116publ136.pdf

[19] DHS, Final Rule, Minimum Standards for Driver's Licenses and Identification Cards Acceptable by Federal Agencies for Official Purposes; Extending Enforcement Date, 84 Fed. Reg. 15624 (Mar. 9, 2023), https://www.federalregister.gov/documents/2023/03/09/2023-04496/minimum-standards-for-drivers-licenses-and-identification-cards-acceptable-by-federal-agencies-for

[20] 6 C.F.R. Pt. 37

visits to the DLO's, causing customer satisfaction to suffer. Part of this problem is the extensive document verification requirements within the federal REAL ID law that applicants must fulfill. Customers may still fail to understand the stricter points of this REAL ID law. Although some states may allow residents to have a non-REAL ID driver license,[21] Texas does not allow this and only issues REAL ID complaint cards as of October 10, 2016. [22] After May 7, 2025, a non-REAL ID Texas Driver License may only be used for state-related purposes such as driving, banking, and voting.[23]

1.2.1.3. Compliance with REAL ID by States

For a State to achieve full REAL ID legal compliance, the DHS must make a final determination that the State has met the requirements contained in the regulations[24] and is compliant with the Act.[25] Each state has a duty to comply with federal rules[26] to ensure consistency across the country in verifying the identity of individuals seeking access to certain federal facilities.

In addition to certain reporting and record keeping requirements for States, DHS will verify full state compliance by examining whether states are meeting certain standards in the issuance of driver licenses and identification cards. States will submit security plans to DHS covering physical security of document production and storage facilities as well as security of personally identifiable information.[27] DHS may review documents, audit processes, and conduct on-site inspections.[28] Additional requirements for recordkeeping, document retention and storage, as well as background checks for certain employees help to ensure the integrity of the card production and issuance process and will assist DHS during audits or inspections of a state's processes.[29] States must

[21] For example, California allows residents to obtain a non-REAL ID driver's license, https://www.dmv.ca.gov/portal/driver-licenses-identification-cards/real-id/what-is-real-id/; See also REAL ID Act § 202(d)(11)(202(d)(11) of the REAL ID Act specifically allows states to issue licenses that do not comply with the act,) ; see also 6 CFR § 37.71.

[22] DPS Website, https://www.dps.texas.gov/section/driver-license/federal-real-id-act#:~:text=REAL%20ID%20and%20Texas%20law,10.

[23] DPS Website ,https://www.dps.texas.gov/section/driver-license/federal-real-id-act#:~:text=REAL%20ID%20and%20Texas%20law,10.

[24] 6 C.F.R. Part 37; see also § 37.51 Compliance – general requirements , https://www.eCFR.gov/current/title-6/chapter-I/part-37/subpart-E/section-37.51

[25] Section 202(a)(2) of the REAL ID Act requires the Secretary to determine whether a State is meeting its requirements, "based on certifications made by the State to the Secretary." To assist DHS in making a final compliance determination, 6 C.F.R. § 37.55 requires the submission of certain materials.

[26] REAL ID Regulations, 6 C.F.R. Part 37, https://www.eCFR.gov/current/title-6/chapter-I/part-37

[27] 6 C.F.R. 37.55(a), State Certification documentation, https://www.eCFR.gov/current/title-6/chapter-I/part-37/subpart-E/section-37.55#p-37.55(a)

[28] DHS, Agency Information Collection Activities: REAL ID: Minimum Standards for Driver's Licenses and Identification Cards Acceptable by Federal Agencies for Office Purposes, April 16, 2019 https://www.federalregister.gov/documents/2019/04/16/2019-07565/agency-information-collection-activities-real-id-minimum-standards-for-drivers-licenses-and

[29] 6 C.F.R. § 37.31, 37.45 (rule requires States to outline their approach to conducting background checks of certain DMV employees in the card production process)

recertify compliance with REAL ID every three years on a rolling basis as determined by the Secretary of Homeland Security. [30]

1.2.2. DLC- Driver's License Compact

Pre-dating the REAL ID Law, the Driver License Compact (DLC)[31] is an interstate compact that began in 1958 among forty-five states and the District of Columbia in which member states share driver license information and traffic violation records with other states. DLC was created to provide "uniformity among member jurisdictions (including states) when exchanging information with other members on convictions, records, licenses, withdrawals, and other data pertinent to the licensing process."[32] The DLC allows for *reciprocal* recognition of licenses to drive and the exchange of information concerning license suspensions and traffic violations of non-residents and forwards them to the state where they are licensed (the "home state").

DLC meets the S2S theme of "One Driver, One License, One Record."[33] Within this theme, AAMVA, a tax-exempt, nonprofit organization, plays a critical role in developing and maintaining many information systems that facilitate the electronic exchange of driver, vehicle, and identity information between organizations.[34] AAMVA develops model programs in motor vehicle administration, law enforcement, and highway safety.[35] The association also serves as a liaison with other levels of government and the private sector.

1.2.2.1. AAMVA Facilitates Implementation of REAL ID

AAMVA created the *one license/one record* concept with the S2S application as set forth in both the U.S. and Canadian Driver License Compacts and Uniform Vehicle Code.[36] The DLC, CDLIS, and PDPS processes all support the S2S theme and are all managed by AAMVA. This policy is also echoed in the REAL ID provisions of the Federal Code.[37] Regulatory prohibition against holding more than one REAL ID card or more than one driver license. The jurisdiction of residence maintains a person's driving record,[38] and the electronic sharing of information between states helps facilitate an efficient implementation of the one driver, one license, one record policy.

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[30] 6 C.F.R. § 37.55.
[31] Driver License Compact (1958), https://ballotpedia.org/Driver_License_Compact
[32] AAMVA, Driver License Compact, https://www.aamva.org/topics/driver-license-compact#?wst=d5a5f5751f7474b62a5bb2b374692b61
[33] DLC, https://compacts.csg.org/compact/driver-license-compact/
[34] AAMVA, (AAMVA represents the state and provincial officials in the United States and Canada who administer and enforce motor vehicle laws), https://www.aamva.org/technology/systems
[35] AAMVA website, https://www.aamva.org/about
[36] AAMVA website, https://www.aamva.org/policy/policy-positions/driver-license-compact
[37] REAL ID Regulation, 6 C.F.R. § 37.29 Prohibition against holding more than one REAL ID card or more than one driver's license, https://www.law.cornell.edu/CFR/text/6/37.29
[38] AAMVA website, https://www.aamva.org/explorer?topic=Driver%20License%20Compact#?wst=343e9c9d28ddb9f58f9b5072b0e83e89

For states[39] complying with REAL ID, DHS has indicated that participation in S2S (State to State Verification System) will be required for the state to be REAL ID compliant.[40] AAMVA's State-to-State Verification Service (S2S) is an vital electronic tool that allows states to determine whether an applicant already holds a license or ID card in another state.[41] S2S allows the licensing systems of individual state agencies to "talk" to each other through a third-party proprietary technology platform.[42]

The REAL ID regulations require states to ensure that a person holds only one REAL ID credential.[43] The REAL ID law, section 202(d)(12) requires states to "provide electronic access to all other States to information contained in the motor vehicle database of the State."[44] Section 202(d)(13) mandates that states "maintain a State motor vehicle database that contains, at a minimum — (A) all data fields printed on drivers' licenses and identification cards issued by the State; and (B) motor vehicle drivers' histories, including motor vehicle violations, suspensions, and points on licenses."[45]

In the Final Rule issued by the Secretary of DHS on Jan. 29, 2008, section (E) states, "the State-to-State[46] data exchange will likely require a software application (likely an index or pointer system) to enable the States to exchange limited information to identify whether an applicant for a card holds a card in another jurisdiction."[47] AAMVA fulfills this data exchange role with member state input.

AAMVA's electronic application systems include: 1. Driver licensing systems[48] (to locate and share driver records, track commercial driver license (CDL) skills testing, and detect fraud; 2. Vehicle systems (to obtain and share vehicle title information, registration, and liens); and 3.

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[39] In our discussion, states, territories, and District of Columbia, are hereafter "States"

[40] AAMVA, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions

[41] AAMVA, https://www.aamva.org/technology/systems/driver-licensing-systems/state-to-state-verification-service-(s2s), (The platform that supports S2S, the State Pointer Exchange Services (SPEXS) was successfully implemented in July 2015)

[42] AAMVA, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions

[43] REAL ID Regulation, 6 C.F.R. § 37.29 Prohibition against holding more than one REAL ID card or more than one driver's license, https://www.law.cornell.edu/CFR/text/6/37.29

[44] Division B—REAL ID Act of 2005, the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005, Pub. L. 109-13, 119 Stat. 231, 302 (2005) (codified at 49 U.S.C. 30301 note).

[45] Id.

[46] "State to State data exchange" term in the regulation here is a broad term, separate from the "S2S Verification Service" by AAMVA which refers to this actual electronic service.

[47] Minimum Standards for Driver's Licenses and Identification Cards Acceptable by Federal Agencies for Official Purposes, DHS, Final Rule, 73 Fed. Reg. 5272 (Jan. 29, 2008) (codified at 6 C.F.R. 37), https://www.federalregister.gov/documents/2008/01/29/08-140/minimum-standards-for-drivers-licenses-and-identification-cards-acceptable-by-federal-agencies-for ; See also 6 C.F.R. § 37.33, https://www.eCFR.gov/current/title-6/chapter-I/part-37

[48] AAMVA'S S2S, PDPS, SR 22/26, and others, htpps://www.aamva.org/technology/systems-outage-reports-and-analytics

Verification systems[49] (to verify driver licenses, state-issued identification cards, passport information, social security numbers, lawful status, and vital events).[50] States decide which applications they will use to facilitate compliance with federal requirements. Federal rulemaking considers the interactions between AAMVA, FMCSA and states in creating uniformity and safety.[51] Not all states use all the electronic tools that AAMVA provides.

1.2.2.2. REAL ID and AAMVA's S2S System

With its first member joining in 2015, AAMVA's State-to-State Verification Service (S2S) provides a means to implement the *one driver, one license, one record* policy goal. Various AAMVA tools such as S2S, CDLIS / Commercial Driver's License Information System,[52] and PDPS processes support the S2S policy and are all managed by AAMVA.[53] CDLIS exchanges commercial license and driver history from the prior state of issuance to the new state. S2S exchanges non-commercial license information from the prior state to the new state. If the S2S state also participates in DHR, then driver history is included in the exchange of non-commercial license information. [54]

For states that comply with REAL ID, S2S limits a person to one REAL ID credential (either a DL or an ID). AAMVA and participating jurisdictions, like Texas, protect the privacy of the information in S2S.[55] The S2S Service is owned and governed by the states that are participating and they do not allow any Federal agency access to S2S.[56] States like Texas pay fees to participate in the service. AAMVA operates and maintains the service, and it also designs, develops, installs and hosts the S2S service for Driver License Agencies (DLA's).

Driver License Agencies (DLA) currently exchange driver and vehicle information nationwide in real time only via AAMVAnet services and systems. AAMVAnet services and systems are not

[49] AAMVA'S VLS, DLDV, HAVV, SSOLV, SSR, USPVS; (motor vehicles agencies can interface with SAVE (Systematic Alien Verification for Entitlements- USCIS) via VLS through AAMVA and its AAMVAnet network), htpps://www.aamva.org/technology/systems-outage-reports-and-analytics

[50] AAMVA, https://www.aamva.org/technology/systems

[51] FMCSA, Commercial Driver's License (CDL) Standards; Incorporation by Reference of a New State Procedures Manual (SPM), NPRM, (Feb. 20, 2024)(FMCSA proposes to amend the Federal Motor Carrier Safety Regulations (FMCSRs) to incorporate by reference the most recent edition of the American Association of Motor Vehicle Administrators, Inc. (AAMVA) Commercial Driver's License Information System (CDLIS) State Procedures Manual (SPM), Version c.0. This would require all State driver's licensing agencies (SDLAs) to use this edition of the manual to provide guidance on the information systems procedures of the commercial driver's license (CDL) program.), https://www.federalregister.gov/documents/2024/02/20/2024-03191/commercial-drivers-license-cdl-standards-incorporation-by-reference-of-a-new-state-procedures-manual

[52] AAMVA, CDLIS, https://www.aamva.org/technology/systems/driver-licensing-systems/cdlis

[53] AAMVA, Driver Licensing Systems, https://www.aamva.org/technology/systems/driver-licensing-systems

[54] AAMVA, https://www.aamva.org/technology/systems/driver-licensing-systems/state-to-state-verification-service-(s2s)

[55] see the State Pointer Exchange Services (SPEXS) Privacy Impact Assessment (available to jurisdiction and federal members), https://www.aamva.org/getmedia/c4666659-33ad-41e7-9feb-12e6b59de880/SPEXS-Privacy-Impact-Assessment.pdf

[56] AAMVA FAQ, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions

available through any other source but AAMVA. AAMVA is also federally identified as the only entity to provide such services for commercial driving purposes.

Participation in S2S does not commit a state to be in compliance with the federal REAL ID Act.[57] However, the Department of Homeland Security looks for S2S to be part of their compliance plan.

1.2.3. Commercial Driver Licensing Information System (CDLIS)

For Commercial Driver's Licenses (CDL), there are Federal standards that the states must meet as part of the issuance process. Whereas S2S exchanges non-commercial license information, CDLIS exchanges commercial license and driver history from the prior state of issuance to the new state. The state licensing agencies collaborated in the late 1980's to develop CDLIS to meet new federal mandates of the 1986 Commercial Motor Vehicle Safety Act.[58] These mandates required that states ensure professional drivers of large trucks and buses only hold one Commercial Driver License (CDL) and there is only one driving record. This record would follow the driver if they changed states and obtained a new license. CDLIS is linked to state driver licensing systems and all states have been using CDLIS since April 1, 1992.[59] S2S extends this platform beyond commercial drivers to all drivers and identification card holders to empower states to check with each other when issuing non-CDL licenses just as they have been able to with CDLs for many years. This reduces instances of drivers holding more than one active driver license.

1.2.3.1. AAMVA's Driver History Record (DHR) Functionality

S2S offers an additional feature, the Driver History Record (DHR) functionality, which supports the concept of *one driver, one history record* by transmitting out-of-state convictions and withdrawals between states for noncommercial drivers. The DHR supports this real-time exchange of information by providing information on individuals who may have more than one driver history record. One of the benefits of S2S DHR is that DHR Administration provides states with new measures to improve the administration of non-CDL driver history (DH).[60] DHR provides visibility of individuals that may have more than one DHR and sets rules for maintaining Driving History in a standardized manner for all non-CDLIS drivers. Efficient data exchange helps states maintain driver history accuracy.

[57] AAMVA website, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions
[58] AAMVA, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions
[59] AAMVA FAQ, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions
[60] AAMVA Newsletter, Colorado, Rhode Island, and South Dakota To Join State-to-State Driver History Record Mar. 4, 2024, https://aamva.org/publications-news/aamva-news/colorado,-rhode-island,-and-south-dakota-to-join-state-to-state-driver-history-record

The State-to-State (S2S) Verification Service Driver History Record (DHR) program has grown in usage across various states.[61] Several states are CDLIS and S2S Participants, including Texas.[62]

States only receive real-time electronic updates on non-commercial drivers when they are participating in S2S DHR. By limiting a person to only one driver license and one driver history (DH), the DHR supports the electronic exchange of driver history and sets rules for maintaining DH in a standardized manner for non-CDLIS drivers of those states. States that participate with AAMVA may pursue safety and REAL ID law enforcement goals by electronically exchanging CDLIS driver history records, including the posting of convictions, withdrawals, and disqualifications.[63]

1.2.4. AAMVA Outages

AAMVA has had some recent outages[64] with their systems (January 2020, September 2023, and March 2024) which adversely affects their member state DLAs including DLD.[65] These outages highlighted the challenges for all parties (AAMVA and the states) in modernizing this interconnected data exchange that is so vital to REAL ID implementation.[66] As legacy DL systems increasingly interact with various state and federal agencies, modernization can improve interoperability, making data exchanges and communication more efficient. The modernization of state systems will likely lead to better integration with other systems, such as law enforcement databases, vehicle registration systems, and online services. AAMVA also provides guides on modernizing DL processes to improve functionality and operations.[67]

[61] FAST Enterprises, LLC, March 5, 2024, https://www.linkedin.com/pulse/supporting-road-safety-tips-implement-s2s-dhr-your-agency-klelf/

[62] AAMVA Newsletter, Texas Implements CDLIS Solution for DACH, July 1, 2024, (Texas on successfully implemented the Commercial Driver's License Information System (CDLIS) solution for the Drug and Alcohol Clearinghouse (DACH) on June 30, 2024. CDLIS and State-to-State (S2S) services are fully operational now) https://www.aamva.org/publications-news/aamva-news/texas-implements-cdlis-solution-for-dach

[63] https://www.aamva.org/technology/systems/driver-licensing-systems/cdlis

[64] AAMVA Improves Transparency on IT Outages, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions

[65] AAMVA related Outages: Sept., 2023, (S2S outage affecting Texas DPS), https://www.dps.texas.gov/news/driver-license-system-now-available-offices-reopen-monday; Michael Bartiromo, Marisa Rodriguez, CBS, DMV facilities across US experience network outage after 'loss in cloud connectivity', March 21, 2024, https://www.cbs17.com/news/national-news/dmv-facilities-across-us-experience-network-outage/; Jan. 13, 2020, https://www.npr.org/2020/01/13/795942049/u-s-drivers-license-network-goes-down-slowing-dmv-offices-around-the-nation;

[66] AAMVA, Systems Outage Reports and Analytics, (root cause analysis document) https://www.aamva.org/technology/systems-outage-reports-and-analytics

[67] AAMVA, System Modernization and Best Practices, https://www.aamva.org/assets/best-practices,-guides,-standards,-manuals,-whitepapers/system-modernization-best-practices

1.2.5. DHS Action and Remote / Online Document Submission – Efficiency via Online Processes

In December 2020, Congress enacted the REAL ID Modernization Act,[68] as part of the Consolidated Appropriations Act of 2021. It includes provisions that would allow states to accept applicant information through "electronic transmission methods following the DHS issuance of regulations and state certification that they comply with those regulations."[69] DHS is in the process of developing regulations to implement this provision, which when implemented by the state could help to reduce the burdens associated with an in-person DLA visit to obtain a REAL ID compliant license or identification card.

Applicants for REAL ID licenses and identification cards at state DLAs generally submit their documentation and information in-person at a state DLA office (referred to in Texas by DLD as a Driver License Office (DLO). During the application process, the state will review and make copies of an applicant's information, take the completed application, take the applicant's photograph, and obtain a declaration that the information presented is true and correct. Efficient DLO's in Texas have an information desk that checks identity documents before an LPS talks to the customer. Time savings can be achieved if the DLO greeter and information desk staff pre-verify a customer's specific documents required for REAL ID compliance. Although DLD has information currently listed on its page on DPS's website,[70] not all in-person customers are prepared to show proof of identity, lawful status, social security number, and address. Online document submission adds an extra layer of document screening or vetting which prevents further delays and thus benefits overall customer satisfaction.

"DHS has provided guidance[71] authorizing states to allow applicants to pre-submit identity and lawful presence status source documents through a secure electronic process in advance of an in-person DLA visit at which time the applicant would physically present those same documents for authentication and verification by DLA personnel."[72] States that utilize this process have indicated that it helps to ensure an applicant has the correct information and reduces customer wait times by allowing the state to electronically copy the information in advance of the visit.[73]

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[68] The REAL ID Modernization Act, Title X, Div. U of the Consolidated Appropriations Act, 2021, Public Law 116-260 (Dec. 27, 2020), https://www.congress.gov/bill/116th-congress/house-bill/133/text (hereinafter, "REAL ID Modernization Act").
[69] Id.
[70] See Texas DPS REAL ID Checklist, https://www.dps.texas.gov/apps/DriverLicense/RealID/
[71] The DHS gives guidance on electronic submission of applicant documents in form letters sent to various states, as seen on its web page.
[72] DHS, REAL ID Applicant Information and Documentation, Request for Comments, REAL ID Applicant Information and Document, OMB 1601-NEW, 87 Fed. Reg. 65603(Oct. 31, 2022), https://www.federalregister.gov/documents/2022/10/31/2022-23656/real-id-applicant-information-and-documentation
[73] Id.; See also *Comments* on Automated Solutions for the Submission of REAL ID Source Documents , Docket No. DHS–2019–0056, Id.me Comments on California Program, https://www.regulations.gov/comment/DHS-2019-0056-0052

1.2.5.1. Modernization and Online Document Submission

As various states modernize their DLAs, Texas can learn from what works or does not work by observing other comparable states. In this study, we interviewed Utah on its DL efficiency and modernization efforts[74] and examined several states' approach to modernizing the Driver License processes using online document submission and other technology solutions. Several states, AAMVA, and the DHS[75] appear to be embracing technology solutions as a method to improve the DL issuance process. These states are taking advantage of the fact they are now permitted to accept electronically submitted copies of source documents with certain restrictions.[76]

On November 7, 2019, DHS issued a request for information (RFI), published in the Federal Register,[77] to receive input on helpful technologies that could assist states in the digital submission, receipt, and authentication of documents and information applicants must provide when applying for a REAL ID driver license or identification card. Despite its frequent reference to privacy, the RFI focuses on security standards and requirements for the issuance of mobile or digital driver licenses to enable Federal agencies to accept these credentials. DHS received 69 responsive comments,[78] including submissions from 24 states, 17 private sector companies, and three associations (AAMVA, NAPHSIS, and USTA).[79] Some states had already begun online submission of REAL ID related documents within their states, as the comments showed.[80] Many docket comments from State DLA's were like this one from Alaska:

> An online system for document pre-approval that verifies customer readiness to physically visit a DMV would eliminate repeat trips to the DMV and significantly reduce the take rate

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[74] See infra, discussion of Utah's mDL program.

[75] DHS, REAL ID Frequently Asked Questions page, https://www.dhs.gov/real-id/real-id-faqs ; See also Feb. 19, 2020, DHS Guidance letter to Alabama Gov. Ivey (allowing online submission of documents), https://www.dhs.gov/real-id/real-id-faqs

[76] See Feb. 19, 2020, DHS Guidance letter to Alabama Gov. Ivey (allowing online submission of documents), https://www.dhs.gov/sites/default/files/publications/real-id/20_0227_real-id_acceptance-elec-submitted-source-docs-al-signed.pdf

[77] DHS, Automated Solutions for the Submission of REAL ID Source Documents, Request for Comments, 84 Fed. Reg. 60104 (Nov. 7, 2019), https://www.federalregister.gov/documents/2019/11/07/2019-24330/automated-solutions-for-the-submission-of-real-id-source-documents

[78] Automated Solutions for the Submission of REAL ID Source Documents, Posted by the Department of Homeland Security on Nov 6, 2019, https://www.regulations.gov/document/DHS-2019-0056-0001/comment , (informative comments were submitted, several by State Driver License Agencies (DLA's), such as North Carolina, Arizona, Maryland, and Alaska, Florida, Ohio. Many states wanted some form of pre-submission of REAL ID documentation before an in person visit for their residents.) https://www.regulations.gov/document/DHS-2019-0056-0001/comment

[79] AAMVA - American Association of Motor Vehicle Administrators, NAPHSIS – National Association for Public Health Statistics and Information Systems, USTA – U.S. Travel Association; see also DHS, https://www.dhs.gov/publication/acceptance-electronically-submitted-copies-source-documents

[80] See *Comments* on Automated Solutions for the Submission of REAL ID Source Documents , Docket No. DHS–2019–0056, Id.me Comments on California Program,(California has been using id.me, with an estimation of "time savings of three to four minutes per applicant" in online DL transactions), https://www.regulations.gov/comment/DHS-2019-0056-0052; and Pennsylvania Comment, (Pennsylvania Department of Transportation (PennDOT) has already leveraged this technology through its pre-verification program and online issuance of REAL ID products for verified existing customers) , https://www.regulations.gov/comment/DHS-2019-0056-0038

> of non-compliant cards. This type of system could also provide remote Alaskans without DMV access a method to collect documents and ensure they meet all requirements in advance of costly travel to an area of the state with a REAL ID issuance office. Document collection and pre-approval could also facilitate a remote, back office, issuance process increasing access to remote populations without requiring cost-prohibitive travel to areas with a DMV office.[81]

On February 19, 2020, DHS informed the States that effective immediately, they are permitted to implement the acceptance of electronically submitted copies of source documents with certain restrictions.[82] Specifically, the States would now be able to add the pre-submission of identity and lawful presence status source documents, through a secure electronic process, prior to an applicant's in-person driver license visit, and physical presentation of those same documents for authentication and verification by DLA personnel. However, REAL ID requires a mandatory facial image capture plus a person must "present" source documents,[83] so applicants will still need to physically present these documents at the DLAs in person for final authentication and verification by state personnel.

In 2020, after the 2019 RFI, DHS completed its preliminary review of responsive proposals, and found "one viable option that can be immediately implemented by the states, territories, and District of Columbia, hereafter "States," consistent with existing authorities."[84] DHS continues to examine proposals, [85] but DHS has decided to approve at least one REAL ID document pre-screening service, per this letter:

> "DHS continues to evaluate the other proposals for action and is working with the Office of Management and Budget and Congress, as necessary. Effective immediately, the States are permitted to implement the acceptance of electronically submitted copies of source documents with certain restrictions. Specifically, the states may now add the pre-submission of identity and lawful status source documents, through a secure electronic process, prior to an applicant's in-person DMV visit, and physical presentation of those same documents for authentication and verification by DMV personnel. According to this

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[81] Automated Solutions for the Submission of REAL ID Source Documents, Posted by the Department of Homeland Security on Nov 6, 2019, Alaska Div. of Motor Vehicles Comments, https://downloads.regulations.gov/DHS-2019-0056-0044/attachment_1.pdf

[82] DHS Press Release,
DHS Announces Streamlining Measures To Help States In Issuing REAL IDs, Feb. 19, 2020,
https://www.dhs.gov/news/2020/02/19/dhs-announces-streamlining-measures-help-states-issuing-real-ids

[83] 6 C.F.R. Pt. 37.11, https://www.law.cornell.edu/CFR/text/6/37.11

[84] See Feb. 19, 2020, Guidance letter from DHS to Alabama Gov. Ivey (allowing online submission of REAL ID documents), https://www.dhs.gov/sites/default/files/publications/real-id/20_0227_real-id_acceptance-elec-submitted-source-docs-al-signed.pdf

[85] DHS Website, REAL ID Act of 2005 Implementation: Acceptance of Electronically Submitted Copies of Source Documents with Certain Restrictions in Advance of an In-Person DMV Visit
(February 19, 2020, DHS letters to the governors of all fifty states regarding REAL ID program and States' ability to accept electronically submitted copies of source documents, with certain restrictions in advance of an in-person DMV visit.) https://www.dhs.gov/sites/default/files/publications/real-id/20_0227_real-id_acceptance-elec-submitted-source-docs-al-signed.pdf; https://www.dhs.gov/publication/acceptance-electronically-submitted-copies-source-documents

> proposal, electronic pre-submission helps streamline the application process by: 1) ensuring that an applicant has the correct information and, 2) allowing a state to electronically retain that information prior to the applicant's in-person visit. Retaining the information in advance eliminates time-consuming activities associated with the physical scanning and retention of source documents that typically occurs during the applicant's DMV visit. We understand that this has a direct impact on overall applicant wait times and customer satisfaction. DHS recommends that States consider implementing this option." [86]

California has embraced technology. The comments from the ID.me vendor about the efficient California electronic document submission program already in effect in 2019 claimed that ID.me and other digital identity providers and remote authentication services already conform to secure federal standards and provide efficiencies:

> "On November 17, 2019, California DMV and ID.me launched a REAL ID document prescreening service at five major field offices. This service enables California REAL ID applicants to upload images of the specific documents they are planning to bring to their REAL ID visit. Applicants can choose to either upload document images from their computer or by taking pictures with a mobile phone with no app download required. This service provides substantial productivity gains with respect to application burden, processing time, and administrative workload. For example, REAL ID applicants who upload their documents at home or at work prior to an in-person visit can get real-time feedback on the specific documents they plan on bringing to understand if the document combination will meet REAL ID requirements or not. Currently, REAL ID applicants do not receive this feedback until they are already at the DMV field office – at which point it's too late to save the customer a wasted trip to the DMV."[87]

1.2.6. Mobile Driver's License or mDL

The REAL ID Modernization Act,[88] re-defines driver licenses and identification cards to include those "stored or accessed via electronic means, such as mobile or digital driver's licenses [or identification cards], which have been issued in accordance with regulations prescribed by the Secretary." Mobile Driver's Licenses (mDL) are "a digital representation of the information on a state-issued physical DL/ID [that] is stored on, or accessed via, a mobile device."[89] mDLs are a secure, contactless digital form of ID (usually on a mobile phone) that give citizens secure control

[86] See Feb. 19, 2020, Guidance letter from DHS to Alabama Gov. Ivey (allowing online submission of REAL ID documents), https://www.dhs.gov/sites/default/files/publications/real-id/20_0227_real-id_acceptance-elec-submitted-source-docs-al-signed.pdf

[87] *Comments* on Automated Solutions for the Submission of REAL ID Source Documents, Docket No. DHS–2019–0056, Id.me Comments on California Program, https://www.regulations.gov/comment/DHS-2019-0056-0052

[88] The REAL ID Modernization Act, Title X, Div. U of the Consolidated Appropriations Act, 2021, Public Law 116-260 (Dec. 27, 2020), https://www.congress.gov/bill/116th-congress/house-bill/133/text (hereinafter, "REAL ID Modernization Act").

[89] Minimum Standards for Driver's Licenses and Identification Cards Acceptable by Federal Agencies for Official Purposes; Mobile Driver's Licenses, 86 Fed. Reg. 20322 (Apr. 19, 2021), https://www.govinfo.gov/content/pkg/FR-2021-04-19/pdf/2021-07957.pdf.

over the personally identifiable information (PII)[90] they share with TSA, businesses, and others. DHS has allowed a waiver of the REAL ID rules[91] for mDL pilot projects for almost 30 states wishing to examine mDL feasibility.[92] The Transportation Security Administration (TSA) is proposing to amend the REAL ID regulations to waive, on a temporary and State-by-State basis, the regulatory requirement that mobile or digital driver's licenses or identification cards (collectively "mobile driver's licenses" or "mDLs") must be compliant with REAL ID requirements to be accepted by Federal agencies for official purposes, as defined by the REAL ID Act, when full enforcement of the REAL ID Act and regulations begins on May 7, 2025.

Utah, for example, has concluded its pilot program and is now issuing mDLs that can be used at certain liquor stores, pharmacies, credit unions and other businesses. [93] In Utah's case, the mDL may be used for identity purposes in banking, travel, traffic stops, medical, and restaurant and liquor store transactions that require age verification.[94] The mDL is accessed through an app that users download to their mobile device and entities utilize a reader that will request, receive and verify the integrity and authenticity of the mDL by accessing the DLD's information infrastructure. As the first mDL to Incorporate Privacy and Security Standards, Utah's mDL fully utilizes standards outlined by AAMVA in their mDL Implementation Guidelines[95] and established by the International Organization for Standards interoperability standard.[96] These standards provide the benefit of cryptographic proof of identity.[97] AAMVA and its membership are transitioning the driver license credential to a mDL platform. The standards by which an mDL and an mDL reader will access the DLD's infrastructure to verify the information contained in the mDL will create a secure way to verify identity.

TSA will make rules on mDL in two phases. The first is a *temporary* waiver of the rules (6 CFR Pt. 37) while TSA makes changes to the REAL ID regulations to incorporate mDL definitions and information. Even after May 7, 2025, TSA will accept mDLs on an interim basis for official purposes. In phase 2, TSA will repeal the waiver and create more permanent rules related to mDLs.[98] With federal rulemaking and technical standards implementation not final on this topic, this is a reason that Texas has not begun the path to using mDLs yet.

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[90] For the Definition of PII, see OMB Memorandum and more at GSA website, https://www.gsa.gov/reference/gsa-privacy-program/rules-and-policies-protecting-pii-privacy-act

[91] (NPRM), https://www.federalregister.gov/documents/2023/08/30/2023-18582/minimum-standards-for-drivers-licenses-and-identification-cards-acceptable-by-federal-agencies-for

[92] Erin Brereton, Almost 30 States Test mobile Driver's Licenses, State Tech Magazine, Jan. 9, 2023, https://statetechmagazine.com/article/2023/01/roughly-30-states-are-testing-adoption-mobile-drivers-licenses

[93] Id.

[94] DPS Press Release, https://dpsnews.utah.gov/new-mobile-driver-license-to-offer-utahns-enhanced-privacy/; See also Utah DLD page, https://dld.utah.gov/mdlusage/

[95] See AAMVA on mDL, (AAMVA's mDL Digital Trust Service (DTS) is the system that supports all member jurisdictions in delivering successful mDL programs to their stakeholders), https://www.aamva.org/topics/mobile-driver-license

[96] ISO /IEC 18013-5, International standard for Personal identification – ISO-compliant driving license – Part 5: mDL application), https://www.iso.org/obp/ui/#iso:std:iso-iec:18013:-5:dis:ed-1:v1:en

[97] Gephardt Daily, Utah introducing mobile driver's license program, Mar. 31, 2021, https://gephardtdaily.com/local/utah-introducing-mobile-drivers-license-program/

[98] https://www.federalregister.gov/documents/2023/08/30/2023-18582/minimum-standards-for-drivers-licenses-and-identification-cards-acceptable-by-federal-agencies-for

1.2.7. National Voter Registration Act

Texas' current implementation of National Voter Registration Act (NVRA) involved alterations to website functionality and coordination of various state agencies,[99] in addition to DLD's on-premise support of the federal law in supplying voter registration forms on its premises.[100] Previous litigation over Texas' implementation of the "Motor Voter" Act has now been resolved by a settlement agreement after several cases from 2016-2021,[101] and DPS is following the required steps to fulfill the agreement. In fact, the updated DLD –DLS Technology Roadmap 2020-21, lists two items in process that are voter related projects. [102] However, to understand the legal duties placed on DLD, both online and onsite, one must understand this legal background.

The National Voter Registration Act of 1993 (NVRA, 52 § 20501-20511), also known as the federal "Motor Voter Act," requires that "(a)(1) Each State motor vehicle driver license application (including any renewal application) submitted to the appropriate State motor vehicle authority under State law shall serve as an application for voter registration with respect to elections for Federal office unless the applicant fails to sign the voter registration application."[103] The NVRA voter registration opportunity applies to *change of address* transactions for all personal identification documents (such as an ID card) issued by a State motor vehicle authority.[104] NVRA defines the term "motor vehicle driver's license" to include "any personal identification document issued by a State motor vehicle authority."[105] The NVRA requires that states offer to an individual seeking services from listed state agencies the "opportunity" to register to vote. This means Texas DPS (DLD) must offer voter registration opportunities to any eligible person who applies for or renews a Texas driver license or ID. Since DPS is one of several agencies listed as a voter registration agency[106] (TEC, § 20.001; NVRA 52 U.S.C. § 20502(5) & § 20506(a)(1)), NVRA requires Texas DPS and its LPSs to provide customers the opportunity to complete a voter registration application at the time of their driver license transaction. (See also, TEC § 20.063, § 20.062; 52 U.S.C. § 20504.)

Section 5 of the NVRA specifically requires that state motor vehicle agencies offer voter registration opportunities, this means the federal law is implemented in part by the DPS, which is also a piece of the transaction, in compliance with the Texas Election Code.[107] In Texas, the Secretary of State and county registrars are also involved in voter registration before elections.

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[99] DIR controls the Tx-by-Tx website (for online DL renewals); DPS controls driver data, and the Texas Secretary of State controls voter registration data. A simple online transaction for a Texas driver involves complex interactions between these agencies.
[100]Texas Election Code (TEC) § 20.002. Agency-Prescribed Registration Application Form
[101] See case resolution discussion, infra.
[102] The DLD –DLS Technology Roadmap 2020-21, on file with the authors.
[103] 52 U.S.C. § 20504. Simultaneous application for voter registration and application for motor vehicle driver's license
[104] 52 U.S.C § 20504(d)
[105] NVRA, 52 § 20502, https://uscode.house.gov/view.xhtml?path=/prelim@title52/subtitle2/chapter205&edition=prelim
[106] Texas Election Code (TEC), § 20.001; NVRA 52 U.S.C. § 20502(5) & § 20506(a)(1))
[107]TEC Section 20.061-20.066

The voter registration application portion of an application for a State motor vehicle driver license shall include a statement that "requires the signature of the applicant, under penalty of perjury" (52 U.S.C. §20504(c)(2)(C)(iii)). State procedures must also comply with The Voting Rights Act (52 USC 10301). Questions have arisen about the form of this signature, and this topic was addressed within this litigation for purposes of DLD's role.

1.2.7.1. NVRA Cases Involving DPS's Previous Lack of Online Voter Registration

1.2.7.1.1. Stringer 1 case (2016-2018), with Stringer v. Pablos (2017)

Three registered voters (Jarrod Stringer, et al) sued the Texas Secretary of State and Texas Department of Public Safety in 2016[108], complaining that Texas violated the "motor voter" provisions of the National Voter Registration Act of 1993 (NVRA) and the Equal Protection Clause of the Fourteenth Amendment by failing to provide for simultaneous voter registration with online driver license renewals and with the online change-of-address forms.[109]

At the time, the state's online driver license renewal and change-of-address system did not also automatically update their voter registrations online.[110] When Stringer moved back to San Antonio in 2014, he updated his driver license online and mistakenly thought he had re-registered to vote at the same time. When he attempted to vote, he discovered he was not on the voter roll. He did not realize that Texas did not use certain online voter registration methods at that time during driver license transactions online. The plaintiff voters argued they were denied the right to simultaneously update their voter registration when they updated the address on their driver license through DPS online procedure.[111] This would be a violation of the NVRA, 52 U.S.C. § 20503(a)(1) ("notwithstanding any other Federal or State law, in addition to any other method of voter registration provided for under State law, each State shall establish procedures to register to vote in elections for Federal office - (1) by application made simultaneously with an application for a motor vehicle driver license"). The NVRA requires, 52 U.S.C. § 20504(a)(1),(2)(Each State motor vehicle driver's license application (including any renewal application) submitted to the appropriate State motor vehicle authority under State law shall serve as an application for voter registration).

The NVRA provides, at 52 U.S.C. § 20504(c)(1),(2), and (d)

> Each State shall include a voter registration application form for elections for Federal office as part of an application for a State motor vehicle driver's license - The voter registration

[108] "Stringer I" for our purposes is Stringer v Whitley, 942 F.3d 715(5th Cir. 2019).
[109] Stringer v. Whitley, No. 5:16-cv-00257 (W.D. Tex. Mar. 14, 2016).
[110] Stringer v. Pablos, 274 F. Supp. 3d 588, 2017 U.S. Dist. LEXIS 96125 (United States District Court for the Western District of Texas, San Antonio Division, March 31, 2017, Filed). Retrieved from https://advance-lexis-com.ezproxy.lib.utexas.edu/api/document?collection=cases&id=urn:contentItem:5NVG-KWK1-F04F-C11G-00000-00&context=1516831.
[111] Stringer v. Pablos (CIVIL NO. SA-16-CV-257-OG)/ Stringer v. Hughs (CIVIL NO. SA-20-CV-46-OG, Preliminary Injunction Order, Jan. 30, 2020, https://www.lwv.org/sites/default/files/2023-12/Stringer%20v.%20Hughs_PI_order.pdf

> application portion of an application for a State motor vehicle driver's license - may not require any information that duplicates information required in the driver's license portion of the form. Any change of address form submitted in accordance with State law for purposes of a State motor vehicle driver's license shall serve as notification of change of address for voter registration with respect to elections for Federal office for the registrant involved unless the registrant states on the form that the change of address is not for voter registration purposes.

At the time, the voter plaintiffs had failed to properly complete the in-person voter registration process after accessing the Texas DPS website, which then stated: "You are not registered to vote until you have filled out the online application, printed it, and mailed it to your local County Voter Registrar. Click here to Download a Voter Registration Application."

In agreeing with plaintiffs' arguments that the state disenfranchised voters, U.S. District Judge Orlando Garcia, ruled in 2018 that Texas violated the 1993 NVRA's "motor voter" provision requiring states to offer qualified driver license applicants an opportunity to *simultaneously* register to vote.[112] Judge Garcia found the difference in the state's treatment of voters who used its online system versus those who dealt with their licenses in person to violate the Equal Protection Clause and the NVRA of 1993 and granted injunctive relief. Defendants appealed.

In November 2019, a decision by the U.S. Fifth Circuit Court of Appeals [113] reversed the 2018 district court judgment ("Stringer 1 case") [114] ordering the state to essentially create an online voter registration system that could be part of the DPS online system. By the time the first case made it into federal court, Stringer and the other voters had successfully re-registered. Because they had recovered their right to vote, the court decided that the plaintiffs did not have legal *standing* to sue.

The appellate court's ruling sent the case back to district court with instructions to dismiss plaintiffs' claims for lack of standing. The judges noted that none of the plaintiffs had indicated they had any intention of moving in the future.

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[112] Stringer v. Pablos, 320 F. Supp. 3d 862, 2018 U.S. Dist. LEXIS 82745, 2018 WL 2193034 (United States District Court for the Western District of Texas, San Antonio Division, May 10, 2018, Filed). Retrieved from https://advance-lexis-com.ezproxy.lib.utexas.edu/api/document?collection=cases&id=urn:contentItem:5SBK-YGT1-JJYN-B0TV-00000-00&context=1516831.

[113] Stringer v. Whitley, No. 18-50428 (5th Cir. 2019); Stringer v. Whitley, 942 F.3d 715, 2019 U.S. App. LEXIS 33828, 2019 WL 5955321 (United States Court of Appeals for the Fifth Circuit, November 13, 2019, Filed). Retrieved from https://advance-lexis-com.ezproxy.lib.utexas.edu/api/document?collection=cases&id=urn:contentItem:5XGW-VRM1-F528-G1M5-00000-00&context=1516831.

[114] Stringer v. Whitley, 942 F.3d 715 (5th Cir. 2019). Retrieved from https://advance-lexis-com.ezproxy.lib.utexas.edu/api/document?collection=cases&id=urn:contentItem:5XGW-VRM1-F528-G1M5-00000-00&context=1516831.

1.2.7.1.2. "Stringer 2" Case (2020)

After the Fifth Circuit case[115], the plaintiffs filed a new complaint arguing that the lack of simultaneous voter registration had *continued* to impact plaintiffs and other voters.[116] The "Stringer 2 case," filed in January, 2020, involved similar issues to the first Stringer Case, but this time the *standing* issue did not exist because the plaintiffs were not registered to vote at their new addresses. Stringer, again, was unable to update his voter registration online along with his driver license after a move to Houston. Stringer characterized the DPS online address update as a misleading process, which allowed users to check 'yes' in response to a site prompt that displays "I want to register to vote." The site then directed the customer to a registration form he had to print out and send to his county registrar. Though the website specified at the time that checking yes "does not register you to vote," that language caused confusion, plaintiffs argued. The plaintiffs claimed they mistakenly thought their voter registration had been updated on the DPS website during the address change transaction; however, this action did not change their addresses for voter registration purposes with the Secretary of State and county election registrar.

In January 2020, the district court granted *part* of a motion for preliminary injunction, ordering change of address forms for updating driver's licenses to also serve as a notification to update voter registration.[117] In this preliminary injunctive relief, the government must register the plaintiffs to vote using the stored electronic signatures DPS possesses.[118] On August 28, 2020, the district court granted the *rest* of the preliminary injunction, ordering that online license renewal or change of address applications will be a *simultaneous* application for voter registration.[119]

1.2.7.2. Case Resolution, August 2021

As of August 2, 2021, the parties have resolved the proper online methods needed to improve Texas' implementation of NVRA in a settlement that states that defendants will continue to use the "changes to the online driver license renewal and change-of-address process to ensure

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[115] For a full list of court documents for Stringer v. Hughs, 5:20-cv-00046, (W.D. Tex.), Filed Jan. 14, 2020; Terminated, Aug. 3, 2021, see case page on Court Listener, https://www.courtlistener.com/docket/16693196/stringer-v-hughs/

[116] Complaint, Stringer v. Hughs, No. 5:20-cv-00046 (W.D. Tex. Jan. 14, 2020).

[117] Stringer v. Pablos, No. SA-16-CV-257-OG, 2020 WL 532937 (W.D. Tex. Jan. 30, 2020)

[118] Stringer v. Pablos, No. SA-16-CV-257-OG, 2020 WL 532937 (W.D. Tex. Jan. 30, 2020) , Retrieved from https://advance-lexis-com.ezproxy.lib.utexas.edu/api/document?collection=cases&id=urn:contentItem:5Y4C-F1P1-F57G-S1K0-00000-00&context=1516831; See p. 17 of the Order: the applicants' "stored electronic signatures": "Defendant DPS must immediately submit the information contained in the previously completed forms, along with the individual plaintiffs stored electronic signatures, as necessary, to the Texas Secretary of State."; see also TEC § 20.066, on signatures that DPS acquires.

[119] Stringer v. Hughs, No. SA-16-CV-257-OG, 2020 WL 6875182 (W.D. Tex. Aug. 28, 2020) (district court orders the defendants to "come into compliance with the NVRA and the U.S. Constitution and establish a DPS system that treats each online driver's license renewal or change-of-address application as a simultaneous application for voter registration" that can be operated by the public by September 23, 2020); See also League of Women Voters site, https://www.lwv.org/sites/default/files/2023-12/Stringer%20v.%20Hughs%20%28August%2028%202020%20Order%29.pdf

simultaneous voter registration is available to applicants"[120] and the District Court has dismissed the case.[121]

1.3. Methodologies and Data Sources

The Study Team used quantitative and qualitative analytical methods to examine deficiencies, and to identify areas to improve efficiency and effectiveness. The Study Team conducted site visits of Driver License Offices (DLO), surveys of customers and staff, tailored interviews of DPS divisions that intersect with DLD, budget, IT, procurement, and driver license records analyses. Also, the Study Team held an initial workshop to discuss DLD challenges, data sources, information and reports and other sources to facilitate task evaluations. Additionally, DLD provided the Study Team with a DPS laptop with the Driver License System (DLS) database so that one Study Team member could perform data extracts, typically downloaded in Excel spreadsheets.

Table 9 includes examples of information that the Study Team requested and DLD provided to the Study Team.

Table 9 Examples of Information Provided by DLD

1	Business Intelligence Team (BI Team) analysis reports of operations at individual Driver License Offices (DLO).
2	The Rider 29 2023 Driver License Services Report to the Office of the Governor on the performance of DLO statewide and individually.
3	Facilities Master lists which provide detailed information about staffing, IT capacity and other facility facts for each DLO.
4	The Toyota Production System Support Center – Kaizen analysis. Carrollton Driver License Office Executive Review May 6, 2021. 'Working Together to make a difference.'
5	Division Contact Center Assessment – Final Assessment and Roadmap January 29, 2021.
6	Support to coordinate DLO site visits to observe operations and response to questions regarding DLD management, operations, planned improvements.
7	DLD's internal performance measures, Budget, Cost allocations and Appropriations Process (CAPPS), Organizational Chart and Points of Contact at the Division of Information Resources (DIR) and the Legislative Budget Board (LBB).
8	Exceptional Item Requests (EIR) from FY 20 through to proposed EIRs for FY 25-26.
9	DLD Incident Tracking Sheet of interactions with angry or potentially violent customers.
10	Data and information about the DLD Customer Service Center.

1.3.1. Data Collection and Analysis

As part of this study, the Study Team used a combination of customer surveys, employee surveys, interviews, and data analysis to identify operational and enterprise deficiencies and leveraged data from several sources, as summarized in Table 10.

[120] Stringer v Hughs, Joint Motion to Dismiss, Case 5:20-cv-00046-OLG, Document 113, Filed Aug. 2, 2021, https://www.lwv.org/sites/default/files/2023-12/2021-08-02_WDTX_settlement-agmt-combo.pdf
[121] Stringer v. Hughs, Order Granting Joint Motion to Dismiss, Case 5:20-cv-00046-OLG, Document 114, Filed Aug. 4, 2021, https://www.lwv.org/sites/default/files/2023-12/2021-08-03_WDTX_order-grant-mtd.pdf

Table 10 Data Sources for Identifying Deficiencies

1	DLD transaction data from the appointment and the Driver License System databases
2	Employee recruitment/retention and salary data
3	Staff interviews with DLD and DPS divisions that interact/provide service to DLD in the areas of Procurement, Information Technology, Innovation and Data, Finance and Budget Preparation, Public Information and Communication.
4	Business Intelligence Team reports at individual DLOs
5	DLO site visits collected by the Study Team
6	Agency budgets, strategic plans, and other financial and operational analysis and exceptional item requests developed by DLD and DPS
7	Survey distributed to DLD staff at headquarters and the DLOs
8	Survey distributed to residents of Texas who had conducted transactions with DLD in the previous two years and had submitted an email
9	Texas population data

The Study Team considered the major goals in selecting these data sources, which are 1) improving customer service, 2) reducing wait times, 3) procuring additional information technology, and 4) incentivizing online transactions. In this study a deficiency is something that hinders effectiveness and/or efficiency in any of these four areas.

Chapter 2. Analysis of Driver License Operational Data and DLD Site Operations and Flow

In 2023, DLD processed 7,509,952 transactions, of which 2,855,079 (38.0%) were performed online [DPS 2023]. DLD models project that the overall number of driver license and ID card transactions will increase statewide by approximately 800,000 between 2023 and 2033. Current projections indicate the demand for online transactions will increase at a higher rate though many factors can affect these predictions. The Texas Demographic Center[122] has forecast the future Texas population growth using different migration rates (Figure 7). Figure 8[123] provides data about Texas population growth in the major metropolitan statistical areas [TDC 2022]. DLD has determined that population growth is the single most significant factor for predicting future DLO transaction demand [DPS 2023]. The Study Team used the TDC v2022 forecast model and the 1.0 Migration scenario, which is consistent with DLD's population forecast methods as indicated in the Rider 29 Report.

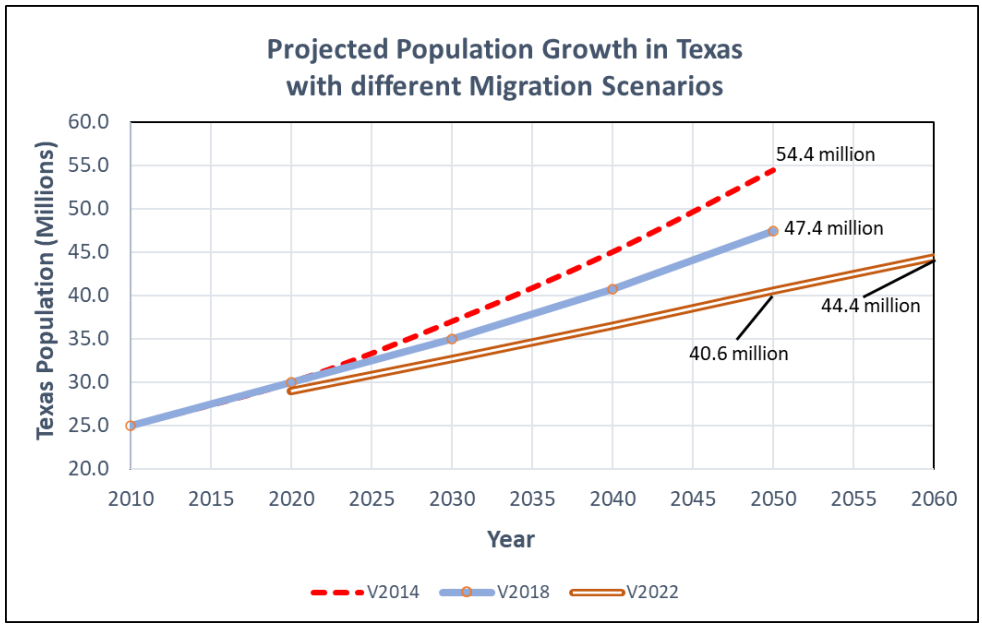

Figure 7 Texas Demographic Center –Three Different Migration Scenarios for Texas

[122] Texas Demographic Center data. (V2014 = Migration rate during 2000 – 2010, V2018 Migration rate during 2010 – 2015, V2022 Migration rate during 2010 – 2020) pg. 7 DLD used TSCs 2022 data release

[123] Texas Demographic Center data. Note: 1.0 migration scenario assumes migration rates will continue at the same rate experienced in 2010 – 2020. Migration results in increases to population not related to births minus deaths. pg. 3 DLD used the 1.0 Migration Scenario

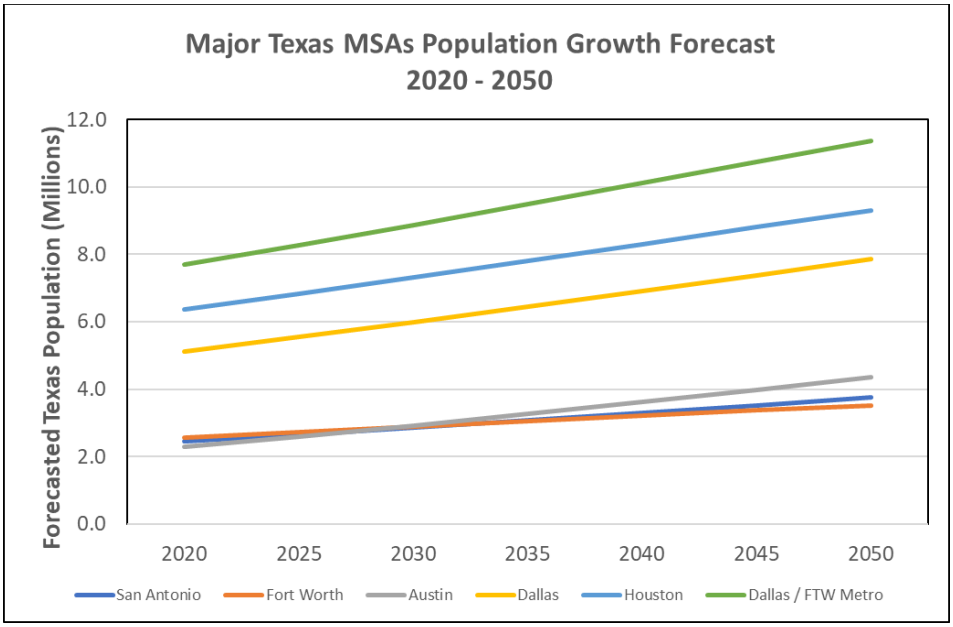

Figure 8 Forecast Population Growth in Six Texas Metropolitan Statistical Areas 2020 – 2050

2.1.1. Historical trends and population linkages

As part of the analysis of DLD operational activity, the Study Team conducted an analysis of the population trends in Texas by focusing on key Metropolitan Statistical Areas (MSAs). The analysis incorporates both historical census data and future population forecasts, offering insights into the growth patterns of cities across the state.

The data used in this analysis comes from the U.S. Census Bureau and the Texas Demographic Center.[124] The MSAs were selected based on their relevance to the cities of interest, and population data were aggregated at the county level within each MSA.

2.1.1.1. Detailed MSA Population Data

This section provides population data for each county within selected MSAs. The data includes census records from 2010 and 2020, along with population projections for 2025, 2030, and 2050. Figure 9 illustrates the population growth trends for selected MSAs in Texas from 2010 to 2050. It highlights significant growth in the Houston, Dallas, Austin-San Marcos, and San Antonio areas, with projections showing continued increases in population through 2050.

The summarized data aggregates the population across all counties within each MSA, providing a high-level overview of population trends from 2010 to 2050 (Table 11 and 12).

The population trends in Texas' major MSAs indicate continued urban growth, driven by economic opportunities, lifestyle attractions, and overall demographic trends. These projections

[124] For Census Data see available at: https://data.census.gov/all?q=Texas. For Texas Demographic Center Projectoins see available at: https://demographics.texas.gov/Projections/2022/

suggest a need for sustained attention to DLD office placement and staffing levels, and maximizing every opportunity to encourage residents to renew their driver license or identification documents online.

- Houston and Dallas: These MSAs are projected to see significant population growth. Houston is projected to grow, reflecting the continued urban expansion and economic opportunities in these areas.

- Austin-San Marcos: This MSA is also expected to experience rapid growth, driven by the tech industry and its appeal as a vibrant, emerging city.

- San Antonio: San Antonio's growth is more moderate but still significant, reflecting its steady economic development and attractiveness as a major Texas city.

Table 11 Detailed MSA Population Data

MSA	County	2010 Census Population	2020 Census Population	Forecast 2025	Forecast 2030	Forecast 2050
Abilene	Taylor	131,506	143,208	148,556	153,525	168,882
Amarillo	Potter	121,073	118,525	118,667	118,628	115,217
Amarillo	Randall	120,725	140,753	146,461	152,027	170,471
Austin-San Marcos	Bastrop	74,171	97,216	103,030	109,187	134,624
Austin-San Marcos	Caldwell	38,066	45,883	48,137	50,343	57,303
Austin-San Marcos	Hays	157,107	24,1067	271,126	302,810	440,396
Austin-San Marcos	Travis	1,024,266	1,290,188	1,384,542	1,468,068	1,680,712
Austin-San Marcos	Williamson	422,679	609,017	661,699	715,401	929,938
Beaumont-Port Arthur	Hardin	54,635	56,231	56,469	56,385	54,331
Beaumont-Port Arthur	Jefferson	252,273	256,526	258,690	260,350	262,035
Beaumont-Port Arthur	Orange	81,837	84,808	85,698	86,325	86,721
Brazoria	Brazoria	313,166	372,031	387,070	401,643	450,041
Brownsville-Harlingen-San Benito	Cameron	406,220	421,017	427,288	433,804	449,091
Bryan-College Station	Brazos	194,851	233,849	256,572	273,380	325,274
Corpus Christi	Nueces	340,223	353178	359,466	364,690	371,485
Corpus Christi	San Patricio	64,804	68,755	70,136	71,476	74,669
Dallas	Collin	782,341	1,064,465	1,137,475	1,213,030	1,508,619
Dallas	Dallas	2,368,139	2,613,539	2,705,928	2,790,940	2,960,764
Dallas	Denton	662,614	906,422	975,967	1,047,144	1,299,072
Dallas	Ellis	149,610	192,455	203,721	215,095	257,336
Dallas	Hunt	86,129	99,956	103,003	105,868	114,399
Dallas	Kaufman	103,350	145,310	157,432	170,145	225,730
Dallas	Rockwall	78,337	107,819	115,129	122,693	154,490
El Paso	El Paso	800,647	865,657	892,863	917,418	975,821
Fort Worth-Arlington	Hood	51,182	61,598	63,116	64,252	67,343
Fort Worth-Arlington	Johnson	150,934	179,927	187,108	194,081	217,778
Fort Worth-Arlington	Parker	116,927	148,222	156,163	163,786	191,461
Fort Worth-Arlington	Tarrant	1,809,034	2,110,640	2,196,606	2281675	2,530,700
Galveston-Texas City	Galveston	291,309	350,682	365,334	379,629	425,600
Henderson County	Henderson	78,532	82,150	83,229	83,792	82,835
Houston	Chambers	35,096	46,571	49,961	53,512	68,861
Houston	Fort Bend	585,375	822,779	884,302	947,676	1,210,241
Houston	Harris	4,092,459	4,731,145	4,927,216	5,114,328	5,633,164

MSA	County	2010 Census Population	2020 Census Population	Forecast 2025	Forecast 2030	Forecast 2050
Houston	Liberty	75,643	91,628	95,918	100,209	118,113
Houston	Montgomery	455,746	620,443	662,870	707,064	885,022
Houston	Waller	43,205	56,794	60,087	63,351	77,246
Killeen-Temple	Bell	310,235	370,647	388,063	403,565	454,744
Killeen-Temple	Coryell	75,388	83,093	85,925	87,499	90,105
Laredo	Webb	250,304	267,114	273,319	279,673	294,162
Longview-Marshall	Gregg	121,730	124,239	125,310	126,238	126,673
Longview-Marshall	Harrison	65,631	68,839	69,500	70,135	71,419
Longview-Marshall	Upshur	39,309	40,892	41,117	41,201	40,584
Lubbock	Lubbock	278,831	310,639	329,844	347,249	395,789
McAllen-Edinburg-Mission	Hidalgo	774,769	870,781	900,491	932,285	1,036,526
Odessa-Midland	Ector	137,130	165,171	175,276	185,716	228,489
Odessa-Midland	Midland	136,872	169,983	181,336	192,533	239,171
San Angelo	Tom Green	110,224	120,003	124,412	128,574	141,967
San Antonio	Bexar	1,714,773	2,009,324	2,112,234	2,211,656	2,524,414
San Antonio	Comal	108,472	161,501	175,738	190,748	256,086
San Antonio	Guadalupe	131,533	172,706	184,084	195,808	241,021
San Antonio	Wilson	42,918	49,753	51,286	52,712	57,252
Sherman-Denison	Grayson	120,877	135,543	139,452	142,859	152,492
Texarkana	Bowie	92,565	92,893	93,230	93,182	91,712
Tyler	Smith	209,714	233,479	239,076	244,181	257,589
Victoria	Victoria	86,793	91,319	92,722	93,984	96,635
Waco	McLennan	234,906	260,579	270,372	279,823	307,022
Wichita Falls	Archer	9,054	85,60	8,383	8,199	7,287
Wichita Falls	Wichita	131,500	129,350	129,625	129262	124,449

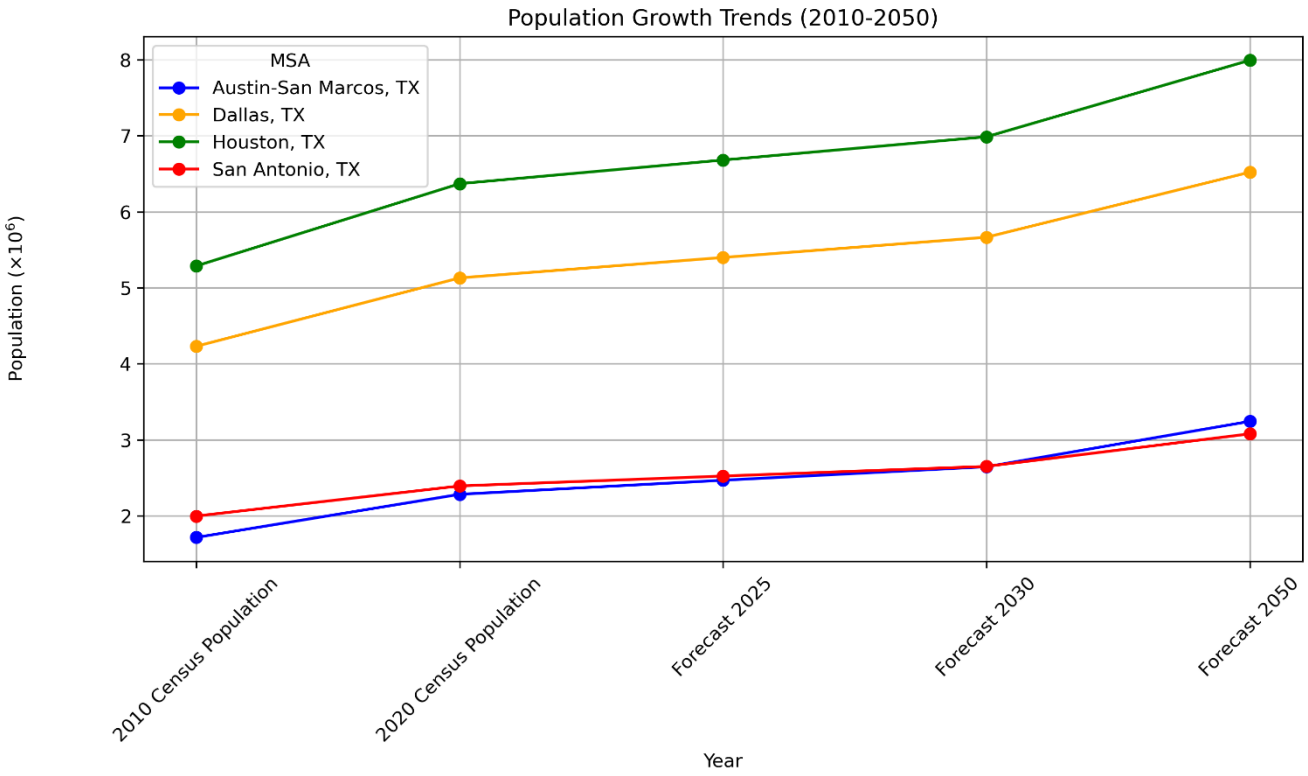

Figure 9 Population Growth Trends 2010-2050

Table 12 Summarized MSA Population Data

MSA	2010 Census Population	2020 Census Population	Forecast 2025	Forecast 2030	Forecast 2050
Abilene	131,506	143,208	148,556	153,525	168,882
Amarillo	241,798	259,278	265,128	270,655	285,688
Austin-San Marcos	1,716,289	2,283,371	2,468,534	2,645,809	3,242,973
Beaumont-Port Arthur	388,745	397,565	400,857	403,060	403,087
Brazoria	313,166	372,031	387,070	401,643	450,041
Brownsville-Harlingen-San Benito	406,220	421,017	427,288	433,804	449,091
Bryan-College Station	194,851	233,849	256,572	273,380	325,274
Corpus Christi	405,027	421,933	429,602	436,166	446,154
Dallas	4,230,520	5,129,966	5,398,655	5,664,915	6,520,410
El Paso	80,0647	865,657	892,863	917,418	975,821
Fort Worth-Arlington	2,128,077	2,500,387	2,602,993	2,703,794	3,007,282
Galveston-Texas City	291,309	350,682	365,334	379,629	425,600
Henderson County	78,532	82,150	83,229	83,792	82,835
Houston	5,287,524	6,369,360	6,680,354	6,986,140	7,992,647
Killeen-Temple	385,623	453,740	473,988	491,064	544,849
Laredo	250,304	267,114	273,319	279,673	294,162
Longview-Marshall	226,670	233,970	235,927	237,574	238,676
Lubbock	278,831	310,639	329,844	347,249	395,789
McAllen-Edinburg-Mission	774,769	870,781	900,491	932,285	1,036,526
Odessa-Midland	274,002	335,154	356,612	378,249	467,660
San Angelo	110,224	120,003	124,412	128,574	141,967
San Antonio	1,997,696	2,393,284	2,523,342	2,650,924	3,078,773
Sherman-Denison	120,877	135,543	139,452	142,859	152,492
Texarkana	92,565	92,893	93,230	93,182	91,712
Tyler	209,714	233,479	239,076	244,181	257,589
Victoria	86,793	91,319	92,722	93,984	96,635
Waco	234,906	260,579	270,372	279,823	307,022
Wichita Falls	140,554	137,910	138,008	137,461	131,736

2.2. Data Analysis Activities

2.2.1. High value data sets – transactions, customers serviced, wait and processing time

The data used in this study was mainly extracted from two databases: the DPS Driver License System (DLS) and the TxScheduler database. The DLS database stores all information from the DLS application, which allows the Driver License Division to capture data on transactions, issuances, enforcements, convictions, demographic information, road test pass/fail rates, and all other information processed and stored in DLS. TxDPS maintains and stores it.

The TxScheduler database stores all information from the TxScheduler application, which empowers the Driver License Division to capture data on appointments, wait times, service times, and all other day-to-day operations of DL office activity. The TxScheduler application and database are stored and maintained by the vendor, Opus Inspection Technologies, Inc.

The data was extracted using the structured query language (SQL), which was coded in the software called DBeaver. The data was integrated and analyzed to inform the assessment of effectiveness and efficiency in this study.

2.2.1.1. Data Analysis

Different types of issuances include in-person, online, mail, phone, offender ID cards, and others. In-person transactions are the most common type, followed by online transactions. Figure 10 shows the pie chart of the total issuance by transaction type in calendar year (CY) 2023.

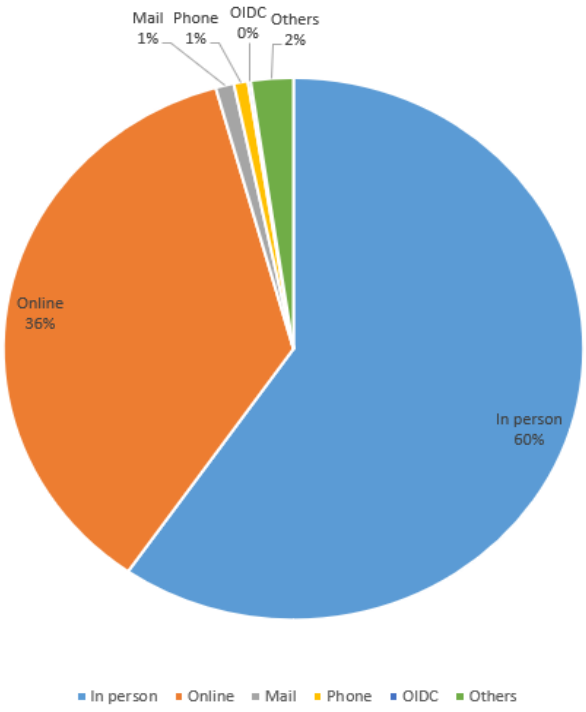

Figure 10 Total Issuance by Transaction Type in CY 2023

As can be observed from Figure 10, in-person transactions (60%) and online transactions (36%) count for about 96% of the total transactions in 2023.

The number of total issuance (including in-person, online, mail, phone, offender ID cards, and other types) from CY 2017 to 2023 is presented in Figure 11 below.

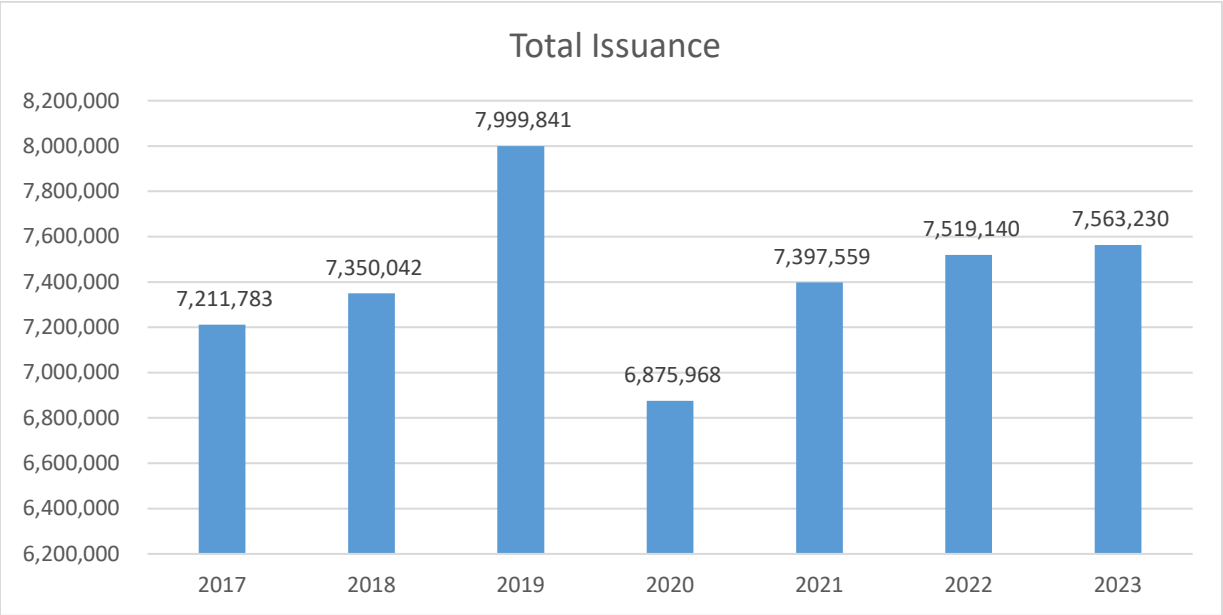

Figure 11 Total Issuance of Texas Driver License and ID Cards CY 2017 - 2023

According to Figure 11, due to the impact of COVID, the number of total issuances decreased by about 1.1 million in 2020 compared with that of 2019. From 2021 to 2023, the number of total issuances increased every year.

Figure 12 and Figure 13 show the total issuances of in-person transactions and online transactions from CY 2017 to 2023, respectively.

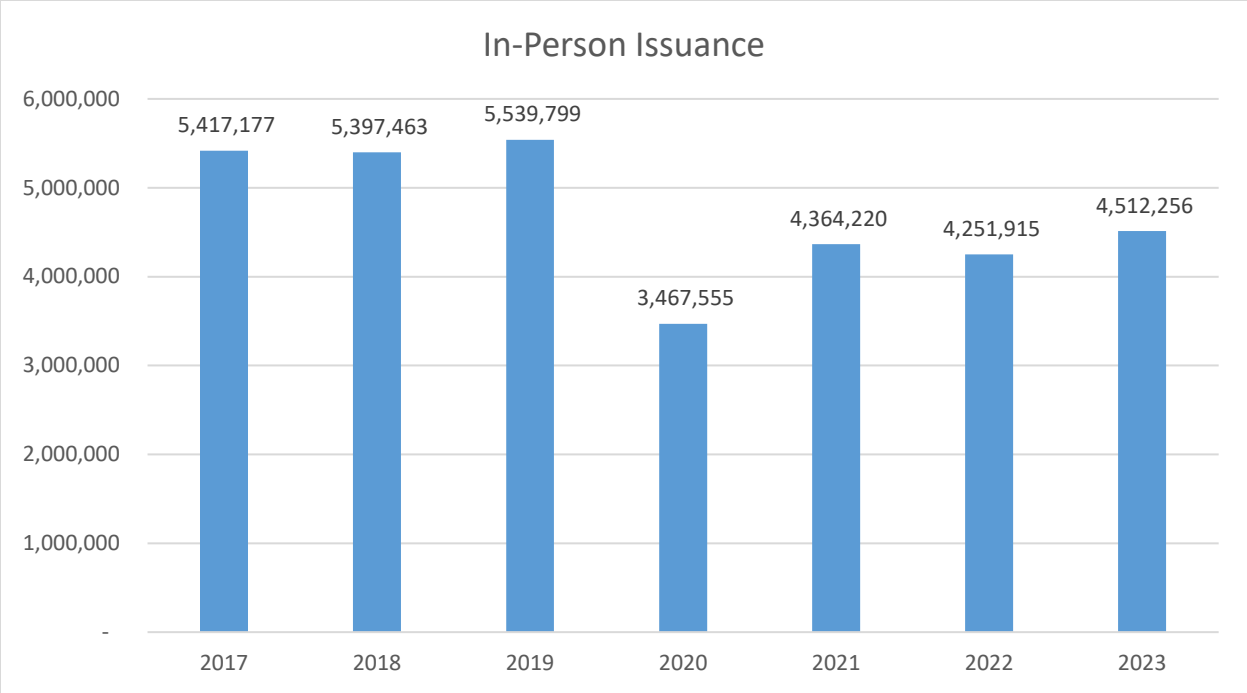

Figure 12 In-Person Issuance of Texas Driver License and ID Cards CY 2017 – 2023

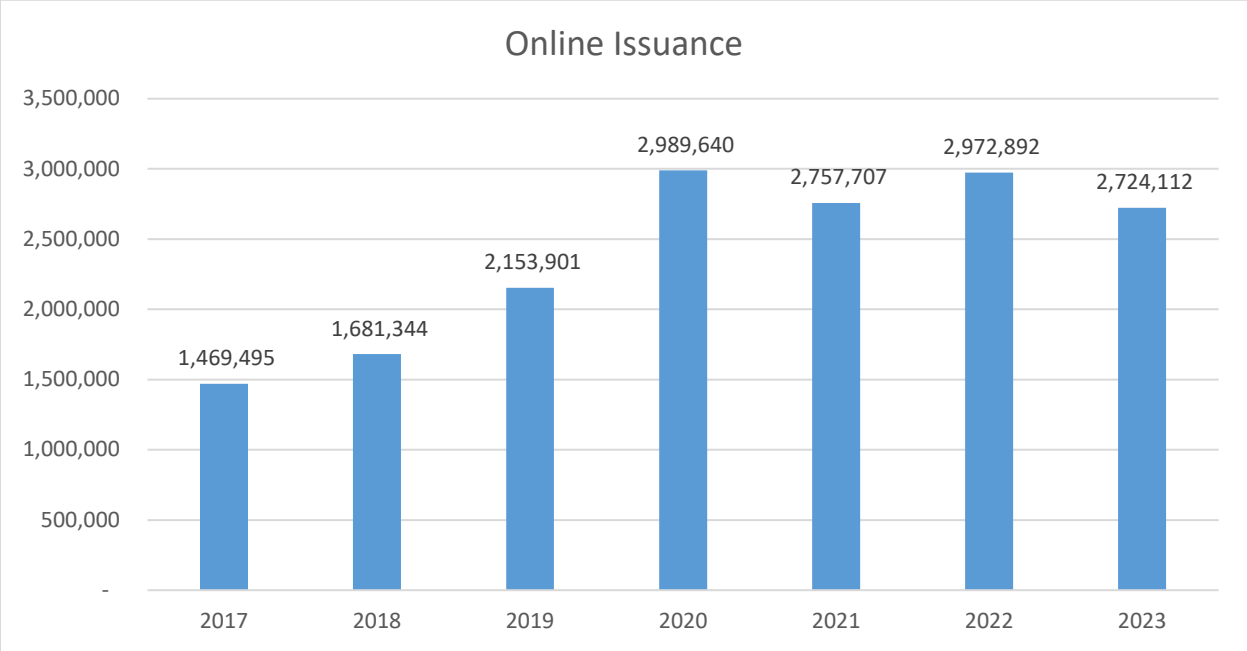

Figure 13 Online Issuance of Texas Driver License and ID Cards CY 2017 - 2023

The average number of in-person issuances from CY 2017 to 2019 is 5,451,480, and the average in-person issuance from CY 2021 to 2023 is 4,376,130, which shows a decrease of 1,075,350 per year. While the average number of online issuances from CY 2017 to 2019 is 1,768,247, and the average online issuance from CY 2021 to 2023 is 2,818,237, which shows an increase of 1,049,990

per year. This indicates that customers are using more online options, which can also be verified by the percentage of online issuance from CY 2017 to 2023 (Figure 14).

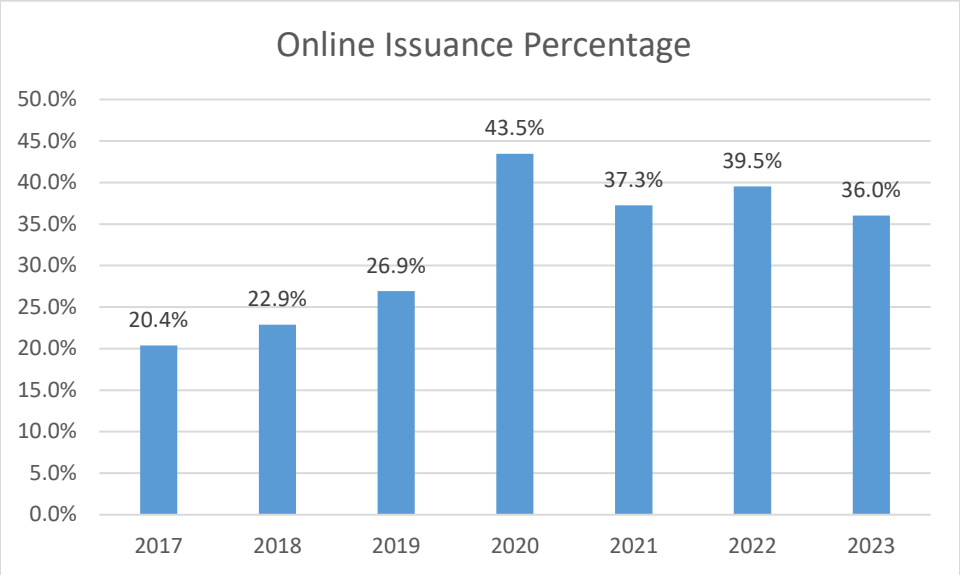

Figure 14 Online Issuance Percentage 2017 - 2023

Figure 14 shows a clear increase of the online issuance percentage of the new appointment system (2021 – 2023), which an average rate of 37.6%. For example, for every 100 issued Texas Driver License Cards or ID Cards in 2023, about 36 were processed and completed online.

2.2.1.1.1. No shows

According to the appointment data from the TxScheduler database, the statewide average no show rate in CY 2023 is about 27%, which can be evidenced by two approaches.

Approach 1: the number of average daily booked appointments and checked in appointments.

In CY 2023, the number of average daily booked appointments is 29,297, and the number of average daily checked in appointments is 21,438. Therefore, the average number of no shows is 7,859, which is about 27%.

Approach 2: the number of total appointments and no shows.

In CY 2023, the number of total appointments is 7,656,059, and the total number of no shows is 2,148,670, which indicates a no-show rate of 27%. Figure 15 presents the FY23 appointments by appointment type.

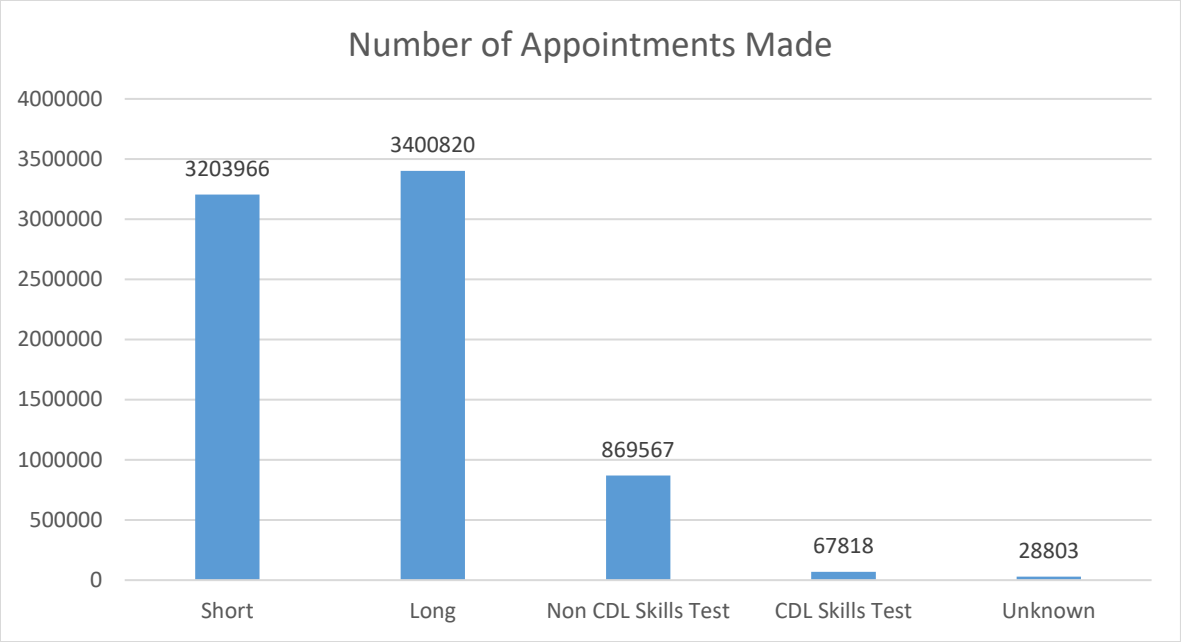

Figure 15 Number of Appointments Made in FY23 by Appointment Type

The long (45%) and short (42%) transactions rank the top two appointment types, which count for 87% of the total appointments, followed by non-CDL skill test (11%) and CDL skill test (1%). This is reasonable because certain types of short transactions can be processed online and no appointment is needed (e.g., driver license or ID card renewal).

Table 13 shows the estimated availability in days, average office wait time, and average service time in FY23 by appointment type.

Table 13 Estimated Availability, Average Wait Time, and Average Service Time in FY23 by Appointment Type

Appointment Type	Estimated Availability in Days	Average office wait time (mins)	Average service time (mins)
Long	58	41	28
short	30	36	20
Non CDL Skill Test	22	28	21
CDL Skill Test	8	35	15

Table 14 presents the percentage of CY 2023 office transactions that are completed under 30 minutes, 45 minutes, and one hour, respectively.

Table 14 CY 2023 Transaction Time Percentages

	Under 30 mins	Under 45 mins	Under 1 hour	Over 1 hour
Wait time	56.7%	71.9%	79.9%	20.1%
Processing time	77.1%	80.0%	80.7%	19.3%
Total time	39.3%	58.3%	71.4%	28.6%

In CY 2023, about 56.7% of the transactions has a wait time shorter than 30 mins, and about 25.2% of the transactions has a wait time between 30 mins and 45 mins. About 20.1% of the transactions has a wait time longer than 1 hour. In terms of the processing time, about 77.1% of the transactions were processed within 30 minutes, and 80.0% of the transactions were processed within 45 minutes. In total (wait time plus processing time), about 58.3% of the transactions were completed under 45 minutes, and 71.4% completed within one hour.

2.2.2. DLD Regions Assessment

The Driver License Division has organized the state into eleven Regions that are shown in Table 15 (maps can be found in Appendix D), along with statistics about number of FTEs, vacancies, customers served in 2023 and other facts. Each Region manages an assigned number of DLOs to meet the needs of customers in that area of Texas. The resources assigned to a Region relate to the customer base, historical information about numbers of customers who visit a DLO for service and other factors.

The DFW Regions: 1A-Garland, 1B-Fort Worth and 1C-Carrollton have 47 small, medium and large DLOs and four mega-centers with 613 available Full Time Employees FTEs (Allocated FTEs minus vacancies). The Houston Regions 2A-Houston, 2B-Houston and 2C-Rosenberg comprise 34 small, medium and large DLOs with five mega-centers with 629 available FTEs. The DFW Regions serviced a total of 1,544,668 customers in 2023 compared to the Houston Regions which serviced 1,591,102 customers. The notable difference in these two sets of regions relates to the average wait times and booking times for original or renewed DLs, though it should be pointed out that all 6 these Regions have average wait times less than 30 minutes.

The DFW Regions average wait times are 1A- 22.8 minutes, 1B- 27.5 minutes and 1C- 15.3 minutes (average 21.9 minutes). The Houston Regions average wait times are 2A- 15.0 minutes, 2B- 14.5 minutes and 2C- 20.4 minutes (average 16.5 minutes). Thus, the Houston Regions have an average of 5.4 minutes shorter wait time than the DFW Regions.

The significant difference between the DFW and Houston Regions relates to average original license booking times and average renewal booking times. The DFW Regions' average original booking times are 1A- 33.5 days, 1B- 36.3 days, and 1C- 37.1 days for an average of 35.7 days. The Houston Regions average original booking times are 2A- 8.7 days, 2B- 5.5 days and 2C- 2.5 days for an average of 5.5 days, which is 30.2 days less on average. The DFW Regions average renewal booking times are 1A- 12.4 days, 1B- 13.4 days, and 1C- 16.1 days for an average of 14.0 days. The Houston Regions average renewal booking times are 2A- 3.0 days, 2B- 3.9 days and 2C- 2.3 days for an average of 3.1 days, which is about 10.9 days less on average. Thus, the

booking times for originals are about four weeks shorter in the Houston Regions compared to the DFW Regions. Renewal license booking times are about 11 days shorter in the Houston Regions than the DFW Regions. These differences in booking times are significant.

The 6A-San Antonio and 6B-Pflugerville Regions are smaller in terms of number of offices, FTEs and customers served. Based on Table 15, the average wait and booking times were approximately the same compared with the DFW Regions which again means that wait times are less than the 30 minute performance measure and booking times are on average less than one month.

In conclusion, the review of Regional statistics did not uncover any deficiencies that resulted in significant differences between Regions or sets of Regions in large metropolitan areas.

Table 15 List of DLD Regions with statistics regarding customers, FTEs, population and operational information

1	2	3	4	5	6	7	8	9	10	11	12
Region	Number of Small, Medium or Large DLOs	Number of Mega Centers	Customers Served in 2023 at DLOS	Nr. of FTEs	FTE Vacancies	Available FTEs	Nr. of BCS Workstations	DLD Region Population	Average Wait Time (this Region) Minutes	Average Original License Booking Time (this Region) (Days)	Average Renewal Booking Time (this Region) (Days)
1A - Garland	14	2	460,704	257	56	201	151	3,524,564	22.8	33.5	12.4
1B - Fort Worth	13	1	545,804	251	47	205	126	2,988,070	27.5	36.3	13.4
1C - Carrollton	20	1	537,160	258	50	208	136	2,725,644	15.3	37.1	16.1
2A - Houston	5	2	459,729	246	43	203	139	4,373,929	15.0	8.7	3
2B - Houston	23	1	631,361	262	44	218	115	2,144,428	15.1	5.5	3.9
2C - Rosenberg	6	2	500,012	260	52	208	121	1,939,377	20.4	2.5	2.3
3 - Weslaco	21	2	504,711	251	36	215	133	2,411,332	14.4	9.5	3.6
4 - El Paso	23	1	343,385	193	43	150	92	1,521,574	10.5	9.3	3.9
5 - Lubbock	48	0	287,364	166	28	138	98	1,406,583	6.6	10.2	5
6A - San Antonio	23	1	511,838	251	56	195	122	3,337,761	21.4	37.3	14.5
6B - Pflugerville	23	1	464,454	243	96	147	124	2,873,746	22.0	35	15.3
Totals or Average	**219**	**14**	**5,246,522**	**2638**	**551**	**2088**	**1357**	**29,247,008**	**17.4**	**20.4**	**8.5**

Note: Starting with Column 1 Region, Data for columns 1 – 4, 8 and 10 – 12 was obtained from the 2023 DLD Report to The Office of the Governor. Data for columns 5 – 7 was obtained from the Combined Organization and Strength Charts October, 2023, Population Data for Column 9 was obtained from the Texas Demographic Center.

2.3. DLD Site Operations and Flow Activities

2.3.1. Driver License Office Site visits

This section reviews the DLO site visits made by the study team. The study team selected mostly Mega Centers and some large DLOs for visitation. Most visits used a team of two team members.

Multiple team members visited various DLOs, necessitating a standardized approach so that all the appropriate data could be collected from each visit. The standardized visit planning is shown below in Table 16.

Table 16 Site Visit Planning Checklist.

Checklist	Activities to Plan and Conduct DLO Site Visits
1	Coordinate with your team member to determine the best date to conduct the visit.
2	Once the team determines the date, communicate with the DLD contacts with the dates and ask for a local center contact.
3	Contact the local center contact with the proposed visit date and ask for confirmation whether it is a good day to visit.
4	Bring enough copies of the observation form (Appendix A).
5	Bring your DPS badge.
6	Arrive at the Mega center before it opens to observe if there is already a line waiting outside. Plan a minimum 4-hour visit in total per center
7	Suggested: The team observe both AM and PM shifts. Draw floor plans of the Center/DLO.

The teams used a standardized observation form to collect the same information at each DLO site visit. The standardized forms with site visit data can be found in Appendix(s) E through M. Additional observations could be made, but the standardized observation form ensured that base data was gathered at each site.

The team visited the DLOs listed in Table 17. This table also shows the Appendices where the documents from each visit are contained.

Table 17 DLO Site Visit Locations.

Region	Driver License Office	Office Size	Date	Observation Documents
4-El Paso	Midland Mega Center	Mega	April 17 - 18	Appendix G
1B-Fort Worth	Fort Worth Mega Center	Mega	May 1	Appendix I
1A - Garland	Dallas South Mega Center	Mega	April 30	Appendix H
2B-Houston	Spring Mega Center	Mega	May 6	Appendix F
2A-Houston	Houston North Mega Center	Mega	May 7	Appendix E
6A-San Antonio	Leon Valley Mega Center	Mega	April 19	Appendix M
6B-Pflugerville	Austin North DLO	Large	April 25	Appendix L
6B-Pflugerville	Austin South	Large	May 16	Appendix J
6B-Pflugerville	Austin Northwest	Medium	May 14	Appendix K

2.3.1.1. Summary of Site Visit Findings

Generally, the DLOs visited have a well-run operation and do a remarkable job in serving the public. After reviewing all nine site visit reports, several themes emerged regarding deficiencies and ways to improve effectiveness and efficiency.

There were some commonalities in the DLO visits listed below.

- Most DLOs use a triage system to vet customers to ensure they have the correct documents. This was identified as a best practice in the BI Team reports.
- No DLO accommodates “walk-in” customers, but post limited same-day appointments.
- DLOs have significant appointment “no-shows.”
- No-shows and daily staffing levels (e.g. unstaffed positions, sick leave, vacations) affect the number of same-day appointments posted.
- Same-day appointments are generally posted just before or after the opening time for the DLO and an announcement is usually made for anyone waiting outside to schedule an appointment.
- There were multiple comments at visited DLOs that staff are understaffed and underpaid.
- Low staff salaries hamper retaining staff. Sometimes they lose staff to DLD HQ positions that may have a “work-from-home” element.
- Some staff work one or more jobs in addition to their DLD job.
- DLO supervisors use their own ideas and sometimes money to provide incentives for staff.

- Additional signing and in multiple languages would help inform the clients of what documents they need, opening and closing times, posting of same-day appointments, and line position. English and Spanish are the predominant languages, but there are others.
- Some DLO personnel commented that more offices were needed in certain areas to accommodate population growth.

Key takeaways regarding what were seen as several deficiencies with recommendations for addressing barriers to effectiveness and efficiency that build on the current strengths of the DLOs include:

2.3.1.1.1. Strengths

The DLOs showed several strengths, including:

- dedicated and knowledgeable staff,
- sustained efforts among staff to conduct triaging and walkthroughs,
- fast processing times, and
- plenty of in-person waiting room seating.

On the ground, supervisors and leads are doing the best they can with manual, on-the-fly appointment modifications to manage missed appointments and accommodate walk-ins. Supervisors with years of experience have the benefit of being able to do this well. Supervisors are using many ways to motivate staff, without the ability to offer much in the way of salary increases, often at their own expense.

2.3.1.1.2. Major Deficiencies

Deficiency: High vacancy rates among DLO staff

Vacancies among DLO staff directly impact the number of customers that DLOs can serve and the speed with which they can serve them. The high vacancy rates were most visible during the site visits via the empty spaces at the BCS counters and the information desks. DLO staff shared the difficulties they are experiencing in recruiting and retaining staff and identified some root causes. The main cause of the high vacancy rates is that the salaries of DLO employees are not competitive, especially in large cities. Given the low salaries, it is common for DLO employees to work more than one job to cover their living expenses. It is also common for DLO employees to leave their jobs for job opportunities at other state agencies or DLD headquarters, given that those jobs typically pay more than working at a DLO. Relatedly, DLO employees do not receive merit raises, merit bonuses are scarce, and few promotion opportunities exist for DLO employees.

Deficiency: High no-show rates

High no-show rates reduce appointment availability, which is one of the primary complaints among customers. Technological limitations are one of the primary root causes of the high no-show rates. Reminder messages help reduce no-show rates, yet there is no automated appointment

reminder system in place. While some DLOs send ad hoc messages reminding customers about upcoming appointments, they do so manually. Further, DLD does not have a system in place that makes it easy for customers to cancel an existing appointment. Lastly, DLD does not clearly communicate with the public about how and when they publish appointments. While the online appointment system usually provides customers with appointments that are weeks or months out, DLOs also intermittently make numerous same-day and next-day appointments available on the website. Many customers who book an appointment far out eventually find they can potentially book an appointment sooner by frequently checking the website. When they get an appointment with a nearer date, they end up with two (or more) appointments, and after going to an appointment, they fail to cancel the other or others. This booking of excess appointments would be circumvented with clearer communication upfront.

Deficiency: Lack of clear communication with the public about the paperwork necessary for their appointment

When a customer must make more than one trip to a DLO to complete their transaction successfully, the capacity (volume of customers) the DLO can serve is reduced. While the DLD website provides information about what customers need to bring to complete their transactions successfully, the information is sometimes not easy to find, interpret, and difficult to read visually. Customers would benefit from a system that allows them to input their information and receive tailored advice about what they need to bring based on their customer profile and situation. The DLD also does not have a significant social media presence. Social media could help drive customers to the specific information on the DLD website so that more customers are getting accurate information.

2.3.2. DLD BI Team Analysis

The current iteration of the Business Intelligence Team (BI Team) started in June 2022 and conducted their first office visit in August 2022. As of June 12, 2024, the team has visited 54 offices. There are 20 more visits scheduled through November of 2024. Following each office visit, the BI Team produces a report. Each report is divided into the following sections: office statistics, which includes information like region, staff size, average daily transactions, wait times, and appointment availability; observations and suggestions, which list any challenges and potential solutions; notable procedures, which acknowledge best practices; staff concerns; and key points, which provides a quick summary of the report's main takeaways. These reports offer a detailed glimpse into areas of strength and challenge for each DLO.

The study team reviewed all 41 reports and logged each challenge. We identified 194 challenges. Next, we grouped each challenge by theme. We identified 13 themes. Table 18 details the 13 themes and the number of times each theme was mentioned in the 41 reports. It is important to note, however, that while the DLOs face common challenges, the appropriate solution for each challenge may vary across DLOs, given that they serve populations of differing sizes and needs.

Table 18 Challenge Themes with Number of Times Reported

Themes	Number of Times Reported
Appointment Publishing (FIFO/Layered/Ratios)	60
Ad Hoc Messaging	20
Morning Procedures	19
Same-Day Appointments	17
Vacancies/Staffing	13
Service Time	11
Staff Recognition	10
Templates for Appointment Publishing	9
Employee Schedule	8
Office Efficiency	8
Return Customers	8
Leadership	6
Class C Road Exams	5

Below, we provide a brief description of each of the themes:

1. Appointment publishing: This refers to the method by which DLOs choose to release or manage the availability of their appointments. Solutions proposed for these challenges include first-in, first-out (FIFO) publishing, optimizing the ratio of long to short appointment availability, and better layering the availability of appointments so that offices can accommodate peak times.

2. Ad-hoc messaging: Ad-hoc messaging is reminders sent to appointment holders that alert them of their upcoming appointment and the required documents to bring. This can reduce the number of times a person visits a DLO and reduce no-shows.

3. Morning procedures: Many DLOs noted that their morning protocols are critical to ensuring the smooth operation of the rest of the day. Establishing morning procedures was cited as a challenge in many DLOs, with proposed solutions such as better utilizing check-in counters or kiosks, properly vetting documents, and assigning a second employee to manage work flows.

4. Same-day appointments: Many DLOs have conflicting protocols around whether they offer same-day appointments. While the DLD website says each office provides them, in practice, not every location does. Better communication with customers on how to access same-day appointments can reduce long lines in the mornings.

5. Vacancies/staffing: Many DLOs across the state experience high staff turnover and are plagued by vacancies that are difficult to fill. The BI Team reports noted this trend, offering

solutions like reducing Class C tests and creating a network communication system for DLOs to temporarily request employees from other, better-staffed DLOs.

6. Service Time: The BI Team noticed some inconsistencies in the service time data and emphasized the importance of closing tickets appropriately, especially when leaving a station to cover another position, during their lunch breaks, and when leaving for the day.

7. Staff Recognition: Relates to fostering and maintaining a motivated and engaged staff. Recommendations include implementing a monthly/quarterly staff recognition program, acknowledging staff achievements one-on-one, and highlighting the office's successes.

8. Appointment Template: Appointment templates can be configured using combined long and short appointments, layered publishing, and a mix between general and kiosk appointments. Customer demand should drive appointment scheduling. Obsolete appointment templates should be removed, and newly configured templates should be added, making it easier to train others.

9. Employee Schedule: Employee schedules should be configured to optimize efficiency and effectiveness. Solutions include prioritizing morning triage, filling the typing stations, and rotating staff to different stations weekly instead of daily.

10. Office Efficiency: This challenge relates to the physical layout of the offices and how staff are utilized. Recommendations related to this challenge are office specific.

11. Return Customers: Customers having to return to DLOs due to missing documentation creates stress for customers and staff. One recommendation from the BI Team is for staff to utilize DPS Only or Fast Track appointments to give return customers same-day appointments.

12. Leadership: This relates to advice for leadership at DLOs and includes scheduling regular meetings with staff and supervisors, providing clear expectations to staff regarding transaction goals, and increasing their visibility by walking the floor and through pods.

13. Class C Road Exams: The scheduling of Class C Road Exams can undermine the ability of DLOs to process long and short appointments, which are often in greater need. This is particularly a problem in smaller offices with fewer staff. Recommendations include possibly eliminating road tests at very small DLOs to focus on processing more transactions and reducing Class C Road exams to three days a week at larger offices.

Chapter 3. DLD Staff Surveys

3.1. Employee Survey

To understand employee perspectives on operational effectiveness and efficiency of the Driver License Division, the Study Team developed an online survey (Appendix B). The Study Team conducted the survey from June 10, 2024, to June 14, 2024, and emailed it to all DLD employees. The survey questions focused on 1) identifying obstacles to effective and efficient customer service and workload management, 2) determining the level of employee access to performance data, 3) the effectiveness of communication and feedback loops, and 4) the effectiveness of the technology available. The Study Team used Qualtrics, R, and Tableau for the analysis. For open-ended responses, the Study Team grouped answers by respondent characteristics and reviewed them qualitatively.

Out of the 3,277 employees invited, 1,169 employees started the survey. The data clean-up process only removed surveys that did not move past the demographic and respondent characteristic questions. The final analysis considers a total of 1,125 surveys (which includes 76 surveys that are less than 100% complete).

3.1.1. Demographics and Other Respondent Characteristics

The survey sample consists mostly of females (77.6%), 30 to 59 year-olds (78.4%), and white (49.7%) and Hispanic (32.8%) race and ethnicity. About a quarter of respondents have been working more than two to five years (25.5%), but nearly half have a significant work history of more than five to ten years (27.3%) or more than ten to 15 years (21.7%). Table 12 in the Appendix contains the detailed respondent characteristics.

In both the survey sample and the DLD population, License & Permit Specialist (LPS) is the most common job title. Table 19 shows the fraction of survey respondents that had a particular job title compared to the fraction of the DLD employee population.

Table 19 Comparison of Survey Sample to DLD Population

	Survey Sample	*DLD Population*
Job Title	*n = 1125*	*N = 2738*
License & Permit Specialist	74.0%	82.5%
Lead Worker	6.8%	5.9%
Supervisor	9.8%	6.1%
Assistant Manager	2.8%	1.6%
Manager	0.8%	0.7%
Senior Manager or higher	0.1%	0.3%
Other (please enter)	6.1%	2.9%

Most of the survey respondents work at a DLO (85.9%) and a few work at Headquarters (11.3%) and the CSC (2.8%). The overall survey response has a 1 to 3.5 supervisor to employee ratio (doesn't supervise others = 77.7%; supervises others = 22.3%).

For the survey respondents who work at a DLO, the vast majority work in a customer facing position (87.9%). Additionally, many worked at an DLO prior to the launch of the appointment system on May 26, 2020 (69.7%). The DLD regions that had the highest number of responses are 1A-Garland (10.6%), 1C-Carrolton (10.4%), 2C-Rosenberg (10.4%), and 3-Westlaco (11.1%). Table 13 in the Appendix shows a detailed breakdown of DLO-specific respondent characteristics.

3.1.2. Obstacles to Operational Effectiveness and Efficiency

Deficiency: Technology gaps, especially the lack of a paperless approach, are the largest obstacles to effectiveness and efficiency at DLOs and the Customer Service Center.

The lack of a paperless system hinders effectiveness and creates unnecessary burdens at the DLOs. Currently, offices lack the ability to accept documents electronically, forcing a wasteful and time-consuming cycle of printing at the office, scanning them into the system, and then shredding the printed copies. Figure 16 shows that 43.1% of employees indicated that this is Always a problem. According to one survey comment, printing adds on average eight minutes to the process. Another major paper-based burden falls on LPSs who must manually enter application information from paper forms. Other states, like Georgia[125], have shown that allowing customers to pre-fill applications online can reduce transaction times by half, which translates to doubling capacity. An electronic system can further enhance efficiency by highlighting sections requiring attention, similar to Utah's[126] online application, which minimizes the time spent reviewing unchanged information.

The CSC also suffers from inadequate technology, hindering its ability to serve customers effectively. The biggest obstacles are outdated or broken equipment and limited access to customer information. Figure 17 shows that one in four CSC employees mention that limited access to customer information is a problem Most of the time. Further, 29.1% of CSC staff indicate that broken equipment is a problem Most of the time or Always. The CSC lacks modern contact center software that allows for omni-channel communication (SMS, WhatsApp, chat, email, etc.) and integrated access to customer information. This is a critical gap considering the millions of calls they manage but this is a gap that DLD currently is addressing. However, even with technological advancements and call diversion techniques, the CSC will likely require additional staffing to handle the current volume of inquiries. With only 55-60 agents and 12-18 dedicated to emails, the current staffing level is insufficient for answering calls. Investing in a comprehensive solution that includes both modern technology and additional personnel is crucial to ensure the CSC can efficiently serve its customer base.

[125] Workshop with Texas Driver License Division. February 16, 2024.
[126] Interview with Utah Driver License Division. May 22, 2024.

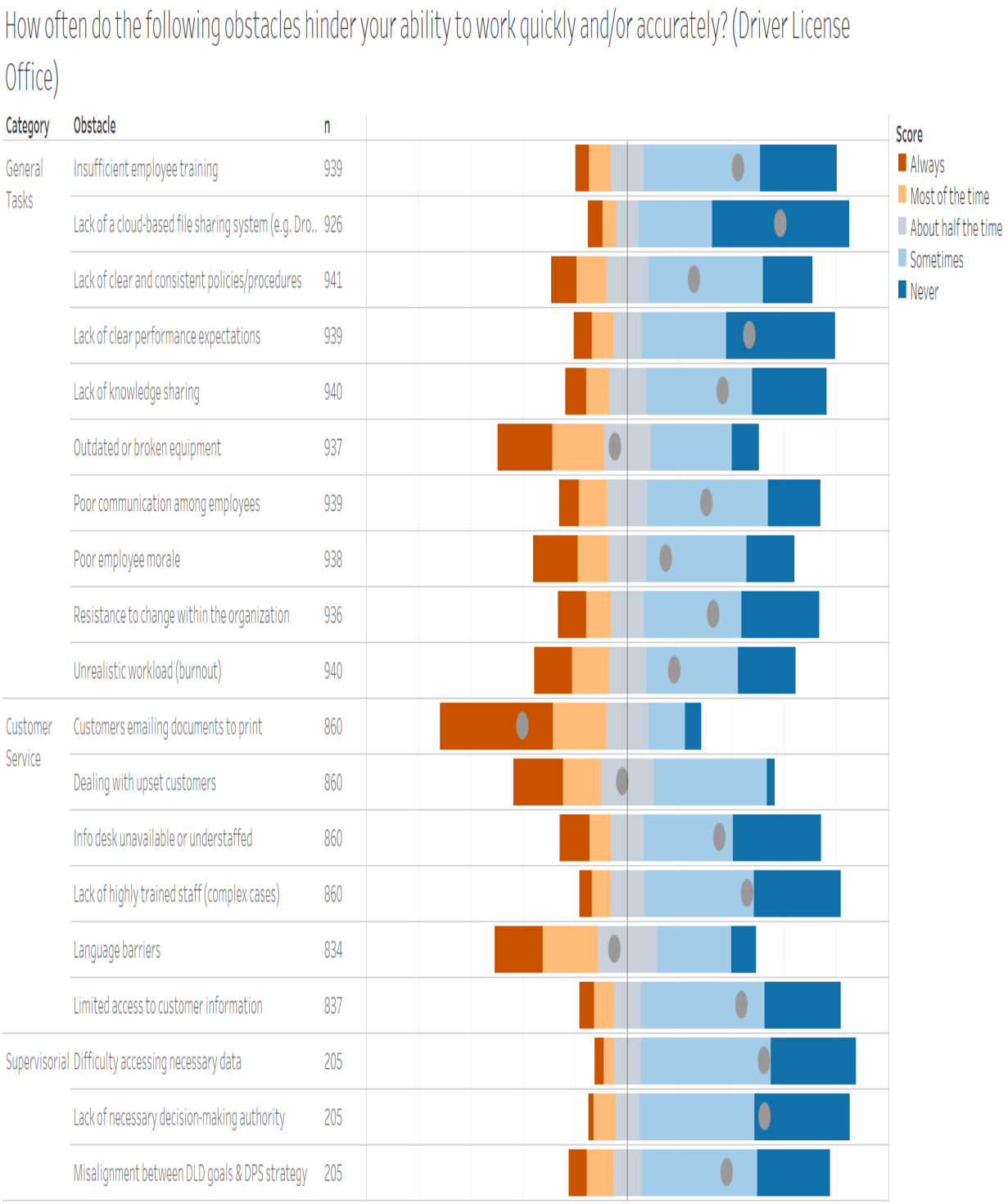

Figure 16 Obstacles to Effectiveness and Efficiency (DLO)

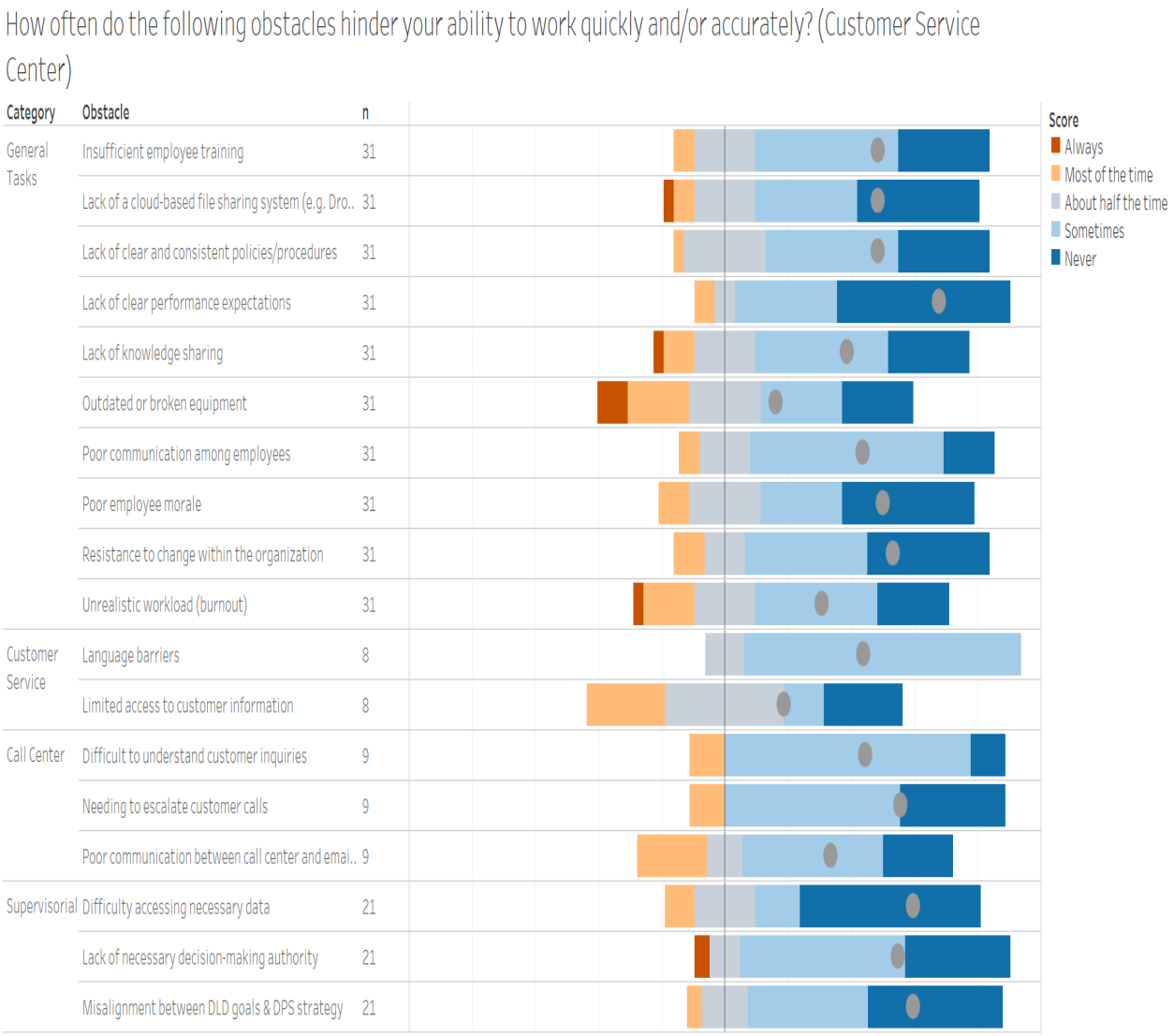

Figure 17 Obstacles to Effectiveness and Efficiency (CSC)

3.1.2.1. Performance Data and Feedback Loops

Deficiency: Lack of specific transaction-based performance targets and lack of access to performance data.

Out of 851 people asked if they have specific performance targets or goals (e.g., an average transaction speed), over one third indicated that they do not have targets or goals (Yes = 67.5%; No = 22.4%; I don't know = 10.1%). The lack of targets is mirrored in the responses from the 97 supervisorial staff reported (Yes = 70%; No = 30%). These results reveal a gap in clarity regarding performance expectations. Of those that indicated that they do have performance targets (n = 571), more than half said they do not check their performance data (20%), or that they do not have access to their own data (33%).

Performance metrics are key to ensuring that a transaction-based business optimizes its capacity and maintains consistency. These transaction-based performance data should be easily accessible. Setting well-defined performance targets for transactions can lead to several benefits, such as increased productivity and efficiency, but it is crucial to emphasize that these targets are not about pushing people to work at an unsustainable pace. Unrealistic expectations can lead to burnout and ultimately unhappy employees. When employees feel overwhelmed and unsupported, it can negatively impact customer service.

3.1.2.2. Effectiveness of Technology Available

Deficiency: The overall technology available is not very effective in allowing staff to serve customers efficiently.

DLD employees revealed mixed perceptions regarding the effectiveness of technology for efficient customer service. All DLD employees were asked about the overall effectiveness of the technology available to them to serve customers efficiently. The response is mostly centered around the middle (moderately effective) with several groups finding the technology less than moderately effective. Employees at HQ have a more favorable view of the effectiveness of the technology available than those working at DLOs and the CSC. Locations with the least favorable views are 1B- Fort Worth, 2A- Houston, 2-C Rosenberg, and 6A-San Antonio.

According to 910 individuals, the most frequent contributor to longer than normal service times is incomplete application forms and missing information. In addition, credit card reader issues are the third most frequent contributor (see Figure 18 & Table 20).

Table 20 Most Frequent Contributors to Longer Service Times

Most Frequent	Incomplete applications and missing information
	Needing to go to a different area of DLO to make change for a customer
	Credit card reader issues
	Trying to translate a foreign language
	Multiple tries to get a good fingerprint
	Adjusting camera and where person is standing for photo
Least Frequent	Waiting for customer to walk up to counter

Technology can ameliorate both of these obstacles. Incomplete applications can be addressed by allowing customers to pre-fill out application forms electronically. Additionally, replacing outdated swipe-based credit card readers with tap-to-pay technology would enhance customer convenience and potentially speed up transactions. These upgrades would align with modern payment methods that customers are accustomed to using.

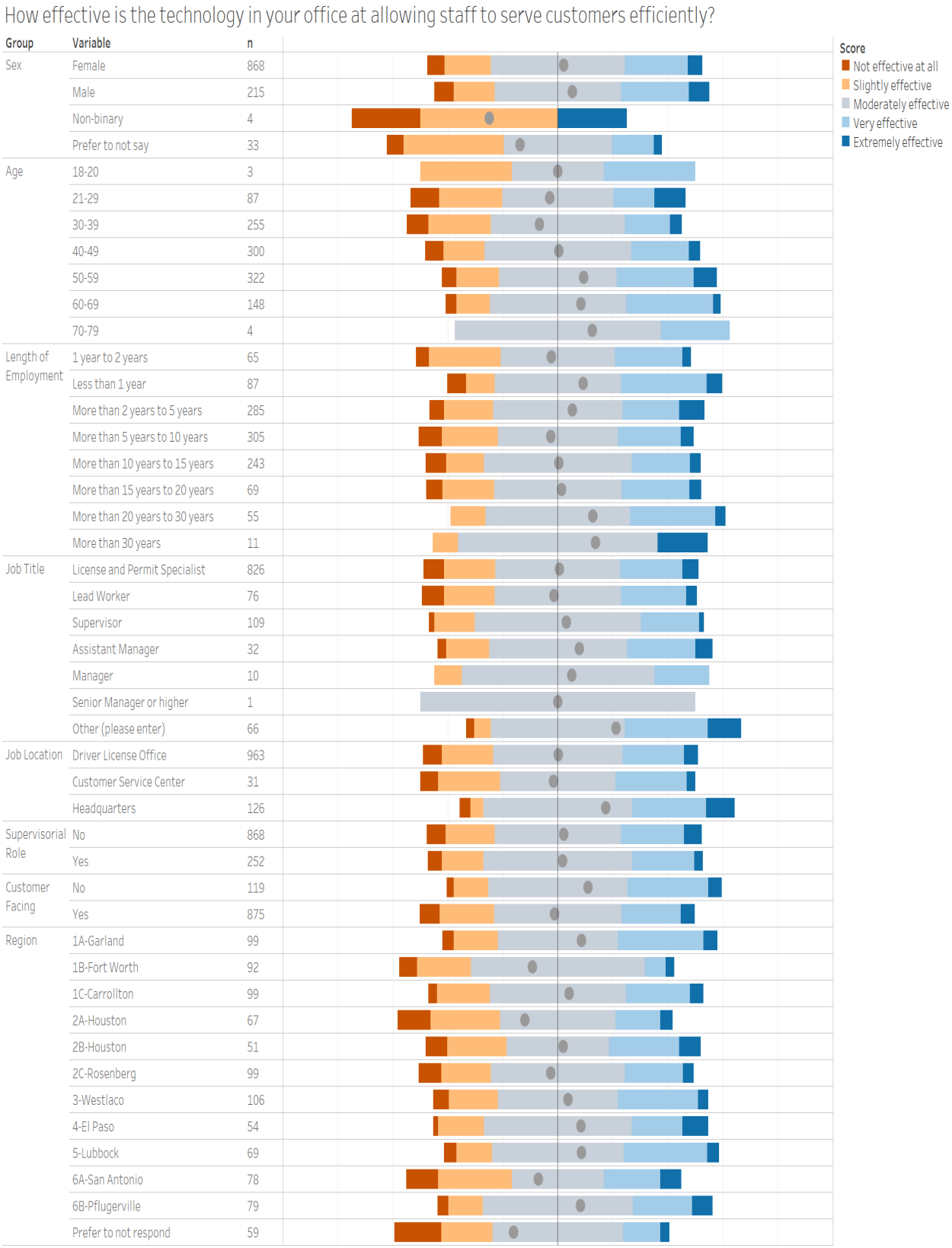

Figure 18 Employee sentiment on the effectiveness of technology overall

Out of the comments received, 29 people indicated that allowing customers to check-in up to 30 minutes prior and up to 30 minutes after their appointment (1 hour window) was problematic to wait times. According to the comments, customers tend to check-in from home or while running errands. When their number gets called, they are not physically present in the office. The DLO has to put them back into the queue, which increases wait times. The general consensus from these comments is that customers should only check-in once they are physically present on-site.

Deficiency: The appointment system is not very effective in helping walk-in customers without a prior appointment.

DLO employees revealed a mostly neutral response with respect to the appointment system helping walk-in customers with no prior appointment (see Figure 19). Respondent categories that fall toward a negative view include those working less than one year at DLD, supervisors, and regions 1C- Carrolton, 6A-San Antonio, and 6B-Pflugerville. Generally, supervisors are the ones who are tasked with controlling the publishing of appointments and adjusting the system on the fly.

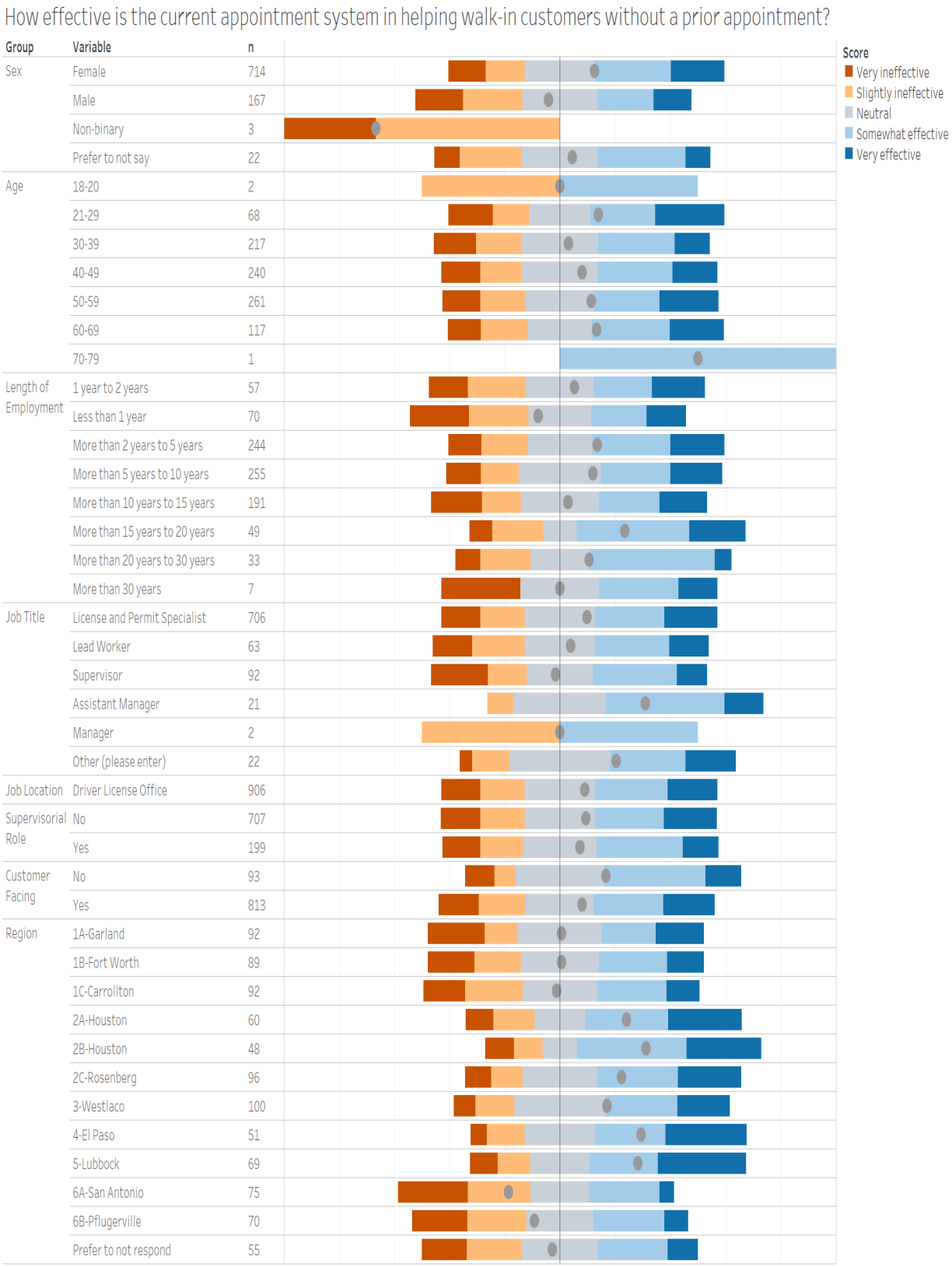

Figure 19 Employee sentiment on the effectiveness of appointment system in helping walk-in customers

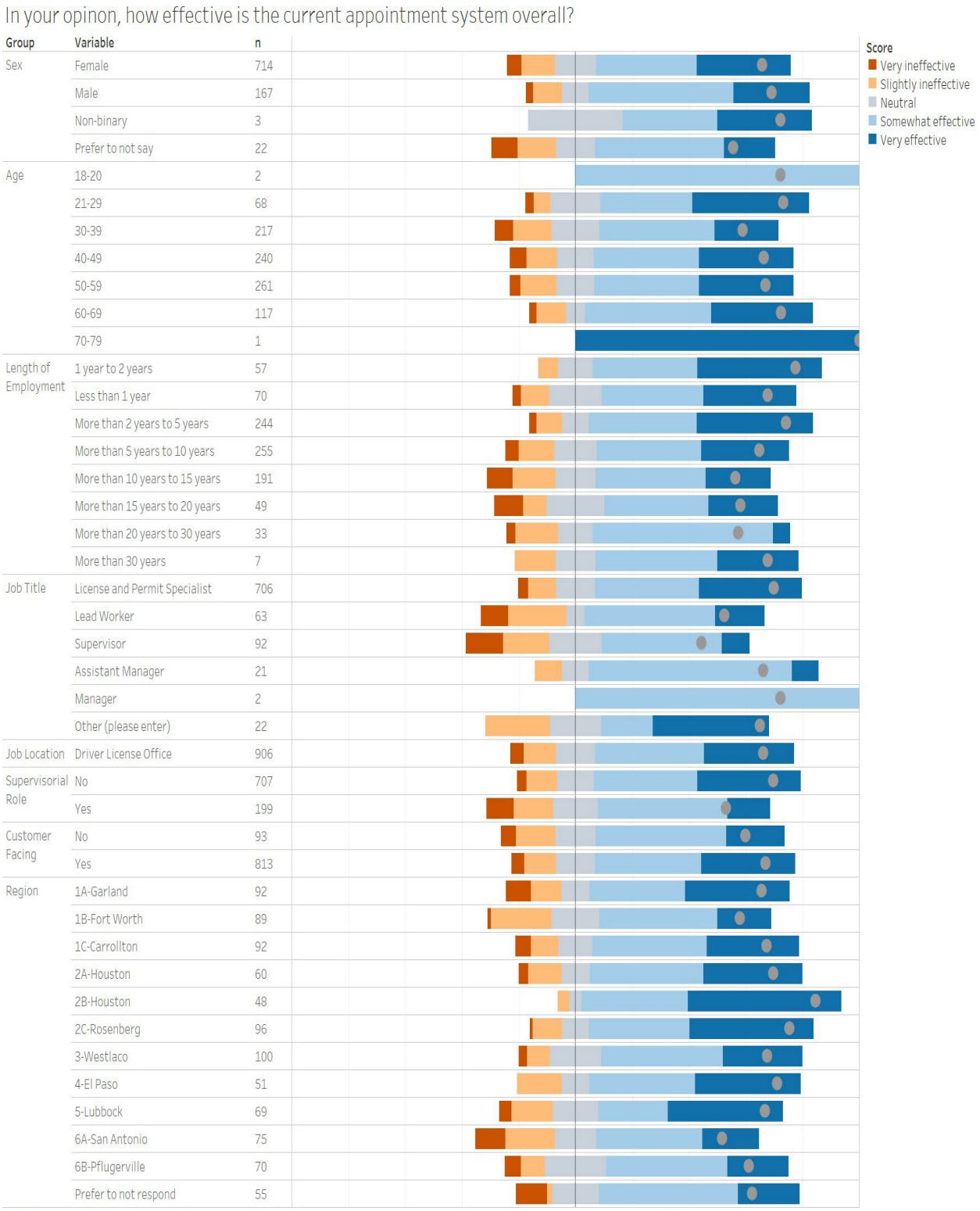

Figure 20 Employee sentiment on the effectiveness of appointment system overall

Staff perspective on average wait times at their office was also mostly neutral and with some cohorts not choosing terrible as an option at all. Respondent categories that fall toward a negative view included those working less than one year at DLD, leads, and regions 1A Garland, 1B- Fort Worth, 2A Houston and 6A-San Antonio.

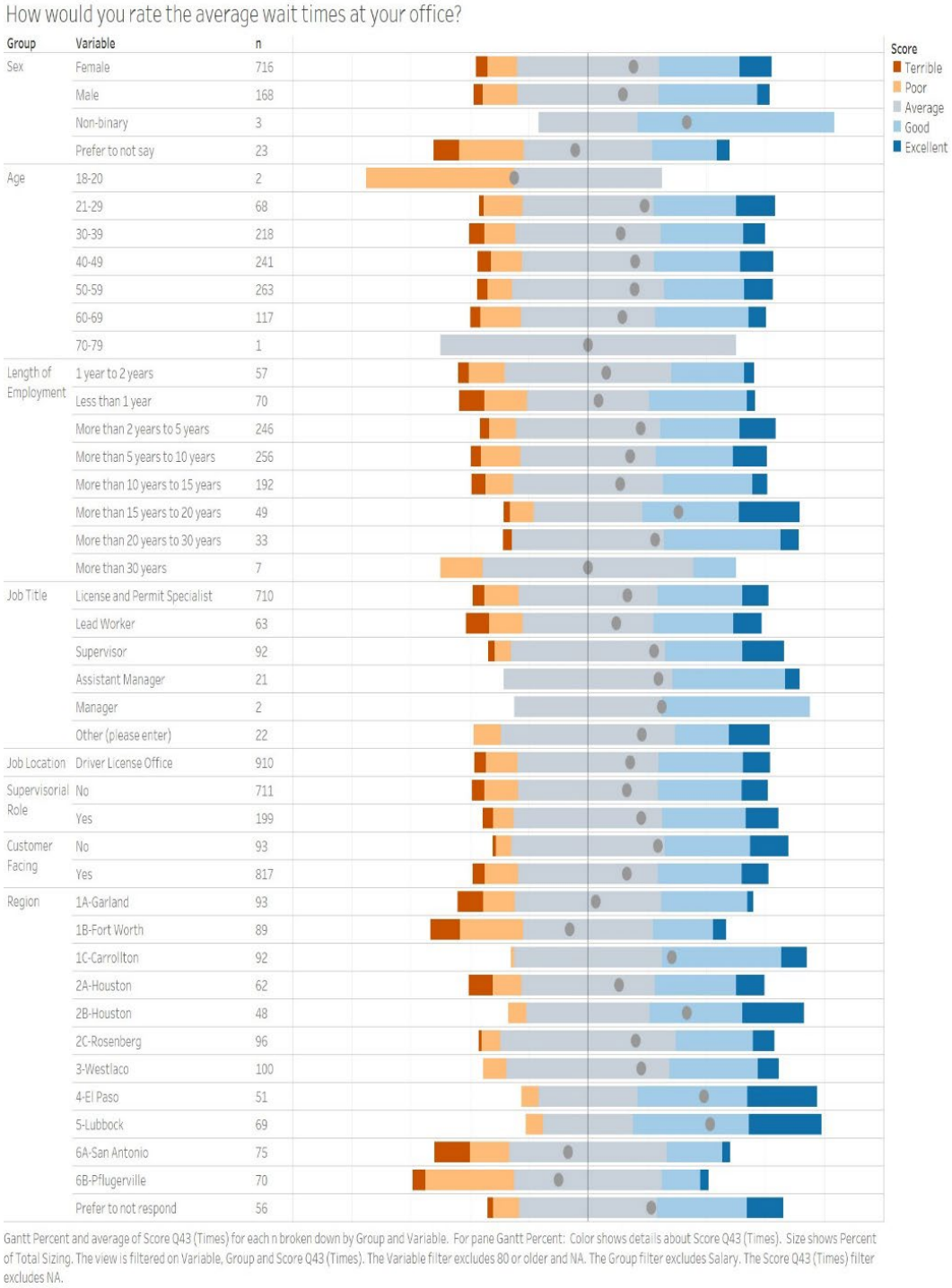

Figure 21 Staff perspective rating their wait times

Staff perspective on quality of customer service fell mostly into the good and excellent ranges, with some cohorts not choosing terrible or poor as an option at all. Out of the regions only three picked terrible (2A Houston, 2C Rosenberg, and Lubbock).

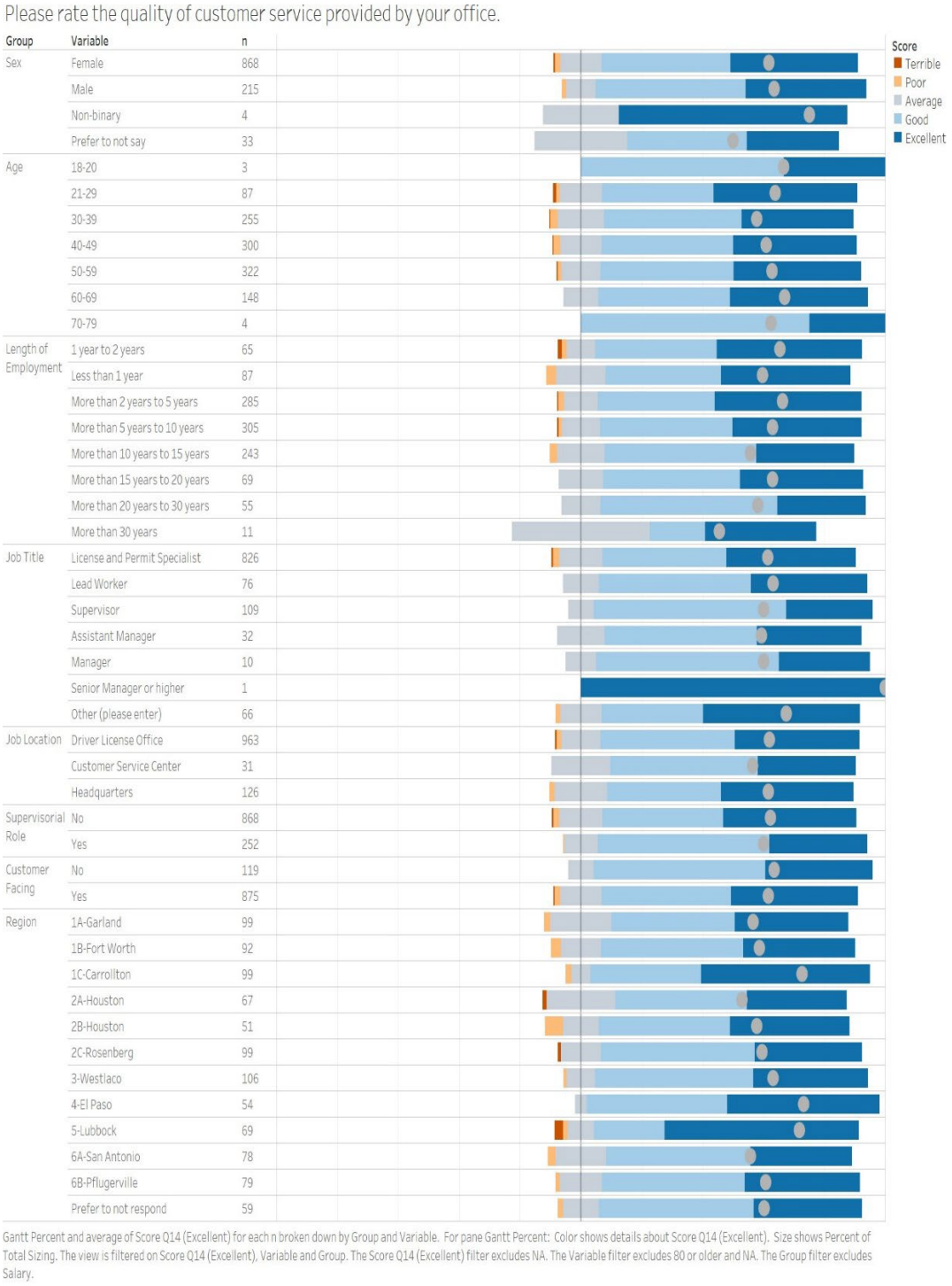

Figure 22 Staff perspective on their customer service quality

Chapter 4. Customer Survey

The DPS Driver License System (DLS) stores the email address of customers who have gotten a new or renewed Texas driver license or ID card. As part of the study, it is critical to conduct a survey to collect customers' experiences and opinions, as well as identified deficiencies (if any) regarding the Driver License Division (DLD) service and operation. The study team designed and distributed a voluntary customer experience and opinion survey, which provided both quantitative and qualitative information about the Driver License Division (Appendix C).

According to the previous study (Murphy et al. 2020), it was determined that a person could likely remember details of their last visit to a Drive License Office (DLO) within two years. Therefore, the study team extracted a set of approximately 9.23 million email addresses from DLS for individuals who had transactions with DLD starting January 1, 2022. Customers are asked to provide an email address voluntarily on the application form when they get a new or renewal driver license or ID card. Thus, a person might have chosen to not provide their email address, or provide a wrong email address, or not had one at the time. The study team works with Zero Bounce to validate the extracted 9.23 million emails to eliminate invalid records (e.g., wrong emails, duplicated emails, incomplete emails, etc.). Zero Bounce is a professional company that provide accurate, fast, and secure email validation service. Due to budget constraint, the study team randomly selected and validated 7 million email addresses (out of the total 9.23 million emails). As a result, about 5.17 million valid email records were obtained, which served as survey candidates and formed the basis for further analysis.

The study team used an online survey platform (Qualtrics™) and distributed a survey invitation email with a survey link to validated customer email addresses. The survey was made available in both English and Spanish—a toggle switch at the top of the survey page allowed switching between languages. Per requested by Qualtrics™ and the university, exactly 100,000 survey invitations were distributed every day, and the survey distribution began on June 13, 2024. The study team stopped sending out invitations on July 22, 2024. To summarize, as of July 26, 9:00 am, the study team received 36,013 survey responses out of the 4 million email invitations.

In order to provide reliable and accurate survey analysis, the study team examined the survey responses and only kept 100% completed surveys ("progress" = 100% and "finished" = "true") whose completion time is longer than 1 minute. In this way, incomplete and careless responses will be eliminated. After filtering, a total of 25,174 valid responses remains for further analysis.
In order to increase the response rate, all survey questions were voluntary, which indicates that the customer can leave a question unanswered if they do not want to answer it. Therefore, each question may have a different number of valid responses.

4.1. Analysis of the 25,174 Valid Survey Responses

- Q1. Please indicate your gender

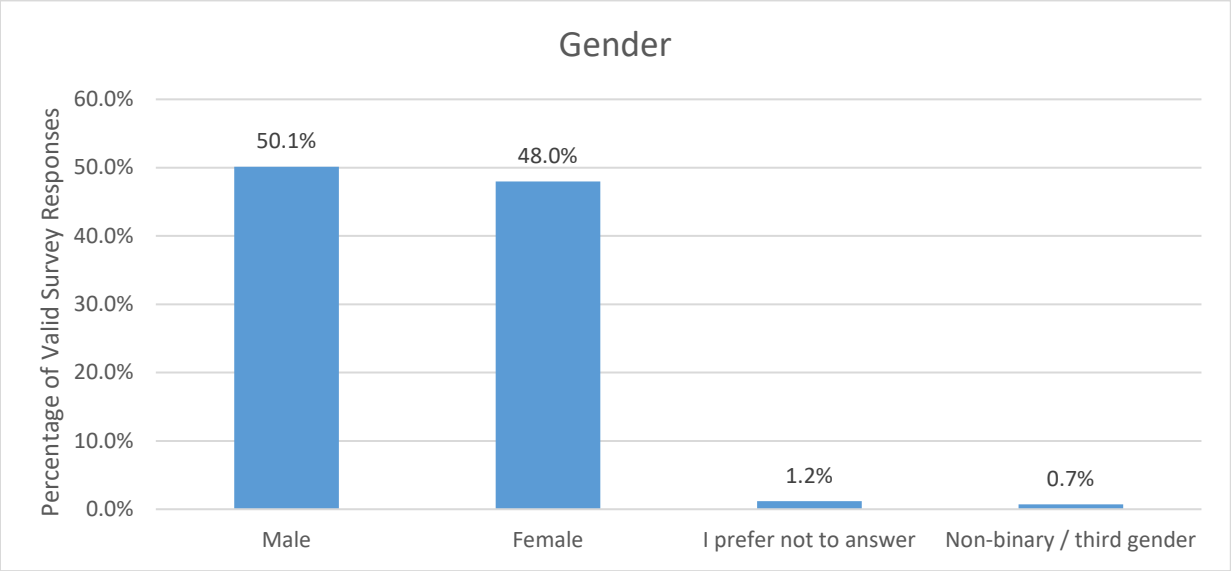

Figure 23 Percentage of Valid Survey Responses by Gender

Number of valid responses: 23,421. Figure 23 shows that 50.1% (11,745 out of 23,421) of the valid survey responses were provided by male, followed by female with a percentage of 48.0%.

- Q2. Please indicate your age group

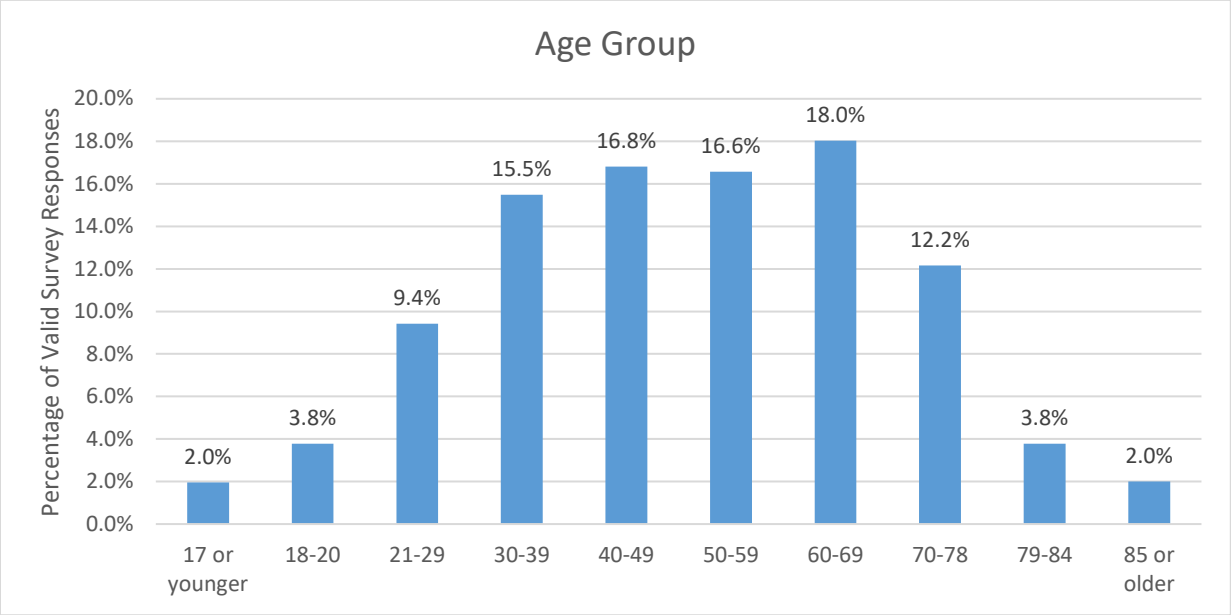

Figure 24 Percentage of Valid Survey Responses by Age Group

Number of valid responses: 25,026. Age Group 60-69 has the highest response rate of 18.0% (4,512 out of 25,026), followed by Age Group 40-49 (16.8%), Age Group 50-59 (16.6%), Age Group 30-39 (15.5%), and Age Group 70-78 (12.3%). In total, about 88.5% of the valid survey responses were completed by customers aged from 21 to 78.

- Q3. Highest level of education and/or training completed to date

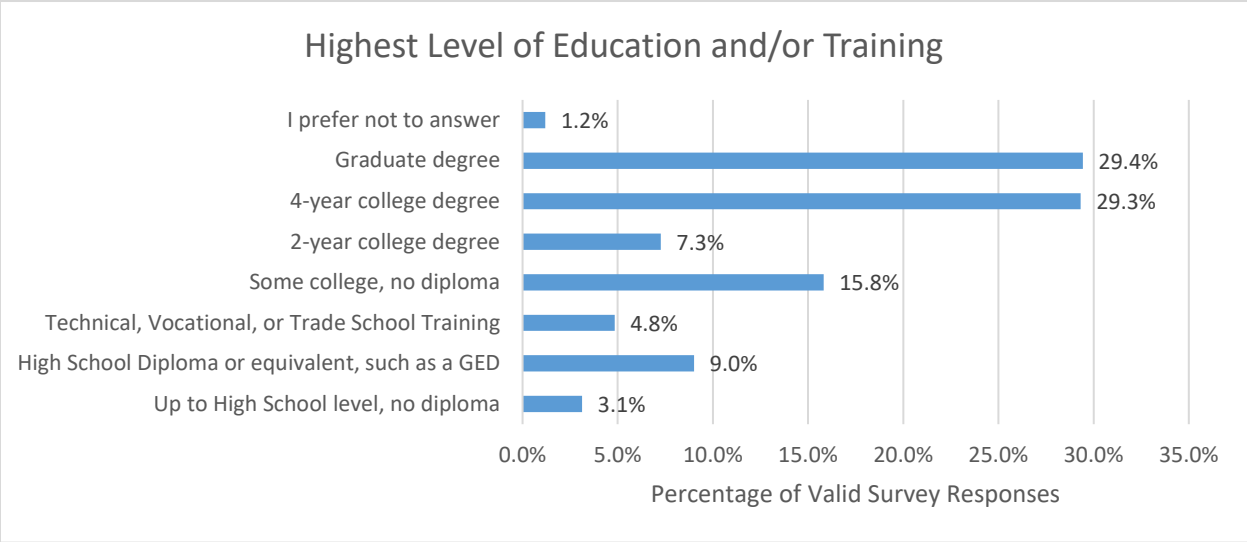

Figure 25 Percentage of Valid Survey Responses by Highest Level of Education and/or Training

Number of valid responses: 25,037. According to Figure 25, graduate degree and 4-year college degree have the top two response percentages with 29.4% and 29.3%, respectively. Some college, no diploma group ranks the third with 15.8%.

- Q4. Please indicate your Race and Ethnicity (Select all that apply)

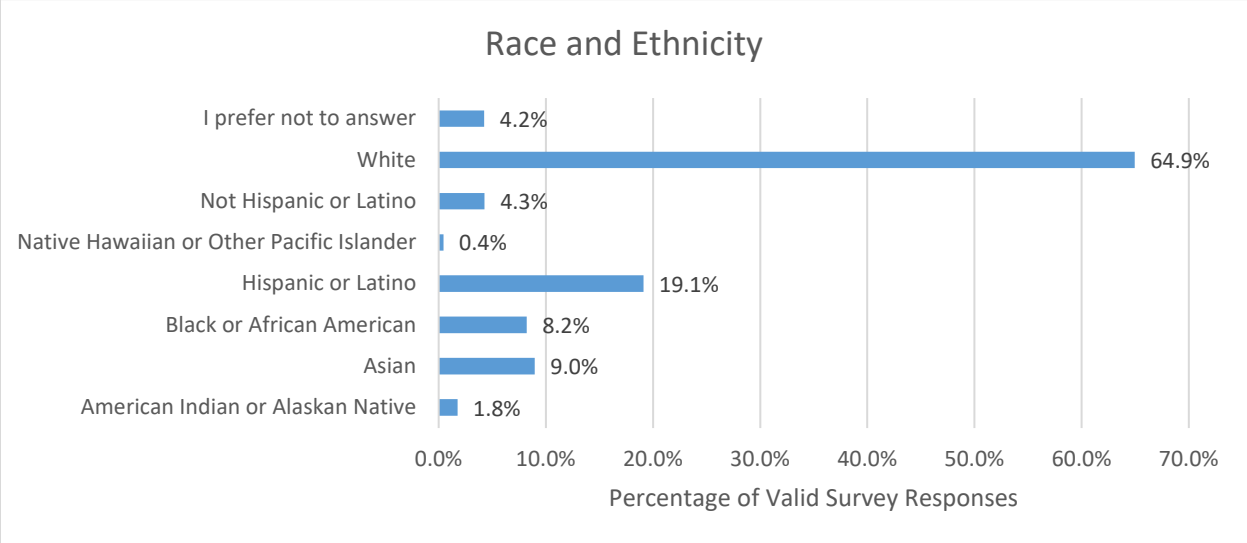

Figure 26 Percentage of Valid Survey Responses by Race and Ethnicity

Number of valid responses: 24,952. Over half (64.9%) of the valid survey responders are white, followed by Hispanic or Latino (19.1%), Asian (9.0%), and Black or African American (8.2%).

- Q5. Do you identify as a person with a disability or other chronic condition that you feel impacted your visit to the Driver License Office?

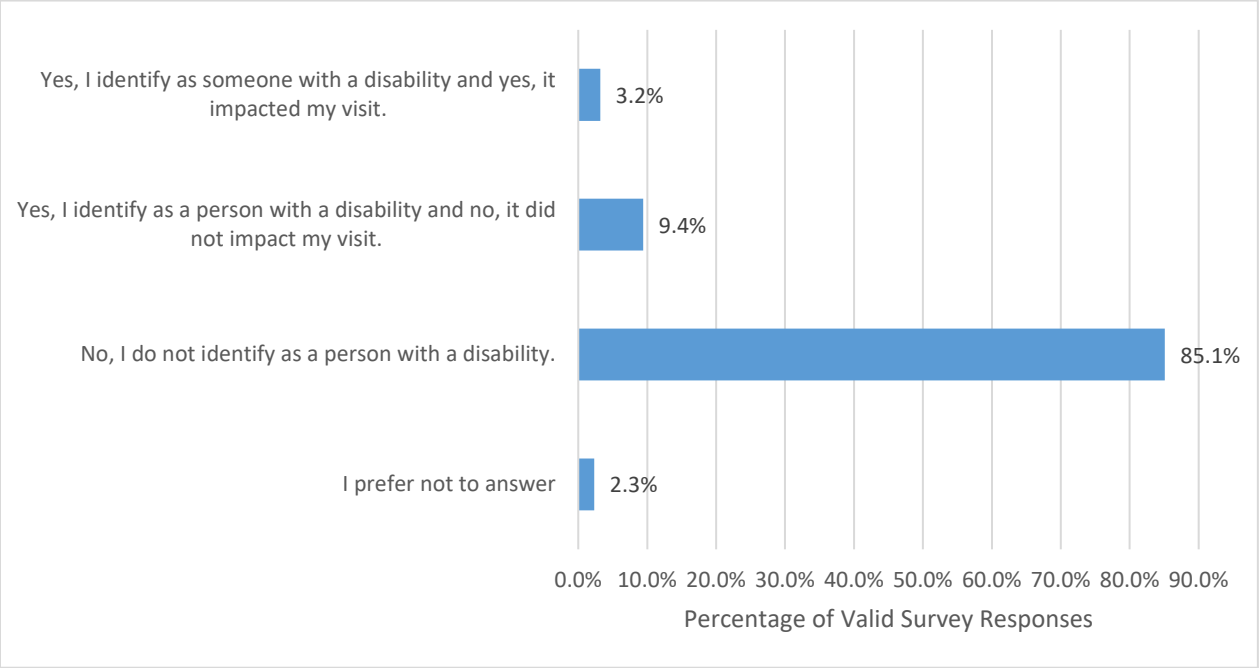

Figure 27 Percentage of Valid Survey Responses by Disability and Chronic Condition

Number of valid responses: 25,014. Most (85.1%) of the respondents are not identified as a person with a disability. About 12.6% of the respondents are identified as someone with a disability. However, only 3.2% indicated that the disability impacted their DLO visit, and the rest 9.4% said the disability did not impact the visit at all.

- Q6. Please indicate your total annual household income before taxes

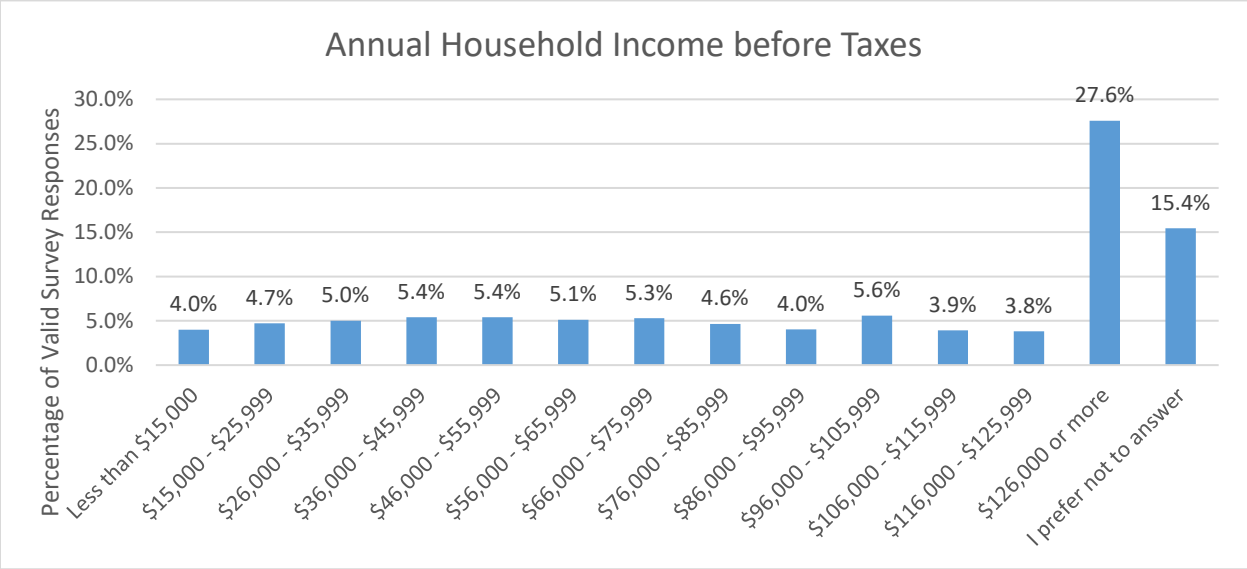

Figure 28 Percentage of Valid Survey Responses by Annual Household Income before Taxes

Number of valid responses: 25,004. The majority (27.6%) of the survey respondents have an annual household income (before tax) of $126,000 or more. About 15.4% of the customers indicated that they prefer not to answer this question. The remaining 57.0% of the survey results present an almost uniform distribution (4% - 5% each group) among the group "less than $15,000" to "$116,000 - $125,999."

- Q7. When was the last time you completed or tried to complete a transaction with TxDPS?

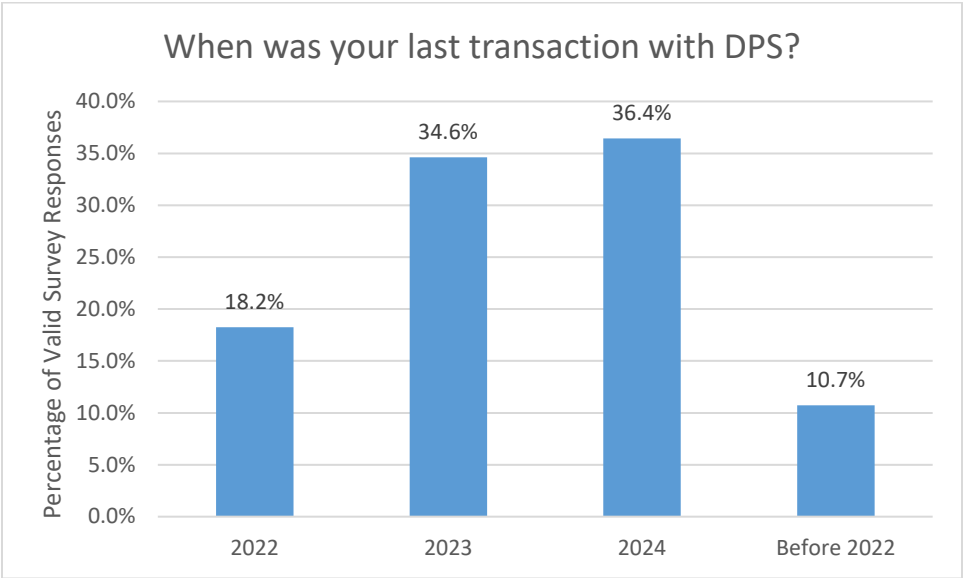

Figure 29 Percentage of Valid Survey Responses by Last Transaction Year

Number of valid responses: 23,658. Most respondents (36.4%) indicated that their last transaction with DLD was in 2024. About 34.6% said the transaction was in 2023 and 18.2% claimed year 2022. Approximate 10.7% mentioned that their last transaction with DLD was before 2022. The number of percentages decreases as the year goes backwards. This is possibly because of the human's memory recall mechanism – people recall details more clearly and are more likely to participated in the survey when they can remember more. In addition, the email addresses were obtained from the previous two years' transaction record.

- Q8. Please indicate the service type you needed from TxDPS last time? (Select all that apply)

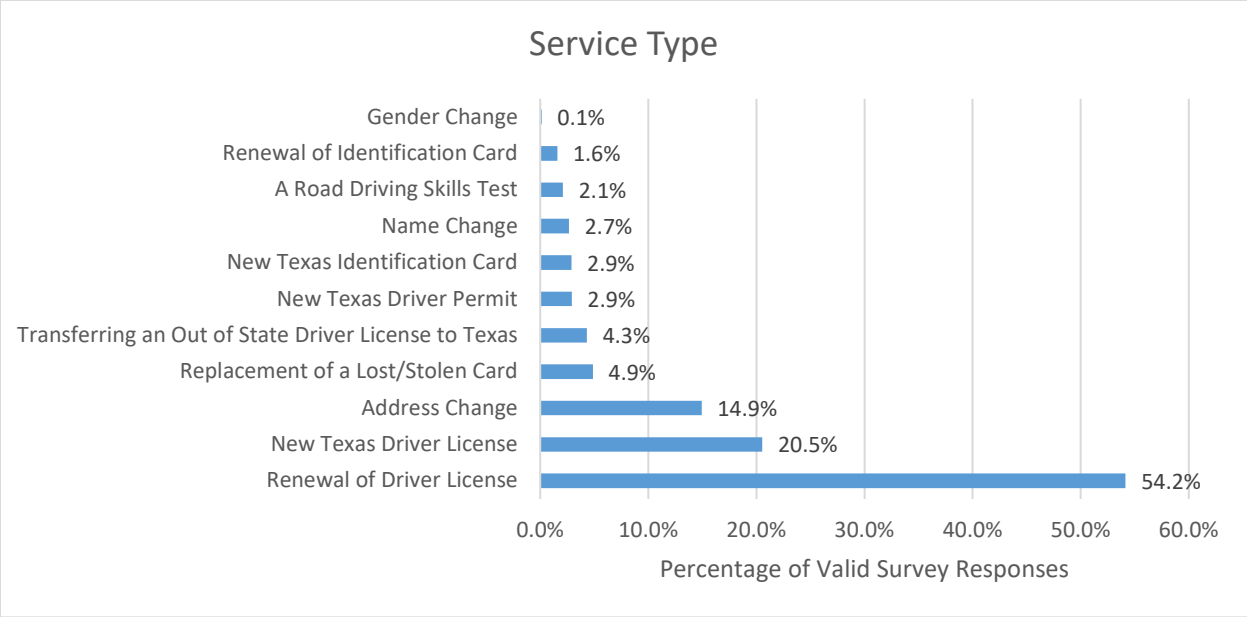

Figure 30 Percentage of Valid Survey Responses by Service Type

Number of valid responses: 24,626. "Renewal of Driver License" is dominantly the most common service type with a percentage of 54.2%. "New Texas Driver License" and "Address Change" rank the second and third with a percentage of 20.5% and 14.9%, respectively. The Texas ID card service counts for 4.5%: 2.9% of new Texas ID card and 1.6% of ID card renewal. About 4.3% (1,065 out of 24,626) of the transactions were transferring an out of state driver license to Texas.

- Q9. Does your current driver license or ID card have a gold star?

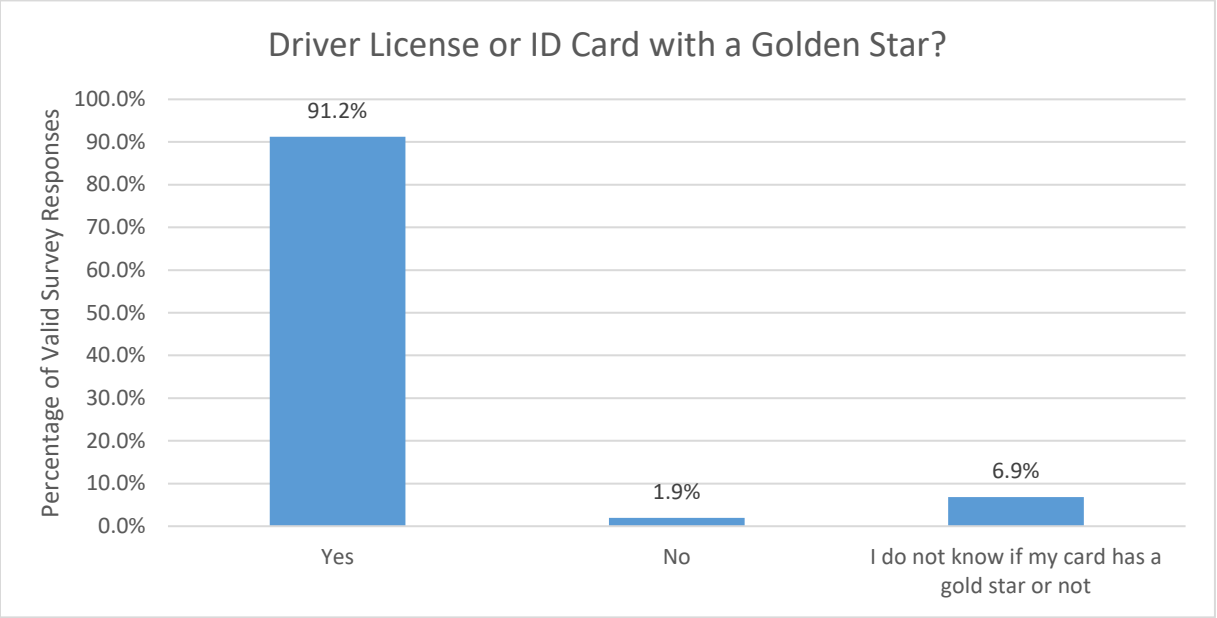

Figure 31 Whether the Driver License or ID Card Has a Gold Star

Number of valid responses: 24,923. More than ninety percent (91.2%) of the responses confirmed that current driver license or ID card have a gold star, which means that most of the cards are now REAL ID compliant. About 6.9% of the respondents said that they did not know if their card has a gold star. The rest 1.9% answered that their current DL or ID card did not have a gold star.

- Q10. For the last time you completed or tried to complete a transaction with the Texas Driver License Office, how did you do it?

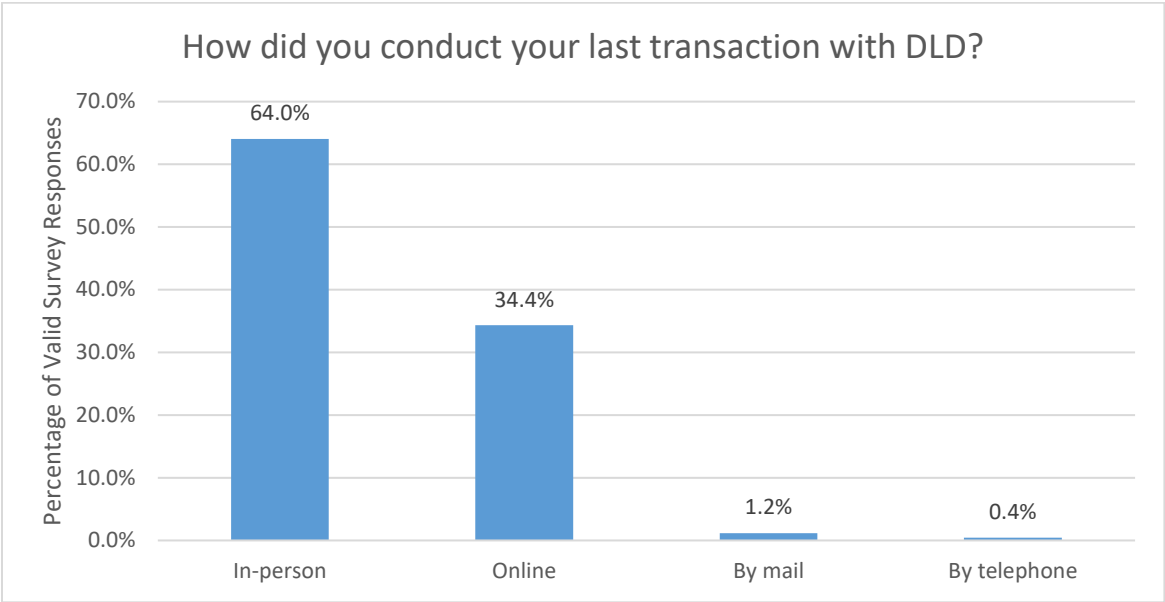

Figure 32 Percentage of Valid Survey Responses by Different Methods

Number of valid responses: 24,907. Most (64.0%) of the transactions were conducted in person at a DLO (15,948 out of 24,907). Approximate 34.4% (8,556 out of 24,907) of the transactions were performed using the online option. People did not use mail or telephone services to complete the transaction very much, with a percentage of 1.2% and 0.4%, respectively. More than 98% of the transactions were conducted either in person at a DLO or online.

- Q11. When visiting a driver's license office in person, which of the following options do you prefer?

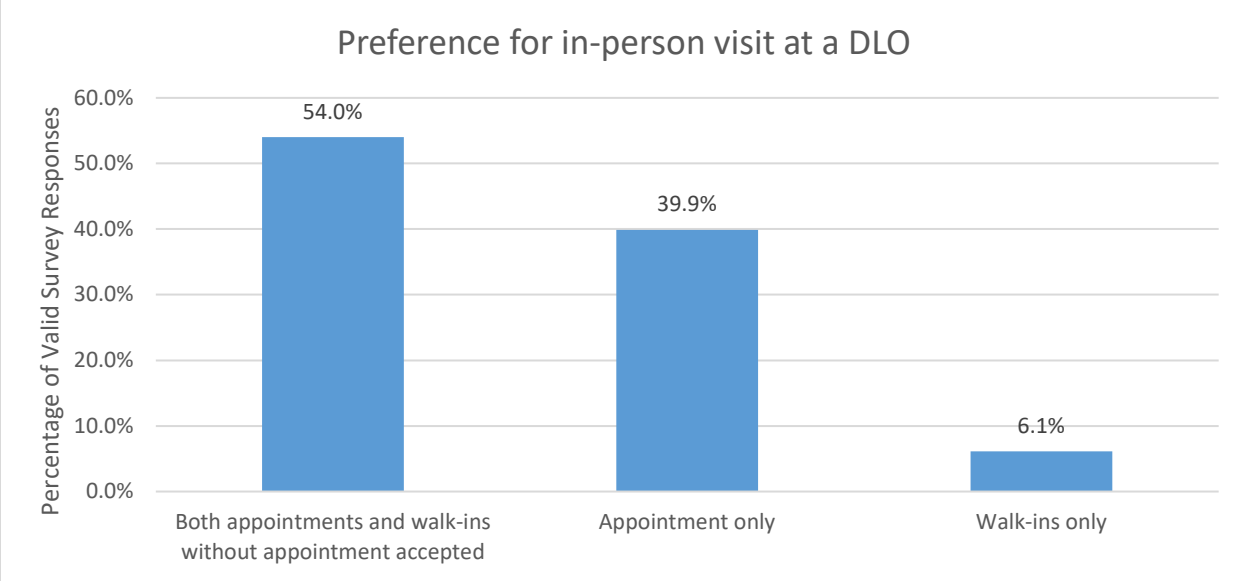

Figure 33 Percentage of Valid Survey Responses for In-Person Visit Preferences

Number of valid responses: 15,836. This question is only available to customers who selected an in-person visit. Out of the 15,836 valid in-person respondents: 54.0% said that they prefer both appointments and walk-ins without an appointment; 39.9% mentioned they prefer appointment only; and only 6.1% indicated that they like the walk-ins only.

- Q12. Please indicate the name and/or location of the Driver License Office you last visited (county)

Number of valid responses: 12,964. This question is only available to customers who selected an in-person visit. Figure 34 presents the heat map of the county where the DLOs were visited.

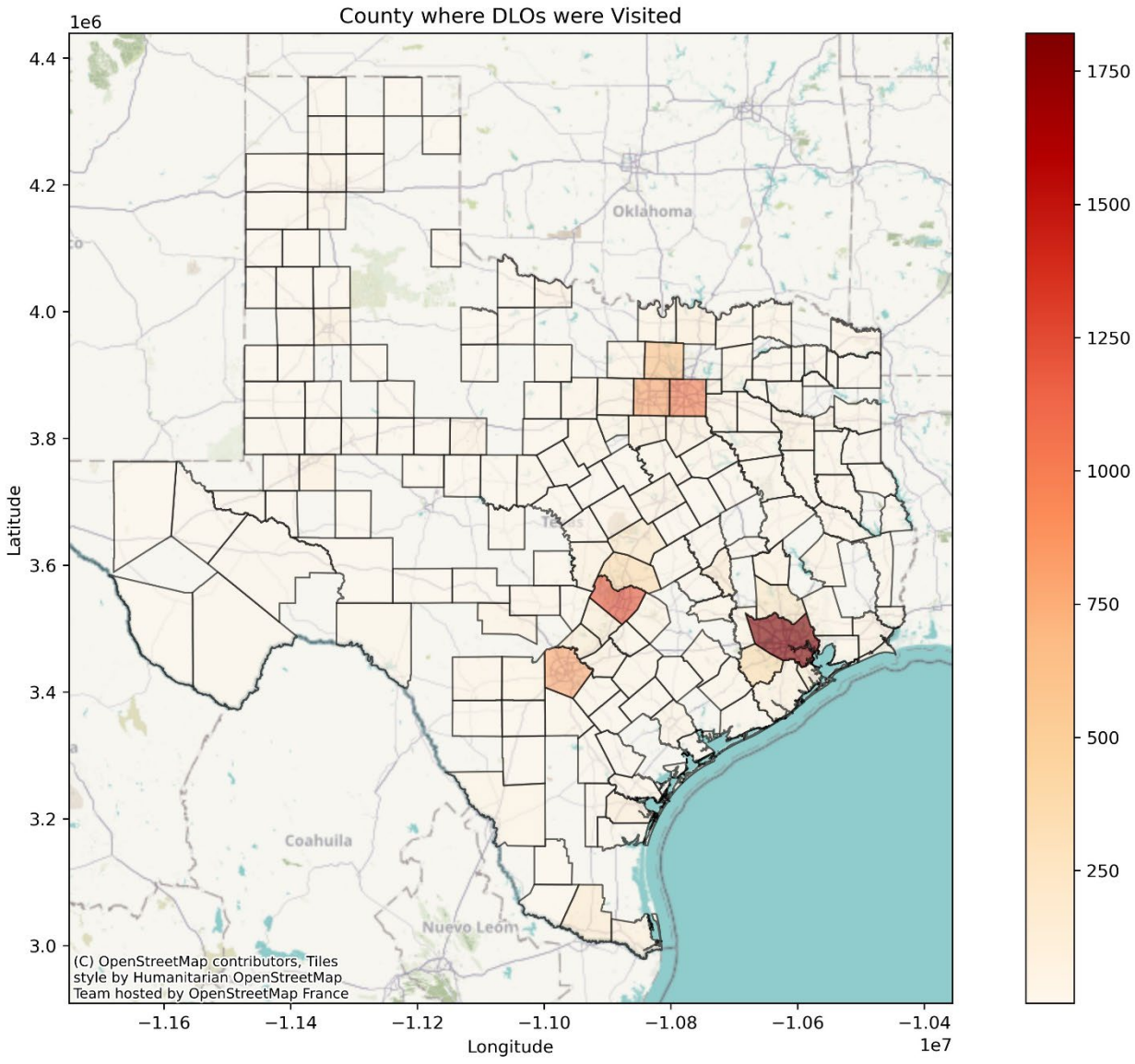

Figure 34 Heat Map of County where the DLOs were Visited

In Figure 34, darker color indicates the counties where a DLO was visited more frequently. Table 1 lists the top ten counties which locates the DLOs visited most frequently by the customers.

Table 21 Top 10 Counties which Locates the DLOs Visited Most Frequently by the Survey Respondents

County	Number of Responses
Harris	1,821
Travis	1,221
Dallas	991
Bexar	792
Tarrant	792
Denton	623
Collin	486
Williamson	373
Fort Bend	368
Montgomery	221

Most of the counties in Table 21 are located in metroplex areas with a large population.

- Q13. When you last visited a Texas Driver's License Office, what was the zip code of your home address at that time?

Number of valid responses: 15,412. This question is only available to customers who selected an in-person visit. Figure 35 presents the heat map of the respondents' residency zip code.

Table 22 lists the top ten zip codes associated with the county name where the survey respondents' home addresses were.

Table 22 Top 10 Zip Codes and Counties where Survey Respondents Lived

Zip Code	County	Number of Responses
78660	Travis County	121
77379	Harris County	93
77494	Harris County	86
78641	Williamson County	84
78130	New Braunfels County	79
75071	Collin County	76
78613	Williamson County	75
78665	Williamson County	71
78745	Travis County	69
75035	Collin County	69

According to Table 22, the top ten zip codes where the survey respondents lived include Travis County, Harris County, Williamson County, New Braunfels County, and Collin County, which is consistent with the results shown in Table 21.

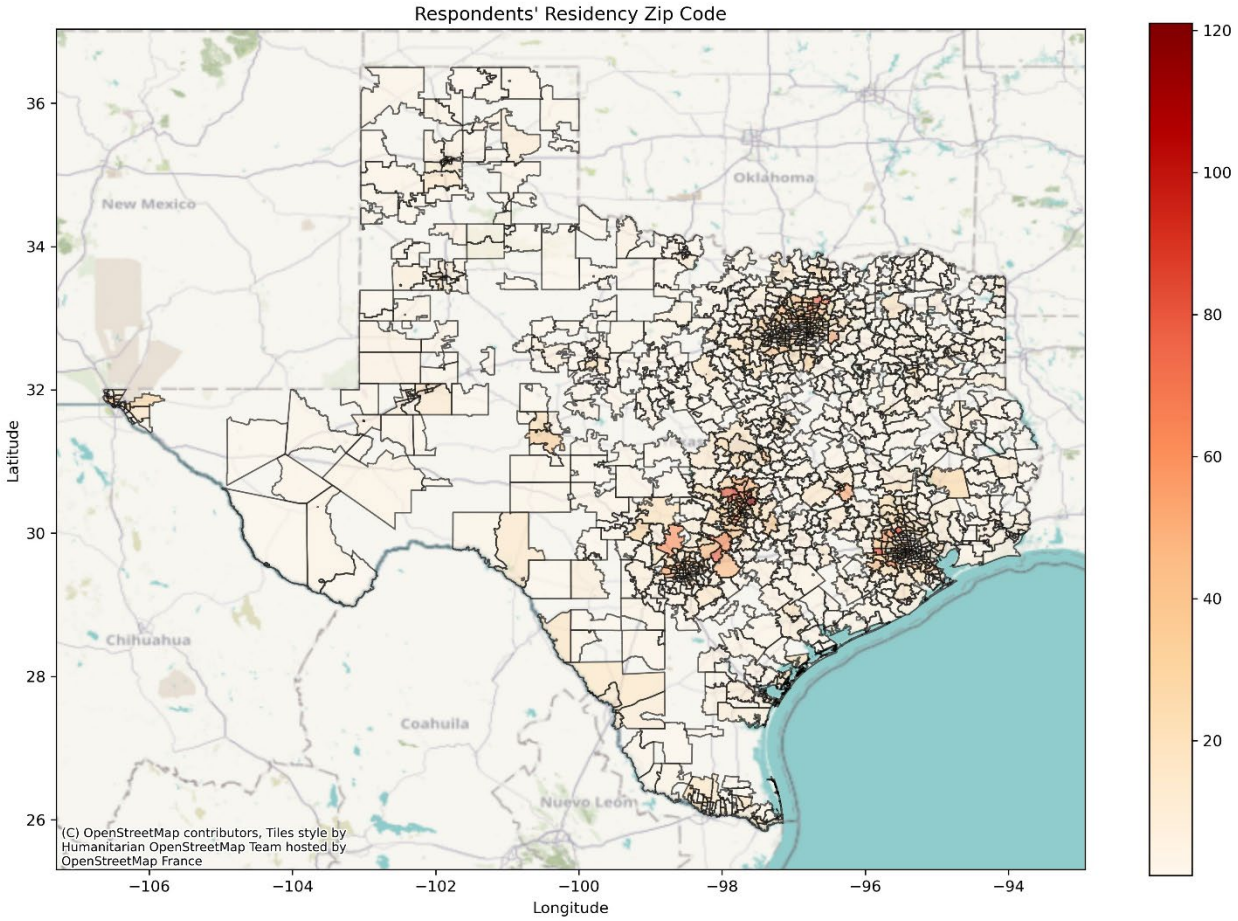

Figure 35 Heat Map of Respondents' Residency Zip Code

In Figure 35, darker color indicates the zip code areas where a higher number of respondents live.

- Q14. For your last visit to the Texas Driver License office, did you manage to complete your transaction?

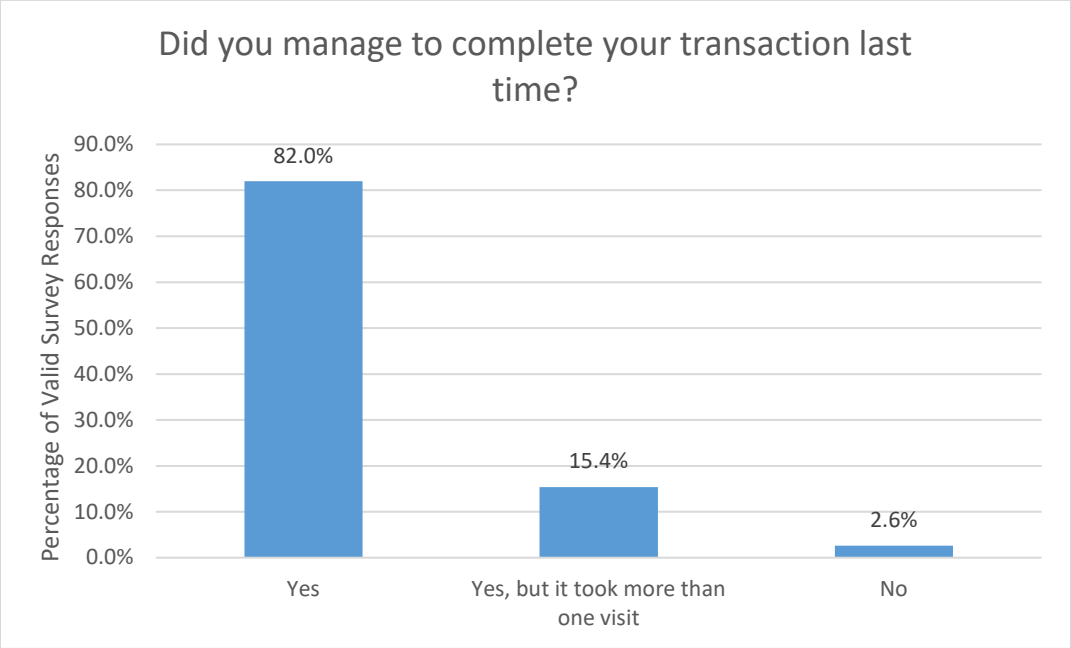

Figure 36 Whether the Customer Completed the Transaction Last Time

Number of valid responses: 15,865. This question is only available to customers who selected an in-person visit. About 97.4% of the respondents indicated that they were able to complete the transaction last time: 82.0% successfully completed the transaction using only one visit, while the other 15.4% had to visit the DLO more than once to have the transaction completed. Only 2.6% (415 out of 15,865) said they were not able to complete the transaction, even with multiple visits.

- Q15. How did you complete your last visit to the Texas Driver License office?

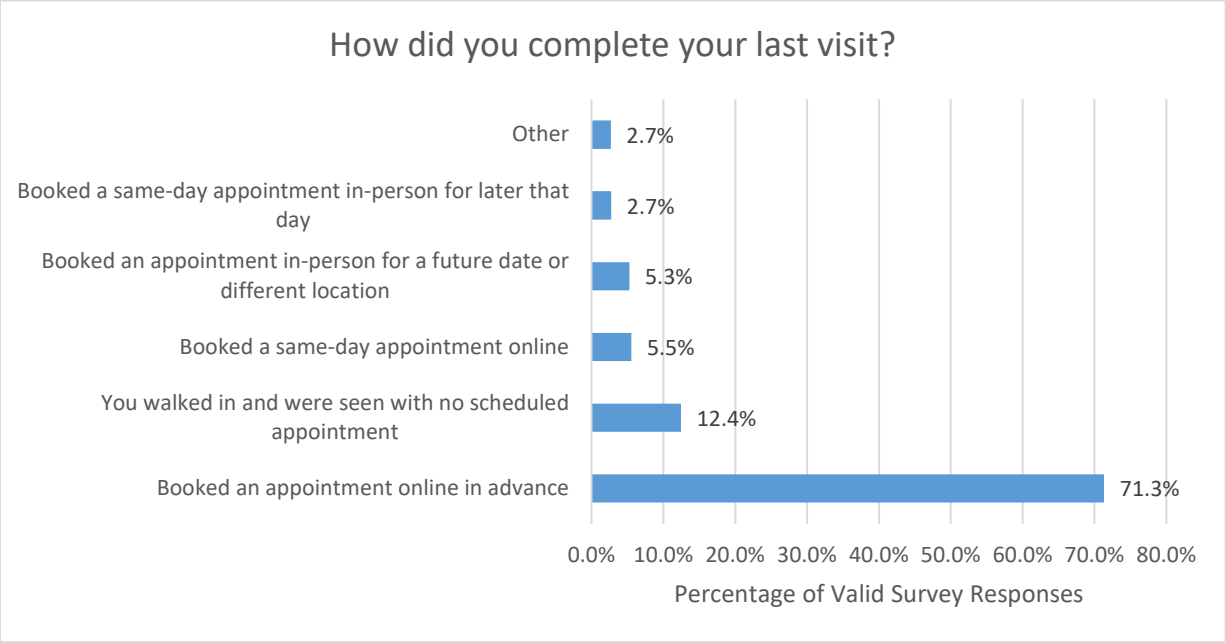

Figure 37 Percentage of Valid Survey Responses – How the Customers Completed their Last DLO Visit

Number of valid responses: 15,874. This question is only available to customers who selected an in-person visit. About 71.3% of the respondents booked an appointment online in advance. 12.4% of the customers walked in with no scheduled appointment. 5.5% booked a same-day online and 5.3% were able to book an appointment in-person for a future date or a different location.

- Q16. Were you able to schedule an appointment the first time you visited the website or office?

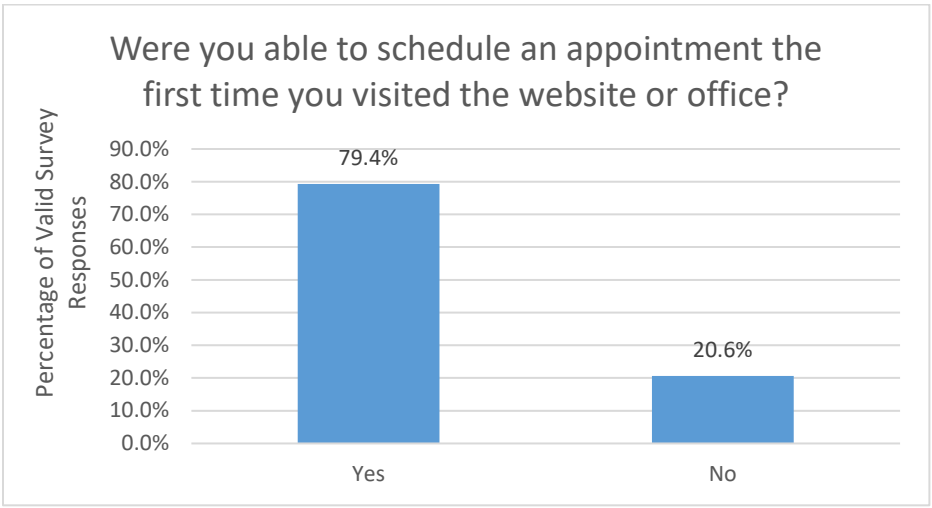

Figure 38 Percentage of Valid Survey Responses – Whether the Customer was able to Schedule an Appointment the First Time

Number of valid responses: 13,870. This question is only available to customers who selected an in-person visit. Almost 80% of the respondents (11,006 out of 13,870) indicated that they were able to book an appointment the first time they tried to schedule one online or in office. 20.6% said that they were not able to do so and had to try a second time (or more) to schedule the appointment.

- Q17. When you booked your appointment online, how long did you have to wait until your scheduled appointment?

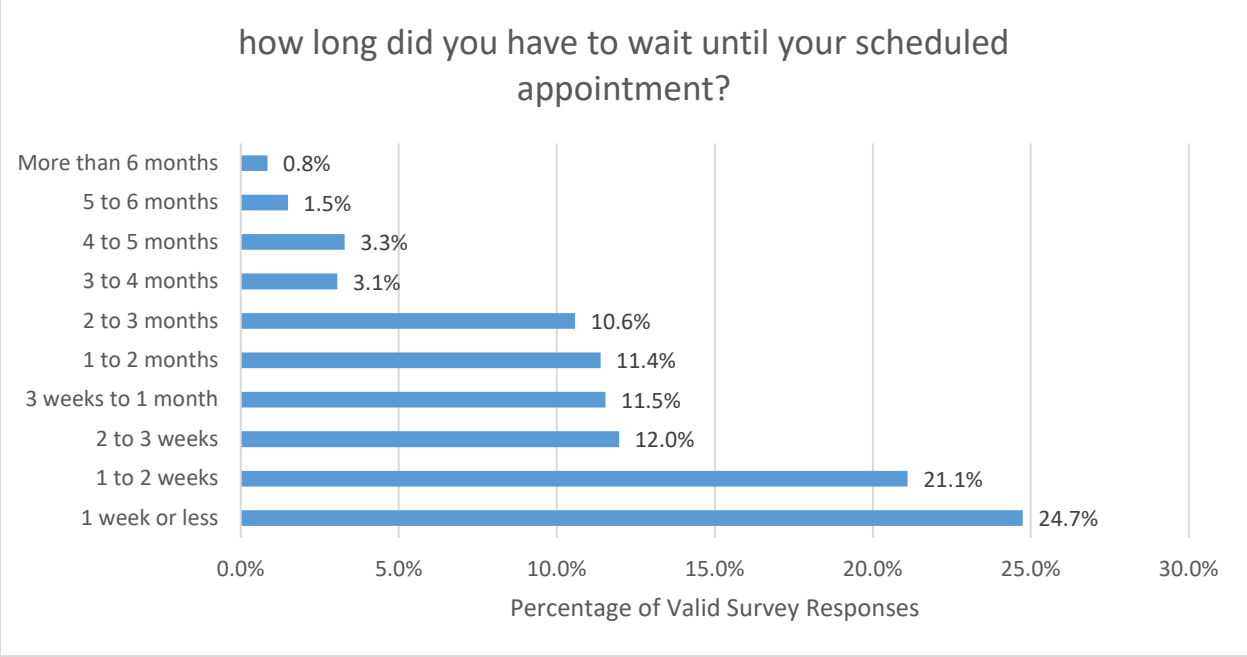

Figure 39 Percentage of Valid Survey Responses – Time the Customer Had to Wait until Scheduled Appointment

Number of valid responses: 12,071. This question is only available to customers who selected an in-person visit. Out of the 12,071 valid responses, 24.7% of the respondents indicated that they only needed to wait 1 week or less until the scheduled appointment, and 21.1% mentioned the wait time is 1 to 2 weeks. In total, 91.3% of the customers waited for three months or less. 8.7% mentioned that they had to wait more than three months to their scheduled appointment.

- Q18. Did you make multiple online appointments through Texas Scheduler ahead of your last visit? If so, how many appointments did you make?

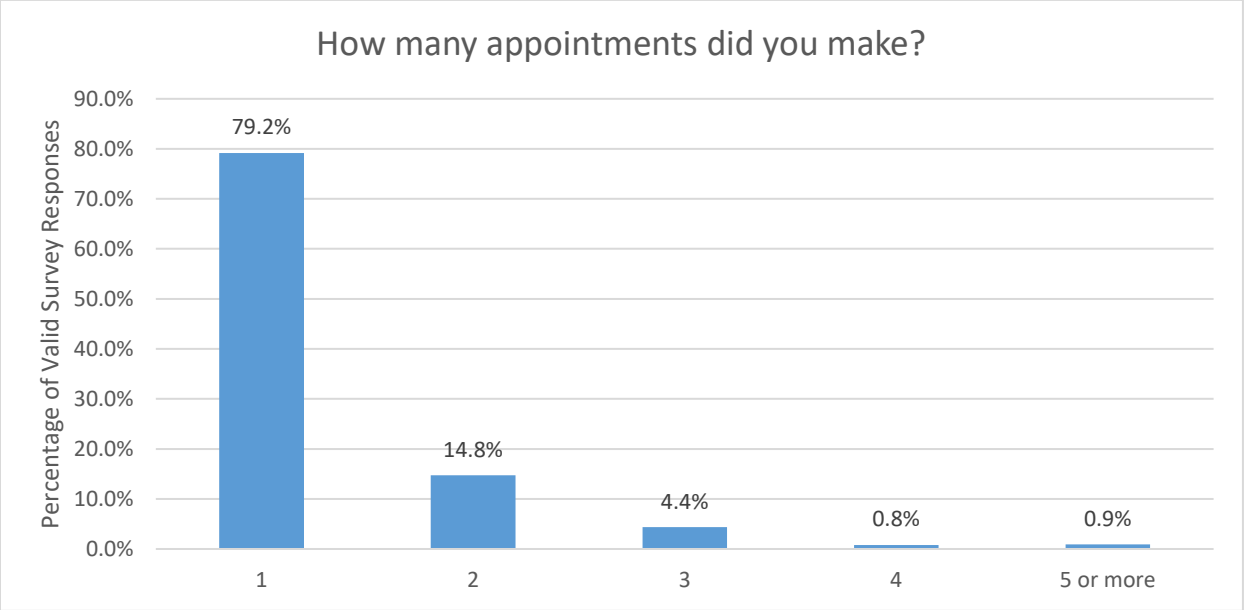

Figure 40 Percentage of Valid Survey Responses – Number of Appointments Made by the Customer for Last Visit

Number of valid responses: 12,074. This question is only available to customers who selected an in-person visit. Out of the 12,074 valid responses, 79.2% indicated that they only made one appointment, while 20.8% mentioned that they made multiple appointments for their last visit: 14.8% made two appointments; 4.4% made three appointments; 0.8% made four appointments; and 0.9% made five or more appointments.

- Q19. How long did you have to wait from the moment you arrived until you checked in or took a ticket?

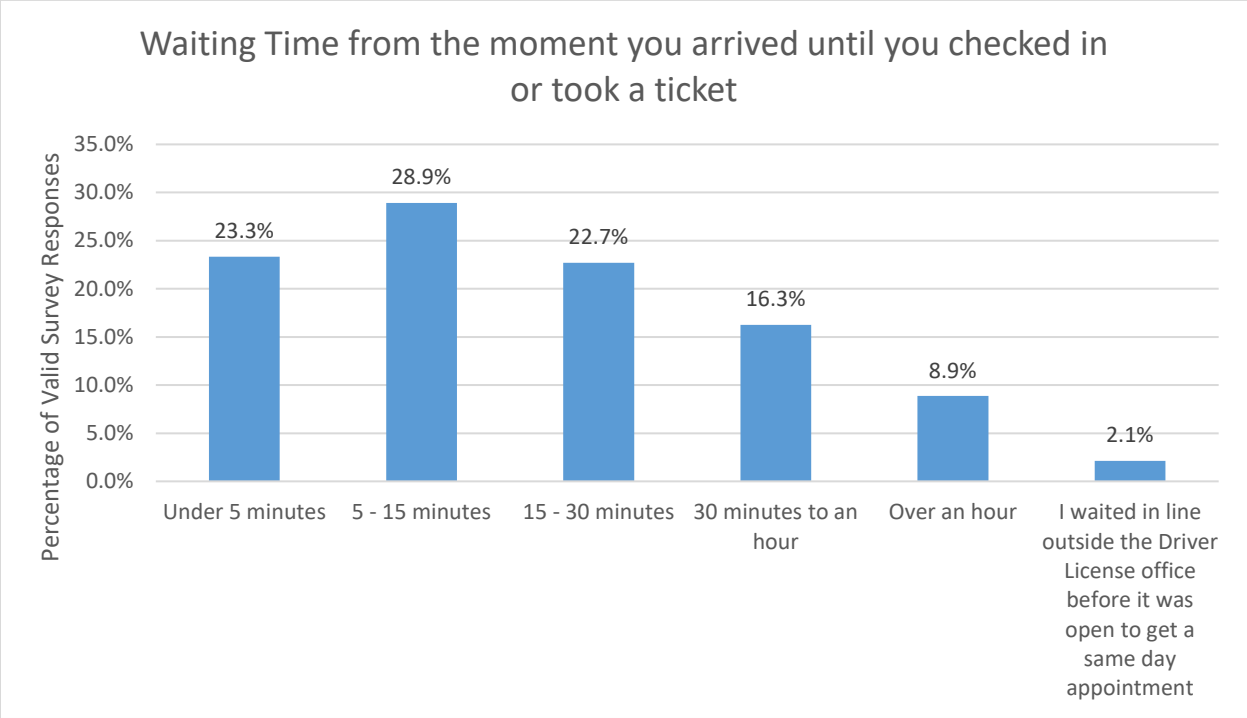

Figure 41 Percentage of Valid Survey Responses – Customer's Waiting Time from Arrival until Checked in

Number of valid responses: 15,872. This question is only available to customers who selected an in-person visit. Most (52.2%) customers indicated that they waited 15 minutes or less from arrival until checked in (or took a ticket): 28.9% waited for five to 15 minutes and 23.3% waited less than five minutes. 22.7% of the customers waited between 15 to 30 minutes, and 16.3% waited 30 minutes to 1 hour. 8.9% of the respondents said that they waited for over an hour to be checked in. About 2.1% (339 out of 15,872) respondents said they waited in line outside the DLO before it was open.

- Q20. How much time, in total, did you spend at the office until you left?

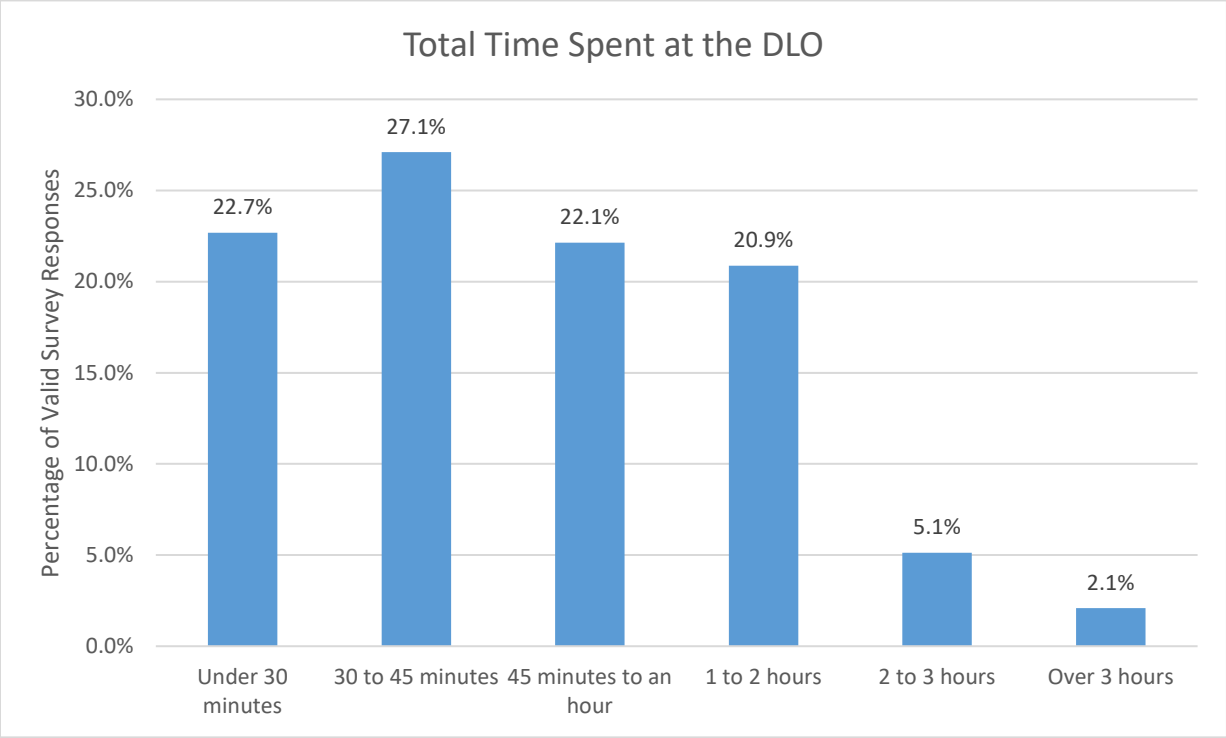

Figure 42 Percentage of Valid Survey Responses – Customer's Total Time at the DLO

Number of valid responses: 15,876. This question is only available to customers who selected an in-person visit. 49.8% of the customers indicated that they spent 45 minutes or less at the DLO: 27.1% spent 30 to 45 minutes and 22.7% spent less than 30 minutes. About 22.1% of the respondents said their total time at the DLO was 45 minutes to an hour. 20.9% spent one to two hours at the DLO, and 7.2% spent more than two hours.

- Q21. What challenges, if any, did you face during your last visit to the Driver License Office? Select all that apply.

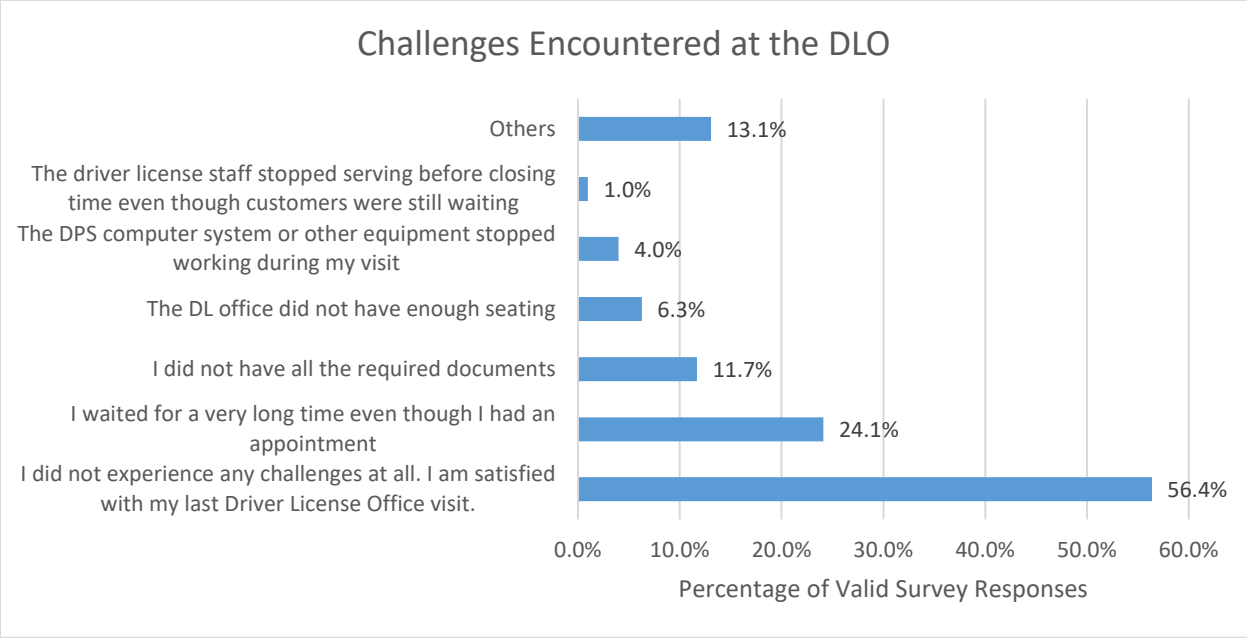

Figure 43 Percentage of Valid Survey Responses – Challenges Encountered at the DLO

Number of valid responses: 14,529. This question is only available to customers who selected an in-person visit. Out of the 14,529 valid responses, 56.4% of indicated that they were satisfied with their visit with no challenges experienced, while the other 43.6% mentioned that they experienced certain challenges. 24.1% thought their waiting time is too long even though they had an appointment in advance. 11.7% said that they did not bring all the required documents with them. About 6.3% indicated that the DLO did not have enough seating, followed by computer system issue (4.0%) and staff stopped serving before closing (1.0%). In addition, 13.1% of the respondents provided their specific challenges by selecting "others", examples of which include "A letter I was sent stated I could use military ID to prove citizenship, but not accepted, had to return", "Appointment availability was so far in the future that I had to drive almost 2 hours to get a relatively soon appointment", "Had to go back and forth to eye doctor", "Birth certificate did not have Jr. on it. I am 71 years old and never had an issue before", and etc.

- Q22. Which of the followings are true about your experience with the staff at the DPS Driver License office? Select all that apply

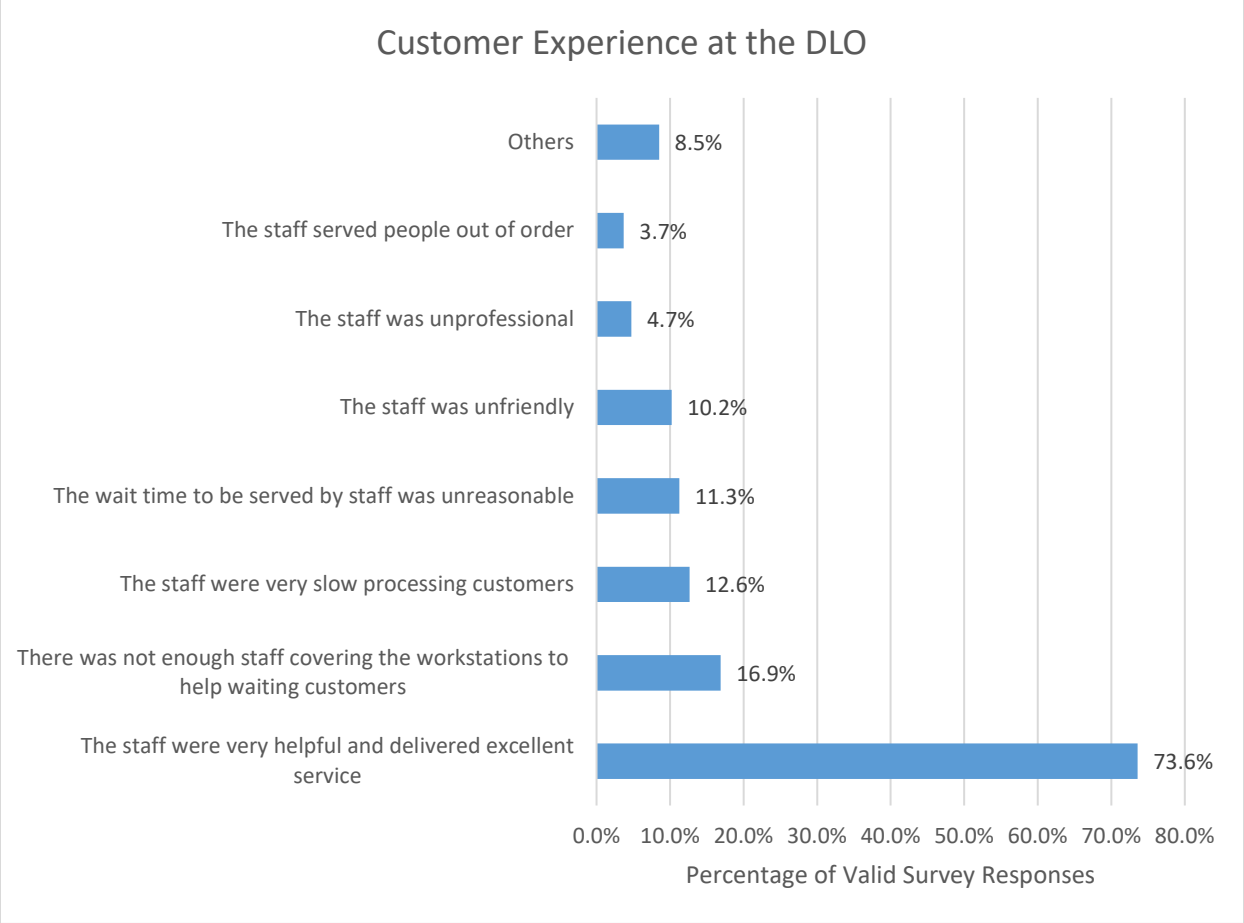

Figure 44 Percentage of Valid Survey Responses – Customer Experience at the DLO

Number of valid responses: 15,621. This question is only available to customers who selected an in-person visit. The majority of the customers (73.6%) indicated that the DLD staff was very helpful and delivered excellent service. About 16.9% selected "there was not enough staff covering the workstations to help waiting customers." Other experiences include "the staff were very slow processing customers" (12.6%), "the wait time to be served by staff was unreasonable" (11.3%) and "the staff was unfriendly" (10.2%). 4.7% thought that the staff was unprofessional, and 3.7% responded that "the staff served people out of order." 8.5% of the respondents provided their specific experiences by selecting "others;" examples of which include "Although data entry was slow, I don't think I could do it faster," "Asking me about pain killers because I have a disability is inappropriate," "Did not have an appointment and said they had no more openings. Because I'm over 90, they were kind enough to fit me in," "Everyone with an appointment was processed in the order of arrival, then had to wait in line for an open workstation, so the appointment times did not seem like they mattered much," and etc.

- Q23. How would you rate the overall performance of the Driver License office based on your last visit?

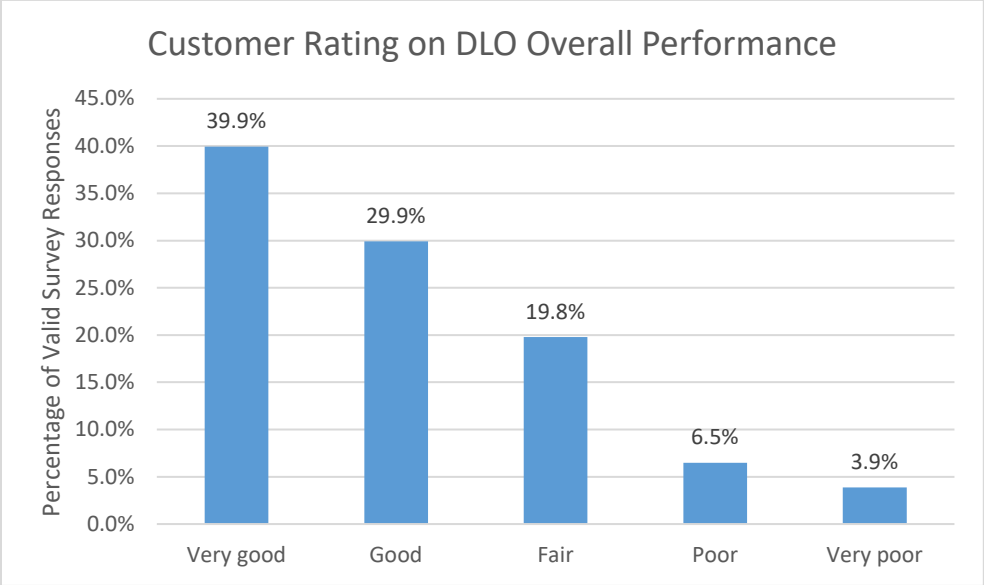

Figure 45 Percentage of Valid Survey Responses on DLO Overall Performance Rating

Number of valid responses: 15,880. This question is only available to customers who selected an in-person visit. Most of the customers (69.8%) rated DLO's overall performance as very good (39.9%) or good (29.9%). 19.8% rated it fair. Only 10.4% rated poor (6.5%) or very poor (3.9%). A Likert scale was developed to quantify customers' rating - 5 means a perfect rating score (very good); and 1 means the worst rating score (very poor). The average rating score is 4.0.

- Q24. Agree or Disagree: I prefer to go to the DPS Driver License Office for business even if I am eligible to complete the transaction online.

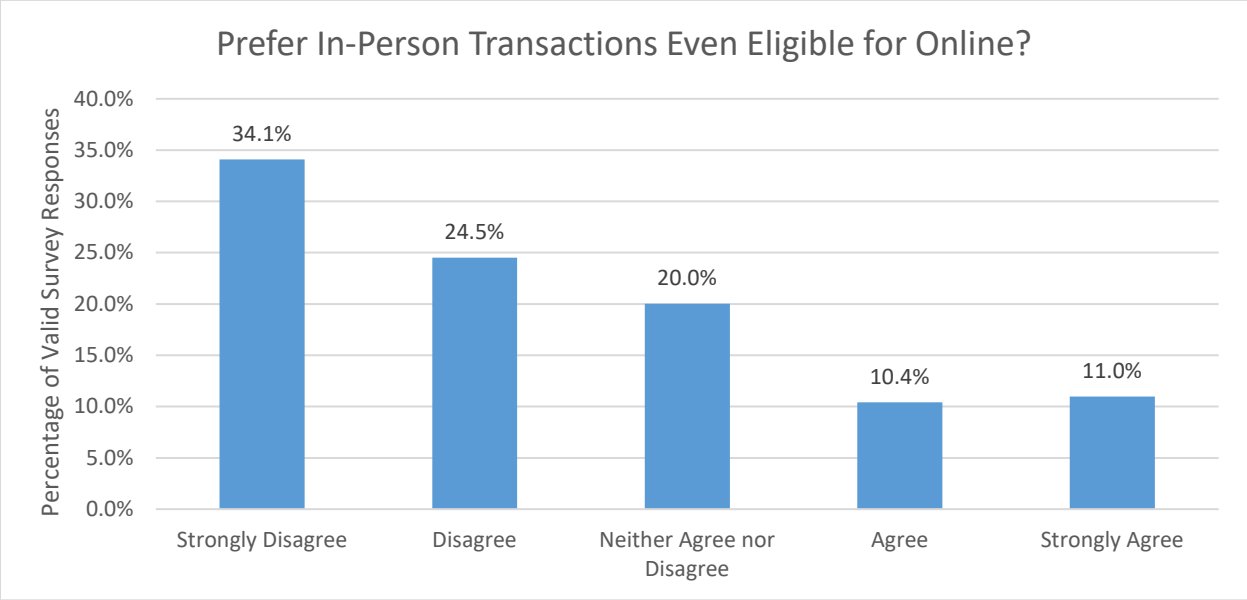

Figure 46 Customer's Preferences between In-Person and Online Transactions

Number of valid responses: 15,884. This question is only available to customers who selected an in-person visit. 58.6% of the respondents selected "strongly disagree" (34.1%) or "disagree" (24.5%), which indicates that they will likely choose online option if they are eligible. 21.4% (who selected "agree" or "strongly agree") prefer in-person transaction even though they are eligible for online transactions; and 20.0% expressed a neutral attitude with neither agree nor disagree.

- Q25. I prefer conducting my DPS transactions in person because (Select all that apply)

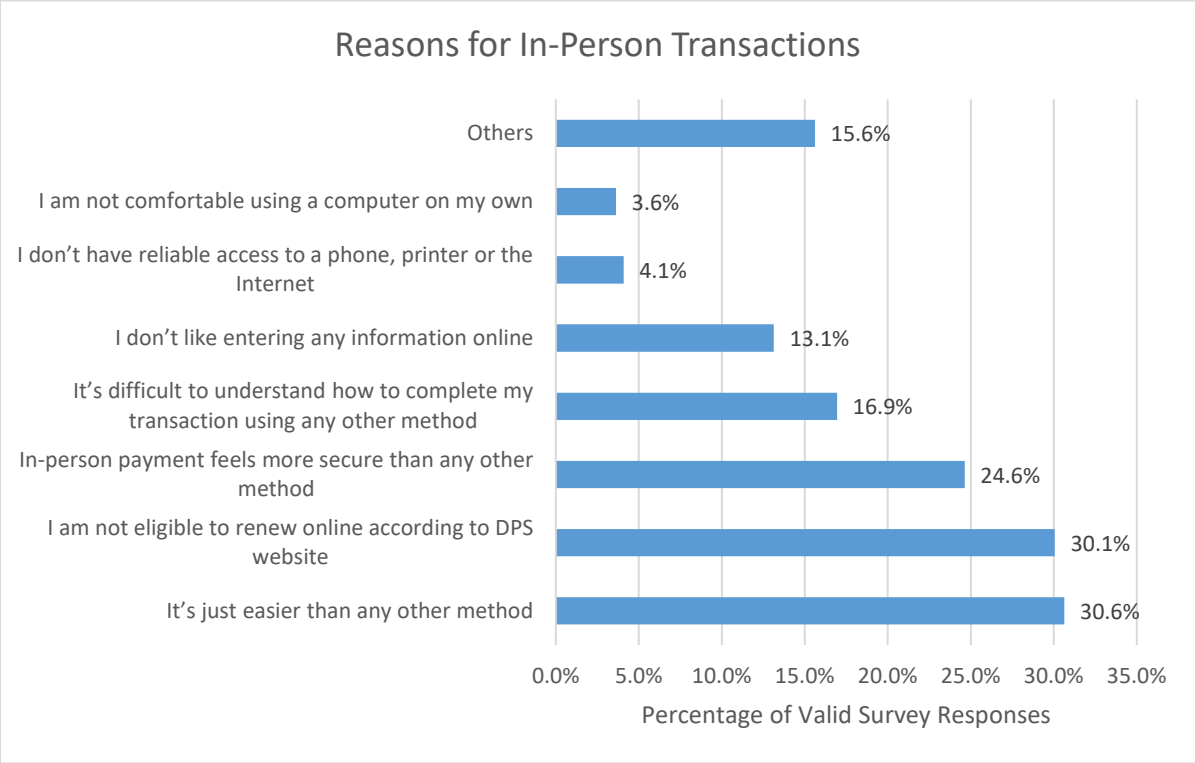

Figure 47 Reasons for In-Person Transactions

Number of valid responses: 5,931. This question is only available to customers who selected in-person visit and did not prefer online options in Q24 (who selected "strongly agree," "agree," or "neither agree nor disagree"). 30.6% of the respondents prefer in-person transactions because they think in-person is easier than any other method. 30.1% of the customers indicated that the in-person transaction was the only option for them because they were not eligible for the online option. About 24.6% said that in-person payment feels more secure to them. 16.9% mentioned that "it's difficult to understand how to complete the transaction using other methods," and 13.1% claimed that they did not like entering any information online. 15.6% of the respondents provided their specific reasons by selecting "others," examples of which include "Because I can ask questions and get immediate, accurate feedback," "I had to get a new vision screening due to surgery," "Considering the multiple proof of residence and identity needed it is just easier in person," "Emergency situation where I needed ID for travel," "I like to keep my human interactions with strangers doing their job going. It's just a personal thing I like to do," and etc.

- Q26. What kind of incentives would motivate you to complete your transaction online versus in-person? Select all that apply

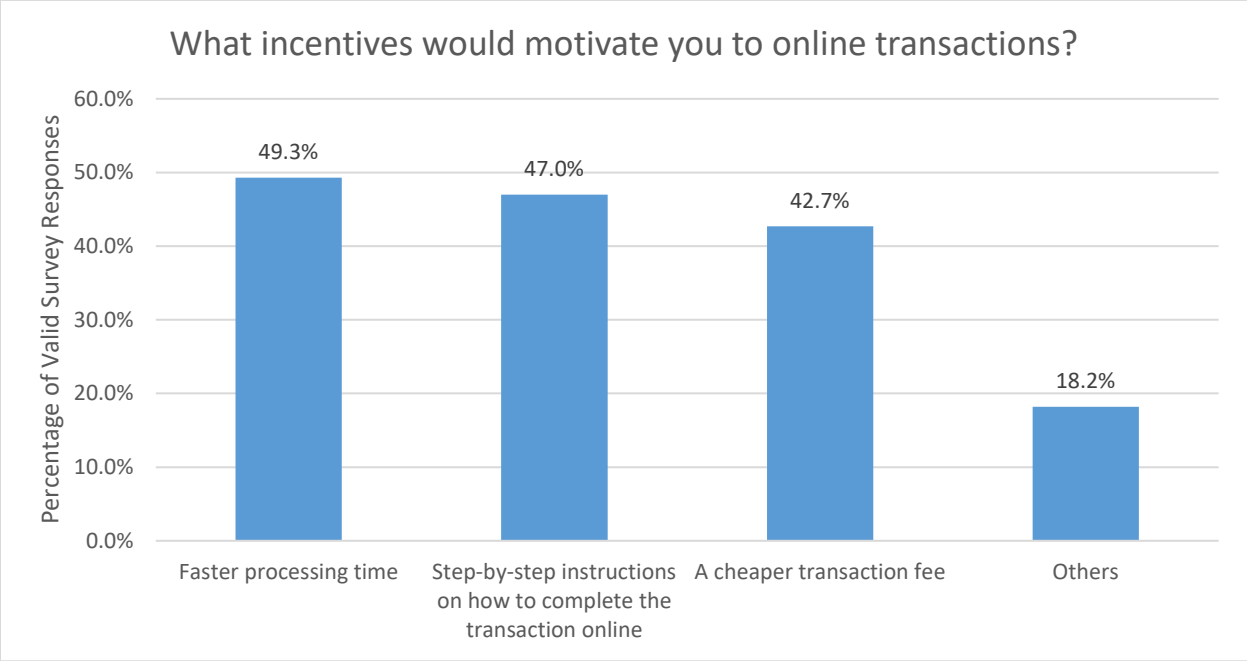

Figure 48 Percentage of Valid Survey Responses on Online Incentives

Number of valid responses: 6,313. This question is only available to customers who selected in-person visit and did not prefer online options in Q24 (who selected "strongly agree", "agree" or "neither agree nor disagree." Faster processing time ranks first with 49.3% responses, followed by step-by-step instructions (47.0%) and cheaper transaction fee (42.7%). 18.2% of the respondents provided their specific thoughts on online incentives by selecting "others", examples of which include "A more appealing website," "Allow CDL holders with excellent records to service themselves online," "Allowing permanent residents to renew driver license online," "also providing an actual person to help with online transactions or questions." "Often times government agencies advise you to visit a website for a service and it becomes very frustrating because the web address provided takes you to a general page and not exactly where you need to be. Much time is spent trying to navigate the site," and etc.

- Q27. How would you rate your overall mail or phone transaction experience with Texas Driver License Division?

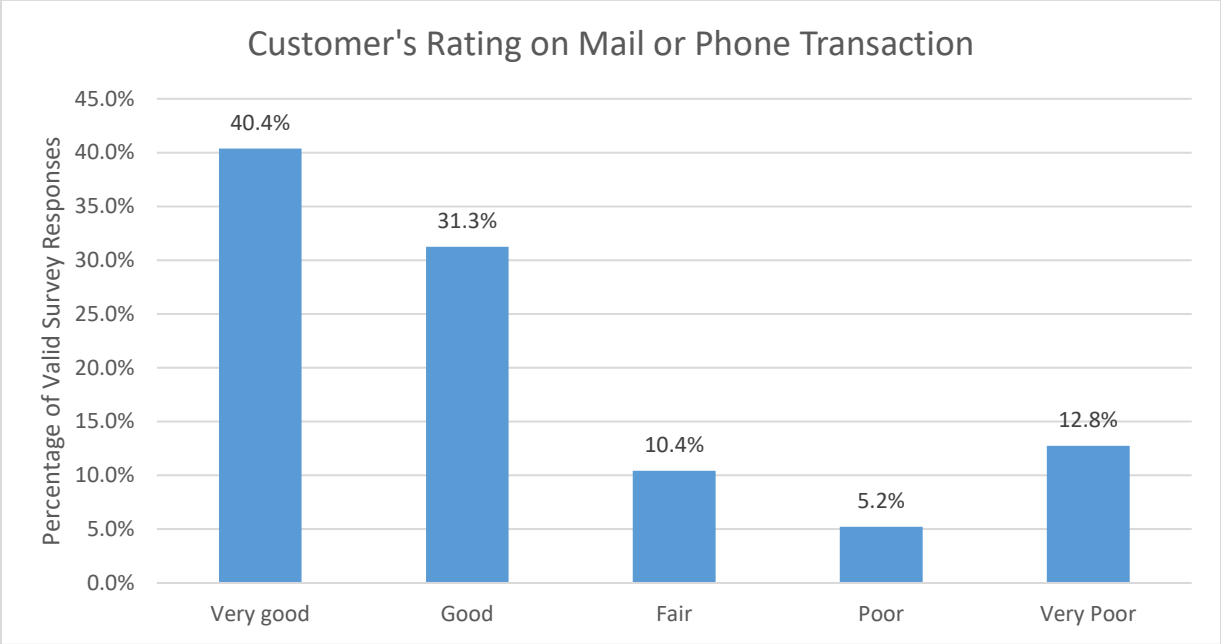

Figure 49 Customer's Rating on Mail or Phone Transactions

Number of valid responses: 384. This question is only applicable to customers who selected mail or phone transaction in Q10. A total of 403 customers were eligible for this question and 384 customers provided their answers. A total of 71.7% of the customers gave a rating of very good (40.4%) or good (31.3%). 10.4% rated fair, and 18.0% provided a poor (5.2%) or very poor (12.8%) ratings to the mail or phone transaction experience. The average rating score is 3.8 (5 means a perfect rating score for "very good"; 1 means the worst rating score for "very poor").

- Q28. Agree or Disagree: The DPS phone operator you spoke with was attentive to providing excellent customer service

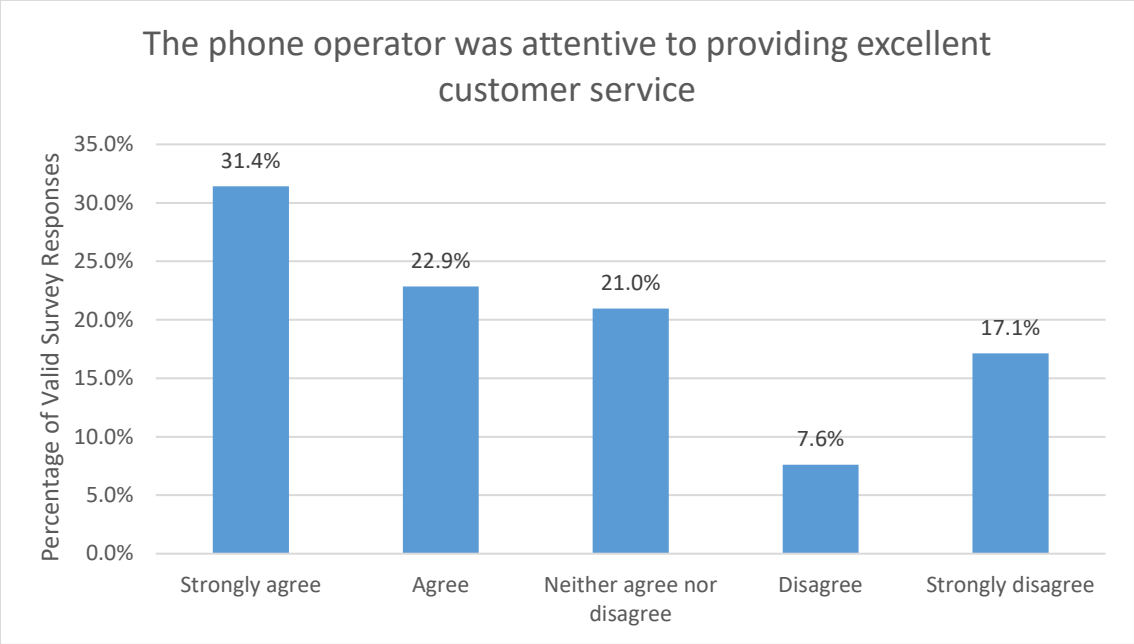

Figure 50 Customer's Rating on Phone Operator

Number of valid responses: 105. This question is only available to customers who selected phone transaction in Q10. A total of 109 customers were eligible for this question and 105 customers provided their answers. 31.4% strongly agree that the phone operator provided excellent customer service. 22.9% agreed and 21.0% expressed neutral opinion. About 17.1% strongly thought that the phone operator was not providing excellent customer service. The average rating score is 3.4 (5 means a perfect rating score for "strongly agree"; 1 means the worst rating score for "strongly disagree").

- Q29. How long did it take you to complete the application by mail or phone?

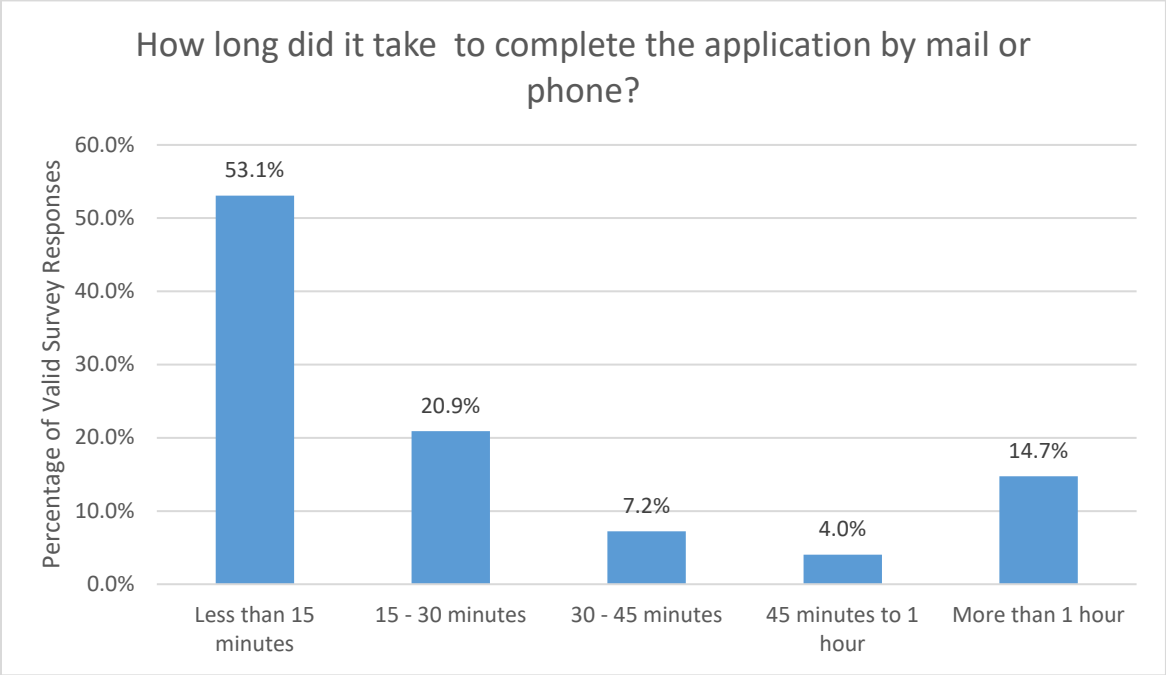

Figure 51 Percentage of Valid Survey Responses on Mail or Phone Application Completion Time

Number of valid responses: 373. This question is only available to customers who selected mail or phone transaction in Q10. 81.2% of the customers completed the application by mail or by phone within 45 minutes: over half (53.1%) indicated that the application completion time is less than 15 minutes; 20.9% finished between 15 and 30 minutes; and 7.2% used 30 minutes to 45 minutes to complete the application. 4.0% indicated 45 minutes to an hour. About 14.7% of the customers said the total completion time is over an hour.

- Q30. How long did it take you to receive the renewed driver license or ID card?

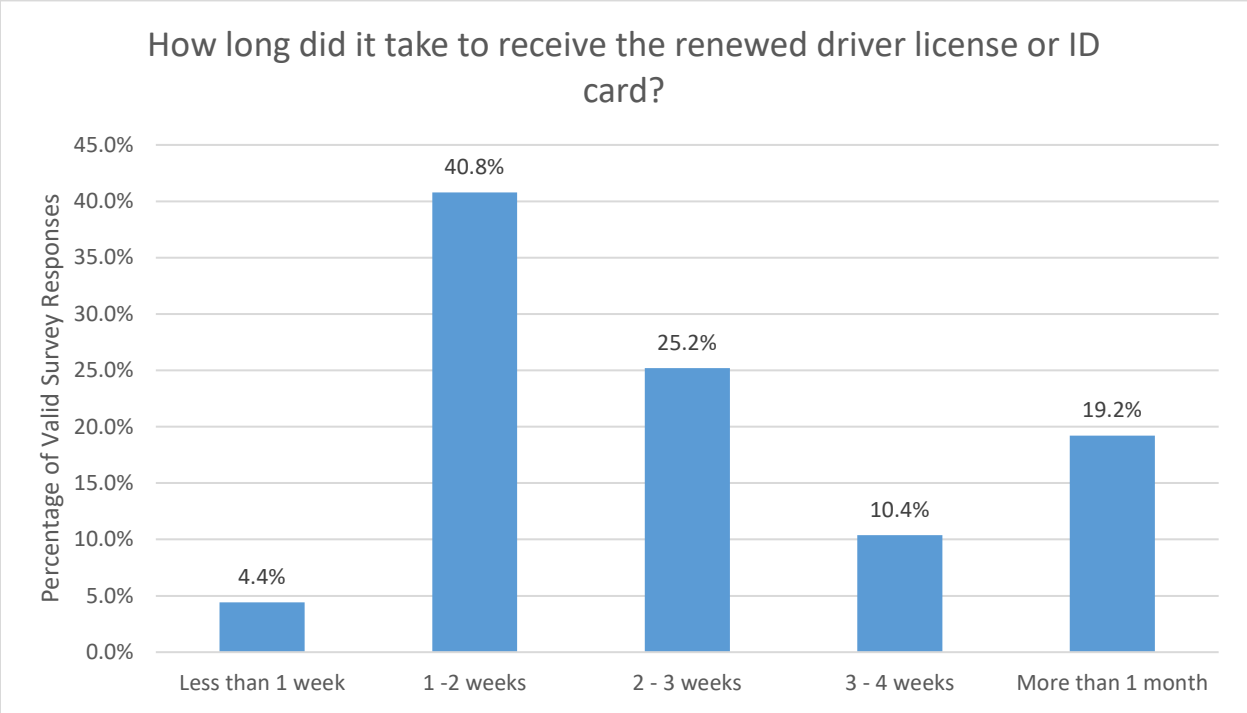

Figure 52 Percentage of Valid Survey Responses on Waiting Time until Receiving Renewed Cards by Mail or Phone Transactions

Number of valid responses: 385. This question is only available to customers who selected mail or phone transaction in Q10. Most customers (40.8%) indicated that it took them one to two weeks to receive the renewed cards. 25.2% claimed that the waiting time is two to three weeks, and 19.2% mentioned that it took more than one month until they received their cards. Overall, 70.4% of the respondents were able to receive the cards within one to three weeks, and 80.8% were able to receive them within one month.

Question 31 to Question 42 is related to online transactions, the detailed analysis of which are discussed in chapter 6.

- Q43. Additional comments.

Many respondents provided additional comments on the survey. Examples include:

- "There's NO REASON to make appointments at bigger offices in bigger cities when you can go in and staff are just sitting there doing nothing. If you go to a small town outside of your bigger cities you can get in without an appointment. Using Covid as an excuse is an OLD EXCUSE!!!"

- "I have to renew it every year though my i20 student permit is valid for 5 years and also I have to pay a lot each year, make sure my DL do not expire, plan one month in advance

and many more just for renewing driver license. Also, the Lamar DPS is always booked and hence I have to get Pflugerville one each time."

- "We initially attempted in Nov. 2023 to get an appt with Terrell DPS but none were available until May 2024. Walked in at Terrell, waited in line outside in the cold for well over hour but did not get in. Started looking all around the internet and located January 2024 appt with Athens. Being from Indiana, this was the most complicated and awful experience especially for someone new to Texas. Outdated systems, hours of operations extremely limited (no evening or weekend times for those that work). Not wanting to move from Indiana to Texas made this process even more aggravating. Indiana has the BMV/DMV (Bureau of Motor Vehicles/Department of Motor Vehicles) FOR ALL LICENSE PLATE AND CARDS - No vehicle testing, etc.

- Department of Public Safety doesn't make any sense as to where to have your MOTOR VEHICLE licensed.

- Vision station was not a machine but a staff member holding up a sign. Really?

- Forms should be able to be completed online instead of handwritten forms.

- As you can tell, this whole ordeal was not a pleasant experience for us. Hope improvements to systems and processes are made"

- "Be more specific on documents required when making an appointment, such as birth certificate."

- "Hire more staff. Fix the A/C. Allow Walk-Ins. Train the staff to be more kind, and to want to help not get rid of the person asking questions. I like the calculator thing on the website, that helped with a younger person getting theirs. At the Angleton office, there was a man who was talking out loud, moving people along, he kind of helped, but it felt off, like being in trouble. Maybe I'm sensitive, but I worked in the medical field and we asked questions from a standpoint of helping. Maybe have kiosk that help people walk thru the process."

4.2. Appointment Booking Time Evaluation: Results from Customer Survey

During the previous DLD Study conducted by CTR/LBJ School in 2019 – 2020, one of the greatest concerns of the state legislature was complaints by customers about the wait time they were experiencing. At that time, the NEMO-Q queuing system was being used by DLD to assign numbers to each customer and used to call 'the next customer' to a processing stations. However, the queuing system did not control the number of individuals who could arrive at a DLO anytime during the day. As a consequence, large numbers of customers would exceed the seating capacity of a DLO, resulting in long lines of customers waiting outside in the heat, cold and rain. The Department of Homeland Security – REAL ID compliant driver license and ID card deadline was

another issue that affected the number of customers at DLOs during that period of time. Without a REAL ID compliant DL or ID card, a citizen would need another form of accepted identification such as a passport to board a domestic flight or enter certain federal buildings. Some states, such as California issued both REAL ID and non-REAL ID compliant DL and ID cards, however Texas chose to issue only REAL ID compliant licenses and cards which also increased the number of customers. Thus, many customers were required to be at a DLO in-person to provide documents and have a new picture taken to obtain a REAL ID which were DHS requirements.

DHS requirements for documents to prove U.S. Citizenship and state (Texas) residency also created confusion among individuals requesting a driver license or ID card renewal or when obtaining a DL or ID card for the first time. Though the DLD website provided information about the types of documents needed to meet DHS requirements, many customers arrived at a DLO without proper identification or other documents which required additional trips to provide all required documents. During the 2019 – 2020 study, the customer service survey asked customers: "The last time you had business at a DPS Driver License Office - how many times did you have to visit an Office to complete your transaction?" Table 23 shows the numbers of customers who made one or more trips to a DLO to complete their transaction.

Table 23 2019 – 2020 Survey Results showing the number of customers who reported 1 or more trips to complete a transaction

2019 - 2020 Survey Results regarding number of trips to a DLO to complete a transaction		
Number of Customers who responded	**Percentage of Customers who responded to this question**	**Number of trips to a DLO to complete the customer's transaction**
26,486	66.74%	1 trip
9,618	24.24%	2 trips
2,607	6.57%	3 trips
650	1.64%	4 trips
202	0.51%	5 trips
82	0.21%	6 trips
41	0.10%	7 or more trips
39,686	100%	

Interestingly, in the 2019 – 2020 Study survey customers were also asked whether it was their fault or DLD's fault that they had to make additional trips to complete their transaction. Table 24 shows that nearly the same percentage of customer responses indicated it was the customer's fault that additional trips were required as indicated that it was DPS's fault additional trips were required. Of the 39,686 customers who visited a DLO, 13,200 (33.3%) reported that it required more than one trip to the DLO to complete their transaction. Of that number, 10,650 (26.8%) indicated whether it was their fault or DPS's fault that return trips were necessary.

Table 24 Additional trips made to a DLO to complete a transaction due to the customer's or DPS's fault as indicated in the customer survey. (2019 – 2020 survey)

2019 - 2020 Customer Survey Responses - Customer's or DPS's fault that additional trips were required to complete transaction					
Customer's Fault for addition trips	Number of Customer Survey Responses	Percentage of Customers with this Response	DPS's Fault for addition trips	Number of Customer Survey Responses	Percentage of Customers with this Response
My fault, 2 trips	3,864	75.6%	DPS fault, 2 trips	3,446	62.2%
My fault, 3 trips	939	18.4%	DPS fault, 3 trips	1,458	26.3%
My fault, 4 trips	220	4.3%	DPS fault, 4 trips	433	7.8%
My fault, 5 trips	59	1.2%	DPS fault, 5 trips	128	2.3%
My fault, 6 trips	23	0.5%	DPS fault, 6 trips	61	1.1%
My fault, 7 trips	6	0.1%	DPS fault, 7 trips	13	0.2%
10,650	5,111	100%		5,539	100%

Table 25 shows results from the 2024 customer survey which indicate that about 15.8% of customers who visited a DLO were required to make more than one trip to complete their transaction. Thus, the percentage of customers who reported that additional trips were necessary to complete a transaction decreased approximately (33% - 15.8%) = 17.2% between the 2019 – 2020 survey and the 2024 survey. This is a significant decrease in number of return customers to complete a transaction and also represents a significant decrease in the number of customers who must transact business at a DLO.

Table 25 2024 Customer Survey – percentage of customers who required more than one trip to complete their transaction.

2024 Customer Survey - Number of Customers who required more than one trip to complete their transaction	
Able to complete transaction	Number of Customer Surveys with this response
Yes	13,140
No	423
Yes, but it took more than one visit	2,464
Percentage of customers who required more than 1 visit	15.8%

Based on the survey results, numerous customer comments stated (paraphrased), "DPS requires much more documentation than other states to obtain a driver license." However, the increased amount of documentation to obtain a REAL ID compliant driver license was incorrectly attributed to DPS-DLD procedures and requirements rather than the Department of Homeland Security. In the 2019 – 2020 period, customers also complained about long wait times and lines outside DLO offices – however, as indicated these were symptoms of 1) the NEMO-Q queuing system which

allowed customers to arrive at a DLO anytime during the day to obtain services, 2) increases in numbers of customers due to state population growth which was concentrated in the metropolitan regions of Texas, and 3) the REAL ID compliant documentation requirements which increased processing times due to additional steps to vet and scan documents for customers who currently did not meet DHS requirements. In addition, more time was required due to customer confusion over the DHS requirements which often resulted in multiple trips to a DLO due to lack of acceptable documentation.

In addition, DLO waiting areas often had many customers still waiting for services at closing time. This meant that frequently, DLO employees would have to work as late as 7 PM to serve all the customers that remained at the DLO after closing. This was of particular concern to DLD Administration and the DLO managers because a large percentage of DLO employees (around 80%) are women, many of whom had children in day-care. Working past normal work hours meant that many employees could be subject to expensive late fees charged by the day-care centers.

To address these problems, DLD Administration worked to implement an Appointment System that would provide customers with a way to select the time they would arrive at the DLO for services. This also provided the DLO managers with a means for managing the number of customers who arrived at the DLO each hour of the day and also helped ensure that a large number of customers were not still waiting for services at closing time. The Applus TxScheduler Appointment System was installed in DLOs during the COVID-19 pandemic sheltering period between March – May, 2020 and began issuing customers appointments in a phased implementation starting in late May, 2020. The Appointment System has proven to be very effective in managing customer backlogs and helps DLO managers plan for the number of employees needed throughout the day to serve customers.

However, since the number of Appointments a DLO can serve in a day is a function of the number of License and Permit Specialist (LPS) employees available to process transactions using Biometric Capture Systems (BCS), the number of functional BCS stations available and the methods used by DLO supervisors to schedule appointments today, within a week, within a month, within 90 days and out to 180 days also affect the efficiency and effectiveness of the Appointment System. LPS employees who call in sick or are on vacation also can impact the number of customers that a DLO can process in a day.

Another factor is that customers may make an appointment but not show up for the appointment (no-shows) which can lead to lost opportunities to process the number of transactions that the DLO is able to process based on resources. Thus, addressing how no-show appointments are managed by DLO supervisors throughout the day also affects the efficiency of DLO operations.

Figure 53 shows the cumulative distribution curve for appointment booking times from 2024 survey data for customers who visited a DLO in 2022, 2023 and 2024 in Region 2A Houston, Region 2B Houston and Region 2C Rosenberg. The x-axis of Figure 53 shows the timeframes a survey taker could select to indicate the appointment booking time they experienced. Note that the Houston Curve combines data from all five DLOs in the city of Houston. Humble DLO and Spring

Mega Center are in Region 2B and Rosenberg Mega Center is in 2C. It is apparent that these curves are very similar to each other and all represent very good appointment booking times. The initial data points indicate that over 40% of customers who responded to the customer service survey were able to obtain an appointment booking date of one week or less from the date the appointment was made. The 2nd data point shows that approximately 70% - 80% of customers were able to obtain an appointment booking time of two weeks or less. The 4th data point shows that essentially 100% of customers were able to book an appointment within two months or less with the vast majority booking within three weeks or less. These trend lines also show that no customers reported a booking time between two months to more than six months.

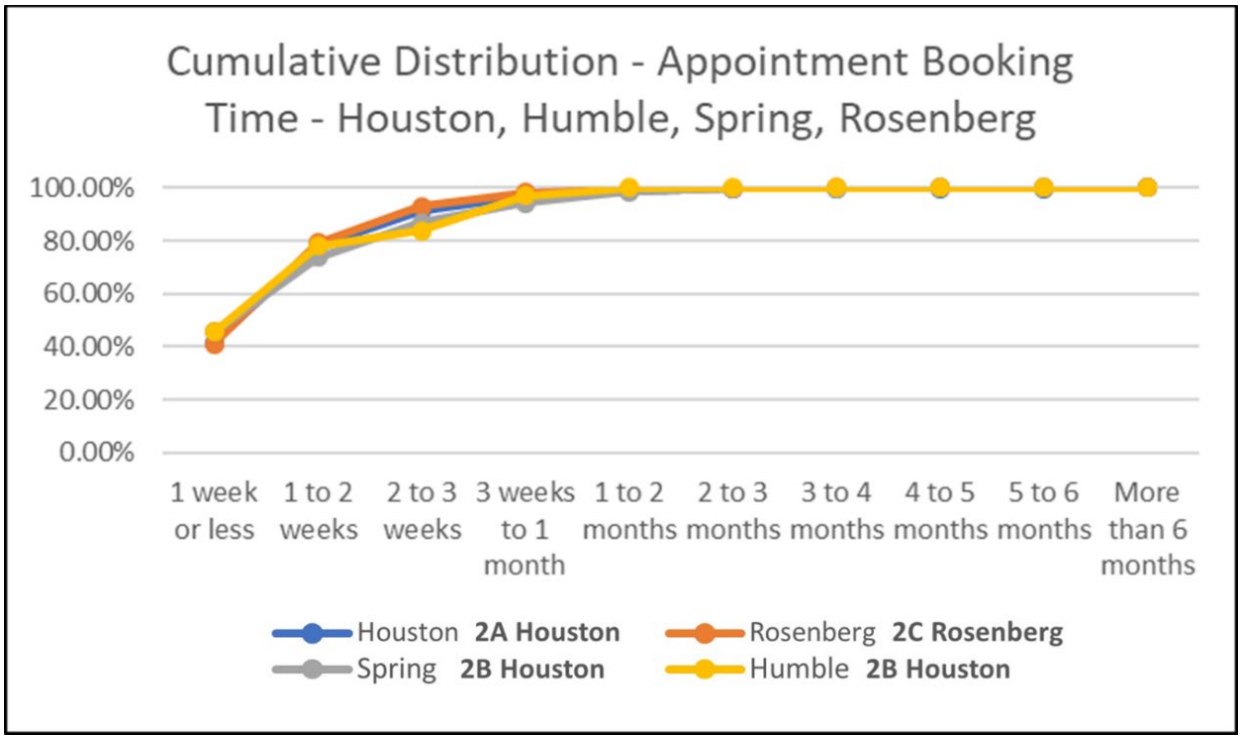

Figure 53 Cumulative Distribution of Appointment Booking Times from the 2024 Study Survey data for customers who visited DLOs in cities of Houston, Humble, Spring and Rosenberg.

By contrast, Figure 54 shows Cumulative Distribution curves for 11 DLOs in the Dallas / Fort Worth metroplex using survey data from the 2024 Study for 2022, 2023 and 2024. This set of curves show a much different trend: 8% to 18% of customers are able to book an appointment within 1 week or less. The cumulative distribution curves show more variability between DLOs as booking times increase with data point 3 (two to three weeks) depicting from 21% to approximately 48% of customers able to book an appointment in three weeks or less. The variation between DLOs decreases as booking times increase, finally converging on nearly 100% of customers able to book an appointment at between five and six months out from the date the appointment was made.

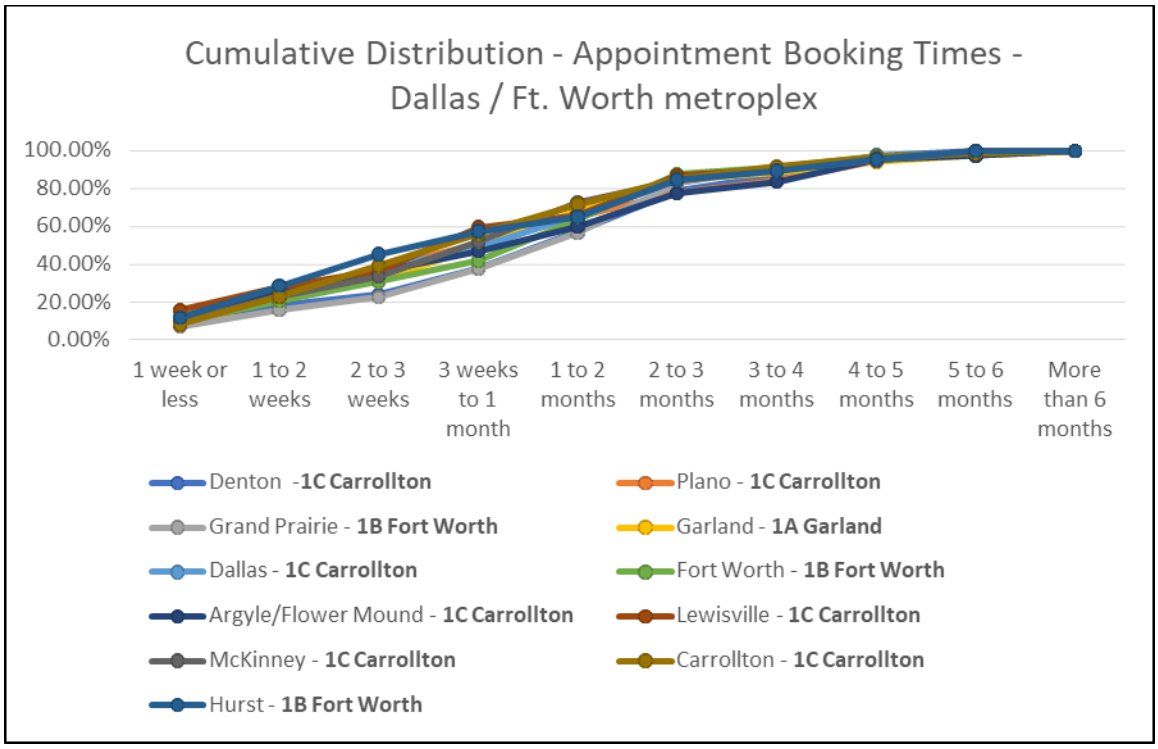

Figure 54 Cumulative Distribution Curves for the DFW metroplex based on 2024 Study survey data

Figure 55 shows the Houston area cumulative distribution curves from Figure 53 and the DFW cumulative distribution curves from Figure 54 on the same graph in order to illustrate the difference in relationships between appointment booking times between these two major population centers. According to DLD Combined Organization and Strength data the 5 Houston DLOs, the Spring and Rosenberg Mega Centers and Humble DLO had 33 LPS vacancies. The DFW DLOs shown in the graph had a total of 61 LPS vacancies.

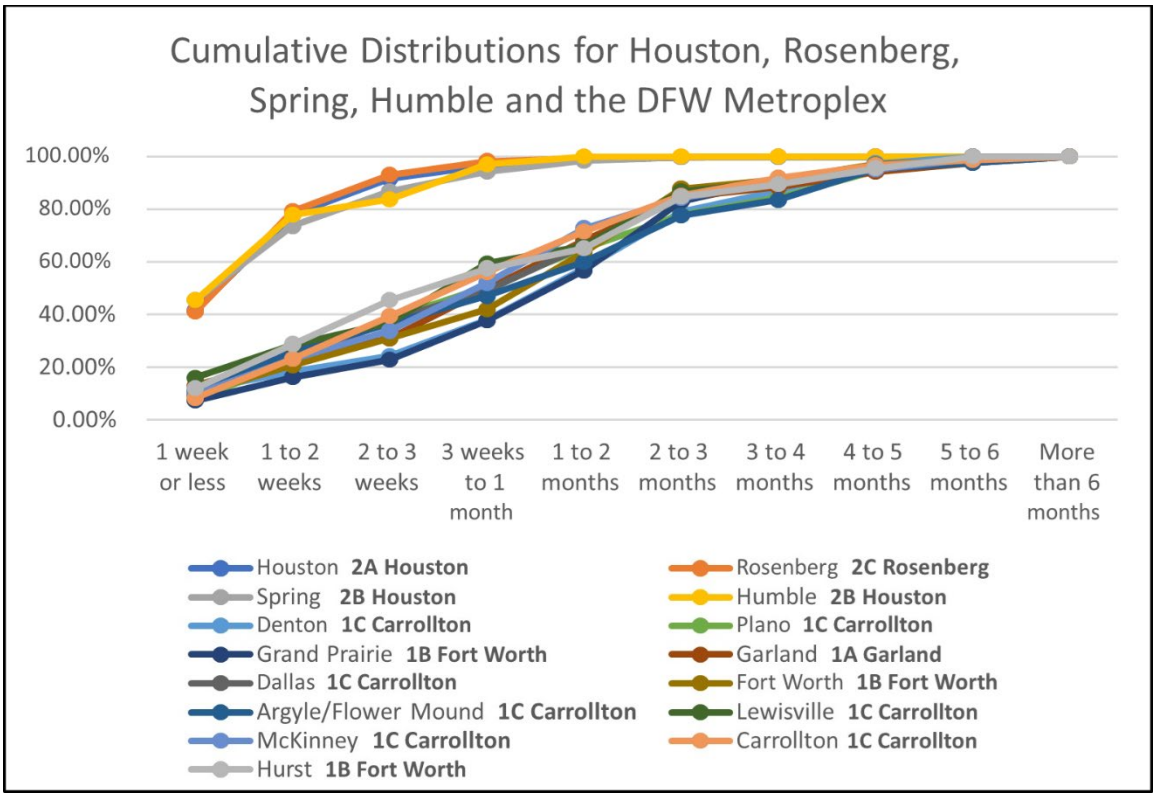

Figure 55 Cumulative Distribution Curves for Houston, Spring, Humber and Rosenberg and the DFW metroplex from 2024 Study customer survey data 2022, 2023 and 2024

Figures 56 and 57 show cumulative distribution curves for Austin and San Antonio (based on 2024 Study customer survey data) that are similar in shape to the DFW curves. According to DLD Combined Organization and Strength data, Austin had 50 LPS vacancies and San Antonio had 28 vacancies.

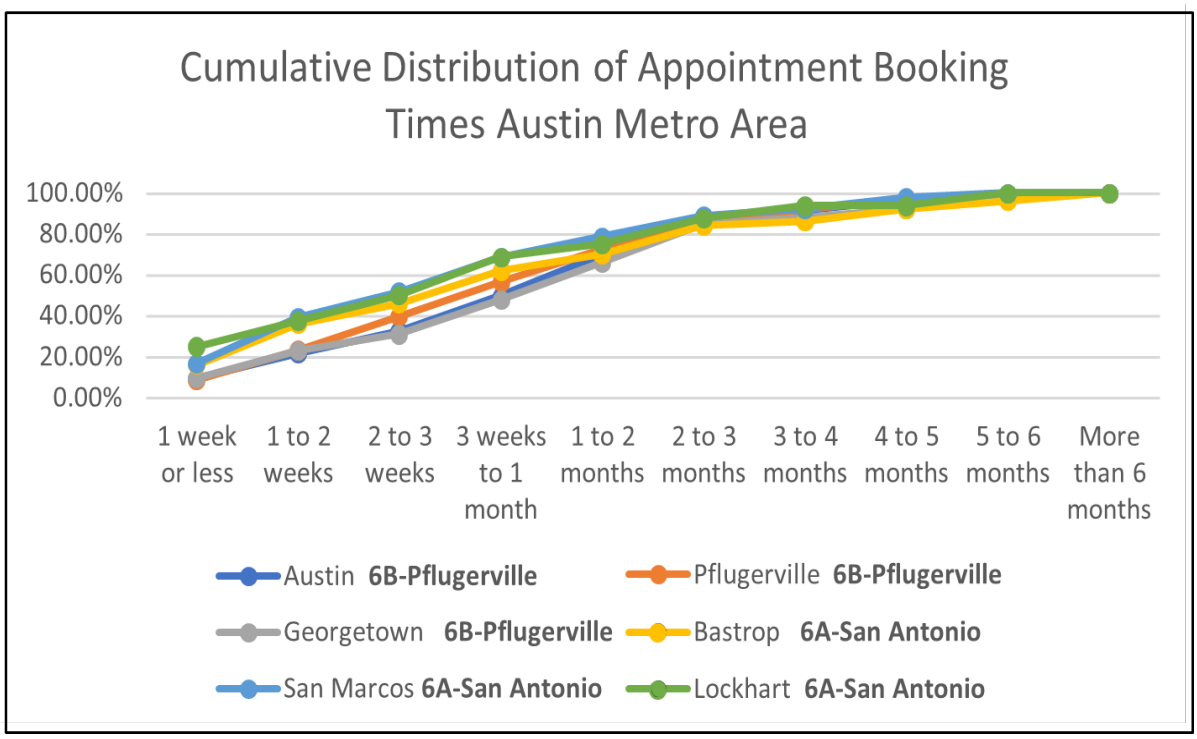

Figure 56 Cumulative Distribution Curves for DLOs in Austin, Pflugerville, Georgetown, Bastrop, San Marcos and Lockhart from 2024 Study customer survey data 2022, 2023 and 2024

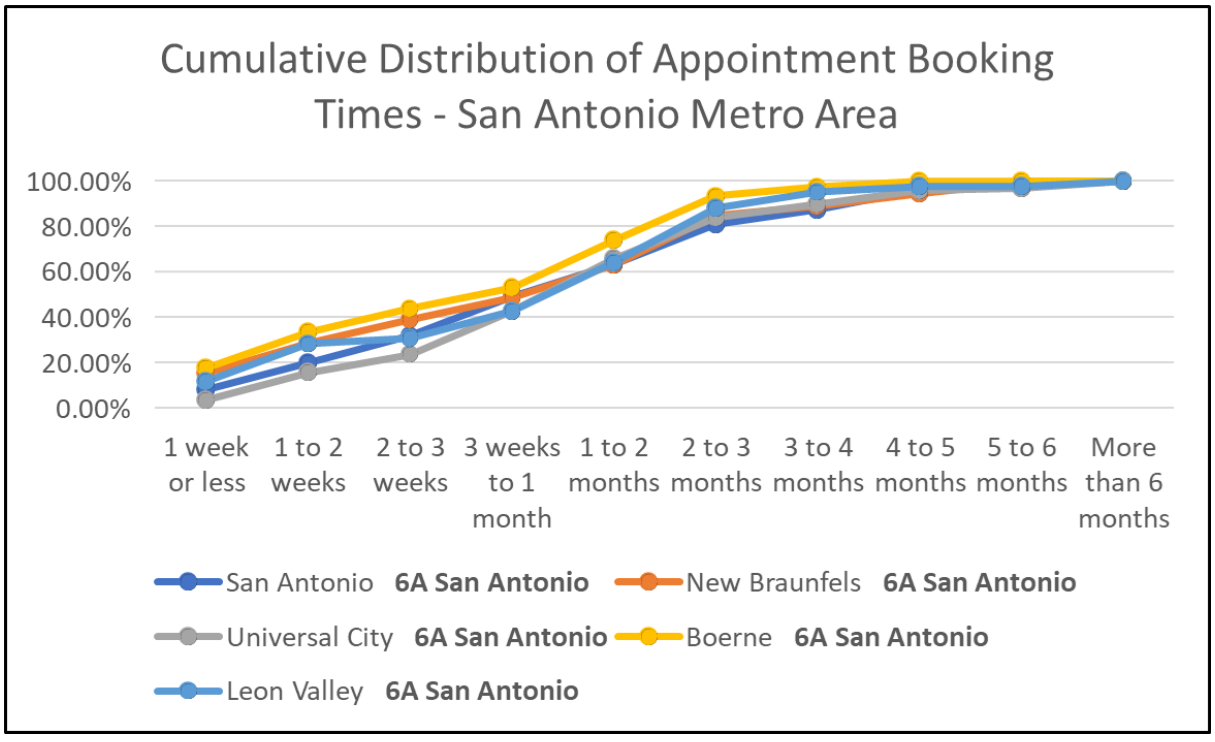

Figure 57 Cumulative Distribution Curves for DLOs in San Antonio metro area from 2024 Study customer survey data 2022, 2023 and 2024

See Table 26 for more comparative information about the Houston and DFW Regional DLOs.

It is apparent that though Houston and DFW have close to the same number of Biometric Capture Systems (BCS) (DFW **270** (209 staffed), Houston **264** (231 staffed)), there is an impact on operations in the DFW Regions due to vacancies, especially among LPS employees who perform driver license and ID card processing. Based on the combined organization and strength data contained in a DLD supplied spreadsheet, the Houston DLOs that are listed currently have 33 LPS vacancies and DFW DLOs listed have 61 LPS vacancies.

The average appointment booking time trend lines shown in Figure 58 are based on calculations of average appointment booking times from the DLD 2023 Report to the Governor's Office.

These values are shown in relation to the 2024 Study customer survey data for 2023 (customer appointment booking time data for customers who visited a DLO in 2022 or 2024 were not included for this particular comparison). The study team theorized that if the 2024 Study customer survey could have been conducted over a longer period of time, additional 2023 data points might have resulted in a closer fit to the 2023 DLD Report to the Governor's Office since those averages were based on an entire year's appointment booking data at each DLO. It is important to note that the difference between the Houston and DFW Regions booking times is retained in Figure 58.

Table 26 Comparison of the Houston and DFW Regions regarding resources and average Appointment Booking Days

City	Total Workstations Biometric Capture Systems (BCS) and Vetting/Information Stations	Total Workstations with an LPS	Survey Average Appointment Booking time (2023 Transactions)	DLD 2023 Report to Governor Average Appointment Booking Time	Survey Average Appointment Booking time (2024 Transactions to date)	DLS (2024) Average Appointment Booking time (to date)
Rosenberg	40	30	7	4	7	7
Humble	8	7	8	4	9	7
Houston (5 DLOs)	184	164	8	5	8	8
Spring	32	30	10	5	9	9
Totals	264	231				
Dallas	48	35	28	29	51	32
Fort Worth	51	39	35	29	58	34
Garland	55	40	32	30	57	33
Hurst	10	10	41	33	44	28
Denton	14	13	38	34	64	44
Carrollton	42	34	30	35	56	35
Grand Prairie	16	15	40	35	65	38
McKinney	9	5	27	47	42	30
Plano	13	8	38	47	64	37
Lewisville	7	5	36	50	61	31
Argyle / Flower Mound	5	5	52	54	55	42
Totals	270	209	36	38	56	35

Note: The average survey appointment booking times shown uses data from customers who visited a DLO in FY 2023, or in FY 2024 to date.

The average booking times in the Houston Region are much shorter than in the DFW, Austin or San Antonio Regions. This could partly be due to differences in resources, but based on an online meeting with the DLD Houston Regional manager, the Regional Managers for other DLD regions and supervisors for DLOs in the Houston area, it is apparent that management experience, experimentation and observation of processes have also helped the Houston DLOs to achieve shorter booking times. The discussion highlighted several insights that potentially could be tried in other DLD Regions – though it was pointed out that each DLO office is different, with different resources and abilities to provide LPSs to vet documents. One Houston mega-center uses 8 LPSs to vet documents which was discussed as a reason for shorter transaction times and fewer individuals leaving the DLO with an unfinished transaction. Houston DLOs supervisors watch transaction and 'no shows' numbers to guide publishing new appointment slots throughout the day. Typically, 25% of the appointments are published the same day and there is no allocation of percentage of appointments based on transaction type (long, short, driving test etc.). One Houston Supervisor watches the queue of customers and if the queue is short or new customers are arriving slowly more appointments are published.

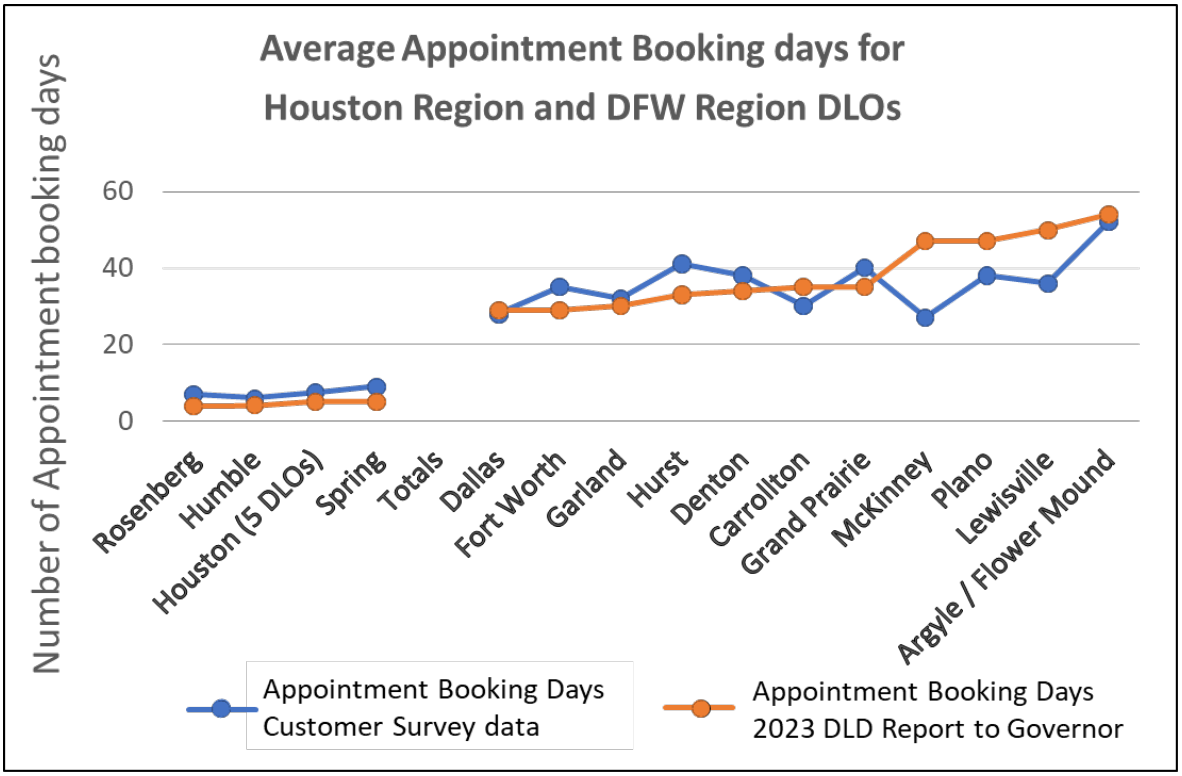

Figure 58 Average Appointment Booking Days for Houston and DFW Regions from 2023 surveys and 2023 DLD Report to the Governor's Office

Another insight from the Houston DLOs is when working with a person who has arrived at the DLO without an appointment, an LPS does not book an appointment until all documents have been vetted and it is shown that the customer has all required documentation. This reduces problems that slow down transaction rates and allows the customer to return home to pick up the missing

document. the customer will be vetted again when returning to the DLO before receiving an appointment and moving to the transaction step. Transactions are typically estimated to take 20 minutes – thus 3 transactions per hour x 8 hours = 24 transaction per work station daily. Long transactions such as first-time licenses typically require longer than 20 minutes to process and benefit from document vetting which reduces transaction times. However, the supervisors realize that not every DLO has the ability to assign 8 LPSs to vet documents – this is a resource constraint.

It is important that DLO employees understand what the goal of their position is and to provide them with the training and tools to accomplish the goal. The Houston DLOs do not use temporary positions to fill vacant FTEs – it is hard to fill temporary FTE slots – though there have been exceptions related to students who attend local colleges and work for DLD. Temporary employment is seen as a stepping stone to working permanently for the DLO, however, hiring full time employees has greater success and fewer challenges due to economic realities in a large urban area.

4.2.1.1. Summary

Appointment booking times have become the new factor that customers focus on as an indicator of DLO performance. Wait times after a customer has pulled a ticket and is vetted is still important, but there are no longer DLO waiting rooms filled to capacity with lines extending out the door. However, in some cases a customer might have a difficult time finding an appointment booking time that is within the timeframe they want. This in part could be due to signing at DLOs which simply state, 'Services by Appointment Only' (Figure 59). Based on trips to multiple DLOs and discussions with customers the belief among some was that 'Unless I have an appointment now, the DLO staff will not serve me." However, DLOs publish appointments just before, or soon after opening using 'no-shows' or other types of openings so that customers without an appointment can schedule one that day, or within a reasonable number of days.

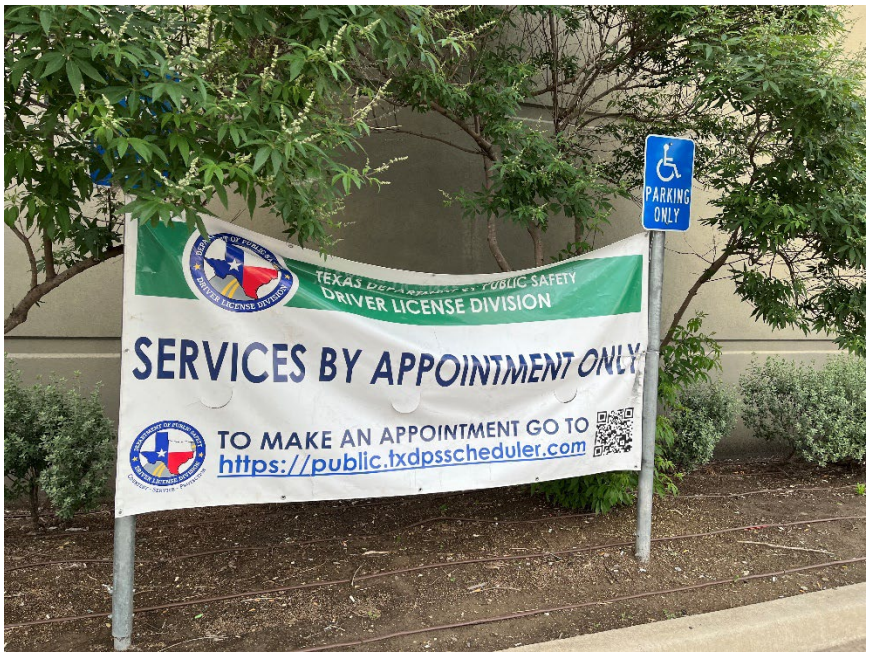

Figure 59 Service By Appointment Only sign outside the Fort Worth mega center

Estimated appointment availability or average booking time for each DLO is published in DLD literature such as BI Team Reports, annual reports to the Governor's Office or State Legislature and databases. However, it is not clear how these numbers are calculated or if estimated appointment availability is equal to the average booking time. These numbers do not necessarily provide a clear picture regarding how long a person must wait to obtain an appointment. This is because the distribution of appointment booking times are often right skewed, non-normal distributions and as such, a single number representing the average appointment booking time might not be the best indicator of how long a customer must wait to book an appointment. It is suggested that a lower and upper bound of appointment booking times would be more accurate in showing customers what the expected appointment booking time could be.

It is also recommended that signage at DLOs explains to customers that the DLO staff may publish appointments near or just after opening time and by using the TxScheduler application, and a customer without an appointment might be able to obtain an appointment for that morning or same day.

The way in which appointments are published varies from DLO to DLO regarding transactions that are short or long. In some cases, DLOs publish a certain percentage of short and a certain percentage of long appointments for different future dates. As described earlier, the Houston Region DLOs do not use this approach and publish appointments on a 'first come – first served' basis regardless of a short or long transaction time. This approach has resulted in overall short appointment booking times for customers that are significantly less than other large urban areas in Texas. It is recommended that DLD further evaluate how the Houston Region has been able to achieve this success.

Chapter 5. DLD Organizational Structure and Program Deficiencies Analysis

5.1. DLD Budget and Budget Allocations

5.1.1. DLD Budget Analysis

5.1.1.1. Financing the Driver License Division

DLD is supported in the 2024-25 biennium by $473,776,061 in funds. Table 27 provides a breakdown of the sources of financing for the DLD. Approximately 98% of financial support comes from the General Revenue Fund, .3% from Appropriated Receipts, and 1.7% from Transportation Administration Fees.

Table 27 Methods of Financing the Driver License Division 2024-25 Biennium

Method of Financing	Dollars	Percentage of Total
General Revenue Fund	$ 465,525,608	98
Appropriated Receipts	$ 169,846	.3
Transportation Admin Fee	$ 8,080,607	1.7
D.1.1. Strategy: Driver License Services	**$ 473,776,061**	**100**

5.1.1.1.1. Budgetary Trends for the Driver License Division

Appropriations for the DLD have generally trended higher from the 2010-11 biennium to the 2024-25 biennium, as shown in Figure 60. For example, appropriated funds for the 2024-25 biennium are 157% higher than the 2010-11 biennium and 70% higher than the 2018-19 biennium.

The main contributor to the dramatic increase in appropriations for the DLD is the implementation of the Driver License Improvement Plan (DLIP) developed by the Texas Department of Public Safety (DPS). DLIP was established in the 2012–13 General Appropriations Act, Article IX, Section 18.07. The primary objective of the DLIP was "to improve services and shorten wait times for driver license customers."[127] Table 28 provides an overview of the fiscal and operational impacts of DLIP from the 2012-13 biennium through the 2018-19 biennium as reported in Fiscal Notes, October 2019.

[127] Department of Public Safety Driver License Improvement Plan (2013)

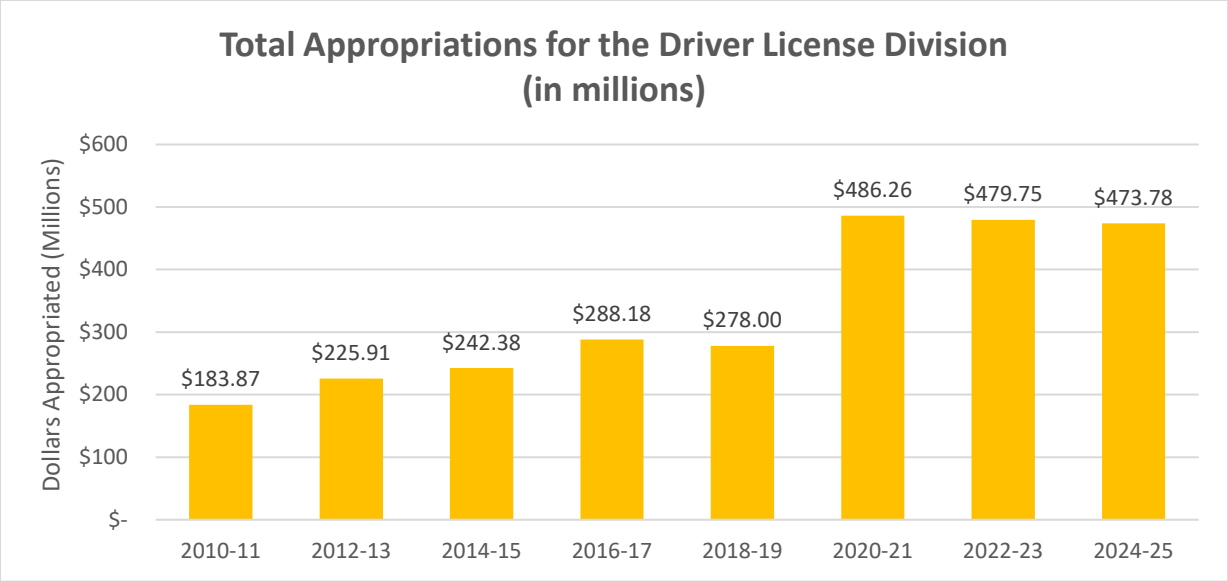

Figure 60 Total Appropriations for the Driver License Division 2010-2011 to 2024-2025

During the period from the 2012-13 biennium through the 2018-19 biennium $443.1 million was appropriated to the DLD via DLIP which translated into the opening of 14 mega-centers and 28 other offices, 86 offices were remodeled or relocated, and 547.3 new FTEs were hired. It is important to note, however, that counter to this trend two driver license offices closed during the 2018-19 biennium "due to a directive from state leaders calling for agency budget cuts."[128]

Table 28 Driver License Improvement Plan Financial and Operational Impacts, 2012-13 Biennium through the 2018-19 Biennium

Fiscal Year Biennium	Appropriations (in millions)	Mega-Centers Opened	Other Offices Opened	Offices Relocated/ Remodeled	New Office Staffing*
2012-13	$64.1	6	2	32	361.0
2014-15	$103	3	8	14	16.0
2016-17	$143	4	18	40	170.3
2018-19**	$133	0	0	0	0
2012-2019	$443.1	13	28	86	547.3

* Full-time equivalent employees.
** Reflects agency budget cuts in the 2018-19 biennium.

DLD was appropriated a $212.4 million increase in appropriations from All Funds for the 2020-21 biennium including $141.5 million to hire 762 new FTEs, $51.3 million to reclassify customer service representatives to license permit specialists which necessitated a pay raise for reclassified employees, and $19.6 million for new driver license offices.

[128] Fiscal Notes, October 2019

During the 2022-23 biennium DLD received $14 million in General Revenue Funds to "purchase or lease, furnish and equip a new Mega Center driver license office in League City, Texas."[129] All Funds decreased by $2.3 million or 0.5 percent during the 2022-23 biennium "due to [the removal] of funding for new driver license offices in Angleton and Denton."[130]

The DLD raises significant revenue for the state of Texas through driver record fees and driver license fees. For example, in fiscal year 2023 the DLD raised approximately $260 million dollars including $185 million from driver license fees (71% of revenue raised) and $75 million from driver record fees (29% of revenue raised). As shown in Figure 61, revenue raised by DLD has generally increased over time, with a major exception being in 2020 during which revenues declined due to persons staying at home because of the COVID-19 pandemic and not establishing or renewing their driver license/ID cards. The $260 million that DLD raised in driver license fees and driver records fees in 2023 is approximately $42 million larger than the approximately $218 million DLD received for the fiscal year of September 2022 through August 2023.

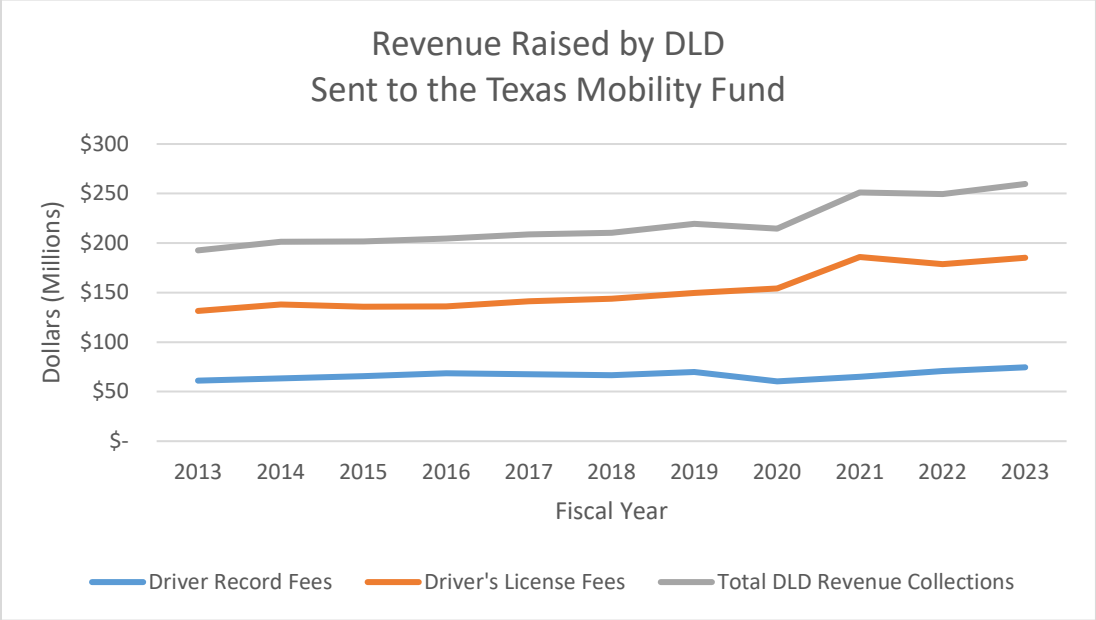

Figure 61 Revenue Raised by the Driver License Division Over Time

These moneys DLD raises cannot be used to fund DLD operations. Statutory law requires that they be sent to the Texas Mobility Fund (Mobility Fund). The Mobility Fund was approved as an amendment to the Texas constitution in 2001 and is administered by the Texas Transportation Commission (the Commission). The Mobility Fund "provide[s] a method of financing for the construction, reconstruction, acquisition and expansion of state highways, including costs of any necessary design and costs of acquisition of rights of way, as determined by the Commission in accordance with standards and procedures established by law."[131]

[129] General Appropriations Act for the 2022-23 Biennium
[130] Fiscal Size-up 2022–23 Biennium
[131] Texas Mobility Fund Annual Financial Report, For the Fiscal Year Ended August 31, 2023

5.1.1.1.2. Financial and Operational Controls and Oversight

Over the years, DLD has implemented several policies to increase control and oversight of its finances and operations. During the 83rd Regular Session, DPS expanded the target goals that it reports in the GAA beyond just a volume goal regarding the number of driver licenses administered to include a goal regarding the percentage of original driver license/ID cards completed within 45 minutes or percentage of duplicate or renewal driver license/ID cards completed within 30 minutes.

During the 84th Regular Session, a provision was included in the GAA requiring that DPS "provide an annual report on the effectiveness of the driver license improvement plan not later than December 1st of each fiscal year… [to] include information related to specific expenditures, program outcomes and outputs, obstacles to improvement, and any other information that the department deems necessary in order to fully report on the progress of the driver license improvement plan."[132]

During the 85th Regular Session, Article IX, Section 14.01 of the GAA was passed, which forbids the Department of Public Safety from "transfer[ing] funds out of Goal F, Driver License Services and Driver Safety, without the written approval of the Legislative Budget Board."[133] The Sunset Report for the 2018-19 Legislative Session noted that "in fiscal years 2012 to 2016, DPS transferred out a net amount of more than $8 million from its driver license strategies. While this is a relatively small figure compared to the program's overall budget, the reduction still impacts the struggling program."[134]

During the 86th Regular Session, the legislature passed a provision requiring the DLD to expand its annual reporting beyond a focus on the impacts of DLIP to "detail the following by office: (1) number of available work stations in the state; (2) average wait times for each mega center; (3) number of available FTEs; (4) a statewide weighted average of wait times at all driver license offices; (5) an analysis and explanation if wait times have increased at driver license offices, including all mega centers, driver license offices within a twenty-mile radius of each mega center, and driver license offices outside the twenty-mile radius of mega centers; (6) a plan to improve driver license operations and customer service."[135]

The 86th Regular Session also approved $1 million in funds to contract with an independent third party "to conduct a study that examines and makes recommendations on the management, operating structure, methods to incentivize driver license online renewal for eligible individuals, and opportunities and challenges of transferring the driver license program to the Department of Motor Vehicles, or becoming a standalone agency."[136] Lastly, DPS was subject to a Sunset Review during the 86th Regular Session.

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[132] General Appropriations Act for the 2016-17 Biennium
[133] General Appropriations Act for the 2018-19 Biennium
[134] The Sunset Report for the 2018-19 Legislative Session
[135] General Appropriations Act for the 2020-21 Biennium
[136] Ibid.

5.1.1.1.3. Unfunded Mandates Impacting the Driver License Division

The DLD often receives legislative mandates from the state legislature without the necessary increase in appropriations to finance their implementation. Table 29 provides a breakdown of the unfunded mandates passed during the 87th legislative session. DLD implemented six unfunded mandates, requiring $633,707 in funds in the next fiscal year and $1,199,745 over the subsequent three fiscal years.

DLD again implemented six unfunded mandates requiring $10,742,632 in funds in the fiscal year following the 88th legislative session and $8,471,946 in funds over the subsequent three fiscal years.

Table 29 Unfunded Mandates Impacting the Driver License Division from the 87th Legislative Session

House / Senate Bill	Initiative	Financial Outlay (Next FY)	Financial Outlay (Subsequent 3 FYs)
HB368	Authority to issue driver licenses to prosecutors that contain an alternative address	$ 6,600	-
HB780	Requirement to establish a bone marrow donor recruitment program	$55,000	-
HB911	Requirement to add the veteran or disabled veteran designator to a driver's license or ID card during a renewal or replacement transaction	$184,889	$427,449
SB15	Requirement to limit the disclosure or sale of certain personal information by agencies	$360,818	$772,296
SB798	Authority to issue a personal ID certificate or driver's license to a victim of dating or family violence or a child of a victim of dating or family violence	$13,200	-
SB1134	Authority to expand the address confidentiality program to include federal bankruptcy judges, marshals of the US Marshals Service, US Attorneys, and family members	$13,200	-
	Total	$633,707	$1,199,745

Table 30 provides a breakdown of the unfunded mandates passed during the 88th legislative session. During the 88th legislative session, DLD implemented six unfunded mandates requiring $10,742,632 in funds in the next fiscal year and $8,471,946 over the subsequent three fiscal years.

Table 30 Unfunded Mandates Impacting the Driver License Division from the 88th Legislative Session

House / Senate Bill	Initiative	Financial Outlay (Next FY)	Financial Outlay (Subsequent 3 FYs)
HB1275	Identifying certificate to a person 65 years of age or older whose driver's license is surrendered	$161,700	-
HB1846	Relating to the skills test required for a CDL for certain commercial learner's permit holders	$9,620,168	$8,471,946
HB3132	Relating to an optimal designation on a driver's license or personal identification certificate indicating that a person has a hearing impairment	$56,300	-
HB3798	Relating to making certain voluntary contributions when applying for a DL, CDL, or PIC (personal identification card)	$16,500	-
SB656	Relating to an optional health condition or disability designation on a DL or personal identification certificate	$3,300	-
SB2376	Relating to the issuance of support adoption specialty license plates and to the Support Adoption account and certain voluntary contributions to that account	$884,664	-
	Total	$10,742,632	$8,471,946

5.1.1.1.4. Exceptional Item Requests (EIR) Made by the Driver License Division

Exceptional Item Requests (EIR) are requests for funding beyond the baseline level made in Legislative Appropriations Requests (LAR). DLD submitted one EIR for FY20-21, two for FY22-23, and three for FY24-25.

DLD prepared an EIR titled "Increase Customer Service Center (CSC) Capacity" for FY20-21 with the aim of receiving funds that would help enhance the performance of its customer service center such that it would have the capacity to answer 100% of the calls it receives and the ability to answer calls within 5 minutes. At the time of the request, DLD could only answer 14% of the calls it received, and the average time to address its calls was 6 minutes. To address this lack of capacity, the EIR requested funds for 580 new FTEs, 72.5 indirect FTEs to support the divisions, and Customer Relations Management (CRM) software. DPS approved this request, but the legislature didn't fund it.

For the following fiscal year, FY22-23, DLD made an EIR titled "Increasing Driver License Services Capacity to Lower Wait Times." The EIR aimed to fund new workstations and additional FTEs in "areas that are experiencing the longest wait times, the greatest growth in population, or a combination of the two."[137] The EIR identified 12 target regions for which to expand workstations and FTEs. DPS approved this request, but the legislature didn't fund it.

[137] Increasing Driver License Services Capacity to Lower Wait Times

The DLD made a second request for FY22-23 titled "Implement federally mandated State-to-State Program for REAL ID Compliance." The State-to-State (S2S) program is a component of the federal REAL ID Act. It is an electronic verification system that aims to ensure that individuals do not have multiple driver's licenses or IDs across states. The EIR sought approximately $2 million in funds annually to maintain the S2S electronic system and funds for approximately 34 new FTEs to resolve duplicates and errors found in identification records. DPS did not approve this request.

DLD prepared three EIR's for FY24-25. DLD submitted an EIR titled "Driver License Customer Service Center (CSC) Staffing." Similar to the EIR titled "Increase Customer Service Center (CSC) Capacity" submitted for FY20-21, this one aimed to enhance the ability of the DLD to handle customer calls and e-mails. This EIR sought funds for an additional 389 FTEs. The DLD estimated that with 389 new FTEs, it could answer at least 50% of customer contacts by FY25. The EIR also sought $8.5 million for technology improvements to manage calls better. DPS approved this request, but the legislature didn't fund it.

The second EIR for FY24-25 was titled "Implement Federally Mandated State-to-State Program for REAL ID Compliance." The aim of this request is similar to the EIR submitted for FY22-23 with the same name, to provide sufficient staffing and technology to implement the S2S program properly. With this EIR, the DLD requested approximately $2M per year to support the S2S electronic system, funds for approximately 33 additional FTEs to support processes related to the S2S system, and funds for approximately 4.2 additional indirect FTEs for agency support staff. This request was not fulfilled. DPS approved this request, but the legislature didn't fund it. The third and final EIR for FY24-25 was titled "Reduce Booking Time Statewide." As its name suggests, this EIR aimed to reduce booking times so that customers across the state could book an appointment within 60 days for all appointment types. The EIR sought approximately $282 million for additional staffing, $2 million for biometric equipment, and $57 million for facilities costs. DPS approved this request, but the legislature didn't fund it.

5.1.1.2. Funding Deficiency

The central deficiency the Driver License Division (DLD) is experiencing regarding its budget is simply insufficient funding and lack of flexibility in using these funds.

Deficiency: Lack of Unspent Balance (UB) Carryover Authority and the $500,000 limit on Capital Budget Authority hinders efficient technology modernization.

AIS contracts are all capital projects which last over a longer period, exceed legislative and fiscal biennia and cost millions of dollars. Lack of UB authority and capital authority creates barriers in funding for IT projects as project development, procurement, contracting and implementation may cross biennia. Costs for technology projects are well over the $500,000 range and they are much closer to the millions of dollars range.

Structural barriers occur because of appropriations laws and rules governing (i) budgeting process and (ii) major information resource Projects. Most DLD IT capital projects exceed two years,

crossing into new biennia. While DLD may have an Unexpended Balance (UB), it must have legislative authority to move funds from one year to the next, or from one biennium to the next biennium. UB authority would assist DLD in managing legacy modernization of the Driver License system and other technology upgrades that have been identified in its IT plan, LAR and exceptional item requests. For example, the Attorney General's Office in its LAR for FY 2022-2023 had included Rider 19 "$33,059,998 in Strategy A.1.1, Legal Services, and $8,187,301 in Strategy E.1.1, Agency IT Projects". This authority would not increase the actual DLD budget, since it merely would provide latitude to manage these complex projects.

Root Causes of Insufficient Funding

DLD staff highlighted three root causes that have created a climate of insufficient funding. First, they noted that the level of appropriations that the DLD has received is inadequate to address the growing demands on the DLD due to rapid population growth in the state. While DLD received an injection of funds from the Driver License Improvement Plan, those funds have not been enough to meet the demands of its growing customer base.

The second root cause stems from the unfunded mandates placed on the DLD by the federal and state governments. The DLD regularly must find funds in its operating budget to implement policies for which the Division was not appropriated additional funds. Such mandates take away from funds that could be used to grow the Division's capabilities to serve more customers in a shorter time.

The third root cause emanates from how the DLD is funded. The DLD is not self-funded; the funds it generates go to the Texas Mobility Fund, and the DLD is funded through appropriations instead. If the DLD were self-funded, its funding might better reflect the level of demand on the Division. The Division could seek approval to add a customer fee to its transactions, which it could keep, but staff ventured that such a fee might not be viewed favorably.

The Division noted several strategies it uses to maximize its current funds and to increase its funding. First, it has decided to focus its exceptional item requests (EIRs) on technological upgrades rather than additional staff because it believes technological upgrades can have a much more significant impact on customer service capacity than additional staffing. Second, it highlights metrics that illustrate its inability to serve customers in a timely fashion in its Exceptional Item Requests (EIR). Third, it is in a pilot program with the Comptroller's office to get live budget data. Lastly, the Division uses funds from vacant positions to fund one-time expenses.

5.2. Employee Salary, Service, Turnover and Merit Pay Analysis

This section consists of several parts, including: a review of employee information as it pertains to salary and service time, an analysis of employee turnover, and a consolidated summary, conclusion, and recommendations.

5.2.1. Review of Employee Information

This section reviews employee information, which includes salary and service time. Included are reviews of DPS DLD data and DPS Law Enforcement data. This section also includes reviews of SAO reports on salary competitiveness. The analyses were conducted using employee information obtained from the DPS (DLD information only), The Texas Tribune (statewide information), and the SAO website. The DPS DLD data was current as of December 1, 2023. The Texas Tribune publishes state employee salary information annually for all state agencies as obtained by the CPA and current as of October 1, 2023. This review's main focus is on the DLD employees that are public-facing in Driver License Offices, but also includes other DLD employees and DPS Troopers (Trooper Trainee to Captain).

The DPS has a wide range of duties, including law enforcement, criminal investigations, emergency management, intelligence and counterterrorism, law enforcement support, regulatory services (including the vehicle safety inspection program), and the driver license program (including commercial driver licenses [CDLs] and non-commercial licenses).

The CPA data obtained indicates that DPS, in all areas of responsibility, had 10,283 employees.

5.2.1.1. License and Permit Specialists (LPS II - LPS V)

LPSs form the backbone of the DLD driver license function. LPSs are generally the public-facing employees that staff driver license offices statewide. DLD data shows 2,422 LPS employees in job titles of LPS II to LPS V. These job titles are classified in the SAO Salary Schedule as shown in Table 31.

Table 31 SAO Job Classification and Salary for LPSs.

Job Title	Salary Group	Minimum Salary	Midpoint Salary	Maximum Salary
LPS II	B14	$34,144	$43,139	$52,134
LPS III	B16	$37,918	$48,024	$58,130
LPS IV	B18	$42,521	$55,096	$67,671
LPS V	B20	$48,158	$62,818	$77,477

An evaluation of the DLD data for LPS employees follows.

5.2.1.1.1. LPS II

There are 393 LPS IIs and this is the entry level position. Figure 62 shows a histogram of LPS II employee service time. Most have zero to two years of service, but there are a few with more service time up to 32 years.

Figure 63 shows a plot of monthly salary versus service time for full time workers. Essentially every LPS II makes $3,276 per month or $39,310 annually, except a few outliers including one person that makes $3,780 per month or $45,365 annually. The $39,310 annual salary is 29% of the salary range for this job title. The X-axis represents the B 14 monthly salary range.

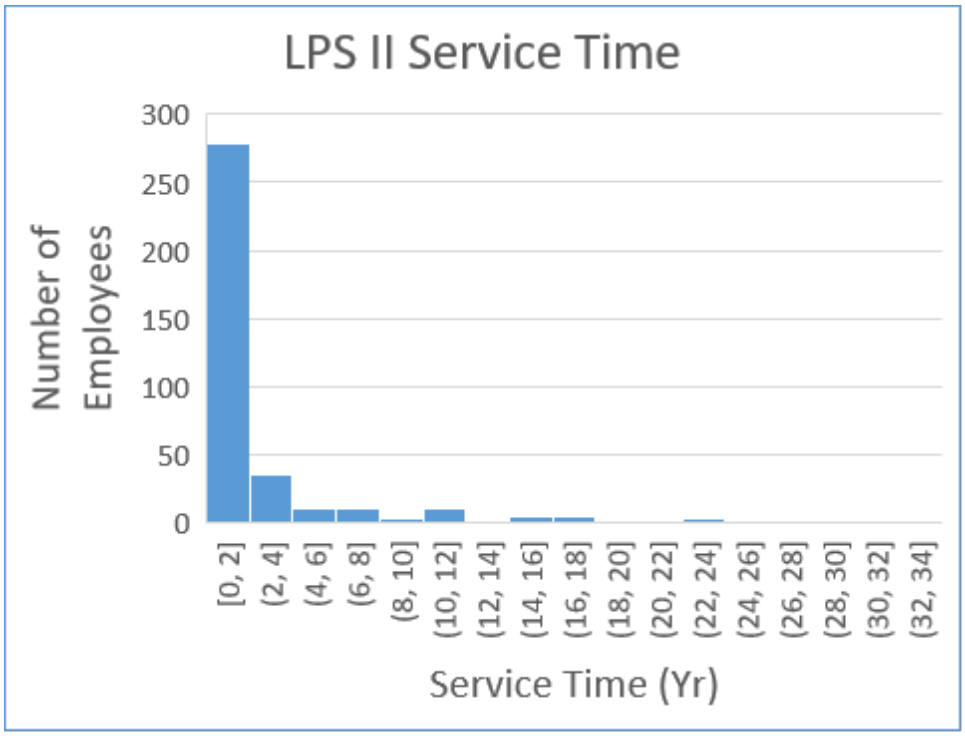

Figure 62 LPS II Service Time Histogram.

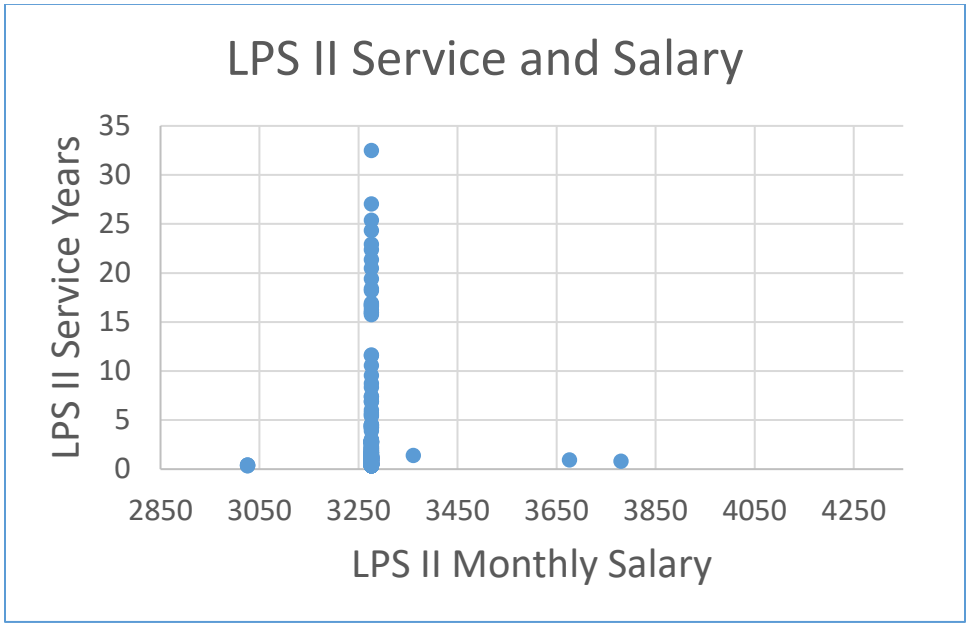

Figure 63 LPS II Monthly Salary and Service Time.

5.2.1.1.2. LPS III

There are 1,414 LPS IIIs, representing the greatest number of LPS workers. Figure 64 shows a histogram of LPS III service time. Many employees have three to five years of service but there is a distribution of higher service times with a high of 33 years.

Figure 65 shows a plot of monthly salary versus service time for full time employees. Every LPS III makes the same salary, $3,876 monthly and $46,046 annually. The $46,046 salary is 40% of the salary range for this job title. The X-axis represents the B 16 monthly salary range.

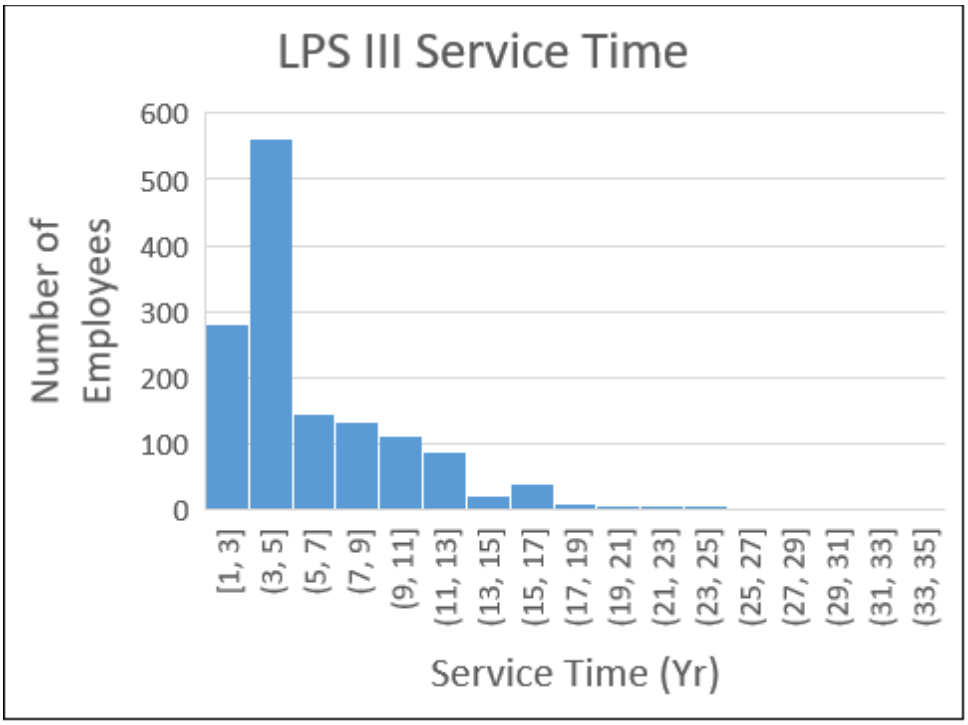

Figure 64 LPS III Service Time Histogram.

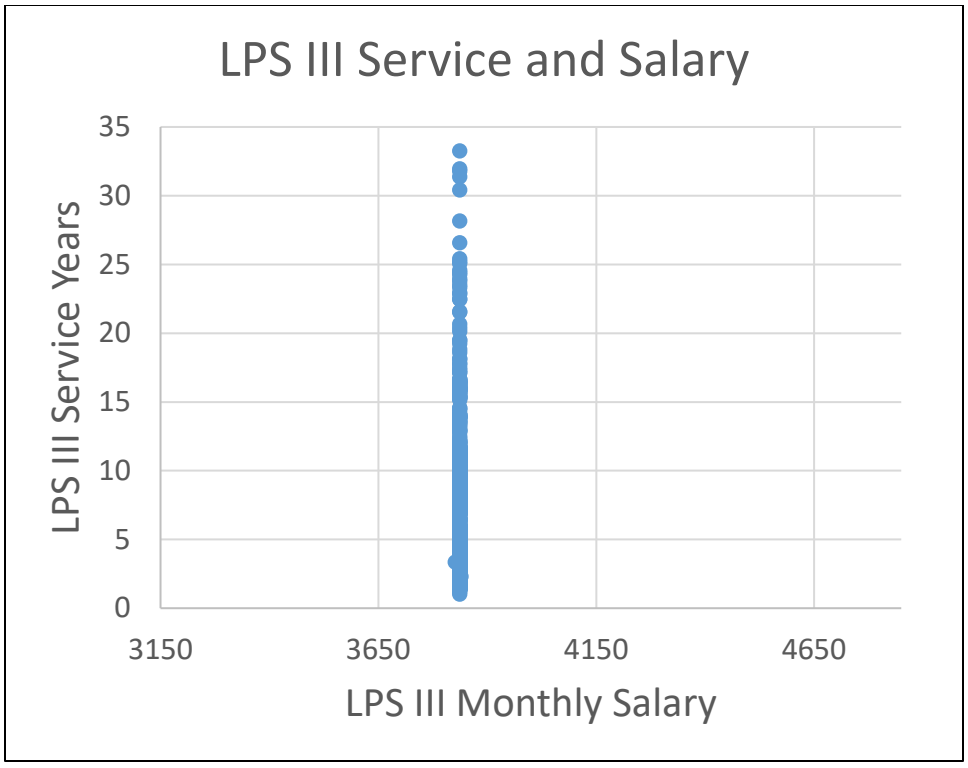

Figure 65 LPS III Monthly Salary and Service Time.

5.2.1.1.3. LPS IV

There are 453 LPS IVs, representing the second greatest number of LPS workers. Figure 66 shows a histogram of LPS IV service time. Service times are longer, with the bulk in the 4-to-14-year range. There are some employees with service times of 30+ years.

Figure 67 shows a plot of monthly salary versus service time. Every LPS IV makes the same salary, $4,443 monthly and $53,317 annually. The $53,317 salary is 43% of the salary range for this job title. The X-axis represents the B 18 monthly salary range.

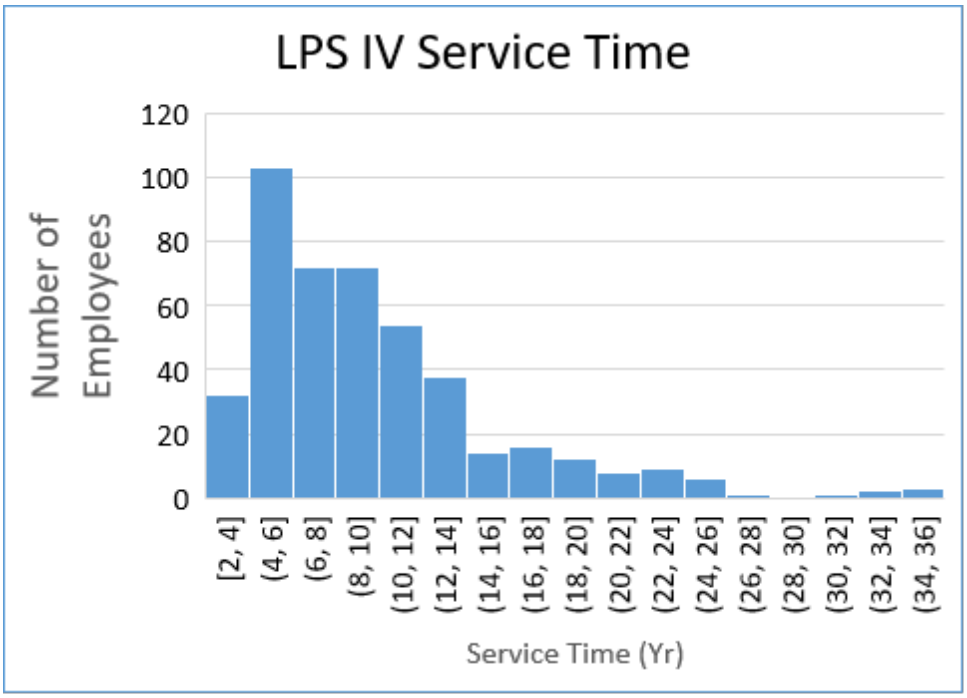

Figure 66 LPS IV Service Time Histogram.

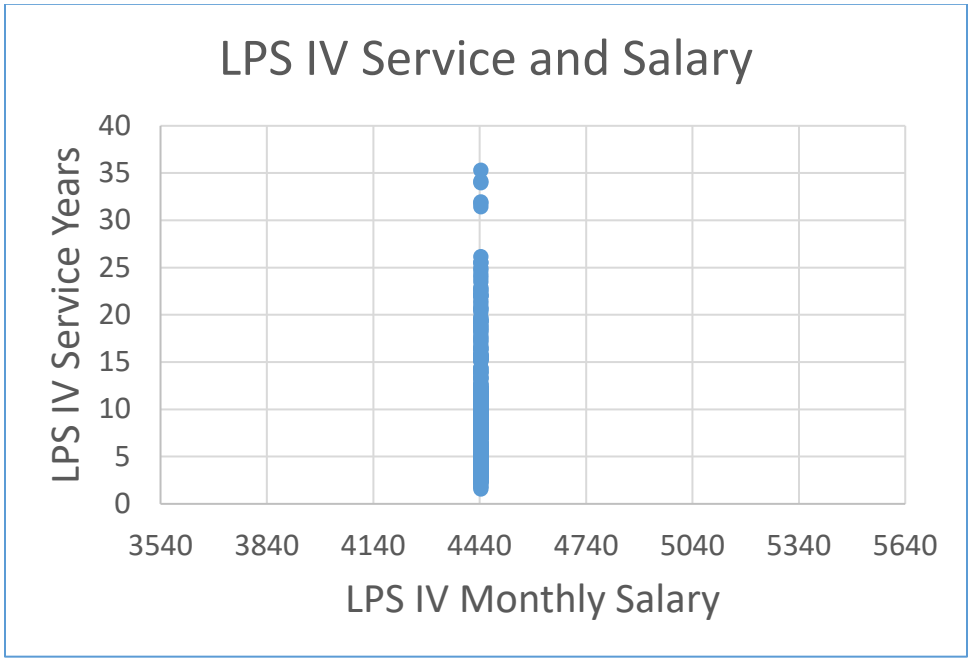

Figure 67 LPS IV Monthly Salary and Service Time.

5.2.1.1.4. LPS V

There are 162 LPS Vs, making them the smallest subset of LPS workers. Figure 68 shows a histogram of LPS V service time. Service times are longer, with the bulk in the 4-to-14-year range. There are some employees with service times of 30+ years.

Figure 69 shows a plot of monthly salary versus service time. Every LPS V makes the same salary, $5,203 monthly and $62,439 annually. The $62,439 salary is 49% of the salary range for this job title. The X-axis represents the B 20 monthly salary range.

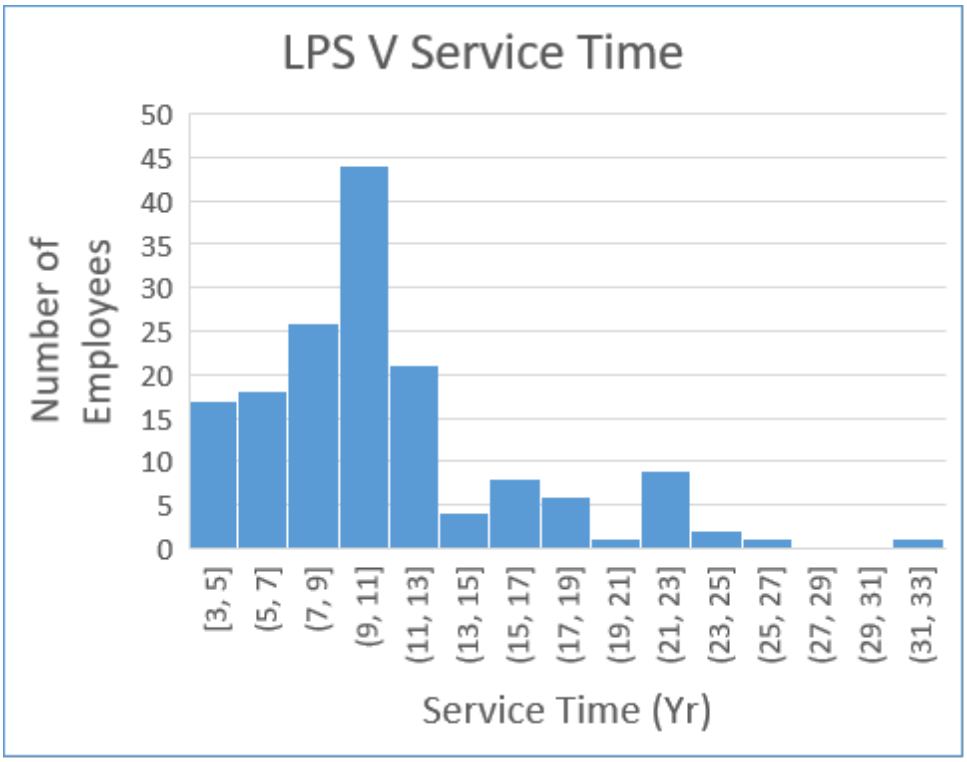

Figure 68 LPS V Service Time Histogram.

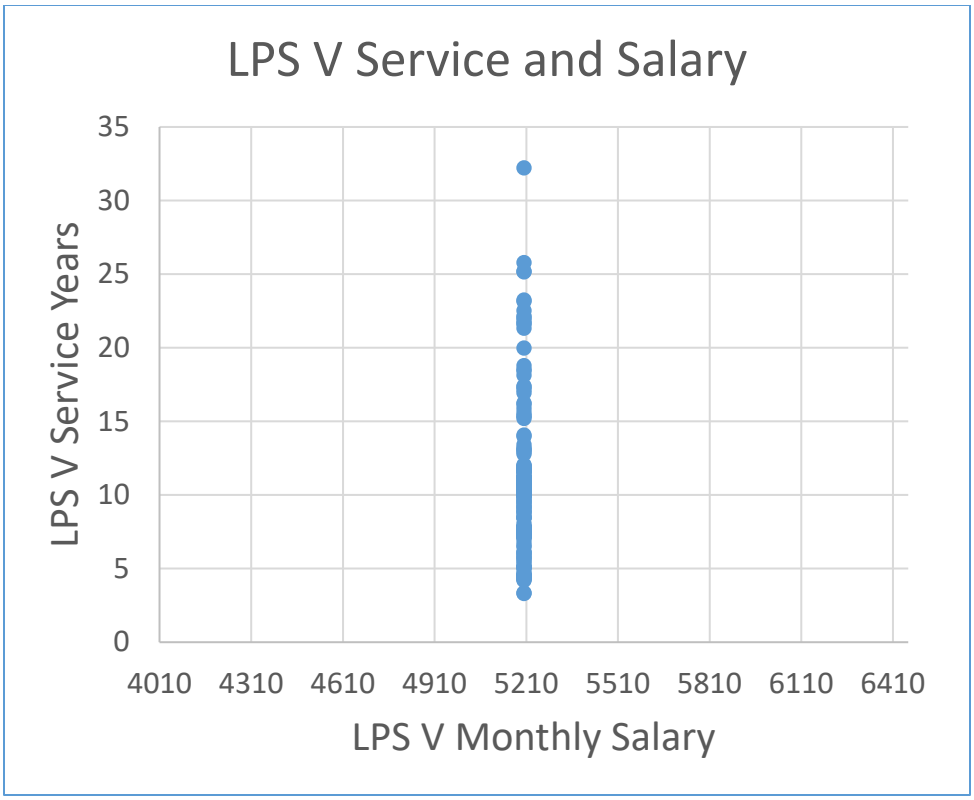

Figure 69 LPS V Monthly Salary and Service Time.

5.2.1.2. All DLD Employees

A review of all DLD employees together shows that all DLD employees are in similar salary bins. Virtually everyone with the same state job title has the exact same pay. There is no salary spread across the available salary range. Figure 70 shows all full time DLD employees at the percentage of the salary range assigned for their job. All DLD employees have salaries in State Salary Schedules A (A13 or A15) or B (B14 to B34). The percentage of salary range is from 7% to 87%, with 90 percent of all DLD full time employees paid at less than 50% of their salary range (the middle of the pay scale) for their job description.

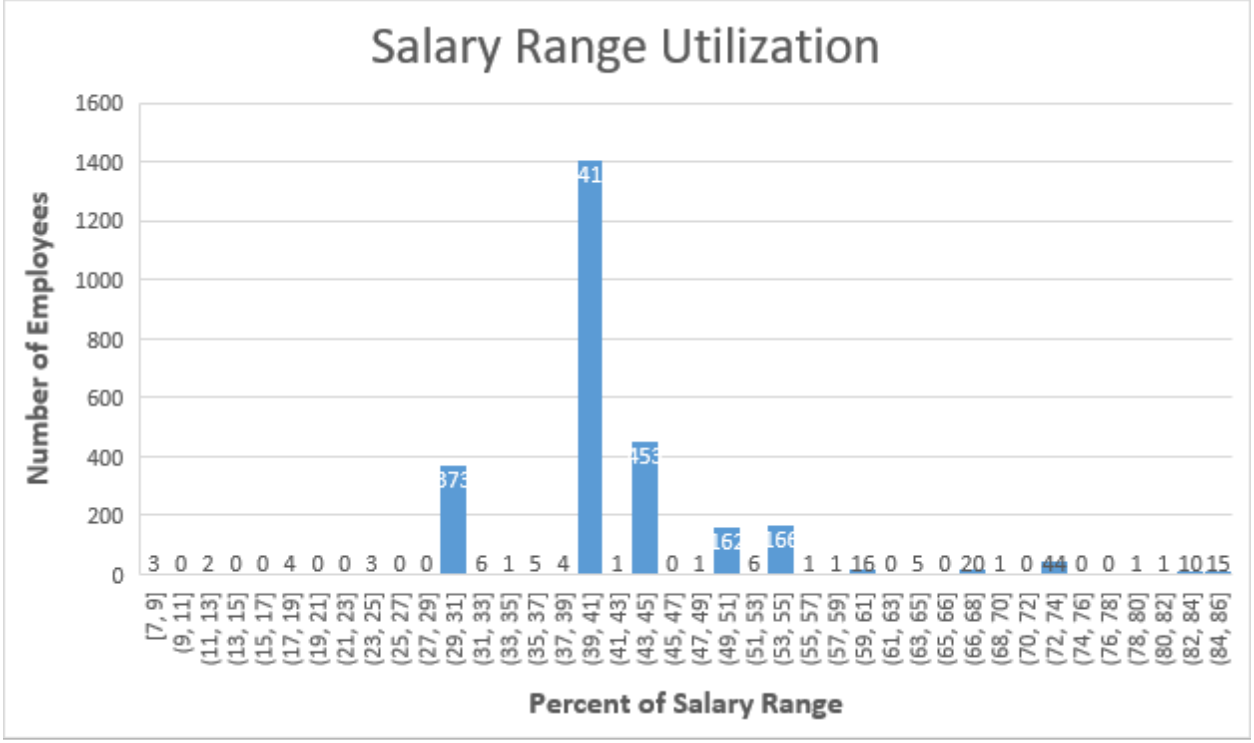

Figure 70 Salary Range Utilization Histogram.

5.2.1.3. DPS Troopers (Trooper Trainee to Captain)

The Trooper Trainee to Corporal job descriptions are contained in one job family and more management level job titles are in the job family from Sergeant to Major. This review will cross job families from Trooper Trainee to Captain.

The salary schedule for employees in these families has no ranges. They are strict salary levels with minimum service times, but no maximum service times. This can result in employees with higher service times in groups with lesser service time minimum requirements, increasing the overall spread of service times for employees with the same salary. Table 32 shows a combined table of the SAO job descriptions and Salary Group C pay table. Shown is the minimum service time required for each position and a salary for those in each salary group.

Table 32 Job Title, Salary Group, and PayScale.

Job Title	Salary Group	< 4 Years of Service	≥ 4 Years of Service	≥ 8 Years of Service	≥ 12 Years of Service	≥ 16 Years of Service	≥ 20 Years of Service
Trooper Trainee	C1	$48,255					
Probationary Trooper	C2	$52,441					
Trooper/Corporal	C3	$62,715	$76,452	$81,895	$85,513	$89,464	$93,414
Sergeant	C4		$85,696	$91,504	$95,254	$99,461	$101,941
Lieutenant	C5		$97,306	$103,579	$107,560	$112,133	$114,948
Captain	C6		$121,221	$125,343	$127,874	$130,417	$131,982

5.2.1.3.1. Trooper Trainee

There are 179 Trooper Trainees. Figure 71 shows a plot of monthly salary versus service time. All Trooper Trainees get the same salary ($48,255 annually, Schedule C - Group 1), and most have less than one year of service time. There are a few (2) with 4 and 5 years of service.

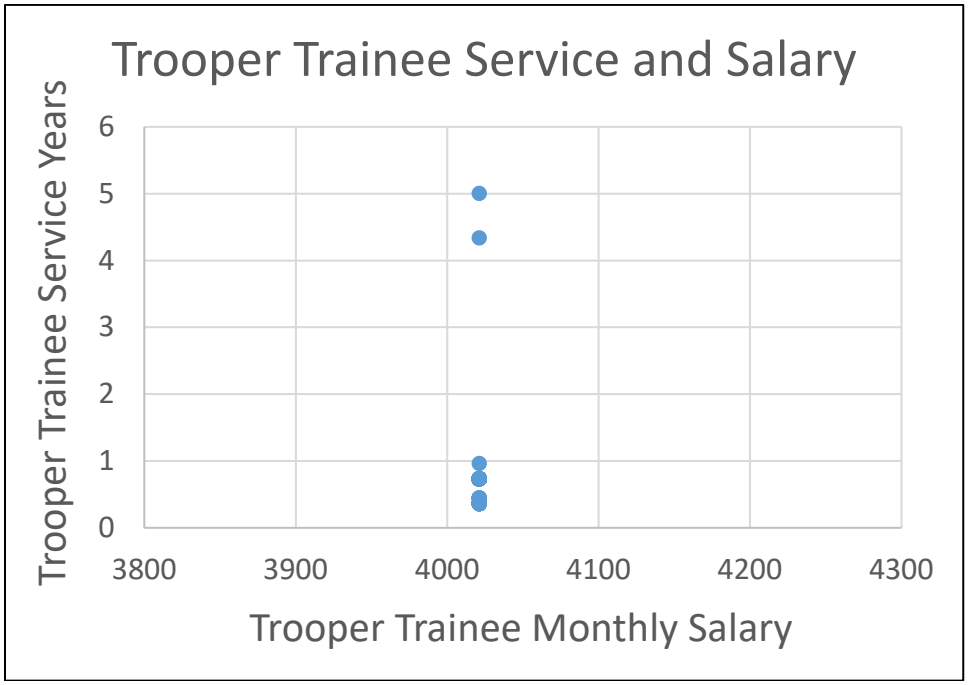

Figure 71 Trooper Trainee Monthly Salary versus Service Time.

5.2.1.3.2. Probationary Trooper

There are 201 Probationary Troopers. Figure 72 shows a plot of monthly salary versus service time. All Probationary Troopers get the same salary ($52,440 annually, Schedule C - Group 2), and most have one to three years of service time. There is one person with five years of service.

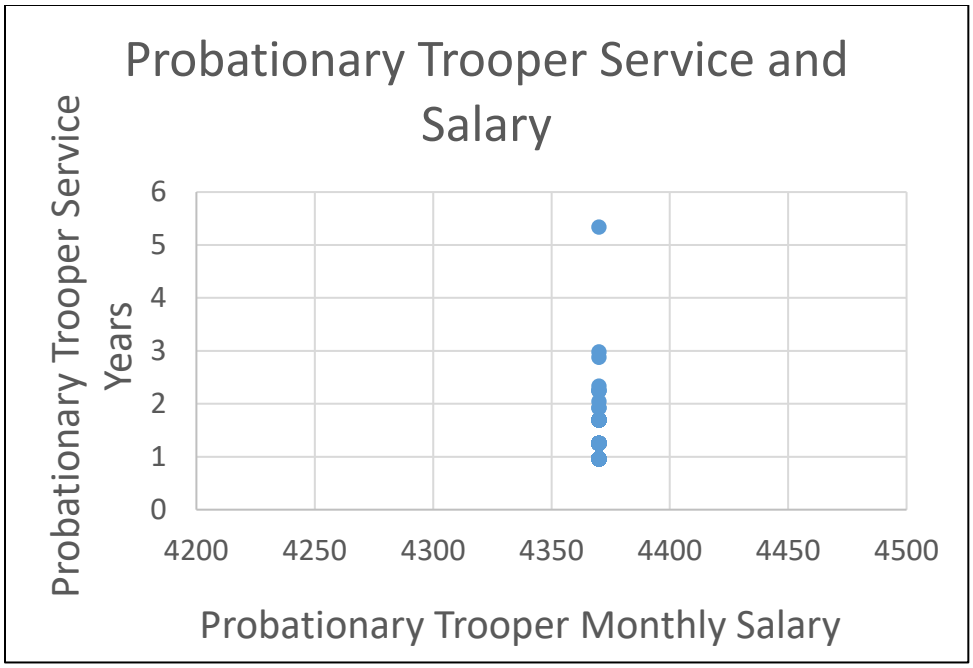

Figure 72 Probationary Trooper Monthly Salary versus Service Time.

5.2.1.3.3. Trooper

There are 1,922 Troopers. Figure 73 shows a plot of monthly salary versus service time. Troopers are in Salary Schedule C - Group 3 (there are six Steps). All six steps are used. The salary range is $62,715 to $93,414. Service Time is one to 45 years.

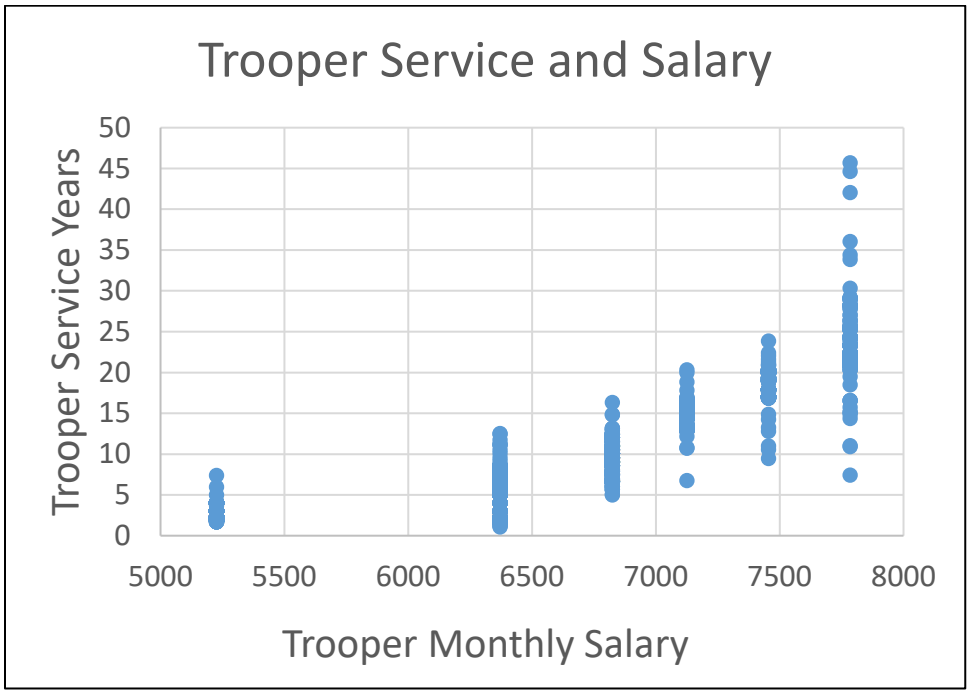

Figure 73 Trooper Monthly Salary versus Service Time.

5.2.1.3.4. Corporal

There are 275 Corporals. Figure 74 shows a plot of monthly salary versus service time. Corporals are in Salary Schedule C - Group 3 (there are six Steps). All six steps are used. The salary range is $62,715 to $93,414. This is the same range as Troopers. Service Time is two to 42 years.

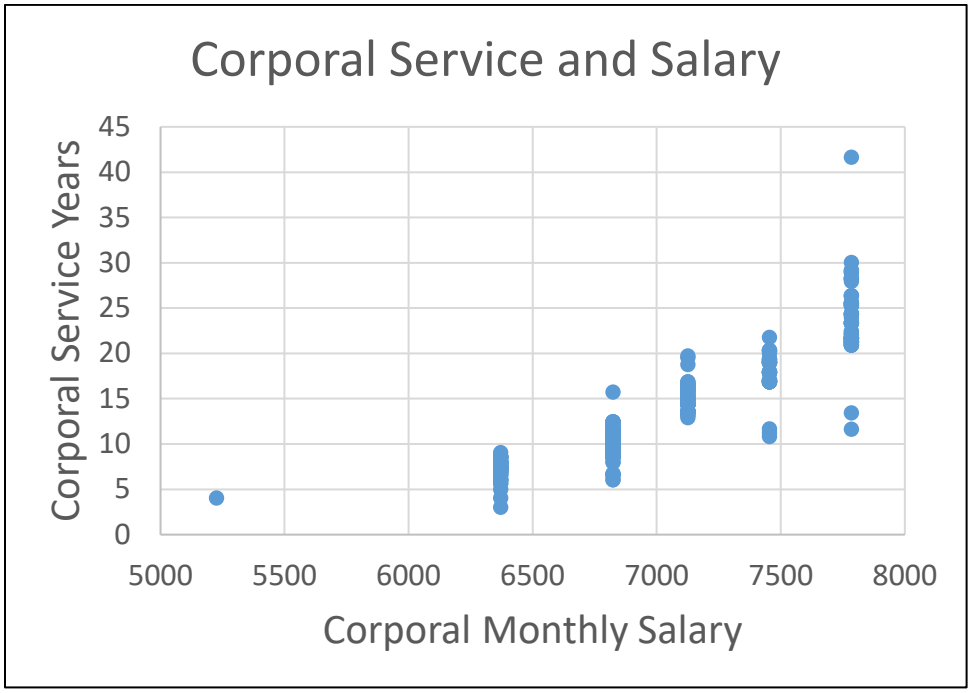

Figure 74 Corporal Monthly Salary versus Service Time.

5.2.1.3.5. Sergeant

There are 1,269 Sergeants. Figure 75 shows a plot of monthly salary versus service time. Sergeants are in Salary Schedule C - Group 4 (there are five Steps). All five steps are used. The salary range is $83,696 to $101,941. Service time is 2.6 to 52 years. There is one Sergeant who shows a salary of $62,715, and this is not on the C4 salary schedule.

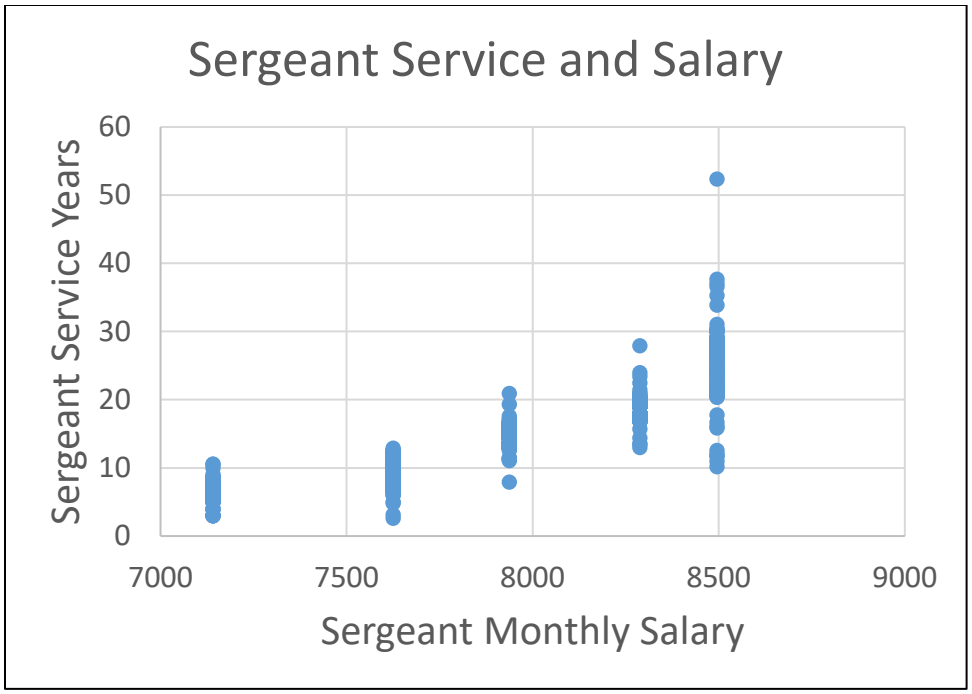

Figure 75 Sergeant Monthly Salary versus Service Time.

5.2.1.3.6. Lieutenant

There are 234 Lieutenants. Figure 76 shows a plot of monthly salary versus service time. Lieutenants are in Salary Schedule C - Group 5. There are five Steps. No one is on the bottom step. The salary range is $103,578 to $114,948. Service Time is 8.5 to 46 years.

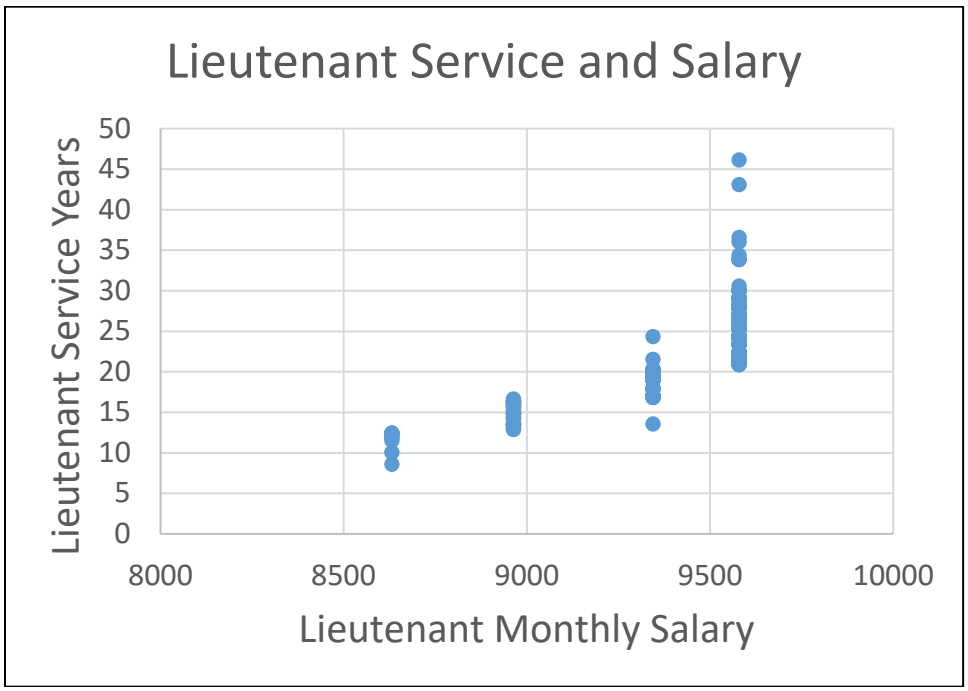

Figure 76 Lieutenant Monthly Salary versus Service Time.

5.2.1.3.7. Captain

There are 75 Captains. Figure 77 shows a plot of monthly salary versus service time. Captains are in Salary Schedule C - Group 6. There are five Steps. No one is on the bottom step. The salary range is $125,343 to $131,982. Service Time is 9.5 to 39 years.

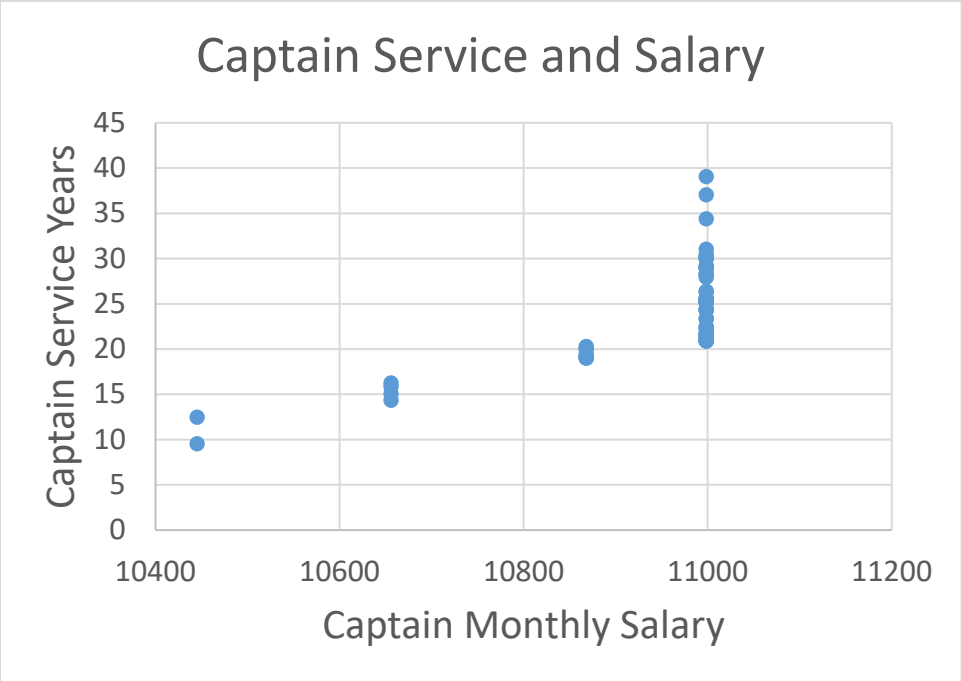

Figure 77 Captain Monthly Salary versus Service Time.

5.2.1.4. LPS Salary Analysis Across Time

Using data from a previous DLD study and current data, the study team compared 2019 and 2023 LPS HR data. The Texas Legislature gave state employees a 5% or minimum of $250 across-the-board pay raise on July 1, 2023, this pay raise is evidenced in the current data. Only those LPS that were employees from 2019 to 2023 were included in this evaluation. This produced a 1 to 1 correspondence of salary comparison over that time. 1,343 LPSs met this criterion. The comparison produced the following:

- 488 employees that were LPS II in 2019 were still working for DLD in 2023.
    - 455 of these received a promotion to LPS III or higher.
    - 32 LPS IIs only received the legislative across the board increase of $250/month given in July 2023.
    - 1 LPSII moved from full to part time (with a corresponding reduction in salary).
- 541 employees that were LPS III in 2019 were still working for DLD in 2023.
    - 117 of these LPS IIIs received a promotion to an LPS IV or V.

- All but a few (see below) received only the $250 across the board legislative pay increase.

- 252 employees that were LPS IV in 2019 were still working for DLD in 2023.
  - 49 of these received a promotion to LPS V.
  - All but a few (see below) received only the $250 across the board legislative pay increase.

- 62 LPS Vs that were LPS V in 2019 were still working for DLD in 2023.
  - These employees only received the $250 across the board legislative pay increase.
  - Fifteen of the 1,343 LPS received a demotion between 2019 and 2023, going from an LPS III to an LPS II, or LPS IV to an LPS III, while one person went from LPS IV to LPS II.
  - Of the 1,343 LPSs present from 2019 to 2023, the 721 LPSs that did not get a promotion only got the $250 legislative across-the-board increase or a demotion.

5.2.1.5. LPS Salary Competitiveness

In September 2022, the SAO released "A Biennial Report on the State's Position Classification Plan for the 2024-2025 Biennium". In Appendix 2, the SAO analyzed many job titles relative to market competitiveness. They developed a benchmark index comparing the midrange of a job description salary to the market. The index was defined as the state midrange salary divided by the market rate for that job description. Parity scored 1.00. State salaries with indices below 1.00 indicated the state position was under market rate, essentially a fraction of the market rate. Index values above 1.00 indicate the state was above market rate.

In the LPS job family, SAO only published the evaluation for LPS I and found that job title at only 92% of the market rate for pay. They did not publish LPS II and above in their report. LPS I midrange in 2022 was $35,819. In 2022, SAO did not recommend a job salary classification adjustment for any LPS classifications.

The SAO's assumption was that on average, state employees in a particular job title earn the midpoint of the pay range for that job description, with a spread both above and below in the range.

For DLD, this is not the case. LPS II are paid at 29% of the range. This means that they are already starting out underpaid. Additionally, all LPS II are paid the same 29% of the range. There is no spread of salaries.

LPS III, which constitutes 52% of all DLD employees, are paid 40% of the salary range. There is no spread of salaries.

LPS IV are paid at 43% of the range. There is no spread of salaries.

LPS V are paid at 49% of the range. There is no spread of salaries. Only at the LPS V level, is the SAO assumption of midrange pay valid.

This means that only the LPS V have a directly comparable salary to the midrange assumed by the SAO to be typical enough to compare to market salary rates.

The error in their study, as it pertains to DLD, is that they assumed the average salary was at the midpoint of the range. With DLD LPS salaries substantially below the midpoint of the salary range (LPS II are at 29% of the range and LPS III at 40% of the range) the SAO market rate index greatly overstates the competitiveness of the DLD salary.

5.2.1.6. Merit Raises and One-Time Merit Payments

This section describes:

- The merit systems available to DLD,
- What merit systems are used at DLD,
- The implications for employees, and
- A simulation of a merit salary increase program.

5.2.1.6.1. What Merit Systems are Available?

Texas statute allows two types of merit pay, merit pay increases or one time merit bonuses. The following it from the CPA website.[138]

> General Provisions
>
> Salary Adjustments for State Agency Employees
>
> State agencies are authorized to use two types of merit methods to reward employee performance:
>
> A merit salary increase (reason code 025)
>
> A one-time merit payment (reason code 035)
>
> Merit Salary Increase (Reason Code 025)
>
> A merit salary increase is an addition to the base salary the employee receives each pay period.

[138] Texas Government Code Section 659.255 https://texas.public.law/statutes/tex._gov't_code_section_659.255 and Texas Comptroller Website at https://fmx.cpa.texas.gov/fm/pubs/paypol/general_provisions2/index.php?section=salary_adjust&page=salary_adju

> For Schedule A employees, agencies must provide an increase of at least $30 per month. The increase in salary is limited to a salary at or below the maximum of the employee's salary group and the agency budget.
>
> For Schedule B employees, agencies may award employees an increase to any amount within their salary group. There is no specified minimum increase. However, the increase cannot cause the new rate to exceed the maximum of the employee's salary group.
>
> One-Time Merit Payment (Reason Code 035)
>
> A one-time merit payment is a single payment to an employee that does not change the employee's base salary.
>
> Agencies are not limited by statute to a certain percentage or amount for a one-time merit payment.
>
> This type of award is ideal for employees who are at or near the maximum rate for their salary group. As it is a one-time payment and not added to the employee's base salary, the maximum of the salary group is not impacted.
>
> Employees on Schedule C are not eligible for merit salary increases; however, employees on schedules A, B and C are eligible for one-time merit payments.

This means that merit salary increases increase the base salary of the employee but must result in a salary that is still in the employee's pay group. Anyone whose base salary is close to or at the top of the salary pay group may not have sufficient salary group range available to receive a merit salary increase.

There is no employee at DLD who is precluded from a merit salary increase because they are near or at the top of their salary group range. Employees range from 7% to 87% of their salary group range.

CPA states that one-time merit payments are "ideal for employees who are at or near the maximum rate for their salary group." These represent one-time payments and enable an agency to continue to reward performance for employees that cannot receive a merit salary increase because there is no room left in their salary range. This does not preclude an agency from using one-time merit payments for other employees.

Employees in Salary Schedule C (at DPS these are the law enforcement job titles), are not eligible for a salary merit increase (because Salary Schedule C has distinct steps driven by minimum service times and not a salary range like the Schedules A and B), but they are eligible for one-time merit payments.

5.2.1.6.2. What Merit Systems are Used at DLD?

Data from DLD shows that DLD does not award Merit Salary Increases. This is evidenced through salary data showing that virtually all employees in a job description make the exact same salary.

Salaries remain the same, except when a person receives a legislatively mandated across-the-board pay raise or a promotion to a new job description within a job family (ex: LPS II to LPS III).

DPS and DLD award One-Time Merit Payments. DLD-supplied data shows that in FY 2023, DLD awarded 668 one-time merit payments totaling $2,213,620, with $1,625,752 going to LPS jobs.

DLD-supplied employee and salary data showed an annual aggregate salary of $137,142,762. The money required to give half of all employees a 3.4% raise in salary would be $2,331,427. This is remarkably similar to the amount spent on one-time merit payments. DLD may see this as increasing their HR budget, but this is tempered by retirements and resignations that lower the annual HR costs. If the full salary range were used for a job title, in theory, longer-serving employees that retired or left would be filled by people making less in salary and it would take time for those employees to attain the higher salary of those who left. In reality this may only produce a small to possibly no increase in overall HR costs.

5.2.1.6.3. The Implications for Employees

A previous study showed that most DLD employees (72%) plan to make a career at DLD. "Making a career" at a state agency generally means that a person plans to work there until they retire. This means that they are interested in their retirement benefits. The previous study also asked employees about the parts of their compensation package that meant the most to them, the three highest ranking answers were salary, retirement, and insurance in that order. This reiterates that many employees are interested in their retirement benefits.

There are many articles and employment/financial websites[139] that describe the use of salary increases versus bonuses (one-time merit payments are bonuses). Some from the employee's point of view and some from the employer's point of view. All employers referenced were private-sector companies and not government agencies. Below is the gist of the discussion.

For employees:

- Retirement benefits are calculated based on salary. One-time merit bonuses do not figure in the retirement calculation.
- Loans and Mortgage applications generally do not include bonuses unless they are seen to be regular and of a similar dollar magnitude. This means a person may not qualify for a home loan or may qualify for only a reduced amount based on only salary only.
- One-time merit payments are generally larger dollar amounts than what would be realized in a salary increase and are available immediately.

For employers:

- Raises represent a lower up-front cost but are an on-going cost and not easily adjustable for economic conditions.

[139] See Infra Notes: 138 through 142

- Bonuses represent a higher up-front cost, but they are not an on-going cost and can be eliminated based on company profitability.

5.2.1.6.4. DLD LPS Merit Study Simulation

The research team conducted a simulation for implementing a salary merit system to see the impact on the HR budget.

This study used the following assumptions:

- The number of employees at each LPS level remains constant at current levels.
- Turnover would remain at current levels.
- A salary merit raise would be 3.4% of salary.
- DLD would have merit money sufficient to award 50% of LPSs a salary merit raise.
- When turnover happens, employees would fill the position at the current Year 0 salary (the salary that all LPS X currently make).
- All salaries start at current levels.
- For the simulation, all merit raises were awarded randomly.
- For the simulation all turnover was selected randomly.

This involved using an Excel spreadsheet with a VBA macro that would choose an input percent to randomly remove from the list of LPSXs. Year 0 represents the current salaries of all LPS employees. The analysis was performed for five years to produce salaries at Year 1, 2, 3, 4, and 5. Each LPS level was split out and evaluated separately using the current turnover and salary levels. Turnover was randomly selected and those employees were deleted from the LPS workforce. Replacements were added at the current salary level. Fifty percent of each new LPS level was randomly selected for a 3.4% merit increase in salary. The results of the simulation are presented in Table 33.

Table 33 Merit Simulation Results.

Year	LPSII	LPSIII	LPSIV	LPSV	Total
0	$15,073,742	$ 65,048,610	$24,152,963	$10,115,099	$114,390,414
1	$15,515,317	$ 66,184,327	$24,564,332	$10,286,909	$116,550,885
2	$15,776,304	$ 67,195,986	$24,966,368	$10,450,930	$118,389,588
3	$15,963,477	$ 68,128,693	$25,343,725	$10,611,651	$120,047,546
4	$16,090,405	$ 68,957,103	$25,717,145	$10,752,609	$121,517,262
5	$16,217,900	$ 69,741,684	$26,099,885	$10,910,987	$122,970,456

Figure 1 shows a plot of this data. One can see that the annual HR costs, using the assumptions above, is not linear and begins to slowly level off after several years. Figure 2 shows the amount of increase each year. This appears to level off around $1.5 million per year.

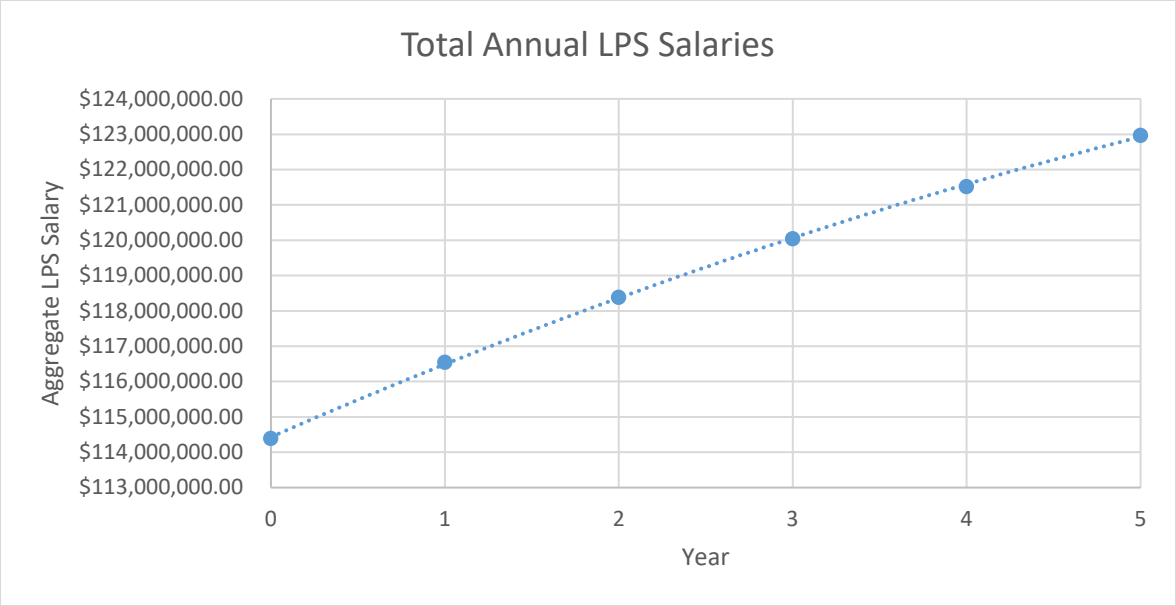

Figure 78 Aggregate LPS Salary with a Merit Program with Time.

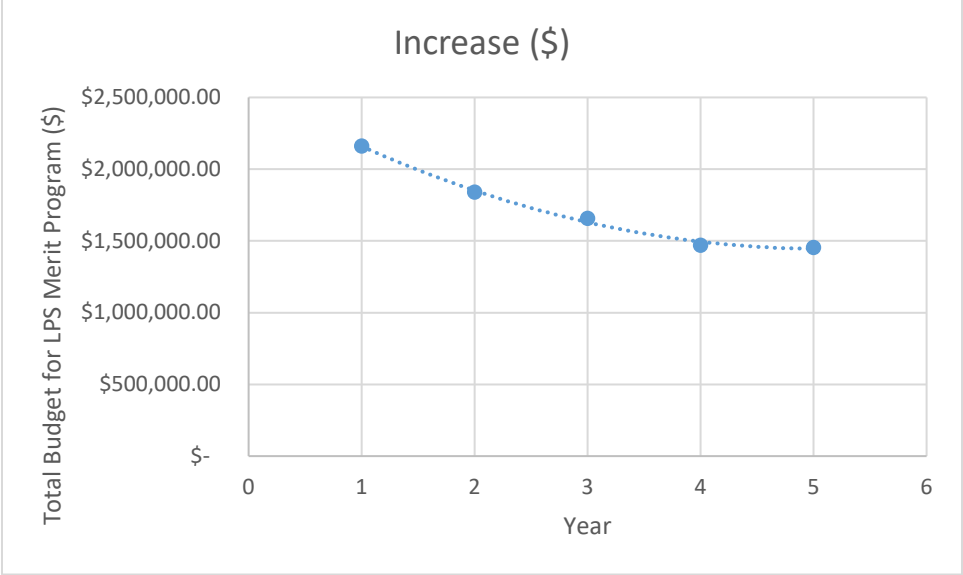

Figure 79 Annual Budget Increase for Merit Program.

There are things that might change this analysis, to include:

- A reduction in the turnover might increase HR costs as fewer replacement employees, at lower starting salaries, would be needed. (This would result in less training costs.)
- Decisions in starting salary levels for various LPS levels. This analysis assumed the current levels for each LPS level. After several years, promotions to the next salary group might

be less than the current salary. (Maybe a 6.8% increase for a promotion would be sufficient if one knows there are merit raises that could be in the future.) This might decrease the overall salary costs.

- The percentage of employees that would get a merit raise could change. (This analysis assumes 50%. A smaller percent would reduce the aggregate cost.)

This simulation shows that for $2 million a year initially, reducing over time to about $1.5 million, DLD could implement a salary merit program. This could serve to reduce turnover and provide an incentive for employees to increase their productivity and effectiveness.

5.2.1.6.5. Summary

The following represents points of comparison and summary from this section.

- LPS employees are almost exclusively in salary bins according to their job title. There are very few employees that are paid other than the standard for that title. They are outliers.
- There are only a few outlier LPS employees that are paid other than the standard pay for that job title and there are some employees that have high service times that are in lower LPS classifications.
- All LPS titles are in Salary Classification B, which allows a wide range of salaries for each LPS job title, but this range is not used.
- All DLD job titles are also in salary bins with virtually all employees with the same job title making the exact same salary, not spread across the salary range.
- Ninety percent of DLD employees are in positions for which the salary level is less than 50% of the salary range for that position.
- DPS Law Enforcement employees from Trooper Trainee to Captain have strict salary bins in Salary Classification C.
- The Salary Classification C has service time minimums and salary steps, which allows for employees to progress in salary in one job description. Data shows that they do progress in salary.
- The SAO evaluated state job classifications for salary competitiveness but did not recommend any change for LPS titles statewide.
- The SAO's competitiveness evaluation assumed that there is a spread of salaries centered on the middle of the range for each job level. This assumption is not correct for DLD. Because 90 percent of all DLD full time employees paid at less than 50% of their salary range, any analysis, according to the standards of SAO, underestimates DLD salary competitiveness.
- Currently, DLD only gives one-time merit payments. This may be because they are not able to secure the budget to account for the long-term salary costs this requires.

- For employees, some may like a one-time merit payment (bonus), but in the long-term, especially if they plan to retire from DLD, a salary increase would serve them better. This also has implications for employee turnover and retention.
- A merit salary increase would cost more for the DLD HR budget, but a simulation shows it is modest. It may have the effect of reducing turnover and improving efficiency.

5.2.2. Employee Turnover.

Employee turnover can seriously affect any employer. DLD is not immune from turnover having a significant impact on operations and effectiveness. Jobvite[140], PeopleKeep[141], Qualtrics[142], and Gallup[143] all say that the cost of employee turnover can be from one half to two times the annual salary of the employee. Most say this estimate is conservative. While the true cost of employee turnover for DLD is not known, DLD customer-facing employees need a significant amount of training in order to be self-sufficient and operate on their own. This chapter reviews employee turnover from a statewide perspective and DLD perspective.

5.2.2.1. Statewide Employee Turnover

The SAO released its publication "An Annual Report on Classified Employee Turnover for Fiscal Year 2023" in January 2024.[144] This publication explores employee turnover in the state, at individual state agencies, and for other key analyses. The report states that the statewide turnover rate went down from 22.7% in FY 2022 to 18.7% in FY 2023.

The SAO examined turnover rates by annual salary. Table 34 shows this information. Turnover rates are the highest in lower paying positions. The data shows that these lower paid positions (making less than $50,000 annually) comprise 46.9 percent of the state workforce.

Table 34 Turnover Rates by Annual Salary Range.

Annual Salary Range	Turnover Rate	Percent of all State Employees
$19,999 or less	NA	0%
$20,000 to $29,999	37.7%	3.7%
$30,000 to $39,000	28.0%	13.9%
$40,000 to $49,999	25.4%	29.3%
$50,000 to $59,999	12.5%	23.5%
$60,000 to $69,999	10.7%	9.6%
$70,000 or more	Less than 10%	20.0%

[140] https://www.jobvite.com/blog/cost-of-employee-turnover/#:~:text=The%20true%20cost%20of%20employee,annual%20salary%20to%20replace%20them
[141] https://www.peoplekeep.com/blog/employee-retention-the-real-cost-of-losing-an-employee
[142] https://www.qualtrics.com/experience-management/employee/cost-of-employee-turnover/
[143] https://www.gallup.com/workplace/247391/fixable-problem-costs-businesses-trillion.aspx
[144] SAO: An Annual Report on Classified Employee Turnover for Fiscal year 2023. January 2024 Report 24-702. https://sao.texas.gov/reports/main/24-702.pdf

SAO did not look at turnover rates for individual job titles but did look at some job families. A job family consists of several job titles and represents a career ladder. The job family with the highest turnover rate was Juvenile Correctional Officer with a turnover rate of 71.8%. The highest turnover rates were classified in criminal justice, employment, social services, and custodial. The License and Permit Specialists job family showed a statewide, all agency turnover rate of 11.8%.

SAO also examined turnover rates for selected state agencies. These are agencies with more than 1000 employees. SAO shows that at DPS, the turnover rate in FY 2023 increased to 9.7% from 8.9% in FY 2022. SAO attributes the higher DPS turnover to an increase in the number of employees that retired. However, this analysis is for all DPS employees, including law enforcement and DLD.

5.2.2.2. Review of DPS DLD Employee Turnover and Demographic Data

This review was conducted using employee information obtained from the DPS. The data was obtained in the form of a spreadsheet with all employee terminations from January 2020 through January 2024. Additionally, the data also contained employee counts for every month from January 2020 through January 2024. Employee turnover was determined for LPS employees and also for all DLD employees.

5.2.2.2.1. LPS Employees

LPS employees constitute the largest job family at DLD. In reviewing termination data from DLD and the total DLD FTEs, a plot of employee separation per month can be tabulated. This is shown in Figure 80. This data shows that for the past three years, there has been a spike in employees leaving DLD in July.

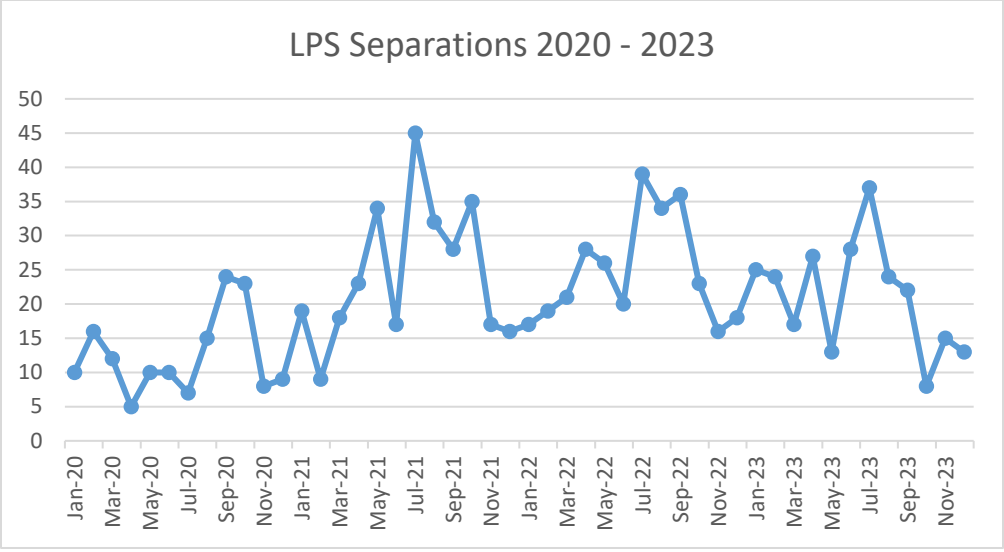

Figure 80 LPS Separations by month (2020 to 2023)

Figure 81 shows the same data as Figure 16, but with added data from a previous project the research team conducted for DLD. This added data covers a time (September 2019) where employees were reclassified, and salaries were upgraded, giving all LPS a salary increase. This figure shows that separations went down (starting in July 2019, in anticipation of the September salary increase) and stayed down for about a year, but began an upward trend around September 2020, while adding higher spikes in July of each year. One of the recommendations from that earlier report included reviewing salary competitiveness at lease every two years to keep job satisfaction higher and turnover lower.

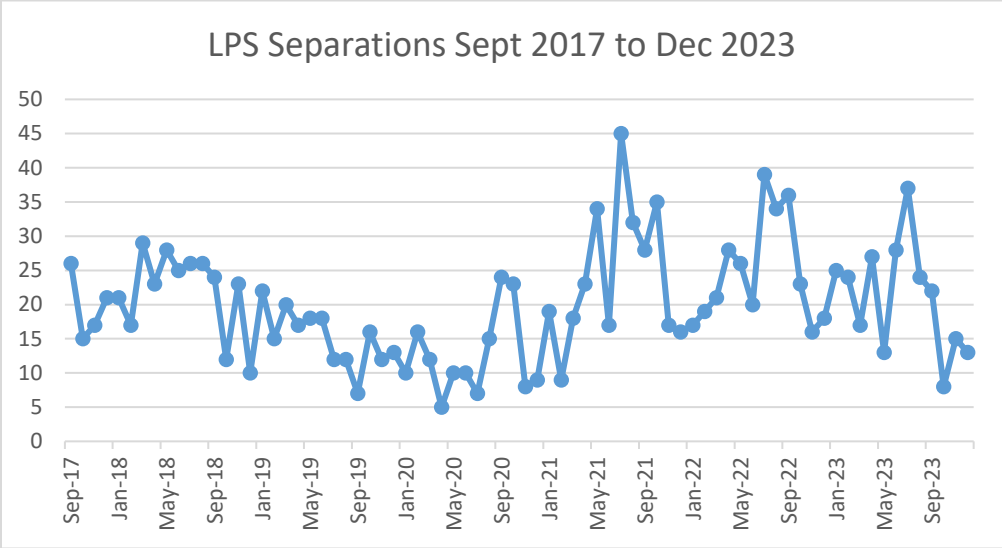

Figure 81 LPS Separations – Sept. 2017 to Dec. 2023

5.2.2.2.2. All DLD Employees

When the analysis shown in 2.2.1 is extended to all DLD employees, the result is shown in Figure 82. This shows that due to the large numbers of LPS employees, the separations of LPS drive the total separations. Few separations occur in all the rest of the DLD employees. This shows that the separation problem is driven by LPSs, which constitute most of DLD employees.

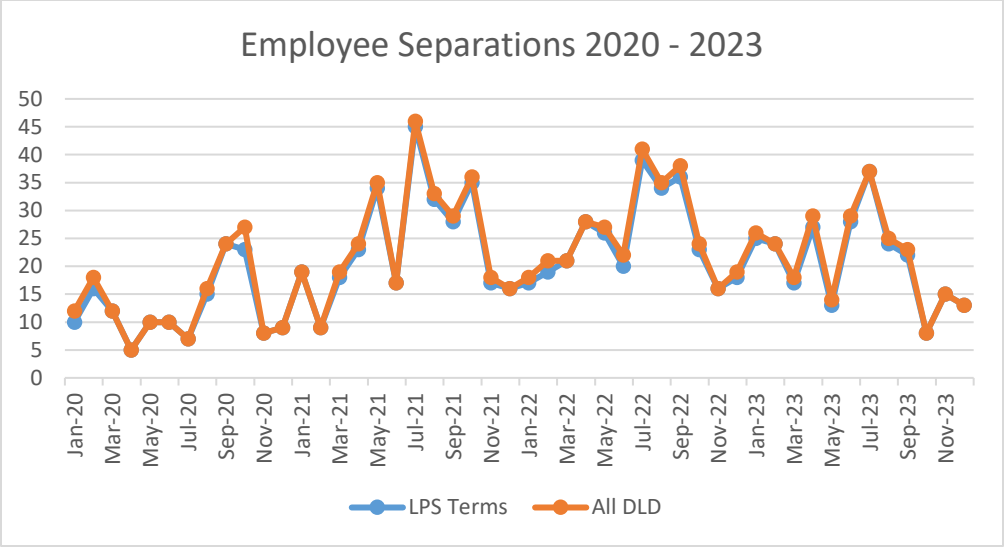

Figure 82 All DLD Separations and LPS Separations.

5.2.2.2.3. DLD Turnover Rate

Table 35 shows the turnover rates, by year, for All DLD LPS Employees and All DLD Non-LPS employees. This data shows similar information as Sections 2.1 and 2.2. LPS suffer a much greater turnover rate than all other jobs at DLD. LPS are the majority of employees at DLD, and their turnover is two to three times the turnover of non-LPS jobs. SAO FY 2023 information shows Texas State Employee turnover rate at 18.7% and statewide LPS turnover rate at 11.8%. By this measure, DLD has below average turnover; however, this turnover rate puts a large burden on DLD as much training is required for LPSs to be self-sufficient. Some studies put the cost of training new employees as high as half to two times of the average salary (see Section 2.4).

Table 35 Percent Turnover, LPS and Non-LPS Employees.

Year	LPS Turnover Rate	All Non-LPS Turnover
2020	5.37	3.00
2021	10.03	2.67
2022	10.59	4.39
2023	9.24	2.53

5.2.2.2.4. LPS Turnover by Job Title

Breaking down the job separation data generates Table 36, which shows the LPS turnover according to job title. This data is only available for 2023. This shows that LPS II, the entry level position, has an extremely high turnover rate. This is even higher than the state-wide rate from the SAO. This position is the entry level, where most training occurs, and is the cohort of employees that will fill the ranks of other LPS positions in the future.

Table 36 2023 LPS Turnover by job Title.

Job Title	2023 Turnover Rate (%)
LPS II	22.9
LPS III	9.8
LPS IV	4.5
LPS V	5.7

5.2.2.2.5. LPS Demographics

The DLD employee data also includes gender. This was used to generate Figures 83 and 84. Figure 83 shows the numbers of employees at each LPS level, by gender. Figure 84 shows the gender by percent of each LPS level. One can see that all LPS levels, employees are about 80% female. This is the same as was found in the previous study.

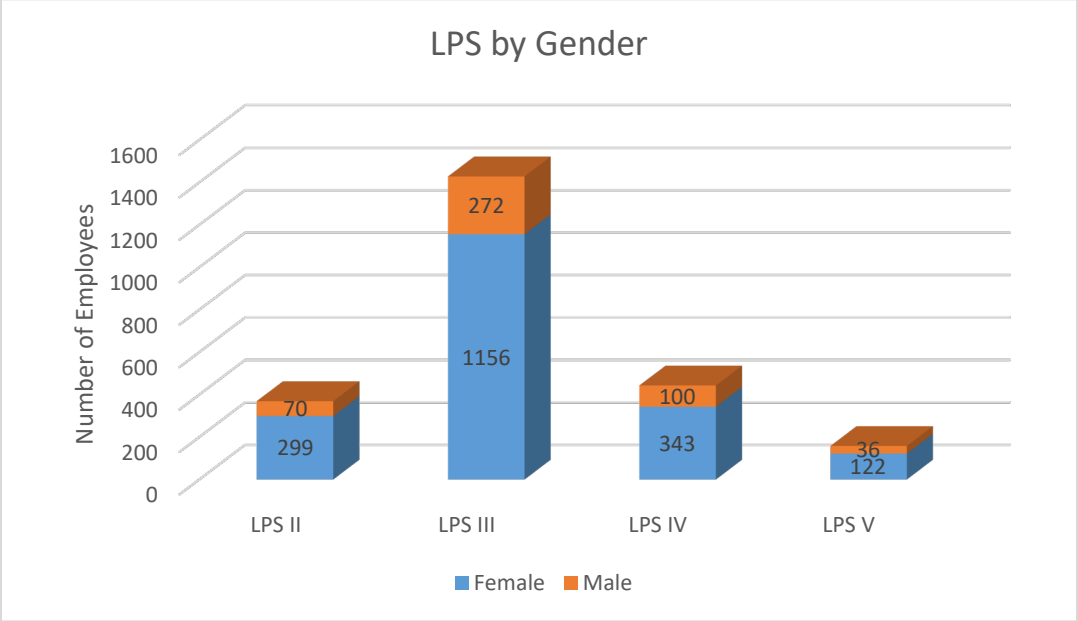

Figure 83 LPS by Gender.

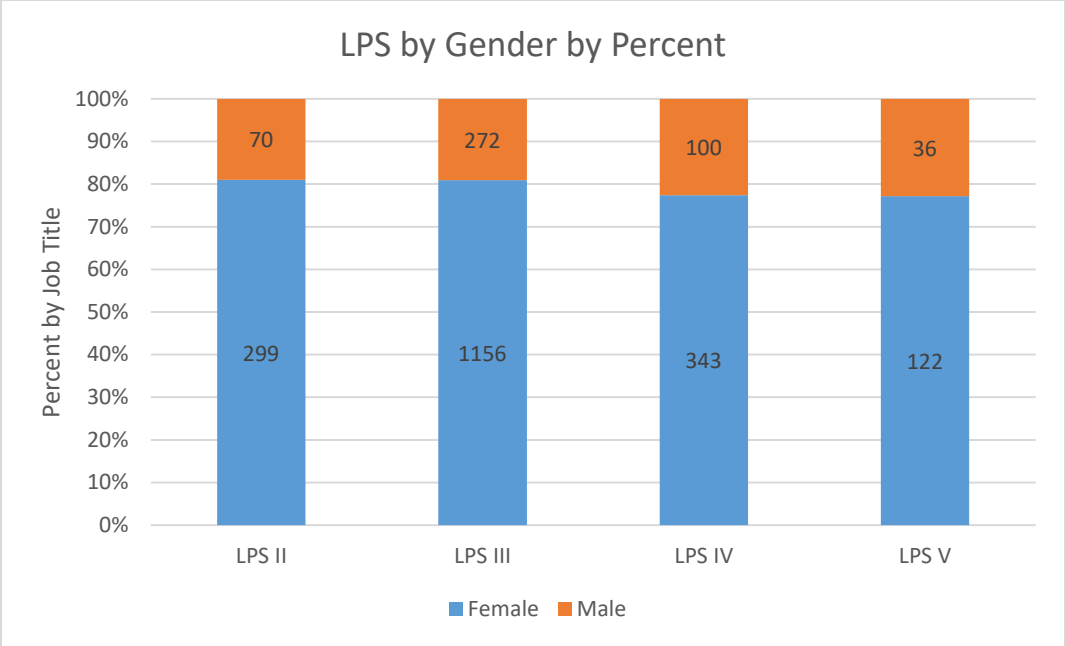

Figure 84 LPS Gender by Percent.

5.2.2.3. Where is Turnover happening?

Organizational strength and vacancies are a moving target as, when there are vacancies, management tries to fill those positions. DLD gave the research team data as of October 2023 for analysis. This was one snapshot in time, but a general analysis can be made. Additionally, DLD has had significant turnover, such that while October 2023 may not be current, it is likely that the data is representative of current FTE numbers.

Data obtained included vacancies and FTE caps for every DLD location in the state. This data was merged with other information from DLD classifying each location size as small, medium, large, and mega.

Table 37 shows the Mega Centers and their open FTEs and FTE caps. These are the DLOs with the most employees and most customer throughput. As shown, 13 of 14 have significant understaffing. Only the Corpus Christi Mega center, though understaffed, is only minimally understaffed as compared to all other mega centers.

Table 37 Mega Center Staffing.

Mega Centers	Open FTEs	FTE Cap
Dallas South Mega Center	14	73
Garland Mega Center	14	63
Fort Worth Mega Center	14.3	66.8
Carrollton Mega Center	8	67
Houston Gessner Mega Center/Annex	10	92
Houston North	7	85

Spring Mega Center	10	89
Houston Southeast (Galveston RD)	8.5	81.5
Rosenberg Mega Center	12	85.5
Corpus Christi Mega Center	2	38
Edinburg Mega Center	7	50
Midland Mega Center	14	41
SA Leon Valley Mega Center	19	59
Pflugerville Mega Center	18	47

Table 38 shows the significantly understaffed Large DLOs. These offices have fewer FTEs assigned, so understaffing can still be a hindrance to operation. The Austin North office shows just above 50% staffed.

Table 38 Understaffed Large DLOs.

Large DLOs	Open FTEs	FTE Cap
Plano	5	26
New Braunfels	4	37
San Antonio Pat Booker (Universal City)	7	27
Austin North	14.5	30
Austin South	7	24.5
Georgetown	9	28
Killeen	5	21

Table 39 shows the medium sized DLOs with significant understaffing. These offices are smaller than the large ones, so staff shortages also mean problems with customer throughput. Austin Northwest and Waco offices show about 66% staffing levels. Other medium-sized offices are not as understaffed.

Table 39 Understaffed Medium Size DLOs.

Medium DLOs	Open FTEs	FTE Cap
McKinney	4	15
Conroe	3	16
Austin Northwest	6	16
Waco	6	15

This review is mostly based on the number of open positions. Not to be minimized, other offices exhibit understaffing as well. For example, an office with only four people and two open FTEs is a significant understaffing issue. There are staffing issues in some smaller offices, but there are many that are fully staffed.

There are 328 LPS vacancies across the state, representing 13.6 percent of LPS staff.

The vacancies around the state are shown in Figure 85. This figure shows that most vacancies are concentrated in urban areas. Likely competition for workers in these areas, which have more economic opportunities for workers, makes hiring and retaining employees much harder. However, there are smaller offices where one or two vacancies have significant impacts on the percentage of vacancies.

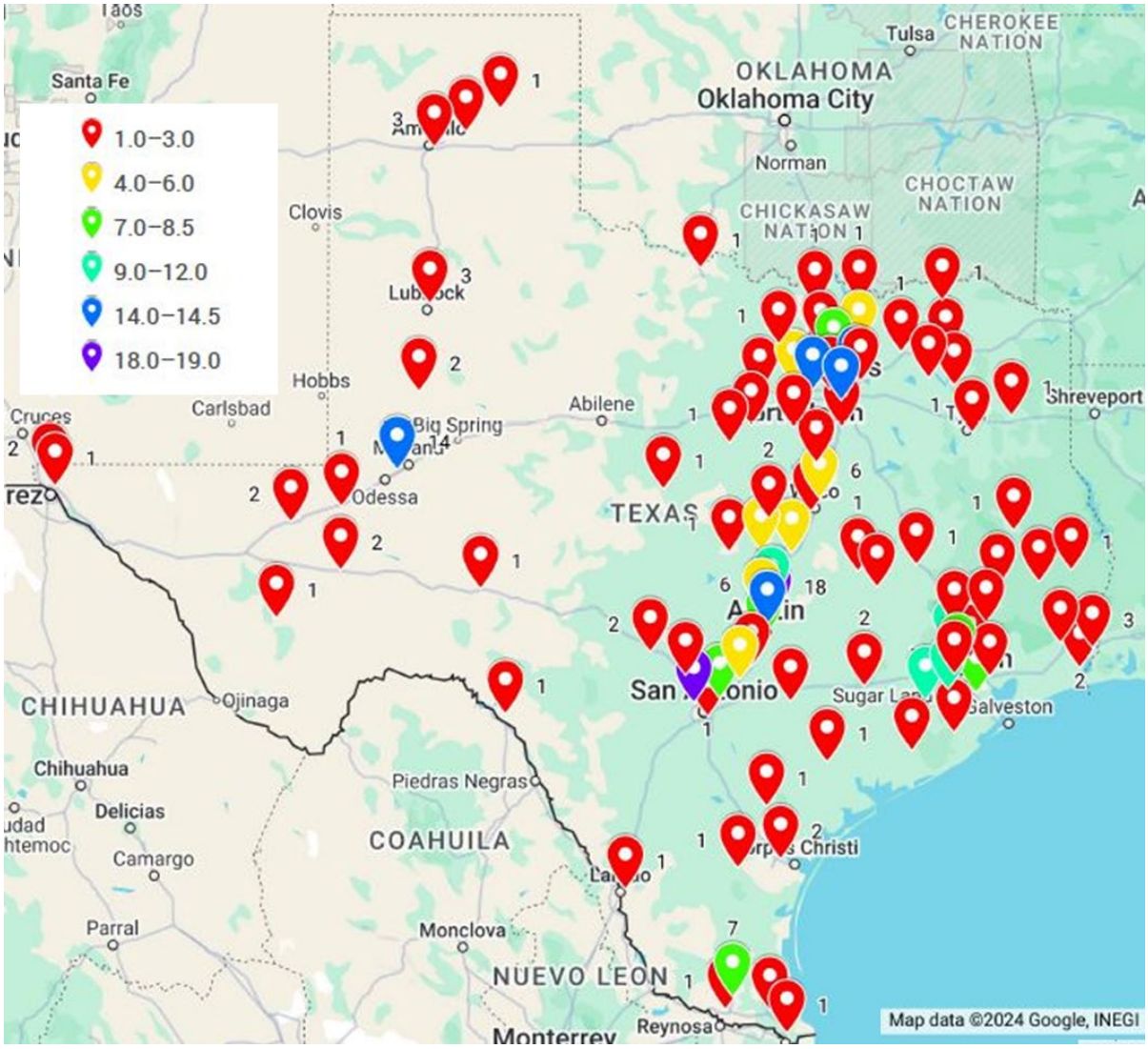

Figure 85 DLO Vacancies.

5.2.2.4. What does Turnover Cost?

As stated in the preamble of this chapter, turnover has a cost. Various citations say that turnover can cost from one half to two times the annual salary.[145] The organizational strength data obtained

[145] See: https://www.bestcolleges.com/united-states/texas/best-cities-to-work/ ; https://burnettspecialists.com/looking-for-a-job-in-texas-the-top-10-cities-to-live-and-work/; https://www.unleash.ai/compensation-and-benefits/bonuses-pay-rises-reward-performance/;

from DLD, and referenced in section 2.3, includes what job titles assigned to each location are vacant. This data is shown in Table 40.

Table 40 Vacant LPS Positions.

Position Title	Vacancies
LPS II and LPS III	300.3
LPS IV	15
LPS V	13
Total LPS Positions	328.3

For this analysis, the extremes will provide a range using both ½ of the annual salary and two times the annual salary. Since DLD would normally find LPS Vs from the ranks of LPS IVs and on down the line, one can assume, conservatively, that estimated training costs will use the salary of the LPS level below the level to be filled.

For this exercise, the uniform salary policy of the DLD is helpful in developing these costs. Annual salaries used are shown in Table 41. Using the commonly cited range, training costs due to attrition would range from $6.6 million to $26.4 million. If vacancies remain at current levels, this is a continuing annual cost.

Table 41 Annual Training Cost for Turnover Replacement.

Position Title	Annual Salary	Training Cost (1/2 x annual salary)	Training Cost (2 x annual salary)
LPS II	$39,310	$5,902,396	$23,609,586
LPS III	$46,046	$345,345	$1,381,380
LPS IV	$53,317	$346,560	$1,386,240
Total Annual Cost		$6,594,301	$26,377,204

This analysis used actual numbers of vacancies, conservative annual salaries, and conservatively used the salary of the next lowest LPS classification in the training cost for the higher ranks. This would be the estimated training cost range to fill the vacant positions. If the turnover rate were lower, this cost would be lower. One could conclude that it is substantially more efficient to retain employees rather than incur this training cost.

5.2.2.5. Summary

The following represents points of summary and comparison from this analysis.

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https://www.vox.com/money/23851170/bonus-raise-job-market-work-money; https://www.investopedia.com/articles/personal-finance/092915/raise-vs-bonus-your-small-business-employees.asp; https://www.fool.com/careers/2018/02/14/why-you-need-a-raise-instead-of-a-bonus.aspx; https://www.paydata.co.uk/hr-hub/blogs/raises-vs-bonuses/; https://www.inc.com/suzanne-lucas/why-a-bonus-isnt-as-good-as-a-raise-even-though-it-seems-awesome.html; and https://time.com/3342841/bonus-bad-news/

- SAO's annual report for FY 2023 shows that:
    - Turnover is problem statewide,
    - Turnover is higher in lower paid positions,
    - Statewide turnover in the LPS job family is 11.8%.
    - DPS turnover (all positions) was 9.7%.
- DLD data show:
    - Turnover is a problem for LPS employees.
    - Turnover is higher for LPS employees as compared to the rest of DLD employees.
    - Long term data shows a dip in employee separations after reclassifications and salary increases in September 2020, but after about a year from that date, separations again climbed.
    - There has been a spike in separations in July for the past three years.
    - Employee turnover in 2023, by job title, shows LPS II had a 22.9% turnover rate. This is higher than the 18.7% reported by the SAO. These are entry level employees that DLD needs to fill the ranks of higher LPS levels.
    - LPS demographics show that LPSs are approximately 80% female in all job titles. This has remained constant for at least the last 6 years where data is available.
    - Understaffing due to employee turnover is a big issue at DLD. In reviewing the staffing issue in a holistic manner, many of the most understaffed DLOs are in urban areas. All Mega Centers are in urban areas. Likewise, large, and most medium size DLOs are in urban areas.
    - Smaller DLO offices can still suffer from turnover, but there are many that are fully staffed.
    - Turnover costs are high and preventing turnover rather than training new employees is much more efficient.

5.2.3. Consolidated Summary, Conclusions, and Recommendations

This review leads to the following comments, conclusions, and recommendations.

- This data shows that all DLD employees, including LPS, and Law Enforcement salaries are strictly in bins according to job title.
- Salary Schedules A and B allow for ranges which can be used for merit increases in pay. This does not appear to be the policy at DPS-DLD. This means that the only way an LPS employee can see a pay increase is to get a promotion or an across-the-board legislative

pay increase. A salary merit pay increase program might provide an incentive for higher job performance.

- DLD shows a history of promoting LPS II to LPS III after about two years, but then they may stay at that level for a long time. The number of LPS IIIs is 3.25 times the number of LPS IVs. This may be dictated by the organizational structure, using LPS IV and LPS V for more leadership roles, but under the current pay policy, this relegates LPS IIIs to a long period with only Legislative across-the-board salary increases.
- DPS Law Enforcement employees, constrained by Salary Schedule C, are in bins too, with added service time minimums. This seems to also constrain salary increases. Performance may be part of the current process of determining promotion according to the service time. Meeting service time does not guarantee a promotion, but not meeting service means no salary increase until service time is met (service time bins are four years apart). Modifications to Salary Schedule C would need to be made in order to address this.
- LPS and Law Enforcement jobs are different. Law Enforcement jobs include an element of danger, and this should be, and is, recognized in the pay scale. However, Law Enforcement job titles have a built-in opportunity for salary progression that the LPS job titles do not. The current Trooper title would allow a person to stay a Trooper their entire career and progress from $62,715 to $93,414 annually, while an LPS III, under the current policy at DLD could spend their entire career at DPS and only receive legislatively-mandated, across-the-board pay increases. Legislatively-mandated across-the-board pay increases are given to all state employees, usually to recognize an increasingly uncompetitive state salary schedule.
- SAO evaluates the salary competitiveness of state job titles. They evaluated LPS titles and found salaries close enough to market rates to not recommend any changes in salary classification. Their assumptions are incorrect on how salaries are distributed at DLD, meaning that, for LPS jobs at DLD, employees are substantially underpaid. SAO has the data to do a more agency-specific analysis, as they have the data for every state employee at every agency.
- DLD gives one-time merit payments but does not use the merit salary increase program that is available to them.[146]
- The spike in employee separations that occurs in July may be related to working mothers and the impending beginning of the school year for their children. If this is true (exit interviews could be used to gauge this, but currently do not), helping improve work-life balance might reduce the attrition.

[146] Park, S., & Sturman, M. C. (2016). Evaluating form and functionality of pay-for-performance plans: The relative incentive and sorting effects of merit pay, bonuses, and long-term incentives. Human Resource Management, 55(4), 697–719. https://doi.org/10.1002/hrm.21740

- Urban areas, where all Mega-Centers are located, generally have more economic opportunities for people and increased pay.[147] In these areas, it is likely that DLD has trouble filling and keeping employees because they have access to better paying jobs in the same geographic area. To address this problem, DLD could use the full pay range available for each job title and allow increased starting salaries for those hard-to-fill positions in urban areas. This solution is already available and could be used today.
- Since: 1) DLD has an FTE cap; 2) turnover is high, especially on entry levels jobs; and 3) pay is on the lower scale (see other sections), DLD should target hiring above their FTE limit, so that on average they might be able to closer achieve their FTE cap and not have significant unfilled positions. This means using the FTE cap as an average allotment and not a ceiling. Sometimes exceeding the limit, while annually meeting the FTE allotment, should be considered as a strategy to keep actual FTEs closer to full staffing levels.
- Instituting a merit pay system would reward workers for performance and likely reduce turnover. The reasons and rationale are:
    - A previous study indicated that for the LPS customer-facing employees, the main points of benefit satisfaction are salary, retirement, and insurance, in that order. Increasing pay and having a salary merit pay program (with merit raises to increase a person's salary in the pay range for the position) addresses two of the main reasons these employees come to work and may enable DLD to hold on to more workers.
    - Texas Government Code, Section 659.255, authorizes two types of merit pay for state employees, merit increased to monthly pay and one-time merit awards which do not affect monthly pay. Since employees are valuing their retirement benefits, merit pay increases increase both take-home pay and future retirement benefits. Knowing a merit system is available to increase their salary, employees will see a benefit in increasing their productivity and effectiveness.
    - DLD had FY 2023 aggregate salary of $137,142,762. DLD gave one-time merit payments of $2,213,620 in FY 2023. The money required to give half of all employees a 3.4% raise in salary would be $2,331,427, only slightly more than was given in one-time merit payments. This is comparatively a small amount of money to keep employees on the job and interested in efficiency and customer service, especially compared to the estimated cost of training replacements ($6.5 million to $26.4 million). There are no employees at DLD that are not eligible for a merit salary increase. The barrier is likely budget and policy. Budget can be paid for with training cost savings. A simulation showed that instituting a merit salary increase program would increase the budget, but modestly compared to the possible savings in turnover costs.

[147] See https://www.qualtrics.com/experience-management/employee/cost-of-employee-turnover/; and https://www.gallup.com/workplace/247391/fixable-problem-costs-businesses-trillion.aspx

Deficiency: High employee turnover is a significant deficiency within the Driver License Division (DLD), particularly for lower-paid positions.

SAO's annual report for FY 2023 shows that turnover is a problem statewide and is higher in lower paid positions. Statewide turnover in the LPS job family is 11.8%, which exceeds DPS turnover for all positions (9.7%).

Understaffing due to employee turnover is a big issue at DLD, with staggering turnover costs (estimated currently at $6.5 million to $26 million). In reviewing the staffing issue in a holistic manner, many of the most understaffed DLOs are in urban areas. All Mega Centers are in urban areas. Likewise, large, and most medium size DLOs are in urban areas. Employee turnover in 2023, by job title, shows LPS II had a 22.9% turnover rate. This is higher than the 18.7% statewide turnover rate reported by the SAO. These are entry level employees that DLD needs to fill the ranks of higher LPS levels. LPS demographics show that LPSs are approximately 80% female in all job titles. This has remained constant for at least the last six years where data is available. Smaller DLO offices can still suffer from turnover, but there are many that are fully staffed. Attracting staff that can speak foreign languages can also fill an efficiency gap that was evidenced in the employee survey.

5.3. Interviews

As part of this study, the Study Team used multiple sources to identify operational and enterprise deficiencies in the DLD; one of those sources was staff interviews with DLD and DPS divisions that interact/provide service to DLD (BI Team, Finance, IT, PIO, IDO, Chief Privacy Officer/Legal, and Procurement) and with the Texas Division of Information Resources Interviews (DIR). This section details discussions from these interviews. For procurement, information technology and the DIR interviews, we also undertook a review of Texas laws in this highly complex and regulated areas. These three sections have both the interview discussions and law integrated together for reading ease.

5.3.1. Business Intelligence Team

The Business Intelligence Team (BI Team) was established (in its current iteration) in June of 2022 to identify and share best practices among DLOs to optimize booking processes and wait times. Here we describe some basic facts of the meeting and key takeaways.

The meeting took place on June 12, 2024, in a conference room at DPS headquarters and involved three members of the Study Team and the head of the BI Team. Analysts on the BI Team attended remotely (five in all), as did a leader in the administration of the DLD. Study Team members asked a number of questions and the BI Team analysts offered substantive responses; the conversation was free-flowing. One of the analysts emphasized that the work of the BI Team is about taking the existing situation and figuring out how to make it better using the pieces and resources they have. He underscored that their job is not about imagining what could be; it is about figuring out how to make improvements given the existing reality. The BI team indicated that so far they had

completed 55 visits to 54 DLOs. The first visit was in August of 2022. They had 20 more visits planned before November of 2024. The meeting with the whole group began at 4 pm and concluded at 5 pm, but Ms. Erlewine stayed afterwards for another half hour at least to respond to further questions from members of the Study Team. After the meeting, Study Team members distilled takeaways from the conversation based on notes from the meeting.

From the interview with the BI Team, a number of deficiencies and ways to improve effectiveness and efficiency at the DLD emerged. Here we identify the main deficiencies and offer recommendations for addressing barriers to effectiveness and efficiency that build on current strengths of the DLD. This analysis of deficiencies and recommendations served as part of the foundation of analysis and recommendations presented in the report.

Deficiency #1: Lack of robust, consistent communication—among offices and between offices and headquarters—specifically relating to challenges and solutions

The BI Team reported that a lack of robust, consistent communication exists among offices. They know this because when they inform a few offices in the region about an improvement that information doesn't trickle to other offices in the region.

This deficiency could be due in part to cultural barriers, such as a norm of "silo-ing" among offices and an us-versus-them ethos among offices and between offices and headquarters that employees reported has been present in the past. Employees also described a previous DLD culture that encouraged a "figure it out with what you've got"/"make it work" mentality when approached with issues. This culture discouraged supervisors from communicating problems up the chain of command. For some longtime supervisors, for example, this ethos still affects their behavior. Some resistance to change was identified by employees as another cultural barrier to change. The lack of robust communication also may be due in part to practical barriers, specifically lack of staffing, resulting from lack of funding that puts many offices in "survival mode." This "survival mode" makes it harder to think about the bigger picture and puts knowledge-sharing among offices on the backburner.

In terms of positives, supervisors currently have a biannual supervisors meeting, but since offices are often in survival mode, it's harder to take that time to think about the bigger picture. Another positive is that DLOs are resilient, always dealing with issues in their faces at the time, though effectiveness and efficiency may be enhanced by improved communication across offices and with headquarters, to report issues. Part of the added value of the BI Team is facilitating communication between offices and sharing knowledge. Also, the BI Team has helped to mend that us vs. them mentality between offices and/or regions that existed in the past.

New leadership is guiding DLD into a new culture—with less silo-ing among offices. Employees now are much freer to speak their mind, make suggestions, acknowledge mistakes, and ask for help. New leadership is also way better at helping and supporting offices, but many supervisors, for example, are still stuck in that "make it work" mentality, instead of reporting up through chain of command, which can lead to sub-optimal solutions. On the whole, they also lack strong channels

of communication with other DLOs to share challenges and solutions. Strengthening those channels could help; explicitly encouraging people to do that and thanking them when they do could encourage that behavior. One analyst suggested a Teams channel for regions, "chat rooms" for supervisors, where they can publish issues and solutions and indicated that such a channel could be a helpful, specific step. Also, DLD is currently working on a Knowledge Base for employees, which will be like a guide, knowledge resource for all containing FAQs, that will work towards improvement in this area.

Deficiency #2: Appointment availability

The BI Team reported that the biggest issue DLOs have right now is appointment availability. Currently, there is a 29-33% no-show rate across the state.

Two possible root causes relate to technology and vacancy rates (i.e., lack of staffing). In terms of technology, the BI Team pointed to the value of having more comprehensive data in Texas Scheduler (e.g., how many times people have to return to office to successfully complete a transaction), and having Texas Scheduler sync up with Driver License System. In terms of vacancy rates, the BI Team concluded that at many offices, appointment availability would not be an issue if they didn't have high vacancy rates. Being fully staffed would resolve the issue. Further, a possible root cause of vacancy rates is salary; it is not competitive and not commensurate with the expertise required to be an LPS, which includes legal training similar to that of a paralegal.

In terms of positives, the BI Team currently makes recommendations to offices about how to "layer" appointments—i.e., when to drop various types of appointments. This approach helps with appointment availability, but the root causes need to be addressed.

More broadly, the BI Team suggested that merit increases would help. Further, they observed that the culture at a particular DLO affects employee morale and that DLO culture largely depends on the supervisor. Finally, they emphasized that at many DLOs, if they didn't have vacancy rates, their other issues wouldn't be there. Being fully staffed would be key.

5.3.2. Public Information Office

The Public Information Office (i.e., Media and Communications Office of the DPS interview took place on June 13, 2024, and involved three members of the Study Team and the Chief of Media and Communications of Texas DPS, and the Chief of DLD. Study Team members asked a number of questions and Chief of Media and Communication's offered substantive responses; the conversation was free-flowing. Afterward, Study Team members distilled takeaways from the conversation based on notes from the meeting.

Two main deficiencies emerged regarding the work of the Media and Communications Office of Texas DPS as it relates to the DLD. Below are the main deficiencies, as well as recommendations for addressing barriers to effectiveness and efficiency that build on current strengths of the DPS Media and Communications Office. This analysis of deficiencies and recommendations served as the foundation of analysis and recommendations presented in the report.

Deficiency #1: Lack of DLD-specific public information campaigns on DLD-specific channels, highlighting the positive work of the DLD and addressing common questions and complaints of the public.

The Chief of Media and Communications indicated that she and her Office have not yet undertaken public information campaigns on social media for DLD due to resource constraints. Much of the focus has been on reactive rather than proactive communication, since most of the work comprises mainly responding to the media.

This deficiency is due in large part to being understaffed. The Chief of Media and Communications took her new role in January 2024 and has been building her team, which became fully staffed as of early June. Her team now includes a media person, a social media person, a press secretary, and a deputy press secretary.

Further, DLD currently lacks a dedicated public communications channel.

In terms of positives, the Chief of Media and Communications indicated that a top priority for her Office is to move from being reactive to proactive. Specifically, she wants to initiate public information campaigns that highlight the positive work of the DLD and address commonly asked questions and common complaints from the public and the positive work of the DLD.

Deficiency #2: Lack of consistent meetings between DPS Media and Communications Office and DLD

The Chief of Media and Communications indicated that since she became Chief of Media and Communications, she has not yet had regularly scheduled meetings with the DLD Chief or DLD senior management.

A root cause seems to be a lack of staffing and relatedly a focus on staffing the Office and reacting to urgent matters, mainly media inquiries.

In terms of positives, Chief of Media and Communications indicated that a priority moving forward is to meet regularly with DLD leadership and hear about their positive achievements and also common questions and complaints from the public so that her team can communicate about these matters in proactive public information campaigns.

Overall, the Study Team highly recommends the use of DLD-specific communication strategies. Separating DLD messaging from broader DPS communications aligns with best practices in social media and communications, where successful accounts are often niche-focused and deliver tailored content. With a vast amount of critical information to share with the public, the DLD requires dedicated communication channels to ensure messages are easily accessible, clear, and not hard to find in the midst of information from other DPS divisions. Establishing a targeted social media presence, managed by a DLD-dedicated Social Media Manager, is critical to addressing public concerns and disseminating vital information that can impact customer service. This

comprehensive communication strategy will not only reduce confusion but also foster a sense of trust and transparency with the public.

5.3.3. Finance Division

The Study Team met with DLD senior management and also with DPS Finance Division staff to gather information on finance management and strategy for DLD on April 30th, 2024.

The staff highlighted that the major contributors to their budget challenges are often causes beyond their control or normal process, and funding staff and IT. Three root causes have created a climate of insufficient funding. First, they noted that the level of appropriations they have received is inadequate to address the growing demands on the DLD due to rapid population growth in the state. While DLD received an injection of funds from the Driver License Improvement Plan, those funds have not been enough to meet the demands of its growing customer base. This makes it challenging to grow and expand services such as more appointments and testing for CDL, ensuring compliance, and meeting the multifaceted demands on DLD as the provider of a document that is so fundamental to everyday life.

Their budget is allocated to four regional areas: regional operations, issuance, records and enforcement, and customer and technical support. There is not a separate budget carved out specifically for DLD IT within the DPS IT budget. There is one budget for DLD and headquarters and regions. They utilize speed charts and program activity codes to break down the budget for analysis and management. This is based on historical budgets and projections. Speed charts are used for procurement and requisitions. These department IDs are location based with program Codes at a 3-4 digit numeric level. There are also different programs in the Driver License Strategy plan; this can track at the regional level if necessary. A challenge does occur with Tableau, in that there is a 24-hour load into Tableau, which is managed by the Comptroller's office. So, it is not real-time and projections are also a month behind. DPS has a pilot program with the Comptroller's office to get live data for finance. They were not sure how long this would continue.

They utilize Tableau for data analysis and forecasting. Forecasting is conducted in August for the upcoming fiscal year, and this is monitored monthly.

DPS works to spend to zero within their budget. Swept funds are also utilized where possible. For example, swept funds were used to form base funding for the appointment solution. For funds on vacant positions, these go to a holding account and then are reallocated. They track and monitor, and they cannot use one-time money for a continuing allocation point. They also only sweep for that month's vacancies. The Agency has authority for biennial transfers, but not beyond to the next biennium. There are transferability policies for unspent funds, but DPS cannot take back DLD funds, but can transfer to DLD from DPS – although this is capped at 20% for operations funding. The DPS Rider also restricts transfers to 25% for capital budget and 20% for operations.

Unspent funds are swept from DLD or DPS by the Comptroller. Unspent Balances from one biennium can occur, but requires a special request to the LBB every time for this shift in the LAR. This is usually for capital expenditure and is very specific, and tied to the receiving authority. All

budget transfers are identified within their coding system. DPS submits a report to the Comptroller for each fiscal year on unspent funds.

The second root cause stems from the unfunded mandates placed on the DLD by the federal and state governments. The DLD regularly has to find funds in its operational budget to implement policies for which the Division was not appropriated additional funds. Such mandates take away from funds that could be used to grow the Division's capabilities to serve customers in a timelier fashion. An example given was the ECM which cost $16 million and was not given an allocation in their budget. This system also needs more features and add-ons which they do not control and require budget allocation to pay to DIR.

The third root cause emanates from how the DLD is funded. The DLD is not self-funded; the funds it generates go to the Texas Mobility Fund, and the Division is funded through appropriations instead. If the DLD were self-funded, its funding might better reflect the level of demand on the Division. Theoretically, the Division could seek approval to tack on a customer fee to its transactions, which it could keep, but staff opined that such a fee would be viewed unfavorably. The funding challenges also impacts innovation and procurement for modernizing their legacy driver license system and other IT components, including requests they must put through DIR that they are mandated to utilize for certain IT procurement items, and for updates to Texas by Texas and Texas scheduler which they use for online transactions, setting appointments and for payments by residents for drivers licenses and ID cards. .

The Division noted several strategies they utilize to maximize their current funds and to increase their chances of additional funding. First, they have decided to focus their exceptional item requests (EIRs) on technological upgrades rather than additional staff because they believe technological upgrades can have a much bigger impact on customer service capacity than additional staffing. Second, they have decided to highlight metrics that illustrate their inability to serve customers in a timely fashion in their EIRs to try and persuade lawmakers to approve them. Third, they are in a pilot program with the Comptroller's office to get live budget data. They are looking at remote issuance of driver licenses, and also using technologies to streamline the process. They also created the BI Team to conduct business analysis to improve efficiency and effectiveness, and identify deficiencies. Lastly, the Division uses funds from vacant positions to fund one-time expenses.

Deficiency: Lack of Unspent Balance (UB) Carryover Authority and the $500K limit on Capital Budget Authority hinders efficient technology modernization.

AIS contracts are all capital projects which last over a longer period and exceed legislative and fiscal biennia and cost millions of dollars. Lack of UB authority and capital authority creates barriers in funding for IT projects as project development, procurement, contracting and implementation may cross biennia. Costs for technology projects are well over the $500,000 range and they are much closer to the millions of dollars range.

Structural barriers occur because of appropriations laws and rules governing (i) budgeting process and (ii) major information resource Projects. Most DLD IT capital projects exceed two years, crossing into new biennia. While DLD may have an Unexpended Balance (UB), it must have legislative authority to move funds from one year to the next, or from one biennium to the next biennium. UB authority would assist DLD in managing legacy modernization of the Driver License system and other technology upgrades that have been identified in its IT plan, LAR and exceptional item requests. For example, the Attorney General's Office in its LAR for FY 2022-2023 had included Rider 19 "$33,059,998 in Strategy A.1.1, Legal Services, and $8,187,301 in Strategy E.1.1, Agency IT Projects". This authority would not increase the actual DLD budget, since it merely would provide latitude to manage these complex projects.

5.3.3.1.1. Finance Meeting Questions

Current Financial Situation and Impact

1. How would you describe the current financial situation of the DLD, including the main factors contributing to any budget problems and the root causes of those problems?
2. How have these budget issues impacted the day-to-day operations of the agency?
3. What changes do you believe are necessary to address DLD's budget issues effectively?

Budget Allocation and Management

4. How is the DLD budget allocated to specific projects and/or to the four functional areas (regional operations, issuance, records and enforcement, and customer and technical support)?
5. Are there opportunities to leverage technology to improve budget forecasting and cost analysis?
6. DPS IT has part of its budget specifically carved out for DLD IT. Do other DPS divisions have budget carved out just for DLD (i.e., DPS Technology and Innovation)? If so, how is that managed?
7. Are there sufficient financial management tools and technology available to track and manage all components of the DLD budget effectively and efficiently?
8. How budget variances (differences between planned and actual spending) are tracked and addressed?

Budget Transferability Policies

9. The LBB and the Legislature may allow transfers of unspent funds between Goals within the DPS budget under certain rules. Have you ever used this process to transfer unspent funds between Goals?
    a. Does this transfer process apply to the full amount of unspent funds, or is there a limit (i.e., 20% original FY allocation) that can be transferred without requiring prior approval from the LBB, Governor's Office, Senate Finance Committee, and House Appropriations Committee?
    b. Have you compared DPS's budget transferability practices, specifically regarding transfers between Goals, with those of other state agencies to identify potential areas for improvement?
10. How are unspent DLD funds handled at the end of the fiscal year?
    a. Is there a process for reallocating unspent funds within the DLD budget, including transfers between line items or funds (e.g., salaries to technology)?

b. Is there a specific internal approval process required for budget transfers within DLD's budget?

11. Do unspent funds need to be reported? If so, where are they reported and how frequently do they get reported?
12. Could you provide an overview of the current DLD budget transferability policies, including transferability limitations due to unmet performance management targets and any relevant agency-level or state-level restrictions?
    a. Have there been any recent instances where limited transferability was applied due to unmet PM targets?

    If limited transferability is a consequence of unmet performance targets:

    b. To what extent can budgets be transferred in such cases? Is there a specific timeframe associated with this limited transferability penalty?
    c. How does this penalty affect the DLD's ability to procure resources needed to achieve those targets?
13. Looking at Article IX, Sec. 14.01, Appropriation Transfers and Article IX, Sec. 14.03, Transfers - Capital Budget, under what circumstances can DLD transfer funds into 'Strategies' with prior written notification to the Legislative Budget Board (LBB), Governor's office, and House & Senate Committees?

Funding Technology and Challenges

14. We believe the DLS system is a legacy system that requires modernization to enhance efficiency and effectiveness, including integration with REAL ID systems and to potentially comply with upcoming federal audits. Did DLD receive any funding from HB2 (87th Legislature, Regular Session) that was allocated for the modernization of legacy systems?
15. How does the impact of funding technology items through DIR impact the Division's ability to strategize for future improvements?
    a. Have you analyzed or compared DLD to other state agencies to see how they have adapted and found funds to pay for DIR technology changes?

Funding Sources and Allocation

16. Do you have any analysis regarding where the driver license fee revenue is allocated?
    a. For example, have you identified how much of driver license fee revenue goes to the Texas Mobility Fund?
    b. Has DPS ever considered asking on behalf of DLD to recover any portion of the driver license fee to cover operational costs?
17. The previous points system associated with driver licenses generated revenue for DLD. Can you quantify the amount of revenue the points system generated for DLD annually or over a specific period?
    a. How did the repeal of the points system impact the DLD's budget? Were there any specific consequences or adjustments made to compensate for the lost revenue?
18. Following the passage of HB 2 in the 87th Legislative Session (2021), unencumbered funds from the DLD were redirected to the General Revenue Fund. Can you provide more details on this process, including the rationale behind the decision and the specific amounts of funds involved?

Budget Optimization and Requests

19. How does DLD approach creating a new appropriation since it has to be an exceptional item from a budget perspective? For example, if it's over and above the amount the agency gets, but has to be in line with the agency's strategy, how does DLD determine the new strategy within the strategic planning and budgeting process?
20. What strategies has DLD implemented or considered to address these budget challenges?
21. What have you asked for in terms of your budget and not received?
22. What have you asked for in terms of your budget and received?
23. What hurdles have you experienced in requesting funding either in the regular budget or in exceptional item requests?
24. Is there anything that you have given up on asking for?
25. Is the exceptional item request process the main way that DLD can increase its overall budget amounts?
    a. Has DLD considered adding more performance measures within the strategies of the Strategic Plan to increase its budget?
    b. How does DLD analyze how it can maximize what it can fund out of its capital budget rather than operating budget?

Contingency Planning and External Benchmarking

26. What contingency plans are in place to address potential budget shortfalls?
27. What do you see as the biggest challenges and opportunities in addressing DLD's budget hurdles?
28. Are there any states that you believe have good budget practices? Can you describe what they do?

5.3.4. Procurement Division

5.3.4.1. Procurement Legal Background

Inherent delays and hurdles in IT procurement can make it difficult to keep pace with rapidly evolving technology. Procurement and implementation of technology is a complex, multi-year, and expensive process. DPS, like many state agencies, is legally required to first use contracts established by the Department of Information Resources (DIR)[148] to obtain Automated Information Systems (AIS), unless the procurement is subject to an exclusion or exemption. [149]

Recent legislation in 2023[150] reflects modernization trends and acknowledges that an agency or eligible entity could economize with DIR's buying power in certain types of IT Products and Services contracts.

[148] DIR is the State's information technology and telecommunications agency, which leverages the buying power of the State and utilizes strategic sourcing methods to select vendors offering the best value on IT commodity items to the State. Tex. Gov. Code § 2157.068(b). see DIR, https://dir.texas.gov/about-dir
[149] Texas DPS Procurement and Contract Management Guide Ver. 4.01, Manual, https://comptroller.texas.gov/purchasing/docs/sb20/DPS.pdf
[150] Tex. Gov. Code § 2054.0525 Customers Eligible for Department Services, https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2054.htm

5.3.4.2. Deficiencies Related to Procurement Law and Regulation

Various deficiencies in the technology acquisition process hamper efficiency and effectiveness for DLD. In interviews with DPS Procurement, IT, IDO and with DIR, we learned that several interconnected deficiencies are related to regulatory, structural, staffing, and financial issues are inherently tied into statutes. Regulatory hurdles can prevent efficiency and effectiveness for agencies. In this case, the interactions between DIR and DPS can be inefficient and ineffective for assorted reasons. DPS DLD in particular is generally restricted by regulatory hurdles and resource limitations including:

- The statutory mandate to use DIR first for most technology solutions.
- Limits on Software Specification writing and vendor communication early in the procurement process.
- The Use of inefficient Waterfall technology development methodology over the use of the Agile Methods.
- Mandates on Procurement Vendor Certification requirements.[151]

In order to understand how cumbersome Texas technology procurement processes are, one must first understand the complex and highly regulated procurement environment that DPS[152] and other agencies currently inhabit.

5.3.4.2.1. Procurement Methods - Automated Information Systems (AIS)

Texas State Agencies are generally required to purchase hardware, software, and technical services through DIR per Texas Government Code §2157.068.[153]

AIS are defined by code[154] to include the following:

1. computers and computer devices on which an information system is automated, including computers and computer devices that SPD[155] identifies in guidelines developed by SPD in consultation with DIR and in accordance with Chapter 2054 and rules adopted under that chapter;

[151] Beginning January 1, 2022, state agencies (TEX. GOV'T CODE § 2054.003(13)) may only enter or renew contracts to receive cloud computing services that comply with Texas Risk and Authorization Management Program (TX-RAMP) certification requirements.(TEX. GOV'T CODE § 2054.0593) For more information, refer to the Texas Risk and Authorization Management Program (TX-RAMP) page on the DIR website,www.dir.texas.gov.
[152] Tex. Gov't Code § 2261.256, The Department of Public Safety (DPS) is required to establish clear levels of purchasing accountability and staff responsibilities related to purchasing and to document contracting policies and practices consistent with the Texas Comptroller of Public Accounts (Comptroller) Texas Procurement and Contract Management Guide (Comptroller's Guide).
[153] Tex. Gov. Code § 2157.068, https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2157.htm#2157.068
[154] Tex Govt Code § 2157.001(1).
[155] The Texas Comptroller of Public Accounts' (CPA) Statewide Procurement Division (SPD) is the central authority for Texas agency procurement guidance, education, and statewide contract development services.

2. services related to the automation of an information system, including computer software or computers;

3. telecommunications apparatus or device that serves as a component of a voice, data, or video communications network for transmitting, switching, routing, multiplexing, modulating, amplifying, or receiving signals on the network, and services related to telecommunications that are not covered under paragraph (4); and

4. for DIR, as telecommunications provider for the state, the term includes any service provided by a telecommunications provider, as that term is defined by Section 51.002 of the Texas Utilities Code.[156]

An agency's purchasing of AIS is regulated by various codes, among others, Texas Government Code, Title 10, Subtitle D, Chapter 2157 Purchasing: Purchase of Automated Information Systems.[157] Non-IT commodity Items are differentiated from IT Commodity Items in the code and the Statewide Procurement Division (SPD)[158] does not have the authority to procure certain types of procurements, such as AIS:

> §2157.006. PURCHASING METHODS. (a) The comptroller or other state agency shall purchase an AIS using:
>
> (1) the purchasing method described by Section 2157.068 for commodity items; or
>
> (2) a purchasing method designated by the comptroller to obtain the best value for the state, including a request for offers method.

5.3.4.2.2. Program Areas of DIR Contracts

DIR Customers, like DPS, are state agencies[159] that pay DIR for technology services rendered.[160] Under DIR's statewide procurement authority, DIR establishes and manages contracts under the following three program areas for use by *eligible* customers:[161]

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[156] Tex Govt Code § 2157.001(1); see also TPCMG, ver.3, p. 35.
[157] Tex. Gov. Code, Title 10, Subtitle D, Chapter 2157 Purchasing: Purchase of Automated Information Systems. https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2157.htm
[158] Texas Comptroller of Public Accounts' (CPA) Statewide Procurement Division (SPD)
[159] § 2054.003(13) "State agency" means a department, commission, board, office, council, authority, or other agency in the executive or judicial branch of state government that is created by the constitution or a statute of this state, including a university system or institution of higher education as defined by Section 61.003, Education Code; for more, see State of Texas Procurement and Contract Management Guide ("TPCMG"), ver. 3, https://comptroller.texas.gov/purchasing/docs/96-1809-3.0.pdfl,l,
[160] Tex Govt Code § 2157(j) 2157.068(j) An "eligible entity", as defined by Section 2054.375, may purchase commodity items through the department, and be charged a reasonable administrative fee, as provided by this section.
[161] See TPCMG, version 3, p. 36 for more; see also, Tex. Gov. Code § 2054.375 for "Eligible " entities for DIR services.

1. Cooperative Contracts program; [162]
2. Shared Technology Services (STS) (e.g., Private Cloud, Public Cloud, Print/ Mail/Digitization)[163] and
3. Telecommunications.[164]

5.3.4.2.3. IT Commodity Items

IT commodity items are a *subset* of AIS.[165] The term includes managed services, through which an agency transfers its personal computer equipment and service responsibilities to a private vendor to manage.[166] The code defines this thus:

> §2157.068. PURCHASE OF INFORMATION TECHNOLOGY COMMODITY ITEMS. (a) In this section, commodity items means commercial software, hardware, or technology services, other than telecommunications services, that are generally available to businesses or the public and for which the department determines that a reasonable demand exists from an eligible entity, as defined by Section 2054.375, that purchases the items through the department. The term includes seat management, through which an eligible entity transfers its personal computer equipment and service responsibilities to a private vendor to manage the personal computing needs for each desktop of the eligible entity, including all necessary hardware, software, and support services.[167]

For a purchase subject to DIR's purchasing authority, an *exemption* is required to procure an IT commodity item valued at $10 million or less outside of DIR contracts. [168]

5.3.4.2.4. Contract Value of IT Commodity Procurements and Monetary Thresholds

Note that Cooperative Contracts are regulated according to *monetary* thresholds of the anticipated contract value[169]; however, STS contracts have no dollar threshold rules and do not require "statement of Work" reviews.[170] As most IT contracts for DLD are over $5 million,[171] these solicitations with an anticipated value of $5 million or more must be

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[162] DIR's Cooperative Contracts Program ,legal threshold contract dollar amounts apply, see Tex. Gov. Code § 2157.068, and https://dir.texas.gov/cooperative-contracts
[163] DIR STS Program, has no dollar threshold rules and does not require "statement of Work" reviews, for more, Tex. Gov. Code Ch. 2054 and Ch. 2059, and https://dir.texas.gov/shared-technology-services
[164] TPCMG, P. 36.
[165] TPCMG, p. 36, v. 3.0.
[166] Texas DPS Procurement and Contract Management Guide Ver. 4.01, Manual, p. 43, https://comptroller.texas.gov/purchasing/docs/sb20/DPS.pdf
[167] Tex Govt Code § 2157.068(f)
[168] Tex. Gov't Code § 2157.006, 2157.068; 1 TEX. ADMIN. CODEChapter 212, Subchapter C; 34 TEX. ADMIN. CODE§ 20.222; See specifically "commodity item", Tex. Gov. Code § 2157.068(a).
[169] Tex. Gov. Code § 2157.068
[170] Tex. Gov. Code Ch. 2054 and Ch. 2059, and https://dir.texas.gov/shared-technology-services
[171] DPS Procurement interview

submitted to the Contract Advisory Team (CAT)[172] for review and comment.[173] Statements of Work for DIR Cooperative Contracts do not require CAT review regardless of estimated dollar value.[174]

Cloud Computing Services

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.[175] The cloud model is composed of three service models: SaaS / Software as service, PaaS / Platform as a Service, and IaaS / Infrastructure as a Service.[176]

Master Contracts

DIR establishes and manages the following types of *master* contracts: Cooperative Contracts for Information Technology (IT) commodity items; Texas Multiple Award Schedule contracts for IT commodity items; Texas.gov contracts, Data Center Services (DCS) contracts; and Telecommunication Services contracts.[177]

DIR Cooperative Contracts Program

All master contracts established by DIR within the Cooperative Contracts Program are awarded through an open and competitive procurement process, beginning with a formal and public Request for Offers (RFO).[178] RFO purchases include the purchase of automated information systems and are covered under Texas Administrative Code, Title 34, Chapter 20.[179]

However, in addition to RFO's, DIR may consider strategic sourcing and other methodologies to select the vendor offering the "best value" on IT commodity items. [180]

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[172] CAT or Contract Advisory Team Information at the Texas Comptrollers Website, https://comptroller.texas.gov/purchasing/contracts/pod/review.php; See also Tex. Gov. Code 2262.101; Tex. Admin .Code, Title 34 §20.160-166

[173] Tex Gov't Code § 2262.101(a)(1).

[174] TPCMG, p. 37; See also Tex. Gov. Code § 2262.101(a), (a-1), (b)-(c).

[175] NIST, Definition of Cloud Computing, Special Publication 800-145, Sept. 2011, p. 2, https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-145.pdf?lspt_context=gdpr#:~:text=Cloud%20computing%20is%20a%20model,effort%20or%20service%20provider%20interaction.

[176] Id., p 2 (for legal purposes, the Texas Admin. Code often refers to NIST for its own definitions of technology terms.)

[177] Texas DPS Procurement and Contract Management Guide Ver. 4.01, Manual, p. 43, https://comptroller.texas.gov/purchasing/docs/sb20/DPS.pdf

[178] TPCMG, p. 36; See also Tex Admin Code § 20.222(c) (c) The comptroller designates the RFO method as the primary purchasing method for procuring automated information systems, including commodity items not procured through DIR. However, in addition to the RFO method, state agencies may purchase automated information systems using a purchasing method designated by the comptroller to obtain best value for the state.

[179] 34 Tex. Admin. Code Chapter 20, https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=34&pt=1&ch=20

[180] Tex Govt Code § 2157.068(b) ("best value")

DIR's Cooperative Contracts Program is known as the DIY model (do it yourself) and includes SAAS (software as a service) products and solutions to meet Enterprise resources planning needs.

DIR offers the following categories of contracts through DIR's Cooperative Contracts Program:[181] Hardware; Software; Technology-based training; Managed services; IT Staff Augmentation Contracts (ITSAC); and Deliverables-Based IT Services (DBITS).[182]

DIR establishes and maintains a catalog of active contracts on the DIR website[183] that contain IT commodity items available for purchase by DPS.

5.3.4.2.5. Monetary Thresholds for Procurement

Monetary thresholds and competitive requirements for purchasing an IT commodity item under a DIR contract are as follows:[184]

Table 42 Monetary thresholds and competitive requirements for purchasing an IT commodity item under a DIR contract

Contract Dollar Thresholds	Competitive Requirements
$50,000 or less	The contract may be awarded directly to a DIR vendor
$50,001 to $1 million	Request for pricing to at least 3 vendors or resellers included in the category to which the contract relates.
More than $1 million, but less than $5 million	Request for pricing to at least 6 vendors included in the category to which the contract relates, or all vendors in the category if the category has fewer than 6 vendors.
Exceeds $5 million	DPS may not enter into a contract to purchase a commodity item through DIR Cooperative Contracts Program if the value of the contract exceeds $5 million.

[181] Texas DPS Procurement and Contract Management Guide Ver. 4.01, Manual, p. 44, https://comptroller.texas.gov/purchasing/docs/sb20/DPS.pdf ; see also DIR website on Cooperative Contracts, https://dir.texas.gov/cooperative-contracts?id=41

[182] "DBITS contracts are ideal for developing a new IT application, upgrading a *legacy* system or for general IT procurement assistance," see DBITS on DIR website, https://dir.texas.gov/cooperative-contracts/deliverables-based-it-services-dbits?id=41

[183] DIR, https://dir.texas.gov/contracts

[184] Table from Texas DPS Procurement and Contract Management Guide Ver. 4.01, Manual, p. 44, https://comptroller.texas.gov/purchasing/docs/sb20/DPS.pdf

5.3.4.2.6. Range of Procurement Values of Contracts in Dollars

Competitive bidding or purchasing through a DIR contract is not required for the purchase of IT goods and services valued at $10,000 or less.[185] Agencies must submit a request for pricing to at least three vendors in a relevant category on DIR's Cooperative contracts list for the purchase of IT commodity items with a value of more than $50,000 but not more than $1 million.[186] For purchases that will exceed $50,000, DPS is required to prepare and submit to DIR (for approval) certain DIR Statements of Work (DIR SOW). The SOW for a contract for an IT commodity item will be examined by DIR to determine if it complies with master contracts and if it contains clearly established deliverables.

Over $1 Million

Agencies must submit a request for pricing to at least six vendors in a relevant category on DIR's cooperative contracts list for the purchase of IT commodity items with a value of more than $1 million but not more than $5 million. [187]

Over $5 Million

Agencies may also submit a request for pricing to at least 6 vendors in a relevant category on DIR's cooperative contracts list or may use a purchasing method designated by the comptroller for the purchase of IT commodity items with a value of more than $5 million but not more than $10 million.[188] Note that Most DLD IT solutions are over $5 million.[189]

For a contract with a value of more than $5 million but not more than $10 million, if an agency utilizes DIR Cooperative Contracts, the agency must submit a request for pricing to at least six vendors or resellers included in the category to which the contract relates or all vendors or resellers in the category if the category has fewer than six vendors or resellers.[190]

5.3.4.2.7. $5 - $10 Million AIS Contracts

Note that for certain categories of AIS procurement, the DIR use requirement becomes more of a choice.[191] For a contract with a value of more than $5 million but not more than $10 million, an agency may opt to utilize DIR cooperative contracts or may make the purchase using the RFO

[185] 1 TEX. ADMIN. CODE § 212.22, For DIR exemption visit DIR's Exemption Requests for State Agencies, https://dir.texas.gov/it-solutions-and-services/state-agencies/exemptions
[186] Tex. Gov't Code § 2157.068(e-1)(2)
[187] Tex. Gov't Code § 2157.068(e-1)(3)
[188] Tex. Gov't Code § 2157.068(e-2), 2157.006, 2157.068(e-1)(3); 34 TEX. ADMIN. CODE § 20.222.
[189] See Tex. Admin. Code § 20.222, Values between $5 million to $10 million allow a choice between DIR or open market. If the value is over $10 million, there is an automatic exemption where DPS can go to the open market and DPS cannot use DIR's cooperative contracts, per DPS Procurement interview June 12, 2024.
[190] Tex. Gov't Code § 2157.068(e-2), 2157.006, 2157.068(e-1)(3); 34 TEX. ADMIN. CODE § 20.222; see also TPCMG, p. 37.
[191] See Tex. Admin. Code § 20.222, Values between $5 million to $10 million allow a choice between DIR or open market. If the value is over $10 million, there is an automatic exemption where DPS can go to the open market and DPS cannot use DIR's cooperative contracts, per DPS Procurement.

purchasing method, as designated by the Comptroller under Section 2157.006(a)(2) of the Texas Government Code.

Most DLD IT solutions are over $5 million,[192] according to DPS so there is some flexibility to choose the DIR contract rather than go to the open market, if the DIR offerings meet DPS business needs.

5.3.4.2.8. DIR Review and Approval of Certain DIR Statements of Work (DIR SOW) - Drafting and Issuing the Solicitation

In the first part of AIS procurement, the customer (DPS) drafts a statement of work (SOW) and/or specifications.[193] Specifications are the line item descriptors within a solicitation that define the good or service that the vendor must offer to be considered for award. [194] When drafting the SOW, the Contract Developer should select the appropriate specification type, consider utilizing deliverables and milestones, and include applicable professional license and certification requirements and established standards. [195]

Unfortunately, contract developers may communicate only in limited forms with agencies during drafting of specifications.

Prior to soliciting and upon award, [196] the SOW for a contract for an IT commodity item will be examined by DIR to determine if it complies with master contracts and if it contains clearly established deliverables. DPS noted that this can be a slow process.[197]

As delays in the preparation of the solicitation document can affect lead-time[198] the time required for the Contract Developer to finalize the solicitation document can vary depending on how well the SOW/specifications are written by the end users.[199]

The DIR contracts over $50,000 that require DIR SOWs include, but are not limited to: DBITS; Managed Services for IT; IT Security Services; Web Development; Cloud Services; and IT staffing services (when a SOW is issued).[200] DLD uses DBITS contracts for many IT projects, such as the technical implementation of DLD - voter functionalities.[201]

A SOW Review is not applicable to: contracts exclusively for hardware or software and not including services; IT Staffing Services when using Request for Resumes; the vendors' standard

[192] See Tex. Admin. Code § 20.222, Values between $5 million to $10 million allow a choice between DIR or open market. If the value is over $10 million, there is an automatic exemption where DPS can go to the open market and DPS cannot use DIR's cooperative contracts, per DPS Procurement.
[193] Tex. Gov. Code § 2054.305 and Tex. Gov. Code 2157.006.
[194] TPCMG, P. 53
[195] id
[196] TEX. GOV'T CODE § 2157.0685.
[197] DPS Procurement interview, June 12, 2024.
[198] DPS Procurement interview, June 12, 2024.
[199] TPCMG, P 48.
[200] TPCMG, v3 p.37.
[201] DLD Technology Roadmap, 2021,(updated as of April 2, 2024), on file with authors.

commercially available support, maintenance, and warranties as documented in the DIR Cooperative Contract;[202] or state institutions of higher education,[203] and other eligible[204] DIR customers that are not state agencies.[205]

The agency must submit a completed draft DIR SOW to DIR for review at least thirty business days before anticipated submission of the DIR SOW to vendors. The DIR SOW submission is very prescriptive and must include the scope of the project, milestones, deliverables description, schedule, acceptance criteria. [206] DIR may reject the submitted DIR SOW, which means the agency will have to modify the SOW until it satisfies the DIR. This happens often and can be time consuming and create inefficiency and delays in getting the SOW out to vendors. [207]

5.3.4.2.9. Exemptions and Exclusions

Sometimes this technology procurement process is unusually lengthy because DPS will use the Cooperative contract method (via DIR) first and, no reasonable bids come in. In such cases, DPS might ask for an exemption after some time (six weeks was noted as an example in one interview) – during which time DPS could have gone straight to an open market procurement.[208] Within this analysis, an agency professional must also determine if the contract dollar value is based upon annual value or life of the contract. However, the DIR Mandate for technology projects leads to significant exemption requests for DPS because many items do not meet DPS's specific needs.[209] This happens so often that several interviewees from multiple divisions suggested a possible *blanket* DIR exemption for DLD technology services due to its unique business needs.

An agency may obtain an exemption[210] or waiver from the requirement to use a DIR Contract to purchase an IT commodity item in one of three ways: DIR exemption, LBB approval, or DIR certification.[211] DPS IT, in cooperation with DPS Procurement and Contract Services (P&CS) Department[212] submits the exemption or waiver request on behalf of DPS.[213] DPS has made use of this exemption process often on a case-by-case basis. [214] DPS Procurement indicated that since September 1, 2020, they have requested 193 DIR exemptions (146 were approved, 39 were withdrawn, seven were denied, and one had no final determination).[215] DPS may invoke

[202] 1 TEX. ADMIN. CODE § 212.1(10)
[203] Tex Ed Code, § 51.9335., https://statutes.capitol.texas.gov/Docs/ED/htm/ED.51.htm#51.9335
[204] Tex. Gov. Code § 2054.0525 Customers Eligible for Department Services, https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2054.htm
[205] TPCMG, v3 p.37.
[206] TPCMG, v3 p.37.
[207] DPS Procurement interview, June 12, 2024.
[208] IDO interview, June 14, 2024.
[209] DPS Procurement interview, June 12, 2024.
[210] DIR, https://dir.texas.gov/it-solutions-and-services/state-agencies/exemptions
[211] TPCMG, v3, p. 38.
[212] DPS Procurement and Contract Services (P&CS) Department
[213] DPS Procurement Manual, p. 44
[214] Tex Gov't Code § 2157.006.
[215] A conviction reporting portal exemption was rejected an that procurement require more editing and staff hours to create a less customized system in the end. Per Michael Parks.

established reasons for an exemption. The Cooperative Contracts and Data Center Services programs are governed by separate government code, and therefore have unique exemption requirements. Agencies within the DCS program are required to have approved DCS exemptions in addition to any exemptions that may be needed or may have already been approved through the DIR Cooperative Contracts program. Submitting Exemption requests for DIR approval depends on the type of request.[216]

5.3.4.2.10. Shared Technology Services and DCS

DIR's STS function involves much DPS input. STS enables the Texas government to reduce taxpayer costs by preventing unnecessary duplication of technology, effort, and services. Collective sharing of technology protects the state's technology assets, simplifies access to government services, and promotes innovative and secure technology use across the state. DIR's STS give Texas government organizations access to a set of managed technology offerings that accelerate delivery of their missions in a reliable, modern, and secure manner. [217]

The services offered by STS include: DCS (with public and private cloud offerings), the Application Services Center;[218] Texas.gov; Managed Security services; and the Open Data Portal.[219]

DPS has opted in to use the DIR's STS-DCS managed AWS Amazon cloud service. [220] This cloud use is developed by Deloitte but managed by DIR under STS DCS umbrella. [221] DIR noted when DPS hosts something in its own DPS data center, this would not be an "application service" agreement. The current use of the AWS cloud services in a private cloud is an example of the *voluntary* nature of the current DPS use of certain DIR technology resources.[222]

Within the second DIR program area, STS, customers (agencies) in the data center must procure software, Software as a Service (SaaS), and Platform as a Service (PaaS) through the program.[223]

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[216] DIR, Exemptions for State Agencies, https://dir.texas.gov/it-solutions-and-services/state-agencies/exemptions
[217] Texas Department of Information Resources ,Agency Strategic Plan for 2025-2029 , p. 5, https://dir.texas.gov/sites/default/files/2024-05/DIR%20Agency%20Strategic%20Plan%20FY%202025-2029.pdf
[218] TEX. ADMIN. CODE § 215.43, (a) Application Services Center Services include the development, deployment, and maintenance of software applications, including: (1) procurement, configuration, and integration of software-as-a-service; and (2) cloud computing services that are not Data Center Services identified by 1 Texas Administrative Code §215.13(a). (b) Any of the services described in 1 Texas Administrative Code §215.43(a)(1) that require an interface or connection with the Data Center Services system environment shall be procured only through this Applications Services Center program, unless an *exemption* has been requested and approved by the department in accordance with 1 Texas Administrative Code §215.44.
[219] Texas Department of Information Resources, Agency Strategic Plan for 2025-2029, Page 5, https://dir.texas.gov/sites/default/files/2024-05/DIR%20Agency%20Strategic%20Plan%20FY%202025-2029.pdf
[220] DIR interview, June 17, 2024; Data Center Services include Texas Private Cloud, Public Cloud Manager, Mainframe Services, Technology Solution Services, and Print, Mail and Digitization Services., https://dir.texas.gov/shared-technology-services/data-center-services
[221] https://dir.texas.gov/shared-technology-services
[222] Information learned from a DIR interview, not this DPS Procurement interview.
[223] Tex Admin Code § 215.43 , https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=1&pt=10&ch=215&rl=43

DIR has established the STS commodities process to accomplish this.[224] An RFO is generally used for automated information systems (AIS) purchases. RFOs are generally used for IT Commodity Purchases exempt from the DIR IT Commodity Program. RFO purchases include the purchase of automated information systems and are covered under Texas Administrative Code, Title 34, Chapter 20.[225]

Deficiencies Related to Procurement Law and Regulation

In our interviews with DPS Procurement, IT, IDO and with DIR, we learned that several deficiencies are related to regulatory, structural, staffing, and financial issues inherently tied into statutes. Regulatory hurdles can prevent efficiency and effectiveness for agencies. In this case, the interactions between DIR and DPS can be inefficient and ineffective for assorted reasons. DPS DLD in particular is generally restricted by *regulatory* hurdles and resource limitations connected to:

- 1. The statutory mandate to use DIR first for most technology solutions;
- 2. Limits on Software Specification writing and vendor communication early in the procurement process;
- 3. The Use of inefficient *Waterfall* technology development methodology over the use of the *Agile* Methods; and
- 4. Mandates on Procurement Vendor certification (TX-RAMP) requirements.[226]

5.3.4.2.11. People, Processes, Money, and Timing – DPS IT and DPS Procurement Lack Resources for Needed Technical Input

IT indicated it has technical, resource and financial constraints, but the resource constraints are the most immediate need.[227] The current DPS IT development and procurement model is a cascading (*waterfall*)[228] process that is not as effective for the development of software and IT solutions as the *Agile* project management model. To fully move into an "Agile" or more modern software development process (using an efficient *Scrum* project and time management framework), IT would need to hire more *people* to fill key roles.[229] . IT has staff that handle many daily DPS IT ancillary jobs, but right now IT does *not* have the dedicated staff for *agile* software development necessary for the full modernization of such a large agency as DPS.

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[224] TPCMG, P. 36.
[225] 34 Tex. Admin. Code Chapter 20, https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=34&pt=1&ch=20
[226] Beginning January 1, 2022, state agencies (TEX. GOV'T CODE § 2054.003(13)) may only enter or renew contracts to receive cloud computing services that comply with Texas Risk and Authorization Management Program (TX-RAMP) certification requirements.(TEX. GOV'T CODE § 2054.0593) For more information, refer to the Texas Risk and Authorization Management Program (TX-RAMP) page on the DIR website,www.dir.texas.gov.
[227] DPS IT interview, June 18, 2024.
[228] *Agile, waterfall and scrum* are terms of art in the software industry. We have attempted to define them here.
[229] DPS IT interview, June 18, 2024.

With rapidly emerging technology and a constantly changing landscape in law enforcement, more agile or flexible procurement laws and policies are needed at DPS. [230] DLD appears to also be using a phased approach. Major Information Resource Projects[231] in DPS currently do not use agile procurements, according to DPS Procurement.

5.3.4.2.12. What is Agile Methodology and Why Does DPS Need It?

Agile[232] is a modern software development process which uses a very specific form of project and time management with methods which are collaborative, iterative, adaptive and flexible.

> Agile project management is an iterative approach to delivering a project, which focuses on continuous releases that incorporate customer feedback. The ability to adjust during each iteration promotes velocity and adaptability. This approach is different from a linear, waterfall project management approach, which follows a set path with limited deviation.[233]

Agile project management models emphasize continuous feedback and adaptation. Whereas, the Waterfall Model is sequential and more rigid, with distinct phases completed in order and phases "do not advance until a phase receives final approval."[234] The "Agile" model promotes ongoing collaboration, while "Waterfall" focuses on thorough planning and execution in predetermined stages.

In terms of time and costs, the agile methodology is worth the changes. The statewide procurement process and the Texas manual both need to be modernized and changed to provide more agility and flexibility during this software development process.[235] Rigid, Prescriptive technology specifications, although they are more likely to get approved by DPS Procurement, CAT and DIR are completely counterintuitive to the way technology works today.[236]

Costs and Efficiency of Project Methods: Agile v. Waterfall

Although the team roles in the agile process are very specific, the efficiency and savings resulting from this methodology are well known in the software world. Agile projects are known to improve overall delivery cost / unit of value and be cheaper per unit of value because they create fewer errors which need to be fixed, and find these errors sooner, when they are cheaper to fix. [237] Agile

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[230] IDO interview, June 14, 2024.
[231] Texas Gov't Code Section 2054.11 (2007), https://texas.public.law/statutes/tex._gov't_code_section_2054.118
[232] A common industry practice now, *Agile* software development is an umbrella term for approaches to developing software that reflect the values and principles agreed upon by The Agile Alliance, a group of seventeen software practitioners in 2001. https://www.agilealliance.org/agile101/
[233] Atlassian Software Development, Agile vs. Waterfall Project Management, https://www.atlassian.com/agile/project-management/project-management-intro
[234] Id.
[235] IDO interview, June 14, 2024.
[236] IDO interview, June 14, 2024.
[237] https://www.linkedin.com/pulse/why-agile-cost-effective-marc-danziger#:~:text=Agile%20projects%20should%20be%20cheaper,meet%20changed%20or%20misunderstood%20requirements.

teams plan continuously throughout the project, making constant adjustments as changes arise and confer with stakeholders on business needs.

Agile may seem more expensive initially due to its ongoing feedback loops, but it often reduces expenses over time by addressing issues early and delivering value incrementally. [238]Waterfall, with its fixed upfront costs, can lead to higher expenses if changes are needed later. Since 2022, DPS IT has been moving towards the agile method of software development but has not implemented it yet for DLD projects due to resource constraints.[239]

Generally, statutes, rules, policies, and guides currently prevent the use of "Agile" models for technology acquisition and are very *prescriptive* and detailed on specifications during the procurement and DIR contracting processes. [240] This can limit the path for IT solutions throughout the process of solving technology problems for DPS/DLD and prevent deviation from plans, even when new technologies emerge that can more effectively and quickly solve a business need.

5.3.4.2.13. Early Procurement Processes and Specification Writing for Technology Solutions

During the initial phases of procurement, i.e., DLD's development of specifications and the scope of work, the DPS Procurement Division may "facilitate the Refinement and Completion of Statement of Work, specifications, and scoring criteria."[241] However, they are not necessarily technical experts for AIS nor programmatic experts[242] for DLD. With the current rapid rate of technology innovation in the market, agencies need a more detailed and up-to-date description of technical requirements in crafting tailored statements of work and these help agencies obtain better long term "best value" [243] for the state.

DIR Technical Input Is Lacking (Spec Writing)

The current level of technology expertise at DPS[244] may be high, but the resources and the number of skilled staff for the size and needs of the enterprise are lacking.[245] DIR is be able to provide insight into how different specifications affect pricing, and how budget constraints might affect some aspects of technology functionality. Yet DIR is not focused on specific, tailored business needs unique to DPS and DLD. DIR must serve all of its customers (agencies).

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[238] Forecast, Agile vs. Waterfall: What's the difference? July 28, 2024, https://www.forecast.app/blog/difference-between-agile-waterfall#:~:text=Agile%20may%20seem%20more%20expensive,if%20changes%20are%20needed%20later.

[239] IT interview, June 18, 2024.

[240] See State of Texas Procurement and Contact Management Guide, Version 3.0, Texas Comptroller, https://comptroller.texas.gov/purchasing/publications/procurement-contract.php

[241] On file with authors, from DPS Procurement Division, A Procurement PCS Source Selection Framework Document lists five steps of Procurement at DPS, (step 2 with Procurement Lead)

[242] Procurement Div., interview, DPS Procurement, June 12, 2024.

[243] "Best Value" – See Tex. Gov. Code, §2157.00.

[244] IN addition to the IT Division, there is a new Innovation and Data Office Division.(IDO) that just opened in January 2024, with a new Chief.

[245] Texas DPS has 21 Divisions and serves over twenty-eight million people residing in Texas, https://www.dps.texas.gov/section/list-divisions

In interviewing DPS IT, IDO, and Procurement staff, we detected a desire for DIR to have more expert *technical* advice at the ready for DPS on the front end of the procurement process. For example, if DPS were to submit an RFI, DPS Procurement would appreciate if DIR had a team of experts that could examine the specifications being written and help refine DPS requirements by offering a practical perspective on what is feasible and likely to get a good vendor response.[246] DIR could suggest adjustments to DLD/IT specifications to better align with what a software solution could deliver. DIR, if it had the staff to assist this way,[247] could assess how well available solutions align with DPS/ DLD needs.

For example, when asked about aiding the DLD in evaluating potential solutions for the often criticized DLD call center, DIR responded it did not "have the staff or statutory authority" to do that, but it could offer DLD "contract vehicles" - since this work was not within the STS scope.[248]

5.3.4.2.14. Modernization, Agile Processes and the Vendor Community

For AIS procurements that are high dollar, high risk, the RFO solicitation process is used. The DPS mean for RFO procurement is 311 days. An Agile or more modern software development process uses cutting-edge methods found among experts that work on these types of projects daily. This process that is more often found in the Vendor community. DPS IT, with its resource constraints, expressed a desire to implement a more agile[249] procurement process with DLD technology, which would involve more ability to engage the vendor community. If DPS-IT could get more experienced and specialized technical expertise from outside DPS-IT, it could better identify any gaps or missing elements in new specifications or discover potential issues or needs IT failed to consider. A lack of skilled, experienced technology staff is not a new problem for state agencies, but the need has only increased as the Texas push for modernizing agencies has expanded.

5.3.4.3. Vendor Communication

Being able to *communicate* more with the vendor community on this could help ensure that DLD's specifications are aligned with industry best practices. Leveraging the expertise of the vendor community on the front end of specification writing could provide DPS-IT / DLD with insights into more advanced or innovative technology features that could benefit the Division. External expertise can point out enhancements or alternatives that DPS-IT might not have considered. DPS-IT is faced with so many tasks that it may lack the full staff or expertise needed for cutting edge specification and requirement drafting. The vendor community could say, for example, if a SaaS solution needs to integrate with existing systems and could provide up to date information on the

[246] DPS-IT interview, June 18, 2024.
[247] DIR also indicated it has trouble finding technical experts that want to work for government salaries, DIR interview, June 17, 2024.
[248] DIR interview June 17, 2024.
[249] For a more thorough discussion of *Agile* and *Waterfall* Methodology. See Atlassian Software Development, Agile vs. Waterfall Project Management, https://www.atlassian.com/agile/project-management/project-management-intro

integration capabilities and requirements. Although DLD and IT may be able to articulate DLD's business needs, a more detailed draft with refined, initial requirements can lead to more useful vendor feedback later on in the procurement process. However, the statutes and rules currently prevent this type of communication.[250]

Although Texas law authorizes the exchange of information between an agency and a vendor related to future solicitations, there are *statutory* and other limits to how much interaction may occur. The main challenge that occurs if a vendor is compensated by the agency for assistance in drafting specifications or scope of work for a solicitation, the vendor will not be eligible to bid on the resulting contract under state law.[251]

The procurement team may develop a plan to obtain any needed vendor input, which may include issuance of a request for information (RFI), attendance at industry days, or directly contacting industry leaders or vendors listed under the applicable code on the Centralized Master Bidders List (CMBL)[252]. DPS Procurement noted that a dedicated AIS specification drafting person would speed up procurement processes under the determinations for Best Value to the state[253] if projects were developed with expert technical help either in-house or from skilled outside vendors who can offer insight current trends, industry practices, and available products/solutions. This would reduce challenges from the start of procurement as it would reduce change orders that are costly adjustments.

Deficiency: Limited interaction with vendors and requirements for highly prescriptive specifications hinders the procurement of new technologies, creating a structural barrier to innovation.

5.3.4.3.1. Procurement Delays - Vendor certification requirements (TX-RAMP)

Procurement Vendor Certification requirements were noted as a barrier and challenge by DPS and DIR for technology acquisition. Beginning on January 1, 2022, state agencies may only enter or

[250] 49 TEX. GOV'T CODE § 2155.090(b). (In drafting the Solicitation, Contract Developers may communicate with vendors for the limited purpose of answering questions. Yet the fear of overstepping the rules prevents much communication.)

[251] TEX. GOV'T CODE §§ 2155.004, 2155.090(b); See also TGCPM p 8; Procurement Div. interview, June 12, 2024, and IT interview, June 18, 2024; Texas DPS Procurement and Contract Management Guide, Ver. 4.01, Dec. 2018, p. 14, § 4.4 Drafting the Solicitation.

[252] Centralized Master Bidders List, https://comptroller.texas.gov/purchasing/vendor/cmbl/; See also TPCMG, p 8

[253] The determination of best value for the purchase of an automated information system is governed by Government Code, §2157.003: § 2157.003. DETERMINING BEST VALUE FOR PURCHASES OF AUTOMATED INFORMATION SYSTEMS. "Best value" for purposes of this chapter means the lowest overall cost of an automated information system. In determining the lowest overall cost for a purchase or lease of an automated information system under this chapter, the comptroller or a state agency shall consider factors including: (1) the purchase price; (2) the compatibility to facilitate the exchange of existing data; (3) the capacity for expanding and upgrading to more advanced levels of technology; (4) quantitative reliability factors; (5) the level of training required to bring persons using the system to a stated level of proficiency; (6) the technical support requirements for the maintenance of data across a network platform and the management of the network's hardware and software; (7) the compliance with applicable department statewide standards validated by criteria adopted by the department by rule; and (8) applicable factors listed in Sections 2155.074 and 2155.075.

renew contracts to receive cloud computing services that comply with TX-RAMP certification requirements.[254] This creates challenges for efficiently finding products. TX-RAMP certification[255] is a challenge for vendors and it can take up to 1 year to acquire and can be costly. Vendors may or may not choose to pursue these expensive and costly types of certifications.

TX-RAMP is related to the product itself, not the vendor. So, a vendor could have a DIR contract, but have a software offering that's not TX-RAMP certified. Since DIR is not the end user, it does not require all products to have TX-RAMP certification. This can create confusion and delays for agencies like DPS. DIR may need to *require* that approved vendors offer *only* TX-RAMP certified products. This is a legislative and structural delay outside of DPS or DLD control.

According to DPS Procurement, this creates delays as the vendor must get *provisional* certification to contract with DPS using that particular uncertified product, which can take up to a year. This creates inefficiency in the procurement process, especially if this period falls over into a new biennium and if capital authority is not authorized for this cost to roll forward.

Rule changes may be needed to re-evaluate the TX-RAMP requirement to enable agency leadership to document and accept risk in certain cases, including the vendors' provisional TXR certification period. This change would enable agencies like DPS to enter into a contract that is not considered void statutorily when the risk of not having the contract is greater than the risk of the TXR certification process not yet being complete. This would also require the agency's cyber team to review and weigh in on tolerable risk.

Deficiency: Procurement vendor certification requirements (TX-RAMP) add time to the process when time is of the essence.

Procurement vendor certification requirements were noted as a barrier and challenge for technology provision. Texas required that state agencies as of January 1, 2022, may only enter or renew contracts to receive cloud computing services that comply with TX-RAMP (TXR) certification requirements. This creates challenges for efficiently finding vendors, as TXR certification for vendors can take up to one year and can be costly, and vendors may choose to not pursue certification. This is a legislative and structural delay outside of DPS or DLD control. DIR noted that vendors may have TXR certification while the product itself is not yet TX-Ramp certified. However, if the rule applies to the product, according to DPS Procurement, this creates delays as the vendor must get provisional certification to contract with DPS using that particular, uncertified product, which can take up to a year. This creates inefficiency in the procurement process, especially if this timeframe falls over into a new biennium and if capital authority is not authorized for this cost to roll forward.

[254] TEX. GOV'T CODE § 2054.003(13), ;TX-RAMP, https://dir.texas.gov/information-security/texas-risk-and-authorization-management-program-tx-ramp

[255] TEX GOV'T CODE §2054.0593; 1 TEX. ADMIN. CODE § 202.27(applies to contractors doing business with an agency for cloud computer services subjected to the state risk and authorization management program. A state agency shall ensure contractor's compliance with the program for contracts it enters or renews after January 1, 2022.)

5.3.4.3.2. Procurement Questions

General Questions:

1. What is the average time it takes to procure large systems?
2. We know that the TPST took three years to implement for DPS. What was the main source of any procurement delays in deploying this portal?
3. How often do procurements cross biennia?
4. Do you need to restart the process as budget allocation goes away?
5. If the procurement process doesn't restart, do you have an in-house process to manage from RFI through to procurement and then contracting given you know this will be crossing a biennium.
6. Could you walk us through the main process steps in procurement for DPS/DLD.
7. Which items matter most in evaluating a vendor or product under consideration: timeline, cost, team size,
8. Do state procurement laws create major hurdles or obstacles? If yes what are these?
9. Do *internal* procurement rules create major hurdles or obstacles? If yes what are these?
10. Are there multiple staff working on a single procurement? If yes, why?
11. Is this problematic for major information resources projects?

Staff Input:

12. How involved in regional management and DLO staff in the process of report writing and providing reasoning for the purchase during the solicitation and awarding process?
13. How involved is regional management in the reporting on vendor performance (TX Gov Code 2155.089) once a contract is completed?

Current Procurement

14. What current solicitations are currently in process for new vendors?
15. Which are renewals of old contracts with current vendors? Which of these contracts are using a phased approach or are in waves such that solutions can be analyzed to assess the impact on customers and users?
    (*We understand that this may be privileged or confidential information, and we will abide by rules in place on disclosure in this. Our goal is to identify solutions that are forthcoming, not to identify parties in negations.)*

Major Information resource Projects:[256]

16. How does the procurement team evaluate the "the comparative total costs of leasing and of purchasing the information resources and information resources technologies involved in the project, with those costs to be determined after taking into account the use of the resources and technologies over their **lifetimes**?"
17. Please describe the process DPS/DLD employs to "quantitatively define the expected outcomes and outputs for the project" and with whom is that information to be shared?[257]

DIR Mandate for Tech Services to Agencies

[256] Texas Gov't Code Section 2054.11 (2007), https://texas.public.law/statutes/tex._gov't_code_section_2054.118

[257] See 2054.118 …" Before a state agency may initially spend appropriated funds for a major information resources project, the state agency must quantitatively define the expected outcomes and outputs for the project and provide that information to the quality assurance team."

We know that Texas State Agencies are required to purchase hardware, software, and technical services through DIR per Texas Government Code (TGC) 2157.068.
Texas Government Code, §2157.068, requires State agencies to buy commodity items (as defined "hardware, software, and technical services") through DIR, in accordance with contracts developed by DIR, unless the agency obtains an **exemption** from DIR, or a written certification that a commodity is not on DIR contract (for the limited purpose of purchasing from a local government purchasing cooperative).

18. Does DLD currently have any exemptions to this general DIR mandate?

Technology Contracts:Technology Contract Questions: [258]

19. Are IT systems handled differently in procurement? For example, do you bring on IT staff to assist?
20. Do you work with DIR on procurement for IT or other systems?
21. Does this lead to longer times for developing the procurement?
22. We know that you currently use 2 cloud-based computing systems in DLD: Tableau and APPLUS scheduler. Can you discuss how this procurement process went in steps so we can understand the process better?
23. If any DLD vendors or products involve use of AI, what procurement process hurdles or impending regulatory hurdles would affect the timeline of such solicitations and negotiations for these products?

Basic Contracting

24. Please walk through the process for us: from solicitation to awarding and other steps involved.
25. Which items matter most in evaluating a vendor or product under consideration: timeline, cost, team size, expertise, track record, integration requirement, risk of customer impact with changes, regulatory considerations?
26. What are the main hurdles that occur in contracting?
27. Are there any problems (structural, compliance or rules) with getting the DLD users of software or platforms to evaluate a product fully before the negations and conversations begin with a vendor?
28. What are the challenges in contracting for IT systems? Please list any specific laws or regulations if you can.
29. Are these different from other types of procurement?
30. Are there multiple staff working on a single contract? If yes, why?

[258] DIR conducts procurements for Cooperative Contracts (CC), STS, Communications Technology Services (CTS), and Internal (I) DIR purchases .
Under DIR's statewide procurement authority, DIR establishes and manages contracts under the following program areas for use by eligible customers: (1) Cooperative Contracts program; (2) STS (e.g., Private Cloud, Public Cloud, Print/Mail/ Digitization.
Subject to TAC 215.43, customers in the data center must procure software, Software as a Service (SaaS), and Platform as a Service (PaaS) through the program. DIR has established the STS commodities process to accomplish this.
(3) Telecommunications. DIR may consider strategic sourcing and other methodologies to select the vendor offering the best value on IT commodity items. (p 36 TXPCMC 3.0, HB 4553 (88th Leg., RS)).
All Solicitations are also posted and maintained on the Electronic State Business Daily (ESBD). (Our team is firewalled from looking at this.)

Legacy System Modernization: Texas government is encouraging use of cloud computing for agencies now. According to Gov't Code Section 2157.007 [259]

31. What is the average time it takes to negotiate a contract for a large system, and especially for what would be termed a legacy system?
32. How does the current procurement process and cycle impede strategies for modernization of legacy systems at DLD?
33. What are the current plans at DLD to encourage movement to the cloud and who can the procurement team assist in this process?

Best Value

34. How does the procurement team ensure they get "best value" in the process?[260]

Proprietary Systems

35. Are there any proprietary systems that currently or will be needed to accomplish the DLD goals or mission?[261]
36. Of these items for DLD, which are most likely to be employed/ implemented within the next 2 years?
    - Procure Customer Relationship Management software to improve Customer Service Center (CSC) analytics;
    - Procure and implement a workforce scheduler;
    - Integrate the IVR with the Driver License System to provide self-service to customers;
    - Revamp website to improve effectiveness in communicating services and requirements for services;
    - Integration of self-photo capability in order for customers to upload pictures for renewal;
    - Send email renewal notification to customers that requires customer authorization and payment;
    - Create online capability for customers to better identify what documentation they need to bring to conduct transactions in offices; and
    - Create capability to input customer data prior to arriving at an office. This may be done through fillable forms to be printed and carried to the office or through a portal which inputs information directly into the Driver License System

5.3.5. Information Technology Division

The Study Team met with DPS IT management on June 18th 2024 to gather information on information technology strategies for both DPS and DLD, understand procurement and contracting

[259] Texas Gov't Code Section 2157.007, Cloud Computing Service, https://texas.public.law/statutes/tex._gov%27t_code_section_2157.007

[260] Government Code, §2157.003

[261] See "(h) If a state agency believes that the needed automated information system may be proprietary to one vendor under Government Code, §2155.067, it shall include the following statement in bold and prominent type at the beginning of the RFO: "Although the requested items in this RFO appear to be proprietary to one vendor under Government Code, §2155.067, all qualified respondents that may be able to provide the requested items are encouraged to submit offers.""

challenges, review current modernization activities for legacy systems, and identify deficiencies. Modernizing legacy systems is a challenge across Texas State Agencies which has been repeatedly recognized by the State Legislature.

The DLS Legacy system was developed in 2005 with a complex rules' engine and back-office processing that truly experienced staff understand. Making changes to the current DLS system is extremely costly and is time prohibitive as it is written mostly in Java (a very old programming language). Java developers are becoming scarce and more expensive to bring in. As an example, a major outage occurred in September 2023 due to the AAMVA State to State (S2S) integration with the DLS which resulted in increased, unanticipated traffic demand on DLS. S2S allows any state that is issuing a document to check with Texas to see if any type of document has been issued previously to their customers. DLS was down for a week managing this process. If architected correctly, for example, if DLS had been in the cloud, then auto-scaling to manage the traffic could have prevented this outage. Modernization is problematic, and cost prohibitive due to technical, resource and financial constraints. Of these the most vital is the resource constraint: lack of technical staff that can help bring cutting edge, modern solutions to DLD. DLD's current approach appears to be a hybrid approach to cloud computing, where they use cloud services for some systems or applications (Scheduler) while keeping others on-premises (DLS, Tableau.). DPS IT said it lacked the technical writers, business analysts and systems analysts familiar with new technology capabilities that could truly develop cutting edge software solutions for DLD. Programmers are available, but they are not specialists in software development for new requirements and documentation of those terms. This approach allows DLD to leverage the benefits of cloud computing, such as scalability, flexibility, and cost-effectiveness, while also maintaining control over certain sensitive data or critical systems. Modernizing government legacy systems entails knowledge transfer challenges, due to retirement or loss of knowledgeable in staff who know how to program the legacy system.

If DLD were to migrate non-sensitive or less critical applications to the cloud while keeping mission-critical or highly regulated systems on-premises due to security or compliance concerns, could make some programming tasks easier. This approach would allow DLD to leverage the benefits of cloud computing, such as scalability, flexibility, and cost-effectiveness, while also maintaining control over certain sensitive data or critical systems. However, it also means adjustments to Texas Scheduler, and DLS are costly in terms of time and person power. Additionally, while the hybrid model allows agencies to tailor their infrastructure to their specific needs, the lack of integration creates problems. For example, in the crime records division of DPS, DPS wants to replace an application, but as the DLS is not written in XML (a modern language) that creates a challenge in how applications integrate with DLS. DLD is using a phased approach to cloud adoption, with DPS using an AWS Amazon cloud managed by STS, which is a DIR managed cloud product offered by Rackspace.

Although the hybrid model allows agencies to tailor their infrastructure to their specific needs, the lack of integration creates problems. For example, in the crime records division of DPS, DPS wants to replace an application, but as the DLS is not written in XML (a modern language) that creates

a challenge in how applications integrate with DLS. DLD is using a "phased approach" to cloud adoption, with DPS using an AWS Amazon cloud managed by STS (which is a DIR controlled cloud product managed by Rackspace).

However, a full shift to the cloud is a more efficient solution, long-term. As an example, DLO supervisors have suggested DLD send out notices to drivers that they can renew their licenses up to two years ahead of time. However, under the legacy DLS, this would be a monumental programming effort – identifying which of the 26 million plus people in the DLS dataset are eligible to renew, each day, every week, and then sending out a notice to them.[262]

According to IT Division the DLS legacy system is holding back modernization in some ways. For example, with a DBQ database engine and moving to the cloud, it's much more efficient to just build something using cloud native services, rather than :lift and shifting" or re-hosting the DLS. As an example, DLD could migrate the DLS to AWS (into the cloud) but DLD would have to leave its database in the DPS on-premises data center, which adds more complexity. A cost-efficient solution would be that DLD replace DLS with a modern licensing system, "out of the box" built with "off the shelf" software as a service (SAAS), with some customizations to make it DPS specific. If DLD were to replace DLS with a proprietary cloud hosted licensing app that is already developed, DPS-IT could use a cloud friendly database engine to easily ensure reliable data exchange moving forward. However, this is currently not possible with current DPS IT staffing constraints.

The Department of Homeland Security has indicated that participation in S2S (AAMVA's state to state service) is required for a state to be REAL ID compliant, as the REAL ID Law requires that states ensure that a person holds "only one" REAL ID credential. [263] States have had to modernize and keep up with these federal regulatory requirements. A DLS outage in September required the addition of infrastructure due to AAMVA's S2S system integration with the DLS and the increased, unanticipated demand in traffic on DLS. DLS was down for a week.

Modernizing the DLS legacy system could also lead to improved efficiency, reduced costs, and enhanced customer experience in the call center because cloud adoption (possibly AWS) and integration of a cloud-based contact center with DLS would lead to easier data sharing. A DLD modernized call center integrated with capabilities from AWS would improve response times and accuracy. For the past four months, there have been ongoing talks with AWS connect, a cloud-based contact center that integrates easily with other AWS services. They propose to limit calls altogether by implementing a chatbot (AI) for more detailed answers, while the LPS talks to a customer on the phone. A chatbot that would be able to give more detailed answers to DLD constituents when they're either on our website or a queue in the call center. Although DPS-IT built a small integration into DLS that allowed for some more efficient ways for the call center

[262] Feb. 13, 2024, EWG meeting, Dep. Chief Dennis

[263] See 6 CFR Sec. 37.29 Prohibition against holding more than one REAL ID card or more than one driver's license, https://www.law.cornell.edu/cfr/text/6/37.29 ; See also more explanation on AAMVA, S2S, https://www.aamva.org/technology/systems/driver-licensing-systems/s2s-frequently-asked-questions

operator to get customer information, there is currently a very low percentage of calls that are actually answered due to a staffing and capacity problems.

Deficiency: Aging Driver License Legacy System hinders effectiveness and efficiency, including integration with modern solutions and architecture cannot handle high surges in traffic, which can lead to unexpected outages.

The challenges in creating and gathering requirements for modernization of DLD systems are many, but one significant one is the development of specifications for new technologies, such as AIS in the RFI-RFO-RFP process. DPS Procurement and IT Divisions noted the challenge around the AIS technical expertise gap. The ability to have sufficient staff bandwidth that has this type of specialized knowledge for development and spec writing in the current waterfall technology process model that DLD is using DLD currently starts a technology acquisition with identifying business needs and then it needs comprehensive documentation to gather and develop the requirements in a Requirements Specification Document (RSD). Detailed requirements are defined at the beginning of the project, often in a linear fashion, covering all aspects of the system. If requirements are documented poorly, it is hard to change later, as business needs evolve.

This deficiency is a structural barrier in that current statewide procurement practices overall are not designed for innovation, agility and flexibility[264] for users that bring cutting edge technology solutions to taxpayers.

Procurement and IT Divisions noted that opportunities to partner with outside entities for requirements gathering, specifications writing and requirement development due to the vendor community's expertise and knowledge on cutting edge technology. The public sector however government has unique hurdles in this process.

Due to state procurement and other laws and rules, if a vendor assists in drafting specifications during the RFI process, the vendor may be excluded later from bidding on the solution during the RFO-RFP process.[265] In the current procurement cycle process for AIS and technology solutions, stakeholder involvement for IT, DLD, DIR, IDO and Procurement is key in the technology acquisition process. Due to current structural barriers created by statute and other policies, [266] DIR, with DPS procurement and IT may contribute to some delays in the process as they are involved in specifying high-level requirements, functionalities, scope development, and the acceptance criteria. With many layers of requirements, an overall technological process can take years to acquire, test and implement a tech solution to a DLD problem. This barrier means by the time a

[264] IDO interview, June 14, 2024, agility and flexibility are sorely needed in current procurement rules. Chief Ballew even recommends redrafting the Texas Procurement and Contract Management Guide, V. 3.0, https://comptroller.texas.gov/purchasing/publications/procurement-contract.php

[265] Texas Procurement and Contract Management Guide, V. 3.0, https://comptroller.texas.gov/purchasing/publications/procurement-contract.php

[266] Tex.Gov. Code Sec. 2157.0685, State Agencies are required to submit SOWs (statement of work) for DIR review and approval prior to solicitation to Vendors (award value over $50,000). DIR must review and sign the final SOW before it becomes valid, and any money is paid to a vendor. State agencies must follow threshold requirements for IT commodity items, https://dir.texas.gov/it-solutions-and-services/buying-through-dir/statement-work-sow

technology upgrade / solution / business need has been identified still more steps are required. These include beginning the acquisition process with DIR and budgeting. This process may result in an Agency missing an LAR and biennial funding cycle[267] to get appropriate funding needed for the technology.

Deficiency: Gathering and Writing Modern AIS/Technology Specifications hinders effectiveness and efficiency, including integration with modern solutions

The current DPS IT development and procurement model uses a traditional **waterfall** approach, which is a sequential development process that does not allow the next phase of the project to begin until the previous phase has been completely wrapped up (analysis, design, development, and testing, for example). The waterfall approach is less effective for modern software and IT solutions compared to **Agile** project management (an approach based on delivering requirements iteratively & incrementally), which thrives in environments with rapidly evolving technologies and changing landscapes, like law enforcement. Agile project management allows phases to overlap. DPS IT noted that it is moving toward using Agile software development processes. With rapidly emerging technology and a constantly changing landscape in law enforcement, more agile and flexible procurement laws and policies are needed. Statutes, rules, policies, and Texas Comptroller guides are prescriptive and detailed on specifications during the procurement and DIR contracting processes, creating structural barriers that prevent the use of the Agile process for technology acquisition. The barrier limits the path to IT solutions as it prevents deviations from plans, even when new technologies emerge that can more effectively and quickly solve a business need.

DPS IT has built an in-house Agile framework for software development, which includes Scrum teams and Kanban efforts. **Kanban** and **Scrum** are popular agile project management frameworks, each offering distinct approaches to organizing and executing work.

- **Kanban** employs a visual system to manage workflows, focusing on continuous delivery and process improvement.
- **Scrum** provides a structured framework that involves short, iterative development cycles known as sprints, led by a Scrum Master who facilitates the team's progress. Regular meetings, called scrums or stand-up meetings, are held to assess tasks, address obstacles, and ensure alignment towards project goals.

However, DLD has not been incorporated into the agile framework yet. The plan to incorporate DLD into the Agile framework has been on hold since 2022. The reason for the hold is resource constraints, including needing additional Scrum Masters (a professional coach and guide who ensures the team understands the scrum framework and its principles, values, and practices), aids for Scrum Masters, business analysts, and Agile Integrators (responsible for pulling together and

[267] Texas is one of four states whose legislatures meet every 2 years. Texas Constitution, Article 3 Legislative Department.

coordinating separate teams and sections). These resources are needed to break-up software requirements into an agile fashion, such as themes, epics, and user stories.

An Agile framework is absolutely critical to enhancing effectiveness and efficiency. The current waterfall approach to DLD's software hinders adopting more efficient and responsive IT solutions. An Agile team for DL's software would offer significant advantages:

- Increased Agility and Faster Delivery: Agile allows for adjustments throughout development and faster delivery of working features, ideal for evolving environments like DLD's.

- Improved Quality: An Agile framework's iterative nature promotes continuous testing and integration, leading to higher quality software solutions.

Deficiency: Waterfall procurement and software development are not very effective for obtaining modern software and technology solutions.

5.3.5.1. Other considerations

Constituents expect quick, high-tech answers like those in private sector web interactions, but when government tries to adopt modern, public facing, private sector type best practices, it must account for REAL ID and other security measures. Federal REAL ID policy is pushing states to modernize for more server capacity for State to State verification. As the public increases its adoption rate of using "Texas by Texas" which has some identity verification built in, this may reduce in-person office visits. The functionality of this site could be improved. DPS-IT has considered modernizing identity verification processes using electronic documents and mobile IDs, but this is far into the future and has security risks to consider.

Current technology at DLO's prevents customers from having a paperless DLO experience. Customers cannot send electronic documents to DLD for electronica uploading. Instead, customers must print out documents on paper, then the LPS must scan them with paper shredding of these print outs occurring daily. This is an inefficient use of printers, paper and LPS time and funding.

Currently DLD has several DBITS DIR Deliverables-Based IT Services)[268] contracts with DIR[269] that include Application Maintenance and Support such as troubleshooting, modifying, maintaining, improving security, and enhancing legacy systems[270] and applications which may be running in a production environment. DBITS contracts awarded under RFO DIR-CPO-TMP-553 provide project-based IT solutions & services and the success of the solicitation is based on the deliverable outlined in the Statement of Work (SOW) issued under the DBITS contract. DBITS

[268] https://dir.texas.gov/cooperative-contracts/deliverables-based-it-services-dbits
[269] See DLS Roadmap.
[270] Per TGC 2157.0685, State Agencies are required to submit SOWs for DIR review and approval prior to solicitation to Vendors (award value over $50,000). Learn more about the SOW process or access the SOW portal.

contracts are ideal for developing a new IT application, upgrading a legacy system, or for general IT procurement assistance, including Independent Validation and Verification (IV&V) services.

Deficiency: Moving to a Paperless Environment

Legislative changes[271] create a need for alterations to DLS or new technology solutions which may necessitate more IT work, tweaks and fixes to the legacy DLS system.

A legislatively mandated change to DLS was required by HB 1275 which allows a person who is sixty-five or older with a REAL ID DL to apply for an ID card online if their driver license card is surrendered.[272] In DIR DBITS contracts, these changes can take a year or more to implement due to resource and financial constraints in IT. DPS-IT is currently examining legacy system modernization as it must report progress regularly to DIR regularly for the DIR Modernization Report[273]

DIR oversees checking in with state agencies on their push to modernize legacy systems. long term plans to modernize legacy systems is a Texas government priority. Section 2054.069 of the Texas Government Code requires the DIR to submit to the LBB a report that "prioritizes, for the purpose of funding, state agency cybersecurity projects and projects to modernize or replace legacy systems" by October 1 of each even numbered year. Section 2054.571 of the Government Code defines a legacy system as "a computer system or application program that is operated with obsolete or inefficient hardware or software technology." DIR submits this Prioritization of Cybersecurity and Legacy Systems Projects (PCLS) report to meet the statutory requirement.

DPS, DPS-IT responded to this report, noting that the DPS licensing platforms needed modernization. This led to an RFI that was released in January xx regarding an examination of how these various licensing platforms could be updated and modernized at DPS, and DLD was listed among the various platforms in this RFI.

Deficiency: Legislative Mandates Unfunded and Adding to Timeline for IT Improvements

Communication between agencies and divisions is lacking sometimes on technology issues which can lead to biennial delays in funding service delivery improvements to taxpayers. This delay affects the effectiveness and efficiency in obtaining the best technology solutions and services to taxpayers in a timely manner. These complex statutory/ legislative, structural and communication

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[271] See DLS Roadmap Releases, as of April 2, 2024, in possession of author. (88th Session: HB 3132, HB 1275, SB 2376, HB 3798, SB 347, SB 1527, SB1518, HB 1163, HB 3647, SB 1070, HB 3646 (release date Feb. 2026); 87th session: HB 911, SB 798, SB 2054).

[272] HB 1275, https://legiscan.com/TX/text/HB1275/id/2818723; See Also DLS Roadmap Releases, as of April 2, 2024, in possession of author. (DLP-23273);

[273] DIR, Prioritized Cybersecurity and Legacy Systems (PCLS) Study Report to the Legislative Budget Board September 30, 2022 , https://dir.texas.gov/sites/default/files/2022-10/2022%20PCLS%20Public%20Report.pdf; Legacy Modernization projects must possess at least one of the following criteria: The project's primary purpose modernizes the agency's legacy systems as defined in Section 2054.571 of the Government Code. Or The project primarily supports continued systems currency by monitoring the agency's application portfolio and information technology infrastructure.

hurdles are understandable given the size and missions of the DPS, DLD, and DIR and the nature of our biennial legislative cycle in Texas.

Many agencies are subjected to a time-consuming, complex web of statutes and rules in the agency acquisition of technology. Although DPS IT[274] meets with DLD Customer Service and Technology [275] weekly to discuss DLD roadmap,[276] technical debt, priorities, system capabilities, legislative requirements and end of life/modernization issues, both entities must also communicate also with DIR, DPS-IDO AND DPS-procurement about technology acquisition topics.

This complex web of communications and approvals creates inefficiencies and delays in implementing technology solutions to help taxpayers get government services.

For example, DPS-IT and DLD were unaware of additional LAR process services provided by DIR[277] that could help them in requesting DLD funding and documenting policy considerations when creating their LAR and other EIR's.[278] Highly technical expertise and knowledge of the rules and DIR processes can help agencies in justifying the business needs for newer technologies to assist taxpayers in receiving DLD services. Correctly preparing and submitting the legislative appropriations request is vital as an agency's LAR connects the development of the agency's strategic plan and the GAA by providing a fiscal statement of the agencies priorities and needs, such as projected performance, projected costs and method of finance proposed for the services the agency provides to the taxpayer.

If something gets overlooked, then DPS DPS-IT misses a crucial deadline in the LAR process / biennial funding cycle for new technologies, the wait is another two years before an item can get funded again. DPS-IT must occasionally work with DIR to ask for budgetary funds to address emerging technology issues that weren't identified during the fiscal note process. To enable comparison of performance between fiscal years, historical data must be maintained and available for any measures that are changed. There are deadlines for agencies to request modifications to previously approved structures and measure definitions. If revisions are not requested or approved in time, the budget structure is adversely affected.

Likewise, if there is an impact to DIR-operated Texas.gov[279] either through legislative requirements or efficiency considerations, DPS-IT must confer with DIR. DPS-IT meets with DIR monthly[280] about any items that impact them in the data center services, STS or in texas.gov, as well as contracts or any risk-filled programs as these topics relate to DPS or DLD.

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[274] 14 FTEs are assigned to helping DLD within the DPS IT department.
[275] Tony Rodriguez, DLD
[276] DLD Roadmap for DLS, xxx
[277] DIR interview, June 17, 2024, in addition to LAR reviews, DIR can support DPs through the fall into the joint budget hearing phases of the legislative seasons.
[278] IT & DLD interviews.
[279] Texas.gov is chiefly maintained and managed by DIR, but the DPS website is located there, with Deloitte as the contactor who designs, develops, maintains and manages the tx.gov platform.
[280] Chief Lane, DPS CIO, is the DPS representative on the business leaders Executive Council, which is a DIR committee.

Deficiency: Communication Challenges Within Agencies and Between Agencies

5.3.5.1.1. IT Questions

Understanding DPS IT's DLS Support

- Can you elaborate on the specific roles and responsibilities of the 14 DPS IT personnel dedicated to the DLS, including any specialists like system administrators, database architects, analysts, or modelers? Do these individuals have additional responsibilities beyond DLS support?
- How does DPS IT work with, communicate, and collaborate with DLD IT (Tony Rodriguez's team)?
- How does DPS IT help DLD determine what IT solutions are most critical to advancing effectiveness and efficiency at DLOs and the Call Center?

Challenges of Legacy System

- How does the legacy nature of the DLS impact its effectiveness and efficiency in supporting DLD operations?
- Can you provide specific examples of challenges encountered due to DLS's outdated nature?
- How do these challenges affect wait times, customer service, and the ability to integrate with modern solutions, like SaaS products?
- Are there any ongoing efforts or plans within DPS IT to address the challenges of the DLS or explore modernization options?
- Are there specific IT needs or opportunities you see as crucial for DLD to improve wait times, customer service, and online transactions?

DLD IT Roadmap and Modernization

- Can you walk us through the DLD IT roadmap, including specific components or parts of the roadmap that address the DLS legacy system?
- How often is the roadmap reevaluated to include new priorities?
- What items here are currently tied to unfunded mandates?
- Has DLD IT or DPS IT examined and assessed:
- The IT support needed for each DLD business capability?

- Any modernization drivers such as poor business fit, value or agility, or high complexity, risk, or cost?

- How often does DPS IT reassess its technology roadmap to incorporate new or changed DLD priorities?

Legacy Systems Review

- In 2014, DIR required a due diligence review for the *Legacy System Study (LSS)*, which was created by the 83rd Legislature (House Bill 2738). Did DLD or DPS conduct a due diligence review of the DLS?

- If yes, has this been updated since 2014?

- The Regulatory Services Division (RDS) issued an RFI for an enterprise licensing platform in January 2024. Was DPS IT involved with the background research supporting the development of this RFI?

- If so, can you provide that background market research (costs and/or timelines)?

Modernization Strategy

- Have there been any analyses or plans developed to explore integrating a modern platform (PaaS), such as Salesforce, with the DPS website or appointment solution? If not, what is DPS IT's role in such analyses and plans for DLD operations?

- Does the current appointment solution read into DLS to give tailored messaging to customers regarding online eligibility?

- Does DPS IT leverage the current contract with AWS to access solutions through the AWS Marketplace?

- Has DPS IT analyzed the current opportunities for the DLS system to integrate with existing solutions to provide a more tailored (and less confusing) customer experience? For example, an integration between the appointment solution and DLS can provide customers with better, more reliable information (*You're eligible for online renewal*) or an integration between DLS and a modern contact center can allow a chatbot to help with call deflection or allow Customer Service Reps to more quickly see customer information.

- How does DPS IT identify, prioritize, and remove pain points so that the technology ecosystem is able to provide appropriate support for DLD's business needs?

- Does DPS IT use value-stream mapping or business-capability-impact mapping to highlight the impact of change or opportunities for optimization?

- Has DPS IT identified an appropriate modernization approach to remove the pain points related to the DLS legacy system or other DLD technology products?
- Has there been a conversation between DPS IT, DLD IT (Tony Rodriguez), and/or DIR about the various approaches to modernizing legacy systems (which include encapsulating, re-platforming, refactoring, or replacing application components)?
- Have any action items resulted from these discussions?
- Have modern data requirements been defined for any new systems currently being discussed? (Introducing new data elements, restructuring existing data, or migrating to a completely different data model.)
- How will DPS IT address any data cleansing, normalization, or enrichment processes necessary to transform legacy data for a modernized system?
- Has DPS IT or DIR developed any strategies for executing a modernized system to remove obstacles to efficiency and effectiveness and improve business tech support?
- How does DPS IT (with DIR support or assistance) implement Continuous Modernization?
- How does DPS IT identify, prioritize, and remove obstacles to digital business from legacy applications?
- DPS IT and DIR Collaboration on Online Renewals
- Does DPS IT and DIR ever collaborate on making changes to online renewals (a DIR-controlled function)?
- Who controls the data/information on all online renewals?
- How is the information shared and or processed between DIR & DLS?
- Is any DL customer data stored, processed, or analyzed by DIR? If not by DIR, then by who? Does DPS IT deal with any of this data?
- Is any of that information presented in an easy-to-digest format for leadership, for example, a Tableau dashboard? If so, who makes these dashboards?
- Does DIR share online renewal statistics and data with DPS IT for data analytics?
- Can DPS IT use this data for analysis, performance measurement, and budgeting?
- Is this information centrally located in a dashboard anywhere, and accessible to DPS IT staff for decision-making or planning efforts?

- When customers check for online renewal eligibility via www.texas.gov/dlrenewal, if not eligible, they are only shown the message "You are not eligible for online renewal". What are the barriers to showing customers the exact reason(s) the system identified them as ineligible?

- With respect to modernizing, simplifying, and maximizing compatibility of the online renewals process across different browsers and devices (laptop versus mobile phone), what are the necessary steps and barriers to identifying, evaluating, and awarding a high-quality/expert UX design vendor to complete DLD website redesign effort?

5.3.6. Innovation and Data Office

The Study Team met with DPS Innovation and Data Office on June 19th 2024 to gather information on strategies for both DPS and DLD, for innovation and data modernization activities.

5.3.6.1. Overview

The Innovation & Data Office (IDO) was created in mid-December 2023. They are currently in the process of staffing all positions and completing their organizational set-ups and baselining policies, processes, and procedures. IDO was established to serve as the DPS's engine for progress. The goal is that IDO partners with agency stakeholders to leverage data and cutting-edge technology to create a safer Texas by identifying, implementing, and managing solutions that improve efficiency and effectiveness across all areas of the department. The IDO also works with divisions to achieve operational excellence by evaluating, improving, and automating processes, and integrating and sharing data and systems. The primary goals for IDO are to:

- Launch quality, effective, and cutting-edge intelligence, investigative, enforcement, and response capabilities.

- Deliver effective, efficient, and secure licensing and regulatory service solutions.

- Conduct efficient and effective administration of business operations by implementing improved processes, automation, and analytical tools.

IDO held a series of discussions with each division to capture current applications and systems, planned application / solution acquisitions, and key challenges, opportunities, and goals for each division to create a preliminary roadmap for the agency that accounts for dependencies, constraints, and opportunities for process improvements, automation, and shared/enterprise solutions.

They noted that data sharing – really applies here. DPS has much data internally. That just because of older technology has been hard to share between divisions. Starting September 1, 2024, they will have a methodology and people in place. They are working to capture "All of things in flight." IDOs vision going forward is: "Proactively going out, scouting to see what projects they need and what funding they need – looking at "As-is" and future state."

A main objective is to utilize this knowledge to capitalize on various assets within the agency, for example, one Division needs a product "x" and want to purchase, but another Division already has this solution or something very similar to this. The goal will be to reduce the number of solutions that you have and in turn be more efficient with state funds.

IDO will undertake process analysis (which they haven't yet applied to DLD). Under this procedure they will evaluate current processes to determine if there are ways to more efficiently tackle process, and also pick out technology that can effectively be utilized for this. Strategy moving forward, is: (1) conduct process analysis, (2) conduct a business case, and (3) find process/IT analysis already vetted by other divisions to save time and enhance efficiency. Unless it is something that meets the MERP criteria.

The IDO consists of resources that specialize in several domains.

- The innovation team conducts research and proofs of concept / technology to identify solutions that support interoperability, automation, and shared systems that support our specific use cases and operational environment.
- The transformation team conducts process assessments and aids divisions across the agency with identifying and implementing improvements to processes, including automation of improved processes.
- Project managers who coordinate with stakeholders to manage the development, acquisition, and implementation of enterprise products / solutions.
- The data team is responsible for data governance and management across the organization and seeks opportunities to integrate, share, and leverage data for key insights and decision-making, including development of analytical tools, reports, and dashboards to deliver insights through data.

The Chief of IDO was previously a DLD Program Manager and is extremely familiar with the legacy system and the operational activities. One goal is to reduce paper, and provide residents

The ability to upload documents online, create and use tele-appointments for certain transactions. They are also working on a Call Center solution. They noted that delivery of a Chat bot is going to take a little longer.

IDO noted for the call center solution that this being driven by DLD, and also is part of being involved with AAMVA.

5.3.6.2. Procurement Challenges

IDO noted that for RFIs and procurement, their process will require that any potentially impacted division participate in the development of requirements. For example, Cyber has to make sure it's secure. IT has to make sure that it meets the long term strategic plan. The division will be the lead,

because it's their business and because the business drives the technology solution. Using this more integrated "many-eyes' process should lead to efficiency.

IDO noted that historically procurement has taken several years, as it was designed to take time and has to meet statutory requirements. Historically this has been a waterfall process – as noted in other interviews the study Team conducted. For example, in 2007 the DLS system development used a waterfall process. The waterfall process is a step-by-step approach in which each step is completed before the next step is started. It difficult to return to previous steps and make changes or improvements if necessary. The DLS System specification had very detailed requirements, which were also very prescriptive. This prescriptive approach made it easy to overlook needed capabilities or the potential future needs of all uses which opened the Agency to risk and difficulty makes changes to add new applications in the future. The DLS System developers had no other option than the waterfall process at that time. This has become a 'learned behavior' that the CAT (Contract Advisory Team), Quality Assurance Team (QAT) or DIR undertake internally for review. This is completely counterintuitive to how technology works.

They would recommend amending the contract management guide. Place agile procurement processes here because technology changes so fast. Being super prescriptive defeats the purpose of procuring technology. It also creates a structural hurdle, as some vendors that won't bid because they can't cover the cost to get the work done. Often smaller companies also cannot bid because they cannot cover all the upfront costs. A major problem here is also the specifications (as noted in interviews with procurement and IT). As the specifications have to be so detailed under current law, if the procurement team cannot understand the technology specifications they won't approve the procurement RFI or RFP. Timing here is also critical The CAT team gets 30 days, then DIR gets 30 days, then QAT gets 30 days. This also adds to time in the initial parts of the procurement process.

Delegation authority is another issue that has repeatedly come up. There a number of agencies that have exemptions from procurement process in general. DPS doesn't have any of those. It's not just the DIR exemption, also exemption from comptroller. Exemptions can take a long time to get from the comptroller. Exemption from DIR if they want to buy something open market. There's a path to do that, but it takes more time.

Deficiency: Current procurement rules focused on waterfall procurement, do not function efficiently for purchasing modern information technology software.

IDO noted that Amazon Web Services (AWS) came in mid-June 2024 and did a data maturity study for them. IDO brought representatives from each Division. DLDs BI Team were present. IDO envisions that the governance for data program(s) will be managed centrally in the IDO office as well as the engineering piece and also designing the integrations and getting the data out.

By creating standards and governance, IDO will create efficiencies, can create training and lessons learned modules, and set up best practices to give greater insight into how to construct reports and how to produce evaluations. One example is Tableau which while being used internally had no

governance or standards so divisions purchased multiple licenses. IDO wants to function as consultants for the division's individual BI Teams so that they can send out experts to evaluate what they're doing, and also integrate BI Teams into IDO processes, so they know where to go for data and analysis. This should also alleviate lack of knowledge with the BI Team in part of IDO user group.

IDO knows that they need to modernize DLS. However, it's a totally custom built system, so in much the same way as the IT interview noted, rather than trying to eat the whole elephant at once, it may make sense to do this in a process, and tackle items that have the biggest and quickest impact first, for example online, paperless and tele-appointments. This could also help for internal benefit and for the longer term it does help with more scalable modernization. An initial process IDO had:

- Step 1: Get the data into the cloud. Much faster adoption.
- Step 2: Put all the front end stuff and the code into a modern solution (Salesforce or something like that).
    - IDO doesn't yet know what that's going to look like, or where DPS is in terms of supportability, as there are other DPS systems that are in worse condition.
- Step 3: Get funding for the license to carry a solution first and then start folding those other solutions first.

Ideally, that solution is scalable that you can migrate the DL solution into it.

Realistically modernization of the legacy DLS is probably six years down the road. Based on what's going on, what is the best answer and solution for the DL system?

IDO will continually partner with DIR regarding multiple services and opportunities to leverage DIR contracts and services to address technology needs and leverages DIR forums and best practices to guide our policies, processes, and implementations. As the office is new, we started with understanding the vision and opportunities already identified by the DLD, captured those in our roadmap, and will aid with evaluating and implementing solutions to support their vision. Going forward, we will continue to partner with DLD to assist DLD with identifying, evaluating, and implementing improved processes and technology solutions to support their operations.

5.3.6.3. Costing and Budgeting

IDOs vision is to partner with divisions throughout the legislative budget cycle to capture cost metrics and costs and benefits and document business cases that will aid in development of the Legislative Appropriations Request and also Exceptional Items Requests. As the office is new and EIs are already due, IDO is relying on market research, which includes assessing the results achieved by other states and industry research that demonstrates estimated ROI for solutions such as chat features for call centers, to estimate the benefit of the requested solutions. The current EIs

have included requests for the automated application process and "an ask" for additional hardware (kiosks) and additional staff (255 FTEs).

Having supported DLD and the Driver License system in prior roles at the agency for a number of years, the Chief of IDO noted that acquiring the solutions identified by DLD in their EIs will improve DLDs ability to serve our customers and serve more customers within any given period of time. It is critical to acquire funding to modernize DL technology and enable more automated, on-line, and self-serve opportunities to achieve the greatest opportunity for efficiency in DL operations in the future. While the solutions identified will improve services and timeliness of service in absence of additional FTEs, the solutions do not preclude the need for more FTEs now given the complexity of the DL requirements as established by federal and state statutory requirements combined with the continued population growth in Texas. They may, based on multiple external factors, including population changes and potential future statutory changes, reduce the need for additional FTEs in the future, or not. This requires continuous population studies, process and technology assessments, SWOT analysis, and monitoring of federal and state legislative changes on ongoing basis.

In essence to achieve efficiencies and effectiveness requires a balancing act for policy makers. In allocating (or choosing) between technology and people – technology serves statewide, and can serve more people. However, if a metric is everyone is served in 30 days, DLD cannot achieve this measure just with people or just with technologies. The example cited is the call center. Even when they have that solution in place, it will still need to be staffed with more representatives to see a 30-40% improvement with their throughput.

A structural hurdle IDO noted is the Cost Appropriations Process. These blanket CAP space/Funding limits require the agency to write a letter that goes to the Speaker and you have to ask for a request to exceed. Sometimes you don't get an answer. These limits are also arbitrary often set between $100,000 up to $500,000, which for construction and technology procurement is not sufficient. The CAP threshold for construction and technology procurement should realistically be set at $1,000,000 which would afford the agencies the use of internal savings, and not having to wait for another session, at which time technology costs may have risen, and effectiveness and efficiencies continue to be poor.

Deficiency. The CAP limits create deficiencies in terms of facilitating access to technology that could improve effectiveness and efficiencies for citizens to receive or access services.

5.3.6.3.1. Questions for Innovation & Data Office

- As a starting point, could you provide a general overview of how the Innovation & Data Office (IDO) team currently supports, collaborates, or otherwise works with the Driver License Division's (DLD)?

- We are aiming to understand how DPS's DIO team can support the DLD's technology goals and needs in achieving improved customer service, reduced wait times, procuring technology, and overall effectiveness and efficiency.
- Could you explain how the DIO supports DLD's technology goals and needs? Are there ongoing projects or initiatives focused on these areas?
- Can the IDO team advise or collaborate with DLD on procuring additional innovative technology solutions that address specific needs and align with efficiency goals?
- What specific expertise and resources within the DIO team can be most beneficial to DLD in achieving effectiveness and efficiency through innovative technologies?
- To what extent, if any, does the IDO collaborate with DLD and/or Texas DIR on initiatives specifically focused on improving and innovating online driver license services?
- To what extent, if any, does the DPS Data and Innovation team collaborate with DLD and/or Texas DIR on initiatives specifically focused on improving and innovating online driver license services?
- How new is the IDO? Where does the BI Team fit into IDO?
- The CTR Team recently met with DLD regarding exceptional item requests (EIRs) to ask follow-up questions.
- The proposed solutions in the EIR mention streamlining processes, but lack cost estimates and lack estimated benefits tied to the technology improvements. For example, it has been noted that Georgia was able to ½ their appointment time (which = doubling their capacity) by procuring tech that allows customers to fill out their own application**.**
    - Have there been cost estimates made for these commodities? Similarly, for the benefits – have the magnitude of the specific benefits been estimated (for example: this would double capacity for this appointment type or this would make the process roughly 1% faster or 10x faster)?
    - If so, how come these cost and benefits specifics are not listed in the EIRs? In general, what are the barriers to determining cost and benefit estimates for technology?
- Given the historical record of EIRs requesting FTEs being denied, in your opinion, would *just* requesting a software solution be more likely to get approved?
    - Would removing kiosks and the additional FTEs make this solution not worthwhile?

- Would the core functionality of the solution still be impactful on capacity even without the kiosks and additional staff?

5.3.7. DIR Interview Report

The Texas Department of Information Resources (DIR) is the official technology agency for the State of Texas and was created in 1993. DIR provides the leadership in and coordination of information resources management within state government (Government Code Title 10§2054.051). DIR gains volume discounts for technology services which state and local agencies can take advantage of. The Study team held a telephone interview with DIR management and various DIR service offices.

DIR's technology procurement and contracting function leverages the purchasing power of the State of Texas to negotiate technology contracts and provide efficient and cost-effective products and services. DIR administers, procures, and manages the Cooperative Contracts program, through which public sector organizations procure billions of dollars of technology goods and services each year. In addition, DIR leverages the state's buying power to offer statewide contracts for STS and supports the state's Historically Underutilized Business Program.[281]

5.3.7.1. DIR processes for DLD

The main interface center that most residents see for online government transactions is within Texas.gov. This links to a transaction but then goes to the actual agency website for a transaction to be conducted. DPS manages what is placed on this, and is the largest user by volume. Texas.gov comes into play for a fee for a transaction that funds costs of transaction process, and systems tech beyond the process. DIR manages a contract with Deloitte for Tx.gov site as a whole. This includes application development and maintenance, marketing and program management. These are maintained and managed by DIR. For DLD this covers driver license renewal, eligibility, replacement, and driver record monitoring. The DLD application developed by DIR under contract with Deloitte and linked in a data center that is a public cloud (Rack Space).

Other back-end systems for DPS (that DLD may interface with/utilize) – on the whole – are developed and hosted by DPS in their own data center. The exception is AWS which is managed by a shared tech vendor in DLS program and other components DLS utilizes that are not in DPS data services program.

DIR hosts and manages the interface through Tx-by-Tx app, which customers can renew and pay for their driver license online. DIR hopes to add more services to this app as a constituent facing tool for renewal of other government services. To date it is used by DPS and Texas Cosmetology.

Major challenges that DIR noted in procuring/developing and deploying technology systems are funding and then statutory requirements. For example, when interfacing with federal agencies and

[281] DIR Strategic Plan (2025-2029), https://dir.texas.gov/sites/default/files/2024-05/DIR%20Agency%20Strategic%20Plan%20FY%202025-2029.pdf

using unclassified federal information, the Federal Risk and Authorization Management Program (FedRAMP) provides . In December 2022, the FedRAMP Authorization Act was signed as part of the FY23 National Defense Authorization Act (NDAA). The Act codifies the FedRAMP program as the authoritative standardized approach to security assessment and authorization for cloud computing products and services that process unclassified federal information. As DLD interfaces with federal agencies for multiple data components, for cloud computing products and services it must ensure any IT vendors are FedRAMP certified.

Adding to this complexity, Texas required that state agencies as of January 1, 2022, may only enter or renew contracts to receive cloud computing services that comply with TX-RAMP (TXR) certification requirements: this is both vendor certification and product certification.[282] DIR noted, however, that if a vendor is FedRAMP certified they are qualified for TXR certification. DPS Procurement Division noted however, that some of their vendors do not have federal contracts so they are not FedRAMP certified, and thus need to be TXR certified.[283] While there is no cost associated with getting certified under the three TXR levels[284], there is a cost to demonstrate compliance with security criteria[285], dependent upon the type of confidential information[286] that may be processed or stored.[287] In addition, a product may not have TXR certification despite the vendor being on a list of DIR approved vendors. This creates challenges for efficiently finding vendors, as TXR certification for vendors can take up to one year and can be costly, and vendors may choose to not pursue certification. This is a legislative and structural delay outside of DPS or DLD control. DIR noted that vendors may have TXR certification while the product itself is not yet TX-Ramp certified.

DIR noted that one challenge for agencies with more than one mission is reviewing their IT/Systems/Call centers and other elements holistically. This could lower expenses and assist with technology modernization as a whole.

Finally, DIR noted that one of their main challenges to procuring/developing and implementing systems is statutory. Historical statutes create a barrier to what is the IT of 2024 compared to the

[282] Texas Government Code Section 2054.138 and Section 2054.0593. see https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2054.htm#2054.138 and https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2054.htm#2054.0593

[283] The Texas department of Information Resources notes that it "reconciles its certification records with FedRAMP on a regular basis to ensure that the cloud service status is reflected correctly across both programs." See Texas Department of Information Resources. December 1 2023. Texas Risk and Authorization Management Program (Tx-RAMP) Program Manual. Version 3.0. https://dir.texas.gov/information-security/texas-risk-and-authorization-management-program-tx-ramp

[284] As defined under TxRAMP Control Baselines specified by 1 Texas Administrative Code Sections 202.27 and 202.77. TX-RAMP Low Impact Baseline (TX-RAMP Level 1) TX-RAMP Level 1 certification is required for cloud computing services categorized by the agency as low-impact information resources. TX-RAMP Moderate Impact Baseline (TX-RAMP Level 2) TX-RAMP Level 2 certification is required for cloud computing services categorized by the agency as moderate or high impact information resources.

[285] Texas Government code, Section 2054.0593(a)

[286] As defined under the meaning provided in 1 Texas Administrative Code Section 202.1.

[287] Texas Department of Information Resources. December 1 2023. Texas Risk and Authorization Management Program (Tx-RAMP) Program Manual. Version 3.0. https://dir.texas.gov/information-security/texas-risk-and-authorization-management-program-tx-ramp

IT of past, which had a network as one block, and telephones as another –when today these are integrated in modern technology networks. DIR is asking the Sunset Commission to consider modernizing the DIR statute.

In addition, a product may not have TXR certification despite the vendor being on a list of DIR approved vendors. This creates challenges for efficiently finding vendors, as TXR certification for vendors can take up to one year and can be costly, and vendors may choose to not pursue certification. This is a legislative and structural delay outside of DPS or DLD control. DIR noted that vendors may have TXR certification while the product itself is not yet TX-Ramp certified. DIR noted that vendors may have TXR certification while the product itself is not yet TX-Ramp certified. DIR noted that one challenge for agencies with more than one mission is reviewing their IT/Systems/Call centers and other elements holistically. This could lower expenses and assist with technology modernization as a whole.

Finally, DIR noted that one of their main challenges to procuring/developing and implementing systems is statutory. Historical statutes create a barrier to what is the IT of 2024 compared to the

Deficiency: DIR Mandate for technology projects leads to significant exemption requests.

Texas State Agencies are *required* to purchase hardware, software, and technical services through DIR under statute. Under DIR's statewide procurement authority, DIR establishes and manages contracts that state agencies can use under three program areas (1) Cooperative Contracts program; (2) Shared Technology Services (STS) and (3) Telecommunications. Most DLD IT solutions are over $5 million, according to DPS, so there is some flexibility to choose to use the DIR contract rather than go to the open market. For a contract with a value of more than $5 million but not more than $10 million, an agency may opt to utilize DIR cooperative contracts or may make the purchase using the RFO purchasing method. DPS Procurement indicated that since September 1, 2020, they have requested 193 DIR exemptions (146 were approved, 39 were withdrawn, seven were denied and one had no final determination).

For IT services under $5 million, the procurement process for driver services is often delayed due to no responses from the DIR vendor community. As driver services represent a niche market, few or no DIR vendors offer the necessary applications or solutions. The current process mandates soliciting DIR vendors first, but due to their limited offerings, this frequently results in no responses and then requires obtaining an exemption, which delays procurement. Obtaining a blanket exemption for driver services would streamline the process and expedite the acquisition of required IT solutions.

5.3.7.1.1. DIR Questions

1. Is there an average time you are seeing in deploying such systems?
2. How do you structure the procurement process, if there is not a master vendor contract in place?
    - DIR fully controls
    - DIR and Agency split duties

    - DIR follows agency requirements
3. What are the main challenges in procuring/developing/implementing systems?
    - Ability to structure RFO's to ensure vendors understand agency(s) requirements
    - Staffing capacity
    - Costs
    - Other factors required under state procurement/contracting rules
    - Any other elements
4. How do you manage or prioritize multiple requests from different agencies?
5. Do you have staff assigned to specific agencies?
6. Can you walk us through how Texas.gov works for your clients who use it for payments etc.?
    - Could you share a delineation of who controls what? For example, do payments go through Texas by Texas or tx.gov?
    - Do you have a data map that shows how these systems work together, e.g. between DIR running the payment part and the link to/from the clients' website?
    - Who controls these components?
    - Does DIR pay for this, or the client, or a mixture?
    - Who has veto power over what?
7. How do you structure the operational approach to managing integration where Texas by Texas or Texas.gov has to interface for payment purposes?
8. Do many agencies have delegation authority from DIR?
9. For what types of systems are such exemptions requested and authorized?
10. How do you manage or guide the development of highly bespoke systems? Looking at the DIR Legacy Modernization Guide (vs4) it would seem that movement away from highly bespoke systems is encouraged - is this correct?
11. Does DIR solely rely on agencies identifying and mapping existing data structures, databases, file systems, data flows, and data relationships within legacy system and other system components?
12. What are the challenges you see in implementing more modern solutions such as CRM software and AI chat bots to interact with agency websites?
    - Cost
    - Staffing capacity
    - other
13. Budget wise do you have specific budget areas that cover the costs of managing these processes?
14. How are costs allocated for future maintenance/upgrades of such systems?
15. What are the major barriers that occur in procuring/developing/deploying such systems?
    - As an example, we've heard that Tx-RAMP can be a barrier due to cost/timing and audit requirements.
16. What are you doing to assist agencies plan for a move to the cloud or other modernization activities since you issued the Legacy Modernization guide that was updated in 2024 ?
17. How does the funding of that process happen?
18. How is the funding for moving to the cloud shared between DIR and the agency?
19. Do you have any timelines set out for what you envisage is the shift of all state agencies to modernization?

20. In reports you get from state agencies are they identifying timelines to implementation and also funding amounts and potential challenges associated with this?

5.3.8. Utah Department of Motor Vehicles

The research team interviewed the Director and Deputy Director of the Utah Driver's License Agency on May 22, 2024.

5.3.8.1. Learned Experience for Appointments and Queuing

Utah noted that public acceptance is the key to implementing new processes; however changing customer behavior can be challenging even if new processes produce improvements. This was experienced when Utah implemented their appointment scheduler which has driven service time down; however, Utah eventually also implemented a queuing system that works in conjunction with the scheduling system.

Currently in rural areas appointments are always available immediately. In their high-volume areas and urban centers, appointments can mostly be booked on the same day but for some appointment types (longer visits and testing), they noted their longest wait for an appointment is a week. Similar to Texas walk-ins are the challenge. One thing they did notice was that 'skills-testing' when schools are out does create more appointments during these months.

Utah found that they were opening enough time slots but that they needed a queuing system that could "play nice" with the customer management system. So, they utilize two systems now. NEMO-Q and their appointment system (Day Smart Software) to manage the appointment setting process and then the flow in the DLO itself. So, NEMO-Q and Day Smart work together. They also utilize 'triage' and greeters.

Once a client comes into the office, they take everyone's photo upfront and then issue the tickets from NEMO-Q once the photo is done for the client to wait to go to a service desk. This also serves as a security process to reduce cheating and make sure it is the same person at each part of the process. They created their own adobe program, so the client's application form is already filled out online and is slotted into their appointment account. They also found that taking the picture up front reduces the need to chop up space to accommodate the backdrop required for pictures. They are looking out for a technology that can inject the backdrop so they can take pictures at every counter.

They noted that their 13 years of using the queuing system and resource management has improved effectiveness. They also, similar to DLD, train their staff with on the job mentoring with a supervisor, and use different offices for mentoring and training as an ongoing process.

Managers and supervisors are given a lot of latitude to direct and control their DLO as they see fit, this includes providing them with operational control on appointment scheduling, staff rotation and mentoring programs.

5.3.8.2. Use of Technology for Uploading Documents

The process for use of technology to get a resident a driver's license is a mixture of in-person staff time and the use of technology.

- Upon arrival, a staff member mans the photo station, and the employee will take the photo, give them a ticket, and make the customer sit down and wait for their appointment.

They heavily rely on electronic uploading of docs, and fillable forms.

- There is an online application – residents that they fill in prior to their application. This is pre-loaded into the system. This puts the onus of accuracy of personal info onto the applicant, and saves a huge amount of time as their license and permit specialist does not have to enter this data. They said this has been a huge efficiency gain.

- Once the resident reaches the LPS, they have highlighted fields showing if there is any change of personal information, so they then ask the client about these changes to confirm them.

- Online application does not require utility bills if the customer has previously had a Utah license.

They saw document upload increase as they adopted REAL ID and the link to lawful presence. This has reduced since they got to REAL ID compliance. They are building a process to have customers submit legal presence documents so they can do a check and then call them forward for appointment

They are in the process of building a system for those applying for a limited-term license (documenting their legal status). They have an online uploading process for doctors submitting medical examinations of clients. Road tests are done on tablets.

They are moving away from paper as much as they can, although they do offer renewal by mail, but this is mostly for their elderly population. For a new license holder, they have kiosks in the DLOs where clients can fill in their online application. Renewal form filling can only be done through the website and phone. They have a "validate without appearing" process – which used to take time – this now uses the online form, and then a google meet is scheduled to process application. This saves time. They use staff in rural offices to manage this type of transactions.

Multiple appointment setting is a challenge, as seen in Texas. The wait time reductions they've seen in reports they have produced (for Governor's office and legislature) are a function of evolution in how they use the scheduler for appointments and also in finding ways to assist families who may have one family email and may have multiple appointments, and also in trying to reduce office shopping and banking of appointments. This has been a problem, especially for road tests. They are looking at 'filtering' options in the software, but they have not yet seen a software that utilizes name and DOB as a filter option (even though this is on every application!) So limited vendor functionality in software plays a role in making office shopping and appointment banking

a continuous problem. Staff continuously monitors and adapts the appointment scheduler for this issue.

Schedule is built out four months ahead. They can release appointments up to a year though. Supervisors closely watch appointment 'take-up.'

Missed appointment rate averages between 5 to 10%. Their appointment take rate is 68%. Road tests are the majority of no shows.

5.3.8.3. Appointment Phasing

Utah DLD does not phase their appointments like the Texas DLD or have a long wait time such as 180 days. However, central Utah DLD does require that at least 4 months of appointments be available at any one point. Their focus is on providing local managers the latitude to be the most efficient office possible, meeting local needs. They estimate they have a 68% adoption rate for appointments and now show rate of around 5-10%.

In managing their operations not all offices have the same schedule. They provide managers and supervisors the latitude for ensuring efficiency in their office. Typically, smaller offices will have one long day shift, while larger metro offices may have multiple shift times that are spread out across the day.

5.3.8.4. Staff & Funding

They noted that being competitive in the marketplace is our biggest weapon in attracting and keeping our personnel. They operate a step payment plan that allows the agency to look at any position within the agency and predict the compensation of that position over a 10-year period. This allows them to see where a person could anticipate being compensation wise over time. It also facilitates for projecting budget for HR costs and can be used as an argument to HR to note that they're 'not competitive in this range/time, etc.'. They have used this. As an agency funded through their license revenue this is essential in ensuring the funds that they want to spend are accounted for within their long-term budget planning process. They recently implemented a Pay for Performance Plan (rolling out in 2024). This will be for employees that exceed a set performance standard that shows they provide value to the agency that is above and beyond their job descriptions and is only awarded in exceptional circumstances.

Historically, on the job training takes precedence over a formal training period – however they are in the process of developing specific modules for training. They don't have a large part-time pool, as managing the benefits package is challenging due to federal rules. It is also difficult to hold accountable part time staff who do not get benefits.

5.3.8.4.1. Compensation Structure

Their current pay rates are $17 per hour for license and permit specialists, $22.97 per hour for supervisors and $19 per hour for employees who manage CDL processes. A commissioner has

set a policy to have all DLD staff at a minimum of $20 an hour which they are currently implementing.

They used a State of Utah HR group to do a market analysis/similar position analysis, and data from their finance manager (who is in DPS so not in DLD). The market analysis, as there are not many state position similar to examiner level, found they were 15-16% behind the market. They were currently looking at trying to institute a modification to raise entry level pay up, and thus raise pay of long-term staff across positions who may not be in a competitive pay rate.

5.3.8.5. Budget Planning

One saving grace with funding is they are self-funded from the DL fees in a restricted account, that they also have carry over authority upon. This means it's easier to go to the legislature as it is out of a direct, isolated and restricted pot. But it is challenging as they have to project income over a 10-year span, as 'fees' are looked at every 7-10 years by the legislature.

A challenge they expect to see is that now they have moved to an 8-year license period (up from 5 years) they will have a reduction in fees coming in. They estimated the state fee for renewal at $52 as their base, this will see a 30% reduction in revenue to the increase in license length terms between 2025-2028. They have been frugal in their spending and their future allocations are taking this 30% reduction into account. They very rarely ask for a fee increase.

They also augment this with the $10 million they've have currently in their carry over account, which they have discretionary spending authority on. Their carryover takes three months to come back to them after budget year end, so they use this time to put together tech and infrastructure plans to that will utilize this stream once it's back. Priorities in their spending are:

- Statutory changes/ operational funds
- People
- Internal efficiencies (deploy tech and looking at infrastructure)

They have made "exceptional requests" but these are rare. The last one was 2010 REAL ID, as wait times went up dramatically. They made the case for more people. This was done through a standard legislative process and expedited under an emergency procedure.

5.3.8.6. Performance Measures

DLD reviews their customer service measures monthly that are received through Qualtrics, Appointment and NEMO Q data, including wait times and face-to-face times, and if they have hot spots. Task lists for remote workers are monitored by their supervisors. They noted that they do not promote internal competition. They noted that while there can be healthy competition, there are outside factors that can affect the metrics provided – so they do not urge managers to use such to motivate employees

Instead, supervisors track employees individually to ensure there are no gaps in service or training – which can be improved through training, coaching, or PIPS.

5.3.8.7. Technology Implementation

They have developed a limited chat bot that answers basic questions and can transfer a customer to the call center. This was due initially to political pressure, but they have seen through implementation it has improved their ability to address more customers. The chat bot can provide answers to questions, but also allows an employee to chat with multiple customers at a time, which isn't possible through a regular call center. The chat function does also link to their call center.

Their call center July 2023 data was 28,745 calls received in, 25,485 serviced. 11% of calls were abandoned. They have 20 employees in call center, seven staff for chats, one Assistant Supervisor, and one Supervisor. They noticed that the call center employees can answer multiple conversations at same time – so this increased efficiency.

Chat function is also growing in the level of efficiency output as they get specific direction to an individual, which translates to less wasted time/appointments. However, they still field a lot of calls.

5.3.8.7.1. Mobile Driver's License (MDL)

Their state legislature requested this. Legislation in 2016 to look at MDL options. They reviewed Idaho pilot program. They documented challenges and aid they should have standards that Idaho had put into place, so didn't overtly pursue at this time. In 2018 legislature said to do an RFI, and in 2019 award contract.

They noted that MDL didn't increase office visits and can be proctored remotely. They look at this program and functionality to not have 'restrictive factors' i.e. wanted an MDL to have functionality across multiple client purposes. They have around 78,000 active MDLs in circulation across Utah. They are currently working on expanding their "use case" to encourage more customers to get one. Currently they are seeing use by law enforcement, fiduciary institutions, and alcohol and beverage checks (one grocery chain uses) and pharmacy identification.

They are still struggling to get to the high adoption of MDL. Thus far they are not seeing any efficiencies specifically from this, but they believe there is potential if proliferation grows.

5.3.8.8. Successes Contributing to Low Wait Times

- The public have been very helpful in spreading the positive message of the efficiency and effectiveness of the DLD.
- Their online application is a game changer, implemented in 2020, it has drastically reduced the need for face-to-face interactions.
- Their REAL ID compliance is complete.

- An efficient appointment procedure helps management organize personnel so that functions run smoothly and efficiently

5.3.8.8.1. Questions for UTAH DLD

- What would you say are your biggest challenges as a division?

Technology

- Uploading documents paperless?
- What are the challenges you face with respect to driver license kiosks in convenient retail locations, such as grocery stores? What about in terms of cybersecurity (shared firewalls with law enforcement) and physical security?
- Your annual report states that your new scheduler reduced wait times by over 5 mins – can you explain how it did that?
- Can you tell us more about your DLD digital chat?
- Why did you implement it?
- Was it effective in reducing wait times or in-person visits?
- Can you tell us more about the implementation of mobile DL in 2021?
- What was your primary reason for implementing it?
- Did its implementation impact traffic at DL offices? Did it reduce the number of visits or wait times in any way?

Staff

- What is your biggest challenge in recruiting and retaining staff and how do you address that?
- What kind of training do you offer staff and how does that work?
- How do you structure staff schedules in a driver license office?
- What are your peak days? Are they staffed differently than other days?
- What is the compensation structure for your supervisor and field operation staff?
- Having a pool of part-time employees could offer greater flexibility to adjust staffing levels based on fluctuating customer demand.

- Who determines the approved number of FTEs per office, and what data informs this decision? How are part-time positions managed in DLOs? If an office wants to request more part-time staff, what steps should be taken to request them?

Budget

- What kind of budget challenges do you face? Are you funded at the level you should be?
- How do you decide on priorities when faced with budget constraints?
- Have you requested additional funding to resolve your challenges? If so, what was that process like? Were you successful?
- What happens to unspent money at the end of the fiscal year? (like funding leftover from staff vacancies).

Performance

- How do you measure the effectiveness and efficiency of DLD? What are the specific measures/indicators that you track?
- Your most recent annual report says your average wait time is 4 mins and the year before that, it was 3 mins and 18 secs – what do you attribute to maintaining those low wait times?
- Many customer-focused businesses use performance metrics to track individual and team performance across locations. This data transparency allows employees to see how they're contributing, fosters a healthy competitive spirit, and rewards top performers with incentives.
- Currently, how do leaders and managers communicate performance data to office staff? Do staff have access to their daily performance metrics?
- Many transaction-oriented businesses establish processing speed benchmarks to gauge employee efficiency. These benchmarks, derived from historical data, define expected completion times for different transaction types. For instance, a business like DLD might determine that "short" transactions should be completed within 15 minutes, translating to a processing speed of four customers per hour. Conversely, "long" transactions might have a 30-minute completion time, resulting in a processing speed of two customers per hour. Is processing speed tracked for employees individually? Yes, If so, what measures are taken if an employee is not hitting their target rate?

5.4. Previous Reviews of DLD Organizational Structure

5.4.1. Sunset Advisory Commission reports

5.4.1.1. July 2018 Report

The Sunset Advisory Commission completed its scheduled Sunset Review of DPS including analysis of DLD. It found that DPS is not maximizing its resources to "Adequately improve Driver License Customer Service". The Review recommended that DLD close inefficient DLOs and perform a study to investigate the potential of transferring DLD to TxDMV.

5.4.1.1.1. Identified Problems:

Problem 1 – Issues in customer service continue despite hardworking staff

- Average wait times at DLOs are increasing across all driving license regions, with the problems only getting worse
- Average wait time for the customer service center is also growing, from an average hold time of 13:30 in 2009 to 14:20 in 2017. The success rate has also decreased to 20%, with more customers giving up on waiting to speak to a DLD representative
- The department has failed to meet its key driver performance metric, completing only 82% of DL and ID card applications within 45 minutes. Though not specifically detailed in the Sunset Commission Report, the actual performance metrics is percentage of original driver license/ID cards completed within 45 minutes and percentage of replacement or renewal driver license/ID cards completed in 30 minutes.
- Anecdotal evidence of long wait times for skills tests, with up to three month waits

Problem 2 – DPS law enforcement structure does not set up the DLD for success

- DPS has a history of transferring funds away from the Driver License strategy, transferring $8 million out of DLDs appropriations between 2012-16
- In FY2017, $8 million went unspent by the DLD, with the remainder sent back to the state to assist the larger DPS agency with its other programs
- The DLD call service center lacks basic technology such as customer relationship software, drastically reducing the capability of DLD to provide sufficient answers to customers
- DPS has not expanded its self-service kiosks in DLOs, limiting the ability of customers to renew licenses and other services
- The DPS website is insufficient for customer needs, and lacks easy-to-find information that customers need to choose the correct services

Problem 3 – DLD has not implemented plans to close DLOs with low demand

- The Department has 77 one-person driver license offices, which do not serve sufficient customers to justify their funding. Half of these have fewer than 1,500 transactions per FY, 20 DLOs had less than 1,000 transactions
- DPS has opened regional mega-centers that further decrease demand in small rural DLOs.
- These DLOs are often not closed due to local pressure or legislative interest
- A 2011 report conducted by Texas State University, identified 26 DLOs as offices that could be closed, with resources being reallocated to other locations requiring funding

Problem 4 – Most States administer DL programs through Departments of Motor Vehicles

- Just eight states use DPS departments to issue drivers licenses, other 42 use an agency like TxDMV
- TxDMV has high customer satisfaction ratings and already provides services that are dedicated to improving customer service

5.4.1.1.2. Specific Recommendations of the Sunset Staff

Addressing small Driving License Offices with dwindling demand (NOT ADOPTED)

- Require DPS to develop and implement a plan to close inefficient DLOs
- DPS should provide a plan which prioritizes the closure of small-serving DLOs, ensuring the saved resources are spread to offices that can increase customer satisfaction
- DPS should consider setting a standard minimum distance between DLOs, as well as a standard minimum volume of business at each office, which can help identify current and future offices that could be closed or reduced to maximize efficiency

Addressing the opportunity to move DLD to TxDMV (ADOPTED)

- Direct the DPS and TxDMV to perform a joint analysis on opportunities and challenges of transferring DLD to TxDMV
- Sunset recommends that DPS instigate a review of whether the DLD could be transferred to TxDMV successfully, and what challenges there may be, like REAL ID, or the lack of physical TxDMV locations.
- Recommend that the report consider these factors and include the estimated costs of such an action and the eventual savings.

5.4.1.2. July 2009 Report

Headline: An overhaul in management structure, with a renewed focus on customer satisfaction through a civilian business management model is required. An important overriding recommendation is that "DPS should operate the Driver License program using a civilian business management model."

- DL services operate through a law enforcement command structure rather than as a business service – as opposed to a structure that prioritizes business sales and a customer service operation

The current management model is a "Chain of Command Style."

- This works well for carrying out individual law enforcement activities;
- However, this hinders communication and sharing of information and ideas
- The "silo" effect works to the detriment of the agency
- Several of the Department's division have separate databases and reporting systems that cannot easily share information – further complicating interagency communication

The DPS Driving License Division primarily constitutes a retail sales operation

- Their management needs to reflect this reality
- Like many businesses, the operation has a significant online component for Texans to renew their licenses
    - In 2009, 16% of renewal transactions occurred online

There are existing, long lasting and continuing problems in the DLD

- DLD does not effectively meet consumer needs
- DLD has long had high-profile problems with customer service, such as long wait times for citizens in driver license offices and its call center
- In 2009 there were no overall statistics on wait times in DLO
- Additionally, in 2009 the stated aim of DLD staff is to have customers wait in line for no longer than 20 minutes
    - How this is measured in 2009 is also not clear
    - Wait time is very different in each office and peak wait times usually occur during lunch hours are much longer than the 20-minute target

- As opposed to most businesses, DPS has not adjusted its operating hours to meet consumer demand
    - Even the most crowded DPS office is generally open from 8am to 5pm
    - Lines at the Gessner office in Houston are reported to snake outside and around the building at peak times
- Call Center Issues
    - Of the 70,000 monthly phone calls, about 10,000 use the automated system to answer their questions
    - After navigating the menu tree, other callers wait an average 13 ½ minutes before being to speak to a member of staff
    - The agency admits that most callers hang up before reaching a live person and that only about 35% of calls are actually completed
    - Call center also closed at 5 pm and on weekends
- Law-Enforcement Model is detrimental to operations
- Two of the consumer-related field operations are overseen by two majors
- At the regional level, DPS manages driver license functions with a captain who oversees two or three lieutenants who oversee sergeants who manage the day-to-day operations
    - No civilian management exists in the region leadership
- Law enforcement is present to ensure the security of the operations, investigate the use of fraudulent documents, and arrest people who are on outstanding warrants
- Peace officer participation also may be integral to the changeover to the federal REAL ID program
- Law enforcement officer training does not focus on business management
    - Such skills are not required – like business acumen – are not part of the job description

Final Recommendations (Relevant to DLD)

1) The Department should contract for a management and organizational study to examine the Department's structure, communication and policies
2) DPS should operate the Driver License Program using a civilian business management model

5.4.2. State Auditor Office Reports

5.4.2.1. 2018 Report

The State Auditor's Office completed a report on The Department of Public Safety's Driver License Division. Specifically, the report concluded that the Department did not have sufficient control over its processes and information verification activities to prevent the issuance of driver licenses and IDs to ineligible applicants.

5.4.2.2. Identified Problems:

5.4.2.2.1. Identified as a Critical Priority

- For DLs and IDs issued between 09-01-2016 and 02-28-2018, the DLD did not consistently retain all documentation required by Texas Statutes and the Department's own policies and procedures.
- The SAO report listed several failures, specifically with the following not having all required documentation. These included Social Security numbers, proof of Texas residency, proof of insurance, proof of Texas vehicle registration, thumbprint scans, and skills test results
    - 25% of DL and ID cards tested
    - 40% of all CDL's tested
- The Driver License System was identified as a core problem due to its failure to require certain documents be uploaded to the system before issuance
- There are secondary reviews of CDLs that are issued, but these processes are not strong enough and are still allowing ineligible applicants to receive CDLs who do not meet the requirements
    - 35% of the 54 CDL's tested that received a secondary review missed required information
- SAO found that the Department relies too heavily on its regional offices to monitor their own offices and provides little centralized oversight of its procedures. In addition, there is no evidence of any centralized reviews or evaluation of local reviews by the central Department. The Department has no stated procedures for reviewing the secondary review process of CDL approval. Any reviews or oversight of this process are not communicated between central and regional offices.

- SAO found that controls and monitoring of the Driver's License System were lacking and identified various security risks and data access problems that were caused by weak oversight of the system

5.4.2.2.2. Identified as a Medium Priority

- SAO reported that publications regarding the Driver License Improvement Plan were insufficient and did not demonstrate the resources expended on various projects
- The accounting system for DLIP is leaving funds that are spent on DLIP unaccounted for in its larger fiscal year reports

5.4.2.2.3. Specific Action Items Critical Priority:

- The Department should monitor compliance with established review requirements of regional offices and present the results of the reviews to the relevant DLO
- Identify and implement additional controls in all DLOs to help employees retain all required documentation
- Document the standard processes that are required for a secondary review of CDL and monitor these practices with follow-up at specific DLOs if required
- The Department should improve controls over access to its DL system to prevent and detect inappropriate use of its driver license data

5.4.2.2.4. Specific Action Items Medium Priority:

- The Department should document its processes for determining which expenditures should be included in its annual DLIP report
- This would provide a consistent process for reporting costs associated with DLIP and minimize potential confusion about the expenditures listed in the Department's annual report

5.4.3. Reports Requested by State Legislature

5.4.3.1. DPS Strategic Plan 2023-2027

The DPS Strategic Plan outlines the vision and strategy for the entire department of public safety, including the Driver License Division (DLD). This summary will focus on the parts of the report pertinent to the DLD. Enhance Public Safety Through the Licensing of Texas Drivers:

- In 2005, Congress passed the REAL ID Act, which enacted the 9/11 Commission's recommendation that the Federal Government set minimum security standards for state-issued driver's licenses and identification cards.

- The *Enhance Public Safety Through the Licensing of Texas Drivers* goal within DPS focuses on providing driver licenses, including commercial driver licenses, as well as state identification cards and election identification certificates, to Texans through the Driver License Program. Issuing and regulating driver licenses impacts almost all Texans and the responsible management of those programs and functions lies within DPS. By ensuring that only qualified drivers are authorized to drive, DLD is protecting Texas.

- The Driver License Program supports the issuance of driver licenses and enforcement of compliance on roadways in four service areas: Operations, Issuance, Enforcement and Records, and Administration. Operations manages the Driver License Offices (DLO) across the state that issue driver licenses, identification cards, and election identification certificates. The other service areas are located at the Department's headquarters and provide critical functions, including enforcing driver sanctions and reinstating driver privileges, assisting customers with online services, coordinating requirements with federal and state agencies, and managing the records and systems.

- The Driver License Division also partners with law enforcement agencies to support traffic enforcement and criminal investigations, as well as with state and federal agencies to support legislative mandates, such as voter registration and compliance with federal mandates like the commercial driver license program.

5.4.3.1.1. Specific Action Items to Complete Goals:

During the FY 2023-2027 period, DPS plans to:

1) Process original, renewal and replacement applications for driver and commercial licenses and permits, as well as identification cards; conduct required written and skills examinations; assist customers via telephone and email; and track the number of issuances and customers assisted or records updated by the support services.

2) Audit, monitor, and take administrative action against Third Party Skills Test providers who conduct regular and commercial knowledge or skills examinations for non-compliance with state or federal statutes and related administrative rules; as well as monitor and analyze transaction data to detect potential criminal or administrative violations.

3) Ensure driver services are efficient and reliable through continuous process improvement by monitoring all performance measures and identifying best practices and opportunities for efficiency. This is done through modernization efforts, such as a complete appointment solution and expanded online services, that maximizes the return on investment in both capital and FTE time, while ensuring consistent quality of services that directly impact public safety.

4) Maintain and enhance the Driver License System (DLS). DLS is the software system used as the central point of issuance for all Texas driver licenses, commercial driver licenses, identification cards, and election identification certificates. There is a continuous need for

maintenance, support, and programming changes to DLS resulting from legislation, federal mandates, and customer service enhancements.

5) Improve Customer Service Center (CSC) services. In FY 2021 the CSC received 7,456,454 telephone calls. Limited staff and technology impacted the ability to respond to Customers. The CSC is currently only able to answer about 12.4% of these calls within 5 minutes, far below an acceptable customer service level. As the population of Texas continues to grow, this situation will continue to deteriorate. The Department continues to work toward automation of information and increased availability of germane information through online services.

6) Continue to increase driver license capacity. To serve customers and keep up with the population growth, Driver License is still in need of additional fully staffed offices that include CDL testing lanes.

7) Incorporate new and innovative technologies into driver services as a key element of continued improvement and reduced wait and processing times.

5.4.3.1.2. Other Considerations Relevant to Goals:

Original DL applications must be processed in an office. Thus, to keep up with projected population growth, DL must increase the size of offices and convert some smaller offices within designated metro areas into larger fully staffed offices to meet projected customer demand.

During the 86th Legislative Session, funding was provided to increase staffing in 194 of the state's 229 driver license offices, including the strategic full staffing of 94 offices. These 94 offices processed a significant share of the state's total driver license transactions, around 78%. In addition to staffing, funding was provided to replace and increase the capacity of the Angleton and Denton offices. The 87th Legislature provided $14 million in funding for a new driver license office in League City, which is projected to open in April 2023.

5.4.3.2. DLD Report to Governor's Office in 2023

The 88th Legislature's General Appropriations Act (GAA) provided Rider 29 in the Department of Public Safety's (DPS) budget, requiring submission of a Driver License Services Report not later than December 1 of each fiscal year.

This report includes information related to specific expenditures, program outcomes, outputs, obstacles to improvement, and any other information that DPS deems necessary to fully report on the progress of driver license operations.

Finances

- DPS allocated $246,063,968 to Driver License Services in FY23, an increase of $26,658,697 from Fiscal Year 2022 (FY22).

- Driver License Services collected $242,408,979 (Driver License fees and Driver Record fees combined) for the Texas Mobility Fund in FY23.

Number of Personnel and Workstations

- A total of 2,906.8 FTEs were authorized for Driver License Services in FY23.
- There were 233 DLOs across Texas with 2,483.3 authorized FTEs equipped with 1,527 workstations.
- Headquarters Operations manages critical services at the DPS Headquarters in Austin with 415.5 authorized FTEs.

Demand for Services

- The greatest challenge to Driver License Services continues to be the growing population. Urban areas are growing at a faster pace than rural areas. This is especially evident in the state's four largest Metropolitan Statistical Areas (MSAs): 1. Houston-Pasadena-The Woodlands MSA, 2. Dallas-Fort Worth-Arlington MSA, 3. San Antonio-New Braunfels MSA, and 4. Austin-Round Rock MSA. These MSAs will need more resources and sooner than other areas of the state. The costs associated with increasing DL capacity in these areas will continue to increase as result of rising building and labor costs.
- Demand for in office transactions is projected to be 20.9% lower than in previous reports, while demand for online transactions is projected to be 70.7% higher than in previous reports.

Performance

- In FY23, DPS had seven outcome performance measures. Of the seven outcome performance measures, four met or exceeded performance targets: the percentage of accurate licenses issued, the percentage of driver licenses and identification cards mailed within 14 days, the percentage of driver records mailed within 14 days, and the percentage of calls answered within five minutes. The remaining three outcome performance measures missed their targets by less than 3.0%: the percentage of original driver license/identification applications completed within 45 minutes, the percentage of duplicate or renewal driver's license and identification card applications completed at an office within 30 minutes, and the percentage of answered calls.
- In FY23, the overall average wait time was 14 minutes. The average booking time for original appointments was 23.5 days. The average booking time for renewal appointments was 10.5 days.
- In FY23, the mega centers served 1,701,444 customers, or 32.4% of all customers served at offices. Eight mega centers had an average wait time of 30 minutes or less. Two mega centers had an average wait time of 31 to 37 minutes. Four mega centers had an average wait time that exceeded 40 minutes. No mega center had a wait time that exceeded 46 minutes.

- Seven mega centers had an original booking time of seven days or less. Five had a booking time greater than 30 days for original transactions. No mega center had an average booking time of 60 days or greater for original transactions. Eight mega centers had renewal booking times of seven days or less. No mega center had an average booking time exceeding 30 days for renewal transactions.

- DPS received one of its highest customer satisfaction ratings in FY23, with 87.6% of customers reporting that their overall experience was excellent or good. In fact, 67.8% of customers reported that their experience was excellent.

Improvements

- The appointment system is one of the most significant improvements to customer service DPS has launched. DPS moved to an appointment system in all DLOs on May 26, 2020, and almost immediately, it began lowering wait times. The system allows customers to book appointments up to 6 months in advance. It helps customers make their appointment based on their availability. A DLO can serve a certain number of customers per hour based on the number of available counters and staff. The appointment system reduces wait times by metering the number of customers arriving at a DLO per hour.

- DPS received funding for additional FTEs during the 86th, 87th, and 88th legislatures which allowed DPS to fully staff 94 DLOs, including all mega centers, large offices, and offices that were historically severely crowded.

- In June 2020, the term of DLs was changed from six to eight years, and CDLs from five to eight years. A CDL with the Hazardous Material Endorsement (HME) is still issued for a five-year term to match federal HME requirements.

- DPS sends renewal reminders to customers when it is time to renew. On June 6, 2021, DPS began sending reminders 180 days in advance of expiration dates, up from 60 days, to help customers schedule appointments in advance.

- In 2022 DPS created the Business Intelligence Team. The team uses a data-driven approach to identify practices within a DLO to lower wait and booking times, then works with the DLO to implement them.

- On October 24, 2021, DIR launched Texas by Texas (TxT), allowing customers to create a secure account and access state government services in one place. TxT allows customers to link their DL or ID card to their TxT account, receive notifications for upcoming expiration dates in a "To Do" list, and conduct transactions all in one place. With the new TxT account, online renewal and replacement options were expanded. Eligible CDL holders are now able to conduct every other renewal through TxT or the existing online application, like DL and ID card holders. Customers can now pay more fees online. Fees for occupational driver licenses and interlock restriction fees are available for online payment in real time. Previously, customers were required to visit a DLO or mail payments

to be processed. The addition of these online services prevents visits to DLOs and decreases the time to process these types of transactions.

Areas for Improvement

- In FY23, 2,099,951 customers did not show up for their appointments (29.9% of the 7,030,222 scheduled). Appointment no-shows artificially lower the number of available appointments. First, no show customers do not tell DPS, so the appointment cannot be opened for another customer. Second, the no show customers will still need to receive Driver License Services and will schedule another appointment at some point in the future.

- The Customer Service Center (CSC) answers customer inquiries by phone and email, Monday through Friday from 7:00 a.m. until 6:00 p.m. The CSC assists customers with questions about DLs, IDs, enforcement actions, appointments, driver records, and other Driver License Services. The CSC is not able to answer all calls due to limited resources and technical constraints. The limited resources result in an extended wait time for customers to get assistance. The CSC has 81.0 authorized FTEs. Previous independent studies have identified the CSC as well managed but lacking critical resources in technology and staffing.

5.4.3.3. Report under Senate Bill 616 to Legislature in 2020

The Study Team, as part of its efforts to identify deficiencies and make recommendations for improving effectiveness and efficiency at DLD, reviewed the previous Study on DLD performance conducted by the UT Austin Center for Transportation Research and LBJ School, published in August 2020. For context, the Texas Legislature, under S.B. 616, commissioned a Study in 2019 to assess DLD performance in five areas—customer service, compliance/security, accountability/trust, efficiency/cost, and culture/staffing—to assess whether DLD should move to the Department of Motor Vehicles, stay in DPS, or become its own state agency. The Study Team reviewed findings from that 2020 study and integrated key recommendations into this report.

Key recommendations were:

- Redesign the website using a modern, user-friendly, fully functional design that displays on mobile devices and supports multiple languages.

- Reduce limitations to renewing online and incentivize online transactions by offering discounts instead of charging convenience fee.

- Create a dedicated Public Information Office (PIO) providing education and awareness using all social media available in multiple languages.

- Develop a modern contact center to boost call center deflections.

- Review salary levels every two years for competitiveness/optimum number/placement of FTEs and ask the legislature for additional FTEs to meet performance measures.

Chapter 6. Identify Opportunities to Incentivize Online Transactions

6.1. Data Analysis

In Chapter 4 the Study Team conducted an online survey to collect customers' experiences, opinions, as well as identified deficiencies regarding the DLD service and operation. As part of the survey, there are 12 questions (Question 31 to Question 42) that are specifically related to online transactions, which were designated to identify opportunities to incentivize online transactions.

The detailed analysis of Question 31 to Question 42 can be found below:

- Q31. Did you try to complete your last transaction online?

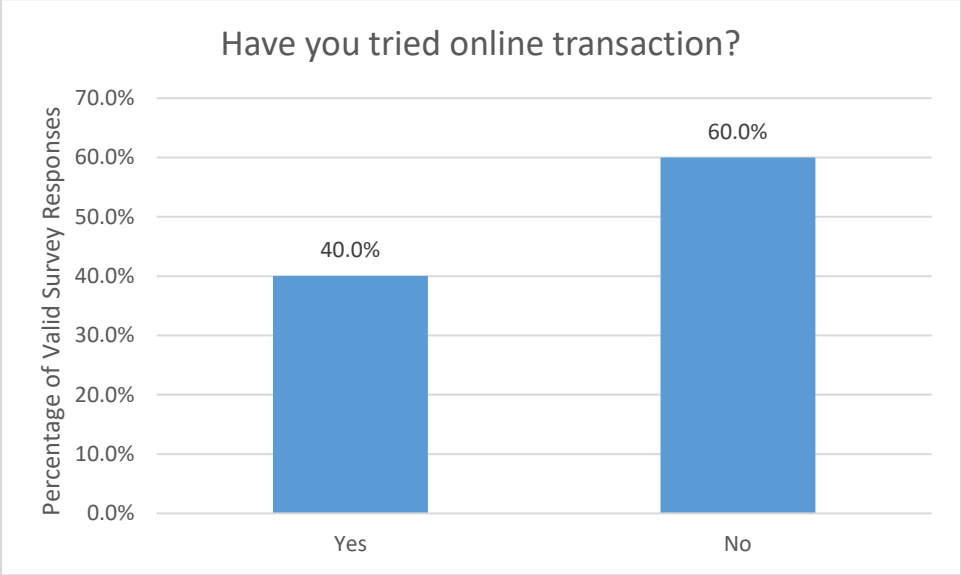

Figure 86 Whether the Customer Tried to Complete Last Transaction Online

Number of valid responses: 16,225. This question is only available to customers who did not select online option in Q10 (i.e., who selected in-person, mail, or phone). Most (60.0%) customers did not try to complete their last transaction online, while 40.0% (6,493 out of 16,225) indicated that they tried online option but end up with in-person, mail, or phone transactions.

- Q32. Which devices did you use to complete the online transaction?

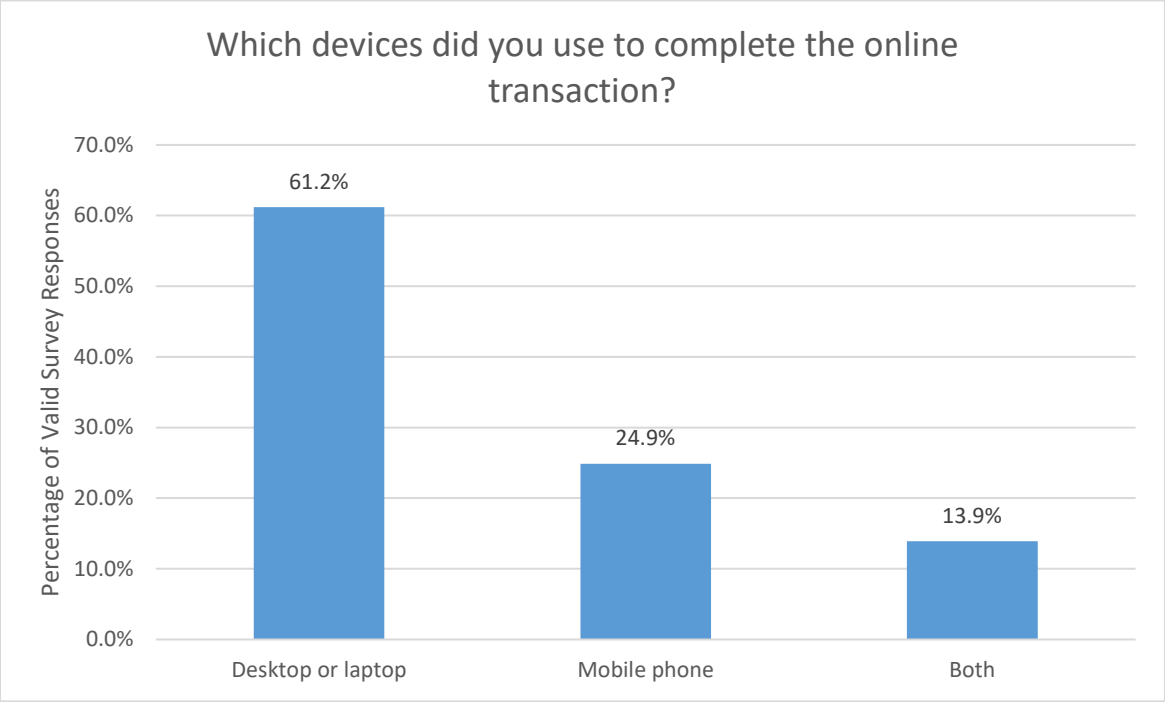

Figure 87 Percentage of Valid Survey Responses on Devices Used to Complete Online Transaction

Number of valid responses: 14,980. This question is only available to customers who selected online option in Q10 or tried online option (i.e., customers who replied "Yes" to Q31). A total of 15,049 customers were eligible for this question. Most (75.1%) customers used desktop or laptop to complete online transactions, of which 61.2% only used desktop or laptop and 13.9% used both desktop/laptop and mobile phone. 24.9% of the respondents only used mobile phones as their devices to complete online transactions.

- Q33. How would you rate your overall online transaction experience with Texas Driver License Division?

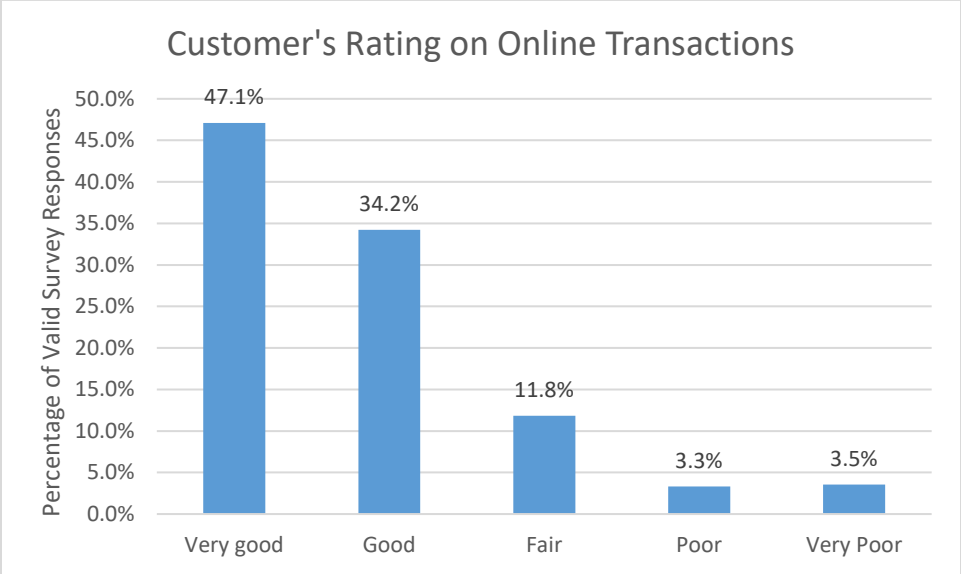

Figure 88 Customer's Rating on Online Transactions

Number of valid responses: 8,544. This question is only available to customers who selected online option in Q10. Most (47.1%) customers gave a rating of "very good", followed by "good" rating with 34.2%. 11.8% of the respondents rated "fair". Only 6.8% of the respondents answered "poor" (3.3%) or "very poor" (3.5%). The average rating score is 4.2 (5 means a perfect rating score for "very good"; 1 means the worst rating score for "very poor").

- Q34. Did you find that the DPS website was well-designed and user-friendly?

Number of valid responses: 14,926. This question is available to every customer as anyone may look for information and/or guidance on DPS website. As presented in Q10, a total of 25,174 valid responses were collected, of which 8,556 (34.4%) used online transaction last time and the remaining 65.6% did not use online method (i.e., in-person, mail, or phone)

Figure 89 to Figure 91 present the opinions on DPS website design from overall customers (14,926 valid responses), including customers who used online method last time (8,506 valid responses), and customers who did not use online method (6,420 valid responses), respectively.

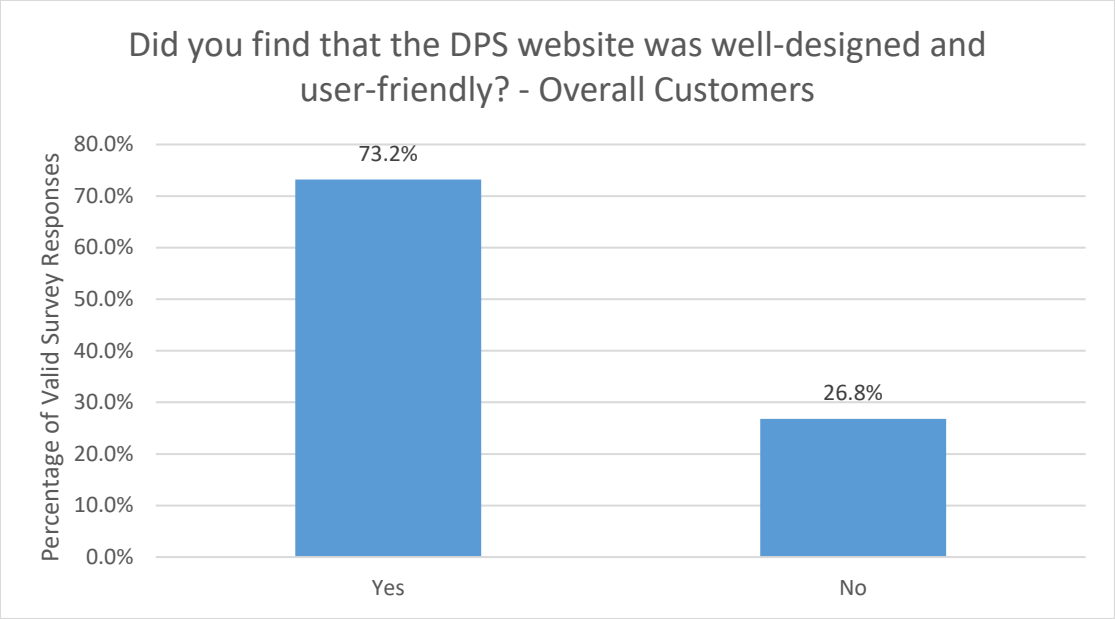

Figure 89 Customer's Overall Rating on DPS Website Design

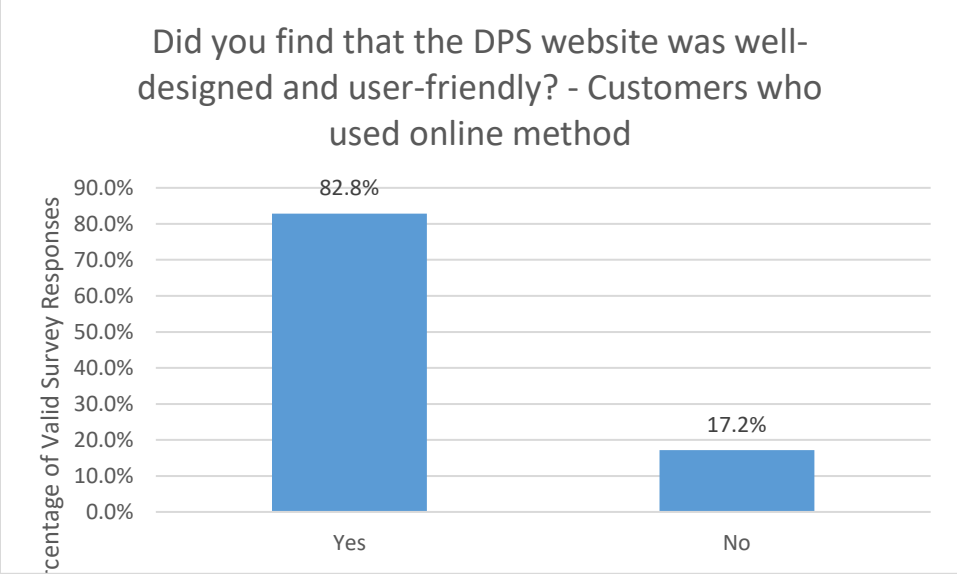

Figure 90 Rating on DPS Website Design by Customers who used Online Method

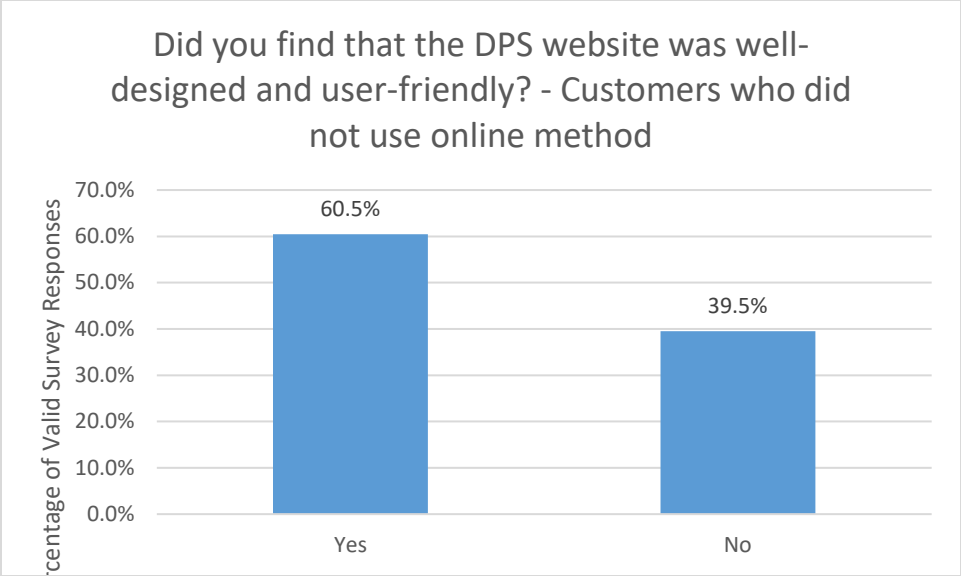

Figure 91 Rating on DPS Website Design by Customers who did not use Online Method

As can be observed from Figure 89 to Figure 91, overall speaking, 73.2% of the respondents thought that the DPS website was well-designed and user-friendly. For those who used the online method last time, this percentage is higher: 82.8% believed that the DPS website was good. For the customers who did not use the online method last time, the rating is lower - 60.5% responded that they found that the DPS website was well-designed.

- Q35. Why did you find the website to not be well-designed or user-friendly? Select all that apply

Number of valid responses: 3,957. This question is only available to customers who found the website not to be well-designed or user-friendly (Answer "No" in Q34). The purpose of this question is to identify the reason why customers found the DPS website not well-designed or user-friendly.

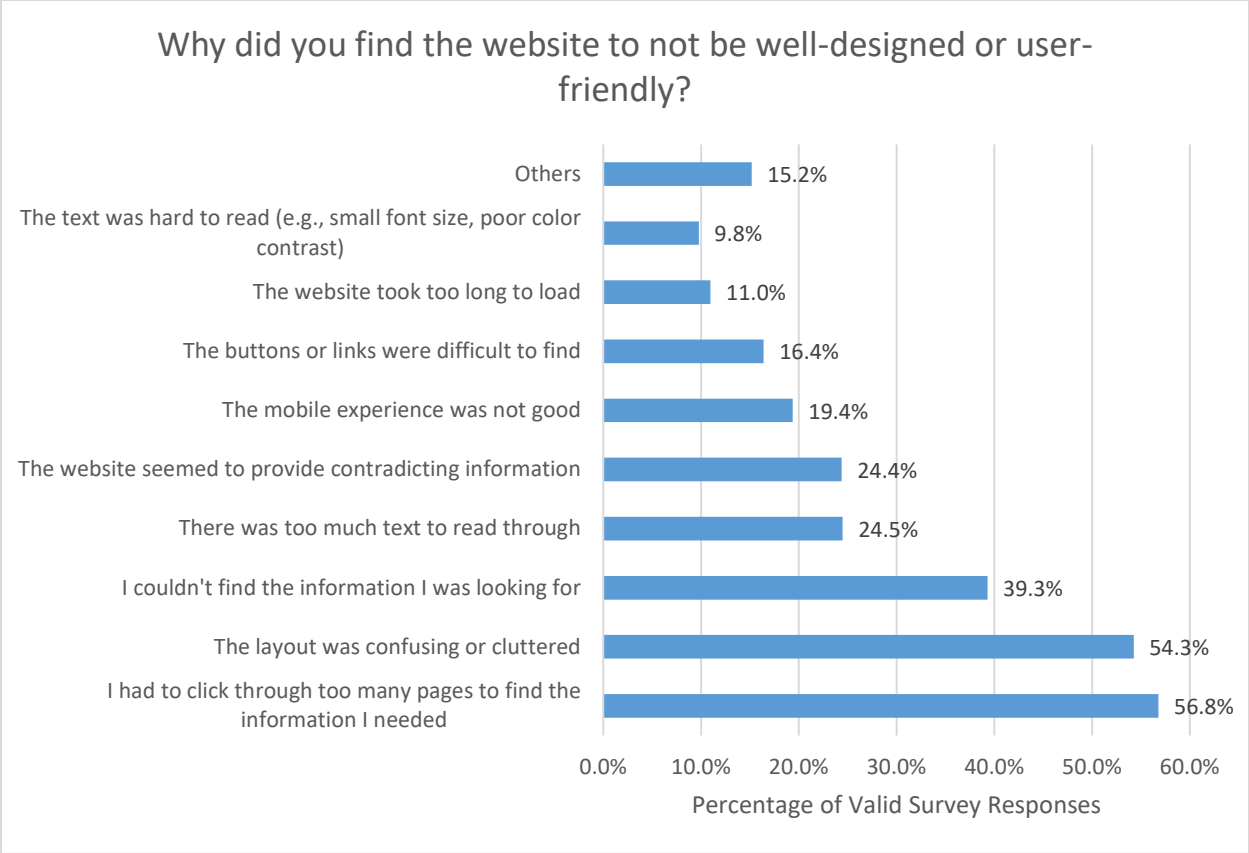

Figure 92 Reasons why the DPS Website was not Well-Designed or User-Friendly

"I had to click through too many pages to find the information I needed" and "the layout was confusing or cluttered" ranked the top 2 reasons with 56.8% and 54.3%, respectively. 39.3% of the customers reported that they couldn't find the information they were looking for. 24.5% said that there were too many texts to read through, and 24.4% said that the website seemed to provide contradicting information, followed by "the mobile experience was not good" (19.4%), "the buttons or links were difficult to find" (16.4%), "the website took too long to find" (11.0%), and "the text was hard to read (e.g., small font size, poor color contrast)" (9.8%). 15.5% of the respondents provided their specific reasons by selecting "others", examples of which include "A google search doesn't take you to the page you need for a renewal", "After filling out all of the info, I was told I had to go to a DPS office in person because of age", "After spending lots of time and clicking on various links, I'm redirected to yet a new platform to register with", "It didn't tell me I was unable to complete online until AFTER I had completed all info online. Once you put your dl number in, it should tell you right away if you can complete online or in person", "It was never clear why I could not renew my license online".

- Q36. Did the website tell you that you were NOT eligible for online transactions?

Number of valid responses: 6,402. This question is only available to customers who tried to complete the transaction online but end up using other methods (i.e., customers who selected "yes"

in Q31 and “in-person”, “mail”, or “phone” in Q10). The purpose of this question is to explore whether the DPS website told the customer why they were not eligible for online transactions.

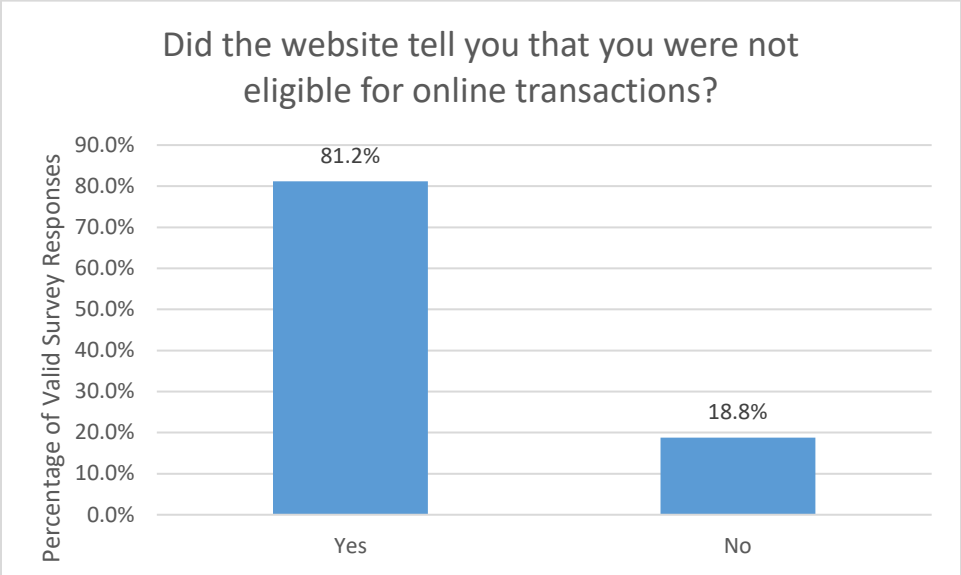

Figure 93 Whether the DPS Website Told the Customers if They were Eligible for Online Transactions

Most (81.2%) of the customers who did not use online method last time indicated that the website told them why they were not eligible for online transactions. Only 18.8% claimed that the website did not provide enough information to understand why they were not eligible for online transactions.

- Q37. What was the reason that you didn’t end up completing your transaction online? Select all that apply

Number of valid responses: 6,213. This question is only available to customers who tried to complete the transaction online but end up using other methods (i.e., customers who selected “yes” in Q31 and “in-person”, “mail”, or “phone” in Q10). The purpose of this question is to explore the reasons why the customers didn’t successfully complete their transactions online.

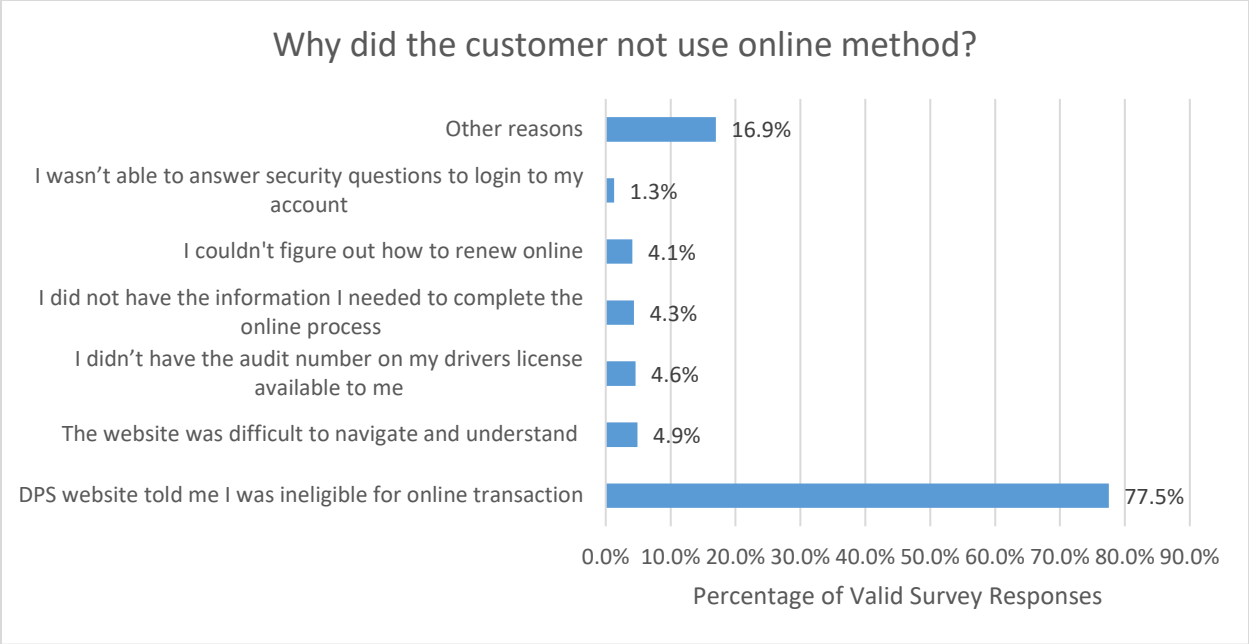

Figure 94 Reasons why Customers not Use Online Method

Most (77.5%) of the customers who did not use online method last time is because they were ineligible according to DPS website. The DPS website design and user-friendly issue counts for 4.9% and 4.6% said they did not have the audit number available. Another 4.3% mentioned that they did not have the required information to complete the online process. 4.1% responded that they could not figure out how to renew online, and about 1.3% of the customers were not able to answer security questions to log in. 16.9% of the respondents provided their specific reasons by selecting "others", examples of which include "I applied for ID online. Even though I had proof that I did apply online the paper did not have my picture on it. So, it was a waste of time and money because I had to go in the office and pay another fee just to get the same receipt with my picture on it", "I needed a DPS issued paper license to rent a car", "I needed to add a Motorcycle permit into my regular DL", "I needed to update my license photo and you can't do that online", "My license was suspended at the time".

- Q38. Compared to an in-person visit, what did you like about your online transaction? Select that all apply

Number of valid responses: 8,446. This question is only available to customers who selected online option in Q10. The purpose of this question is to identify the benefits of online transactions from the customers' perspective.

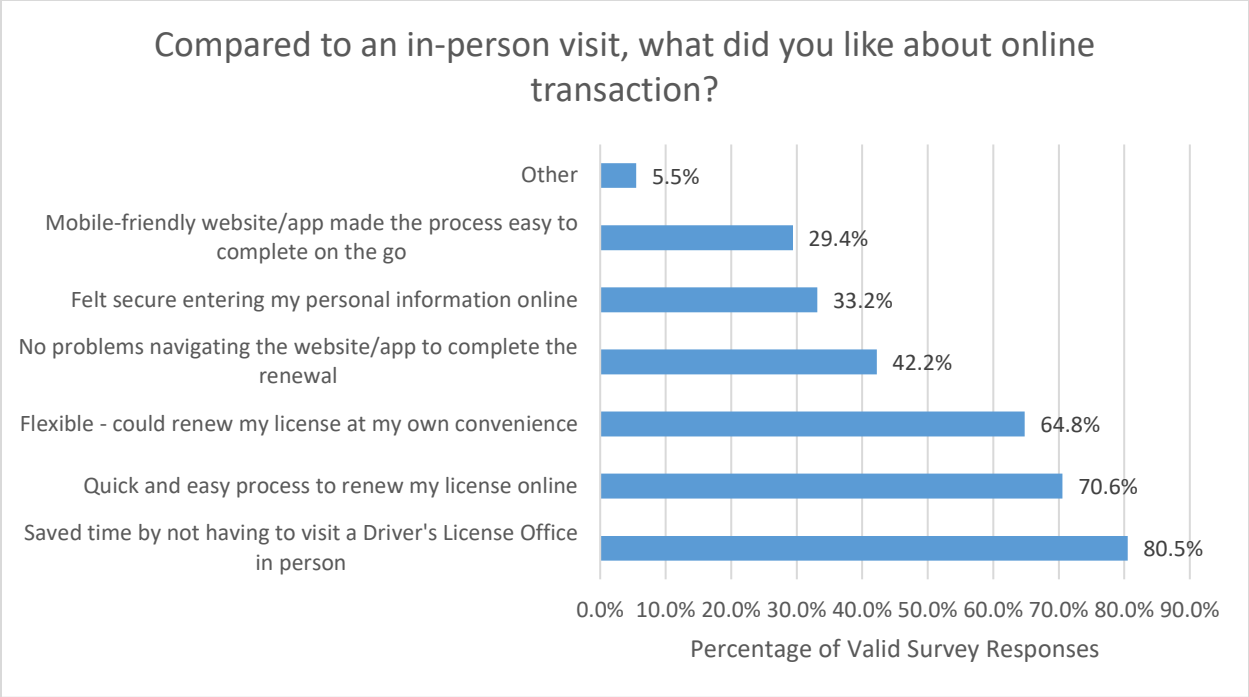

Figure 95 Reasons why Customers Prefers Online Transactions to In-Person Visit

Out of the 8,446 valid responses, most (80.5%) customers liked their online transactions because it saved time by not visiting a DLO and waiting in person. 70.6% indicated that it was a quick and easy process to renew online, and 64.8% of the respondents liked the flexibility because they could renew at their own convenience. 42.2% said that they had no problems navigating the website to complete online renewal. 33.2% felt secure entering their personal information online, and 29.4% liked the mobile-friendly app. 5.5% of the respondents provided their specific reasons by selecting "others", examples of which include "Online transaction was easy when traveling out of state", "no appointment required", "Quick, easy, NO wait, and spent no gas money".

- Q39. What do you dislike about your online transaction experience?

Number of valid responses: 559. This question is only available to customers who selected online option in Q10 and provided a "poor" or "very poor" rating to their online transaction experience in Q33. The purpose of this question is to identify the reasons why the customers did not like their online experience.

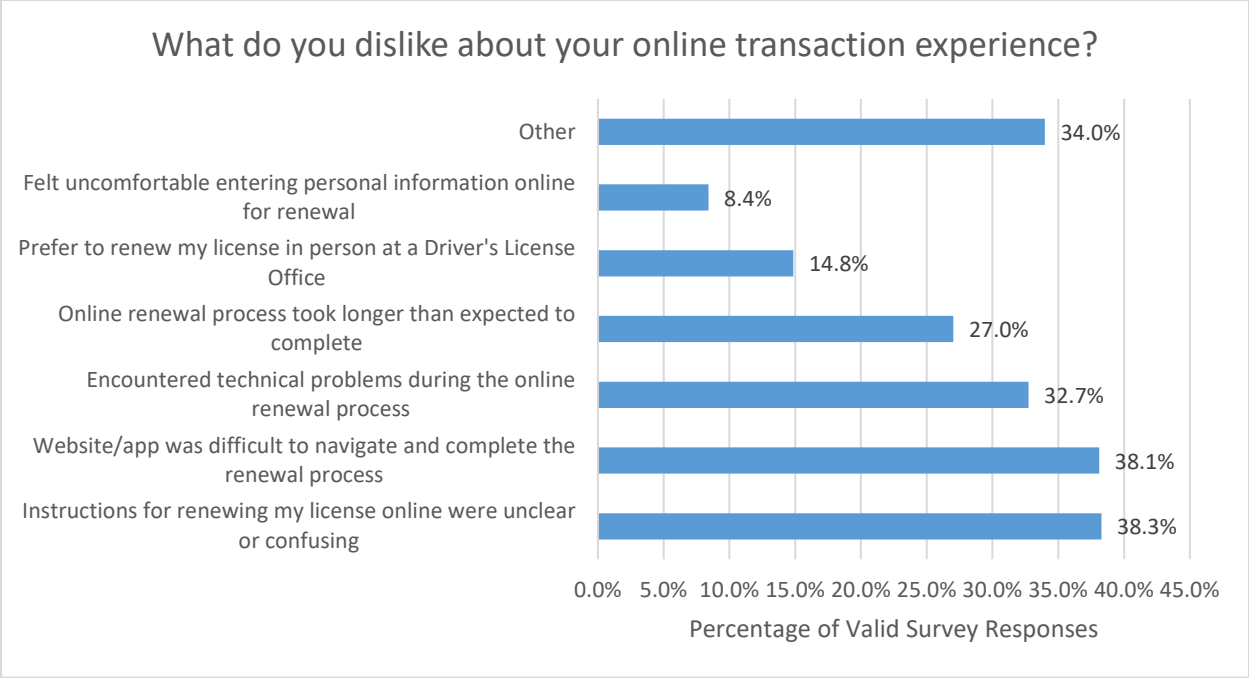

Figure 96 Reasons why Customers did not like Their Online Transactions Experiences

Out of the 559 valid responses, 38.3% said the instructions for online renewals were unclear or confusing, followed by 38.1% saying that the website/app was difficult to navigate. 32.7% encountered technical problems during the online renewal process, e.g., error messages, freezing, etc. 27.0% claimed that the online renewal process took longer than expected, and 14.8% preferred in-person visit. About 8.4% mentioned that they felt uncomfortable entering their personal information online. 34.0% of the respondents provided their specific reasons by selecting "others", which includes "Almost paid a private company to update my info before I realized it wasn't the official DPS website", "DPS mailed both my and my wife's licenses to the wrong address", "Couldn't confirm renewal. Couldn't get support", "I ordered a replacement license online, never got it, and was locked out of my online account. For no reason", "didn't receive it. no shipping tracking info".

- Q40. Would you recommend the online renewal process to your friends, family, or coworkers?

Number of valid responses: 8,488. This question is only available to customers who selected online option in Q10.

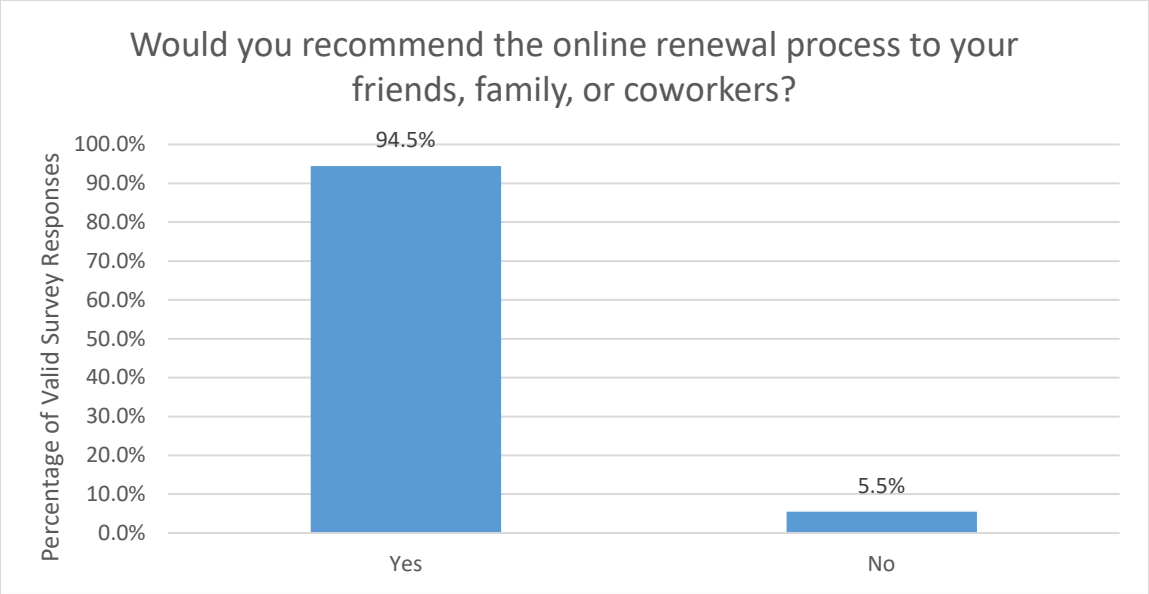

Figure 97 Whether the Customer would Recommend Online Renewal to Others

94.5% of the customers who used online transactions last time would recommend the online renewal process to their friends, family, or coworkers, which indicated a high possibility for word-of-mouth dissemination.

- Q41. Below are the requirements for online renewal. Please select ALL of the statements that were true for the last time you renewed your license or ID card.

Number of valid responses: 6,023. This question is only available to customers who renewed DL or ID in person last time (i.e., customers who selected "in person" in Q10 and selected "renewal if driver license" or "renewal of identification card" in Q8). The purpose of this question is to identify customers who were eligible for online renewal but renewed in person last time. Out of the 6,023 valid responses received, only 91 (1.5%) satisfied all of the eligible criteria for online renewal. Most (98.5%) of the customers who renewed in person last time were not eligible for online renewal.

- Q42. Below are the requirements for online address change. Please select ALL of the statements that were true for the last time you changed your address.

Number of valid responses: 327. This question is only available to customers who changed address on their DL or ID in person last time (i.e., customers who selected "in person" in Q10 and selected "address change" in Q8). The purpose of this question is to identify customers who were eligible for online address change but visited a DLO in person last time. Out of the 327 responses received, 256 (78.3%) satisfied all of the eligible criteria for online address change. These 256 customers were eligible to change address on their DL or ID online, but they visited a DLO in person.

6.2. Deficiencies Identified

The Study Team's analysis identified technology and communication gaps as the primary factors discouraging online transactions. While some barriers like lack of computer skills, internet access, language barriers, or trust issues exist, technology can address them. For example, text message reminders with renewal links could significantly simplify the process for those that do not have access to a computer.

- **Deficiency: There is a gap between customer demand for online transactions and their ability to renew online.**

The customer survey revealed a significant discrepancy between attempted online renewals and successful completions. While 34.4% of respondents reported renewing online (according to Figure 32 of Section 4.1), a substantial number (approximately 815) were informed by the website that they were ineligible (according to Figure 94 of Section 6.1). This suggests a need for clearer website messaging and potentially expanding online eligibility criteria. The major hurdle to not allowing multiple online transactions stems from 1) the need to take an in-person eye test and 2) the need to take a new picture every 16 years[288].

While the current 8-year renewal cycle and technology limitations prevent multiple consecutive online renewals, technological advancements could address these challenges. For instance, technology could allow doctors to electronically submit eye exam results to DLD. Additionally, DLD could establish clear picture standards for online submissions, allowing customers to take their own photos similar to how the U.S. Department of State allows self-taken passport photos and to submit electronically or by mail[289].

Issuance types for driver licenses and ID cards include in-person, online, mail, phone, offender ID cards, and others. In CY 2023, in-person transactions are the most common (60%), followed by online transactions (36%). Table 43 illustrates the breakdown in CY 2023 for all 7,563,230 transactions.

Table 43 Issuance by Transaction Type in CY 2023

Transaction Type	Number of Issuance	Percentage
In-person	4,512,256	59.7%
Online	2,724,112	36.0%
Mail	77,162	1.0%
Phone	59,285	0.8%
Offender ID	11,727	0.2%
Other	178,688	2.4%

[288] 6 C.F.R. § 37.25 (2008).
[289] Passport Photos. U.S. Dept. of State. https://travel.state.gov/content/travel/en/passports/how-apply/photos.html

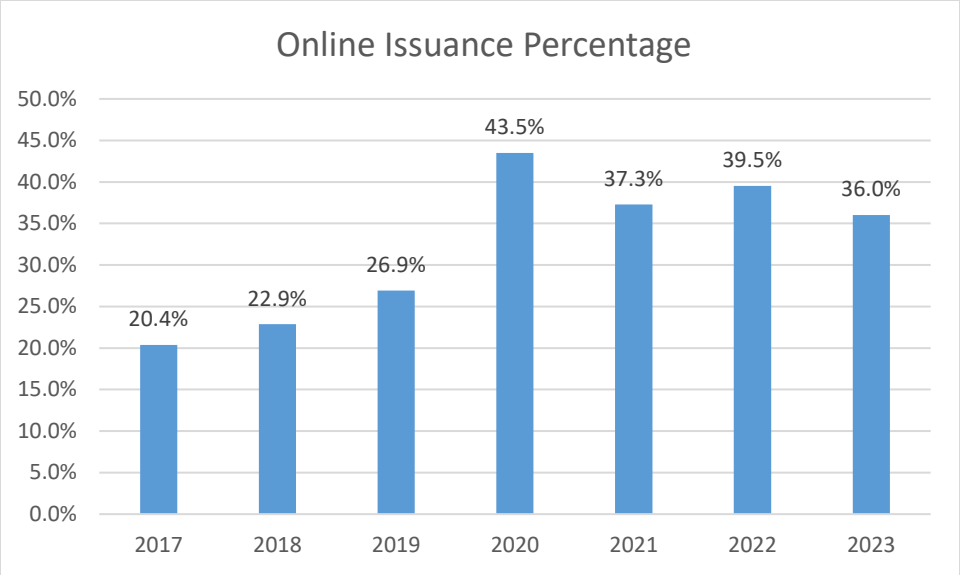

Figure 98 Online Issuance Percentage CY 2017 - 2023

Figure 98 shows a clear increase of the online issuance percentage of the new appointment system (CY 2021 – 2023), which has an average rate of 37.6%. For example, for every 100 issued Texas Driver License Card or ID card in CY 2023, about 36 were processed and completed online.

This data, spanning three years on either side of the COVID lockdown, suggests that online transactions will be a trend. However, whether online transactions will reach the 50% mark (DLD's estimate of the true fraction of people eligible for online transactions) remains uncertain.

Customer feedback highlights the increasing demand for online services. As shown in Figure 99, online transactions in the five major MSAs have increased significantly (78-84%) and more than doubled in San Antonio between 2017 and 2023.

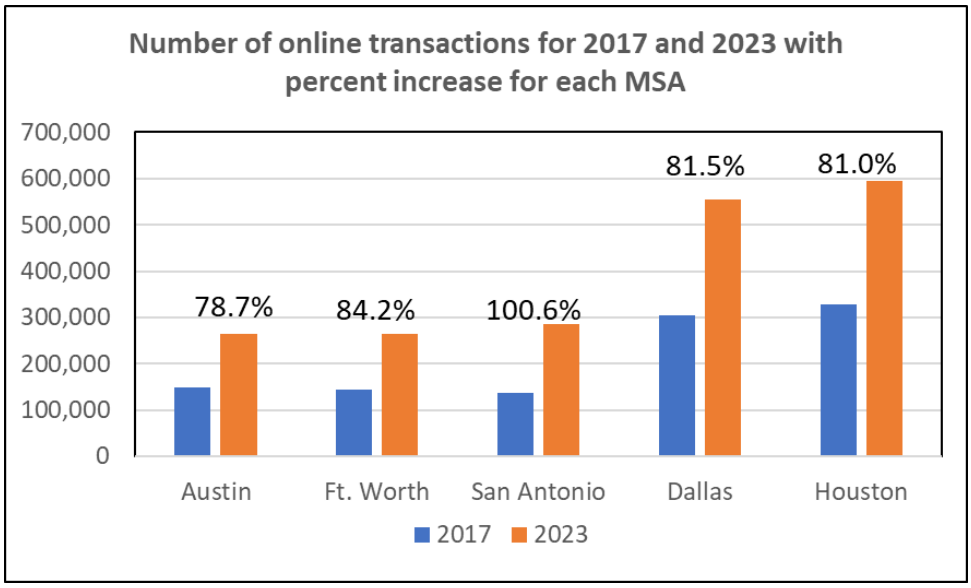

Figure 99 Number of online transactions by MSA

- **Deficiency: The DPS website's DL pages lack user-friendliness, with a convoluted navigation requiring too many clicks to reach the online renewal page.**

The current website design, while understandable given the DLD's historical focus on core operations amidst resource constraints, reflects a limited user-centric approach. DPS pages are very text heavy and important links are buried in long blocks of text. Many public agencies struggle with presenting complex information in an easily digestible format. However, by partnering with a professional vendor specializing in user experience (UX) design, DLD could significantly improve the website's usability and make it easier for customers to find links that enable self-service. All paths to renew driver license from the DPS website require clicking through at least five pages. By contrast, Texas.gov/Driver-Services only takes one click to get to the legacy online renewal page. Applying Human Factors principles, such as minimizing clicks, using clear language, intuitive navigation, and employing visuals to reduce reading burden could transform the online experience for a broader range of users.

The DR-32 Renewal Notice currently includes a banner highlighting online renewal eligibility. Additionally, a field to capture cell phone numbers has been added to the DL-14A application form, paving the way for future text message reminders. Further, DLD is exploring a mobile driver license (mDL) program with improved communication features to better inform customers about service options. However, this program is still under development.

Chapter 7. Identification of Efficiencies and Benefits and Recommendations for Improvements with Timeline identification

Based on all of the data collected, new technologies have the greatest potential for reducing wait times and transaction times, as well as increasing successful transaction rates and improving the customer experience in the shortest implementation timeframe. Adequate funding, employees and office capacity are also essential to provide excellent customer service and to address increased transaction capacity; however, modern technology may offer more immediate advantages.

7.1. Effectiveness and Efficiency Achievements to Date

DLD has implemented a series of initiatives designed to enhance both effectiveness and efficiency in serving the public since 2020. These efforts address customer wait times, staff workload, communication strategies, and service delivery models. Below are some key achievements to date.

7.1.1. Customer Experience Improvements

- **Appointment System Implementation (May 26, 2020):** Replaced the queuing system with an appointment-based system, allowing customers to schedule visits based on DLO capacity. This reduced wait times and improved staff workload management.
- **Renewal Reminder Extension (Beginning 2020):** Increased renewal reminder lead time from 60 days to 180 days before expiration (June 6, 2021). This allows customers more time to renew their licenses and potentially reduces visits to DLOs.
- **Driver License and CDL Term Extension (Starting June 2020):** Extended the validity period for Driver Licenses (DLs) and Commercial Driver Licenses (CDLs) from 6 and 5 years to 8 years, respectively. This lessens the administrative burden for both customers and DLO staff.
- **Customer Satisfaction Increase:** Customer satisfaction has risen by 7% since FY20 and maintained that improvement through FY23.

7.1.2. Operational Enhancements

- **Business Intelligence Team (BI Team) Creation (2020):** Established a team focused on identifying and sharing best practices among DLOs to optimize booking processes and wait times. The BI Team has generated 45 reports offering customized guidance to DLOs for improving customer experience.

- **Knowledge Base Implementation (Ongoing):** A knowledge base that serves as a central source of truth is being developed to provide readily accessible information for DL employees. Confluence will serve as the platform for the knowledge base.

- **Continuing System Updates:** Ongoing updates are being made to the Scheduler, TxT platform, DLD website, CSC, and the Driver License legacy system (DLS). For example:

  - DLD recently entered a contract with Amazon Web Services (AWS) Amazon Connect, which is an easy-to-use omnichannel cloud contact center service.

  - For the appointment solution, several enhancements are coming in January 2025 to improve the experience for both customers and supervisors/leads, including effortless cancelations.

7.1.3. Strategic Initiatives

- **League City Mega Center Funding Secured ($14.0 million):** Secured funding for a new Mega Center driver license office in League City, which will expand service capacity.

- **Public Information Office (PIO) Establishment (2024):** Created a new Public Information Office within DPS to enhance communication strategies.

- **Innovation and Data Office Establishment (2024):** Established a new Innovation and Data Office to drive continuous improvement through data analysis and innovative solutions.

- **DLD Video Services Contract (In Progress):** Awarded bids for a video services contract to create informational resources for customers and staff regarding obtaining driver licenses.

- **DIR Shared Services Program Opt-In:** Following a legislative change, the DLD gained the ability to leverage shared services offered by the DIR.

This section presents the findings from the operational and enterprise-level assessments. The Study Team recognizes that contributing factors can directly or indirectly influence DLD's overall effectiveness and efficiency. In addition, external contributing factors outside DLD's direct control can significantly impact operational and enterprise activities (Table 44). Recognizing them is crucial for developing realistic improvement strategies.

Table 44 Factors out of DLD control that can affect operational and enterprise activities

External Contributing Factors
Texas population growth: Rising population translates to an increase in demand for driver licenses and ID cards, potentially straining DLO capacity.
Federal & State regulations: REAL ID requirements and other evolving laws and policies can add complexity to DLO procedures.
Budgetary constraints: Unfunded mandates and limitations on budget authority can restrict DLD's ability to invest in resources and technology.
DLD project prioritization: Resource allocation for technology projects across DPS can impact the speed of procuring and implementing improvements specifically for DLD services.
Online system management: External management over the online driver license transactions can limit DLD's ability to optimize its functionalities for customer needs quickly.

7.2. Operational-level Findings

This section presents the Study Team's findings on operational deficiencies. Operational deficiencies include all of the activities occurring within Driver License Offices (DLOs) and the Customer Service Center (CSC). The Study Team analyzed data from customer and employee surveys to identify areas where staffing, technology, and communication appeared less effective or efficient in providing customer service and in promoting online services. The following sub-sections highlight key challenges and suggest improvements to increase effectiveness and efficiency in serving customers and to enhance online transaction adoption.

7.2.1. Regional Service Delivery Findings

The Driver License Division has divided the state into eleven regions shown in Table 45 contained, along with statistics about number of FTEs, vacancies, customers served in 2023, and other facts. Each DLD region manages an assigned number of DLOs to serve customers in the region. DLD assigns resources to a region based on customer base, historical information about numbers of customers, and other factors. The following discussion relates to the make-up of Regions including numbers of Mega-Centers, Large, Medium and Small offices, FTEs, Biometric Capture Systems and vetting / information works stations, vacancies and other factors that can affect the wait time, booking time and number of customers served at a DLO and within the Region.

7.2.1.1. Customer Volume and Staffing

The State Legislature required DPS to prepare an annual report (H.B. 1 Rider 29) to be presented to the Governor's Office which contained the FY results for specific performance measures relating to processing time, appointment booking time, percentage of DL/ID cards mailed in 14 days, and other statistics such as the number of workstations in each DLO and statewide. The first Rider 29 Report was provided to the Governor's Office in December, 2023; Table 45 provides some statistics from the Rider 29 Report and other DLD references.

Table 45 DLD Regions with statistics including customers served, number of FTEs, Vacancies, Workstations and other factors

1	2	3	4	5	6	7	8	9	10	11	12
Region	Number of Small, Medium or Large DLOs	Number of Mega Centers	Customers Served in 2023 at DLOS	Nr. of FTEs	FTE Vacancies	Available FTEs	Nr. of BCS Workstations	DLD Region Population	Average Wait Time (this Region) Minutes	Average Original License Booking Time (this Region) (Days)	Average Renewal Booking Time (this Region) (Days)
1A - Garland	14	2	460,704	257	56	201	151	3,524,564	22.8	33.5	12.4
1B - Fort Worth	13	1	545,804	251	47	205	126	2,988,070	27.5	36.3	13.4
1C - Carrollton	20	1	537,160	258	50	208	136	2,725,644	15.3	37.1	16.1
2A - Houston	5	2	459,729	246	43	203	139	4,373,929	15.0	8.7	3
2B - Houston	23	1	631,361	262	44	218	115	2,144,428	15.1	5.5	3.9
2C - Rosenberg	6	2	500,012	260	52	208	121	1,939,377	20.4	2.5	2.3
3 - Weslaco	21	2	504,711	251	36	215	133	2,411,332	14.4	9.5	3.6
4 - El Paso	23	1	343,385	193	43	150	92	1,521,574	10.5	9.3	3.9
5 - Lubbock	48	0	287,364	166	28	138	98	1,406,583	6.6	10.2	5
6A - San Antonio	23	1	511,838	251	56	195	122	3,337,761	21.4	37.3	14.5
6B - Pflugerville	23	1	464,454	243	96	147	124	2,873,746	22.0	35	15.3
Totals or Average	**219**	**14**	**5,246,522**	**2638**	**551**	**2088**	**1357**	**29,247,008**	**17.4**	**20.4**	**8.5**

Note: Starting with Column 1 **Region**, Data for columns 1 – 4, and 10 – 12 was obtained from the FY 2023 DLD Report to The Office of the Governor. Data for columns 5 – 6 was obtained from the Combined Organization and Strength Charts October, 2023, Data for Column 8 was obtained from the 2023 DLD Facilities Master List, Population Data for Column 9 was obtained from the Texas Demographic Center. BCS = Biometric Capture System.

Note: The number of vacancies varies from month to month depending on hiring success, departures, region of the state, the economy, competitive salary rates and other factors. Major metropolitan areas tend to have the highest vacancy rates and turn-over rates.

Population growth is seen as the greatest contributor to increased numbers of customers and DL / ID card issuance. However, other factors discussed in the following sections also affect wait times, appointment booking times and customer satisfaction.

Appointment Booking Methods and Wait Times

Appointments are managed differently by DLO supervisors and regional managers such that certain offices use a First-in First-out (FIFO) approach which means that there are no percentages of long- or short-transaction appointments used for near term or future appointment availability. In other DLOs, certain percentages of short- or long- appointments are set by the management team based on past experience. The method used for layering appointments is also based on the number of Biometric Capture Systems (BCS) and License and Permit Specialists each office has which translates to the number of customers that can be served daily. The ability to serve customers in a timely fashion is also impacted by employee vacancies, and Personal Time Off for sick leave or vacation.

DLD has 233 Driver License Offices which are categorized based on the number of counters (Biometric Capture Systems and vetting / information workstations) that the Office has:

- 14 mega centers (22 or more available work stations)
- 20 Large offices (10 to 21 available work stations)
- 31 Medium offices (5 to 9 available work stations)
- 125 Small offices (1 to 4 available work stations)
- 43 Scheduled offices (1 to 4 available work stations. The office is closed at least 1 day a week).

The following discussion provides additional information and recommendations regarding wait times and appointment booking times.

7.2.1.2. Wait Times

The average statewide wait time in FY 2023 was 14 minutes. (DLD 2023) However, wait times vary from DLO to DLO depending on customer volume, number of FTE vacancies, number of BCS and vetting workstations and LPSs to perform transactions, vet documents and provide customers with information.

There is no specific performance measure for wait time, which is the amount of time between when a customer pulled a ticket at a kiosk, until the time the customer is called by an LPS and processing begins. There are two performance measures used by the Legislature, LBB and DPS-DLD with regard to the amount of time necessary to complete a transaction at a DLO for a non-CDL license. These are:

1. The percentage of original, non-commercial driver license and identification card applications completed at driver license offices within a target time of forty-five (45) minutes from customers' booked appointment to the time customers are finished at the

counter in a driver license office. This measurement does not include the time to take any written or driving examinations. Current performance target is 63.05%.

This performance measure includes both wait time and processing time and is for original (new license – non CDL) transactions.

2. The percentage of **replacement, or renewal, non-commercial driver license and identification card applications** completed at driver license offices within a target time of thirty (30) minutes from customers' booked appointment time to the time customers are finished at the counter in a driver license office. Current performance target is 51.12%.

This performance measure includes both wait time and processing time and is for renewal of DL or ID cards (non-CDL) transactions.

These numbers are not additive since they pertain to two different types of transactions which are also referred to as 'long' (45 minute performance measure) and 'short' (30 minute performance measure) transactions among DLO employees. Since both of these performance measures combine wait time and processing time into a single amount of time: 45 minutes or 30 minutes – these values (percentage of long and short transactions target percentages) are not additive since both long and short transactions are occurring in parallel during operations at a DLO.

The DLD 2023 Report to the Governor's Office provides wait times for each mega-center and small, medium or large DLO in Texas. The term 'wait time' is defined as 'The number of minutes between customers checking into the office and being called to a workstation." Based on visits to DLOs, the CTR Team members read messages on LCD screens which said 'If you have not pulled a ticket, we do not know you are here." Thus, '**checking into the office**' is assumed to mean the point in time at which a customer **pulls a ticket at a kiosk**. However, there are some issues with using the time when a ticket was pulled as 'the beginning of wait time'; examples are given below:

1. If a customer arrives at a DLO two hours before their scheduled appointment and pulls a ticket, does wait time begin when the ticket is pulled, or the time when a customer had an appointment? The CTR Team thinks that wait time should begin at the appointment time, not when the ticket is pulled.

2. With regard to wait times listed in the 2023 DLD report and the two performance measures for long- and short-transactions, there are DLOs with average wait times that leave little time for processing after the average wait time is subtracted from either 45 minutes or 30 minutes. Thus, reducing average wait times for those DLOs could increase the percentage of customers who meet the 45 minute or 30 minute performance measure.

However, longer wait times are a symptom of other factors associated with transaction processing including;

- Operating an Information / Vetting workstation center to ensure customers have all required documents or have their questions answered;

- Staffing all BCS stations with an LPS;
- Performing repairs and maintenance of broken BCS devices through a vendor contract in a timely fashion;
- Expanding existing DLOs to accommodate more BCS processing stations and FTEs; or, building new DLOs in the region to accommodate increased population.
- Filling vacancies and especially LPS vacancies to ensure all BCS processing stations are staffed;
- Assuring that DLO supervisors and regional managers are experienced and are willing to experiment with how to layer appointments, utilize staff and manage work flows to maximize efficiency and effectiveness.

Shorter wait times result in shorter combined wait + transaction times which means more appointments can be scheduled and customers served. Shorter wait times also improves customer service. Shorter wait times can be gained through some adjustments to appointment scheduling, LPS training and other management practices. However, obtaining shorter wait times may require additional resources including BCS stations, FTEs, and vetting / information workstations.

Table 46 contains data extracted from 38 BI Team Reports for DLOs of different size. Note that the total transaction time is computed using the Short wait time, Long wait time (in this analysis these were averaged) and the short processing time and long processing time. Again, for clarity, a short transaction refers to a DL / ID card renewal, address change or other similar transaction. A long transaction refers to obtain a new (first time) DL / ID card for a new driver, a person who has just moved to Texas or similar transaction.

It is important to note that wait times are shown for both long- and short-transactions. This is because new LPS employees are first trained on short-transactions. As experience is gained, an LPS will also be trained on long transactions and eventually will be competent to perform both types. However, as an example, if a DLO has 15 LPSs of which five are new and in training, all 15 LPSs can perform a short-transaction, but only ten LPSs can perform a long-transaction. In some cases, this can lead to differences of several minutes in wait time between short and long transactions with long transaction having longer wait times.

The next section will discuss appointment booking times.

Table 46 Data from 38 Business Intelligence Team (BI Team) Reports for different DLOs

Office	Office Size	2023 Customers Served	Number of LPS postions	Number of filled LPS positions	Number of Processing (BCS) Work Stations	Number of Information Work Stations	FY 2023 Average In Office Wait time short (minutes)	FY 2023 Average In Office Wait time Long (minutes)	FY 2023 Average In Office Processing time Short (minutes)	FY 2023 Average In Office Processing time Long (minutes)
Argyle	Medium	20,274	7	6	5	0	18	18	38	38
Austin North	Large	48,361	30	15.5	14	2	31	34	18	22
Austin Northwest	Medium	41,609	16	11	8	2	30	38	12	19
Austin South	Large	53,175	24.5	17.5	12	2	32	45	20	19
Bastrop	Small	14,957	5	5	3	0	11	14	9	12
Baytown	Medium	53,630	16	16	8	1	21	23	21	16
Carrollton Mega	Mega	149,474	68	64	42	5	28	29	16	26
Castroville	Small	14,126	5	5	3	1	20	21	15	15
Conroe	Medium	42,721	16	13	6	1	23	27	18	16
Corpus Christi Mega	Mega	71,602	39	38	24	4	20	21	18	28
Denton	Large	57,071	27	24	14	3	30	33	20	26
Edinburg	Mega	81,249	50	46	24	3	19	31	23	40
Floresville	Small	9,090	3	3	2	0	20	20	13	14
Fredericksburg	Small	6,940	2	2	2	0	15	20	7	10
Gainesville	Small	14,690	4	4	3	0	31	34	50	68
Garland Mega	Mega	86,849	63	45	40	3	42	51	34	32
Georgetown	Large	47,408	28	19	12	2	35	40	16	23
Houston Dacoma	Large	86,891	30	30	16	1	19	19	19	19
Houston East	Medium	55,343	16	16	8	0	17	17	11	15
Houston SE Mega	Mega	160,080	81.5	72.5	48	5	26	28	13	18
Huntsville	Small	18,586	6	6	4	0	11	13	34	47
Hurst	Large	43,113	17.5	17.5	10	1	21	27	11	12
Killeen	Large	44,397	21	13	12	2	26	34	12	18
Lake Worth	Large	57,912	35	32	16	4	30	38	22	16
Leon Valley Mega	Mega	82,346	60.5	49	22	5	29	33	19	27
Lewisville	Medium	26,906	12	9	7	0	29	37	28	44
Lockhart	Small	5,537	1	1	1	0	21	21	7	8
Marble Falls	Small	18,579	4	4	4	0	24	27	12	17
Pflugerville Mega	Mega	76,559	47	34	31	6	42	48	18	27
Rockwall	Medium	19,653	10	10	5	0	11	14	10	15
San Antonio McMullen	Large	64,319	21	21	10	2	19	21	15	12
San Antonio P. Booker	Large	58,662	26	24	16	2	34	36	15	20
San Antonio SE	Large	62,059	28	25	10	3	25	27	13	17
San Marcos	Medium	23,212	8	8	5	0	15	17	16	14
Seguin	Small	13,099	4	4	3	0	33	39	15	16
Sherman	Medium	23,899	9	8	5	0	10	11	13	14
Taylor	Small	14,580	3	3	2	1	17	20	11	15
Temple	Medium	21,209	10	7	5	1	13	14	10	11

7.2.1.3. Appointment Booking Times

The customer appointment booking time is the number of days from the time an appointment is booked (scheduled) until the day the appointment is available. It is assumed that customers try to find an appointment which is closest in days to the date the appointment is made. However, there are different conditions that might not lead a customer to look for the closest booking date:

- The customer does not need the closest appointment date, since they are booking for a future date closer to the time when their Driver License or ID card needs to be renewed.

- The appointment that is closest in time to when the customer wants to schedule the appointment is available at a DLO that is further away than a DLO or DLOs available within short driving distance. The customer must choose if booking a closer booking date is worth a longer drive to the DLO with the appointment time that is wanted.

- The customer is not aware that DLOs, on a daily basis, may publish a number of same-day appointments and in some cases appointments within the next few days. The customer is not checking the DLO or DLOs within a short driving distance on a daily basis to find the date that is wanted or at least a much closer booking date.

- A customer has visited a DLO with a banner or a sign indicating 'No Service without an Appointment'. Since they have not been able to book an appointment within the timeframe that is desired, they believe that DLO staff will not help them find an appointment which meets their needs. This of course is not the case; often a customer might arrive without an appointment and is able to use the kiosk to book a same day appointment for the transaction they need. This has been observed by CTR Team members when visiting DLOs in different cities.

- The customer wants an appointment for themselves and perhaps one or two teenage children who want to obtain a learner's permit. Thus, booking an appointment at one DLO that meets the needs of the customer and his/her children might limit choices.

The Business Intelligence Team (BI Team) Reports were again referenced to create a table showing the average appointment booking time and the availability of short- and long-transaction appointment booking times. Considering that a number of customers who took the customer service survey stated that appointment booking times were a problem, the data in the BI Team report was used to access the actual appointment availability for Austin and surrounding areas.

The TxScheduler Appointment booking system was accessed and the available appointments examined considering whether the availability is similar to the BI Team Report figures for the Austin metroplex area and the City of Houston. Table 47 contains information from the BI Team reports to provide average, short- and long-transaction appointment availability. It is important to note that the date of the BI Team Reports vary and can be a year old. For example, the BI Team Report for Austin South is dated August 30, 2023, Houston, Dacoma, January 24, 2024, Houston East and Houston Southeast mega center, January 25, 2024.

Table 47 Business Intelligence Team (BI Team) Report data for appointment booking times

Office	Office Size	2023 Customers Served	Number of LPS postions	Number of filled LPS positions	Number of Processing (BCS) Work Stations	Number of Information Work Stations	Appointment Availability Days (short transactions)	Appointment Availability Days (long transactions)	Appointment Availability Days (Average)
Argyle	Medium	20,274	7	6	5	0	25	79	43
Austin North	Large	48,361	30	15.5	14	2	21	33	26
Austin Northwest	Medium	41,609	16	11	8	2	27	48	29
Austin South	Large	53,175	24.5	17.5	12	2	24	45	32
Bastrop	Small	14,957	5	5	3	0	14	65	30
Baytown	Medium	53,630	16	16	8	1	4	4	4
Carrollton Mega	Mega	149,474	68	64	42	5	14	67	28
Castroville	Small	14,126	5	5	3	1	18	47	30
Conroe	Medium	42,721	16	13	6	1	11	13	13
Corpus Christi Mega	Mega	71,602	39	38	24	4	2	2	2
Denton	Large	57,071	27	24	14	3	17	48	28
Edinburg	Mega	81,249	50	46	24	3	1	2	2
Floresville	Small	9,090	3	3	2	0	26	47	35
Fredericksburg	Small	6,940	2	2	2	0	13	42	26
Gainesville	Small	14,690	4	4	3	0	18	49	25
Garland Mega	Mega	86,849	63	45	40	3	17	29	22
Georgetown	Large	47,408	28	19	12	2	23	37	31
Houston Dacoma	Large	86,891	30	30	16	1	12	14	10
Houston East	Medium	55,343	16	16	8	0	11	12	10
Houston SE Mega	Mega	160,080	81.5	72.5	48	5	4	7	6
Huntsville	Small	18,586	6	6	4	0	4	6	6
Hurst	Large	43,113	17.5	17.5	10	1	23	47	25
Killeen	Large	44,397	21	13	12	2	8	32	22
Lake Worth	Large	57,912	35	32	16	4	21	45	29
Leon Valley Mega	Mega	82,346	60.5	49	22	5	26	61	35
Lewisville	Medium	26,906	12	9	7	0	22	79	50
Lockhart	Small	5,537	1	1	1	0	19	60	31
Marble Falls	Small	18,579	4	4	4	0	17	67	35
Pflugerville Mega	Mega	76,559	47	34	31	6	21	54	35
Rockwall	Medium	19,653	10	10	5	0	39	90	61
San Antonio McMullen	Large	64,319	21	21	10	2	19	41	27
San Antonio P. Booker	Large	58,662	26	24	16	2	20	58	31
San Antonio SE	Large	62,059	28	25	10	3	21	40	28
San Marcos	Medium	23,212	8	8	5	0	20	63	22
Seguin	Small	13,099	4	4	3	0	17	42	31
Sherman	Medium	23,899	9	8	5	0	15	56	28
Taylor	Small	14,580	3	3	2	1	12	40	28
Temple	Medium	21,209	10	7	5	1	20	34	21

An appointment at the Pflugerville mega-center was requested, however, the available locations include Austin South and other DLOs within about a 50-mile driving radius. The Austin South BI Team Report from one year ago indicated that the average appointment booking time was 32 days. It is apparent, that LPS vacancies at the Pflugerville mega-center and other Austin DLOs have had an impact on appointment availability.

Figure 100 shows the TxScheduler appointment results for a renewal appointment requested for Pflugerville. As can be seen the nearest appointment date for a drive license renewal in the Austin area is at Austin South for January 25, 2025. Other options are given for closer appointments in Killeen, September 23, 2024 about one month away, and Fort Cavazos, September 17, 2024 also about one month away, those these two dates agree with the BI Team Report booking availability, it would be necessary to driver about one-hour to these alternate locations.

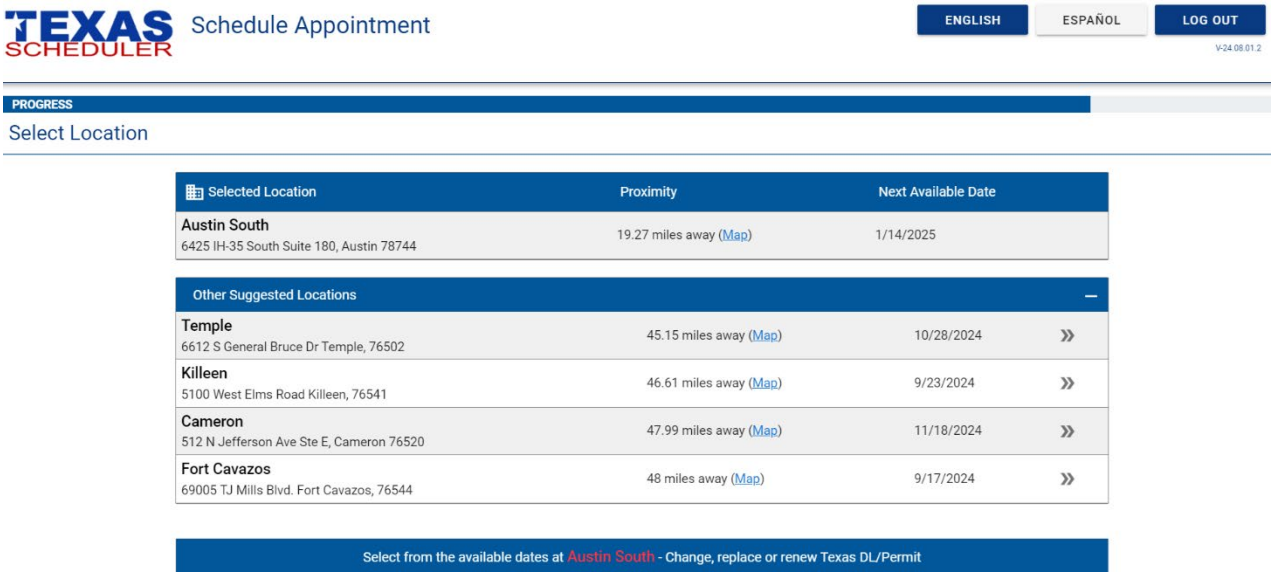

Figure 100 TxScheduler available appointment booking dates for a driver license renewal

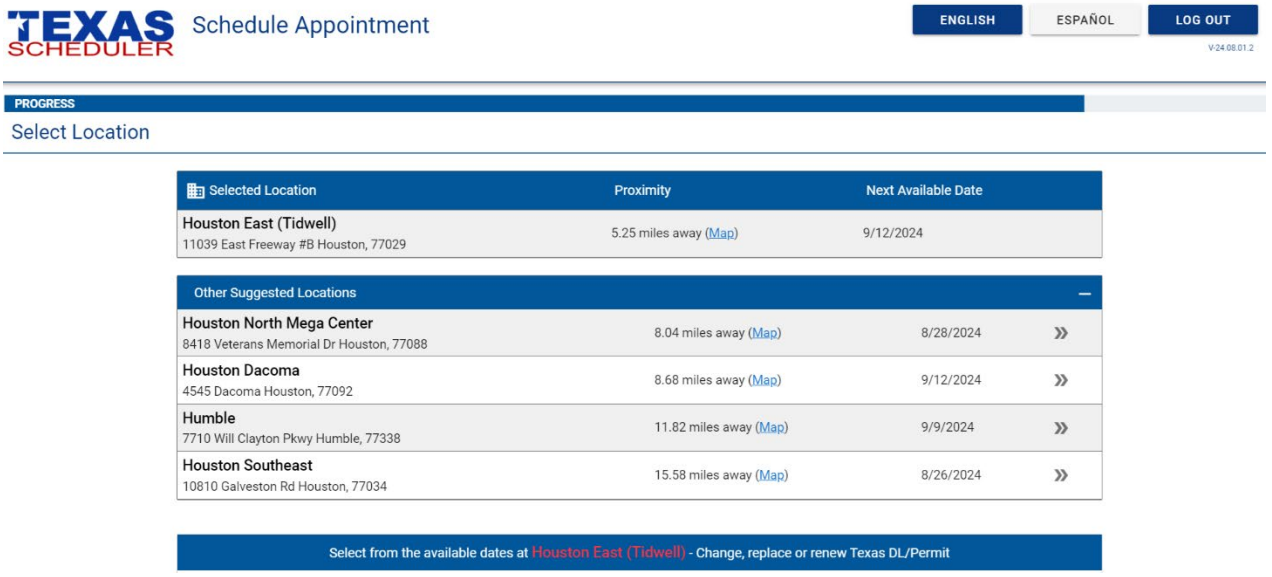

Figure 101 TxScheduler available appointment booking dates for the City of Houston

The City of Houston appointment booking availability includes Houston East September 12, 2024 about four weeks from now, Houston Dacoma, September 9, 2024 also about four weeks, Houston Southeast August 26, 2024 about 12 days, and Humble September 9, 2024 also about four weeks from now. The DLOs in Houston offer several options for appointment booking dates that are just days or weeks away.

The CTR Team realizes that this assessment is only considering the appointment booking dates that are listed in the TxScheduler software and do not consider same day appointments that could be available either in Austin or Houston within a few days. The only caveat is that a customer would need to visit a mega center or DLO in Austin prior to the office opening and log on to TxScheduler to book a same day appointment if available. The same is true for Houston, a same day appointment could potentially be scheduled once the mega centers or DLOs are open and the same day appointments made available.

The CTR Team evaluated the BI Team Report data for both the wait time and processing time information listed in Table 46 and the average appointment booking time, short- and long-transaction booking times shown in Table 47. DLO operations involve many processes that are not static, but rather stochastic in nature. Though it is apparent that having a DLO fully staffed will result in more transactions completed, shorter wait times and possibly shorter transaction times, there are other factors that also affect these operations. Appointment no-shows, supervisor and Regional manager knowledge and experience in best practices for layering appointments based on current conditions, process flow and other factors are also extremely important. Knowledge and experience are not tangible though the results are often evident as seen in the Section 4.2 Figures of the Houston Region and Austin metroplex DLO appointment cumulative distribution curves.

7.2.2. Driver License System and Appointment Data Findings

This study primarily relied on data extracted from two key databases:

DPS Driver License System (DLS): This comprehensive database, maintained by TxDPS, stores all information captured by the DLS application. This includes details on transactions, issuances, enforcements, convictions, demographics, road test results, and any other information processed by the DLS system.

TxScheduler: This database, managed by the vendor Opus Inspection Technologies, Inc., stores all information generated by the TxScheduler application. It provides insights into DLD operations by capturing data on appointments, wait times, service times, and other daily activities within Driver License offices.

Structured Query Language (SQL) queries were coded using the DBeaver software to extract data from both sources. This integrated and analyzed data set provided the foundation for assessing DLD's effectiveness and efficiency in this study.

7.2.2.1. Issuance Trends

Issuance types for driver licenses and ID cards include in-person, online, mail, phone, offender ID cards, and others. In 2023, in-person transactions are the most common (60%), followed by online transactions (36%). Table 48 illustrates the breakdown by in 2023 for all 7,563,230 transactions.

Table 48 Issuance by Transaction Type in 2023

Transaction Type	Number of Issuance	Percentage
In-person	4,512,256	59.7%
Online	2,724,112	36.0%
Mail	77,162	1.0%
Phone	59,285	0.8%
Offender ID	11,727	0.2%
Other	178,688	2.4%

According to Figure 5, COVID-19 resulted in a decrease of approximately 1.1 million total issuances in 2020 compared to 2019. Issuance numbers have risen steadily since 2021. The average number of in-person issuances per year from 2017 to 2019 was 5,451,480 (see Figure 6 below). This decreased to an average of 4,376,130 per year from 2021 to 2023, a decline of 1,075,350 annually.

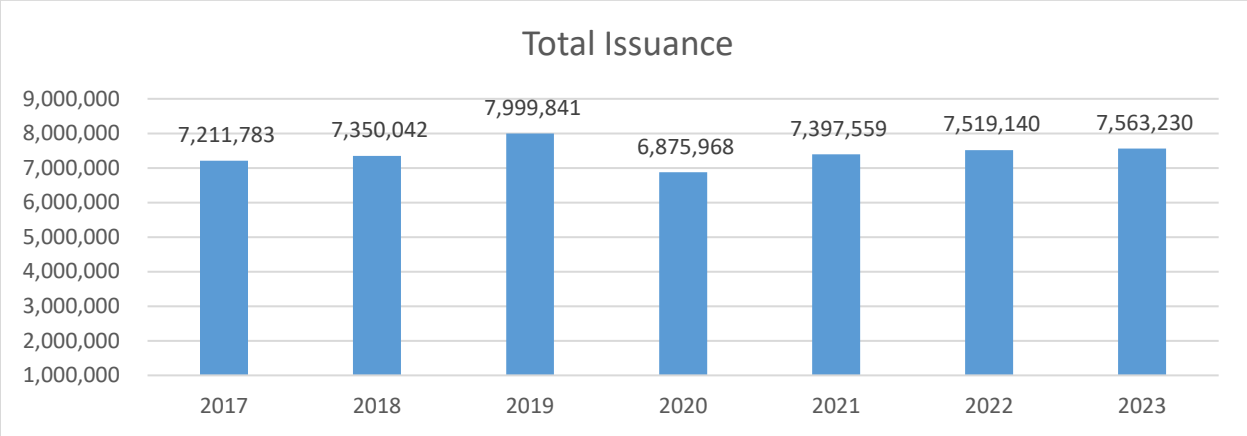

Figure 102 Total Issuance of Texas Driver License and ID Cards CY 2017 – 2023

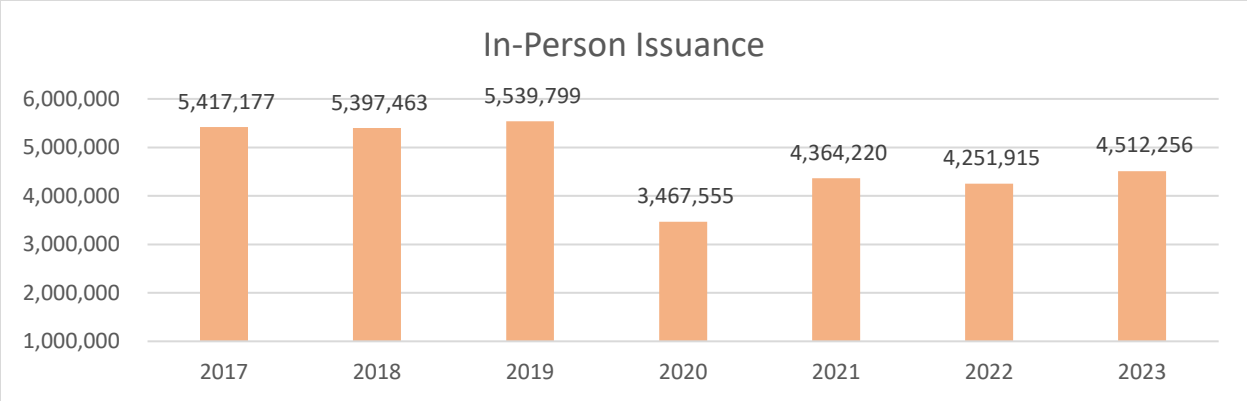

Figure 103 In-person Issuance of Texas Driver License and ID Cards CY 2017 – 2023

Conversely, the average number of online issuances per year increased from 1,768,247 (2017-2019) to 2,818,237 (2021-2023), representing an increase of 1,049,990 annually (see Figure 104). This data suggests a growing shift toward online transactions by customers, which is further supported by the increasing online issuance percentage from 2017 to 2023 (Figure 104).

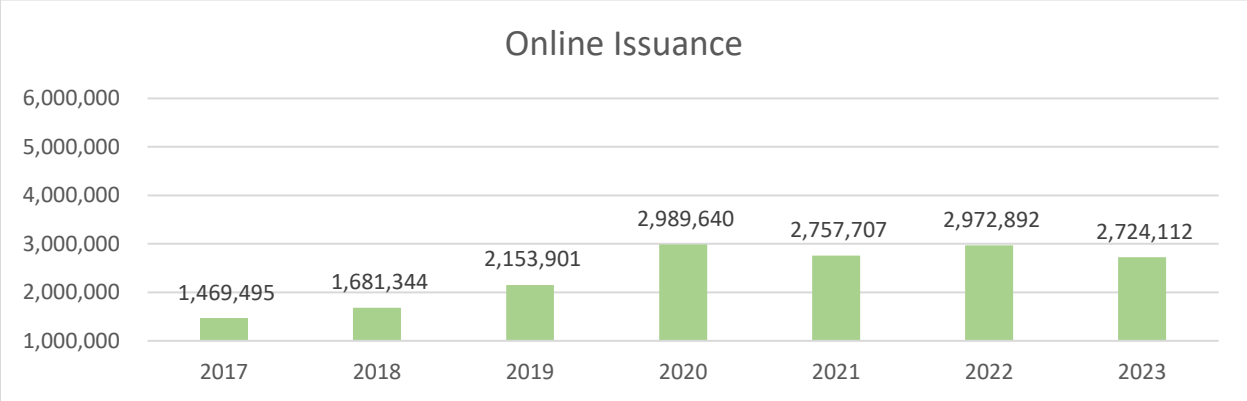

Figure 104 Online Issuance of Texas Driver License and ID Cards CY 2017 - 2023

Figure 104 clearly shows a rise in the online issuance percentage for the new appointment system (2021-2023), reaching an average rate of 37.6%. Hence, for every 100 Texas Driver License or ID Cards issued in 2023, approximately 36 were processed and completed online.

7.2.2.2. No Show Rates

The statewide average no-show rate for appointments in 2023 was around 27%, as evidenced by two data sources: daily appointments and total appointments. In 2023, the average daily number of booked appointments was 29,297, while the average daily number of checked-in appointments was 21,438. This translates to an average of 7,859 no-shows, which equates to roughly 27%. In terms of total appointments, the total number of appointments in 2023 was 7,656,059, with a total of 2,148,670 no-shows, again indicating a no-show rate of 27%.

Deficiency: High no-show rates result in reduced effectiveness in maximizing appointment availability and capacity at offices.

The high no-show rate of 27% in 2023 represents a significant deficiency for the DLD, as it directly reduces the available capacity for legitimate appointments. This translates to a substantial number of wasted appointment slots that could have been used by other customers. The 2023 Rider 29 Report states:

> Even with the success of the appointment system, not all customers show up for scheduled appointments. In FY23, 2,099,951 customers did not show up for their appointments (29.9% of the 7,030,222 scheduled). Appointment no-shows artificially lower the number of available appointments.

One potential approach to reduce no-shows is to implement limits on the number of appointments an individual can book associated with one email. However, DLD is hesitant to rely solely on email addresses for this purpose because families, for example, may share the same email to create appointments. If the appointment system places the limit of one appointment per email address, then families that share one email address would not be able to make appointments for more than one family member at a time. That is where alternative solutions come in.

7.2.2.3. Limiting Appointments with PII

Implementing a system that uses a combination of personal identifying information (PII), such as birthday and the last four digits of the Social Security number, could offer a more robust approach to limiting appointments without relying on shared email addresses. Currently, the DLD does not use PII for this purpose.

The current "appointment only" structure, combined with the limited number of same-day appointments available online, discourages walk-in customers, especially those arriving later in the day. This approach is inefficient, as no-shows can occur throughout the day, leaving appointment slots unfilled. These gaps could be readily filled by walk-in customers. Further compounding the issue is the confusing messaging between office signage, which may state "appointment only," and the DLD website, which mentions limited same-day appointments at the start of business. This inconsistency discourages walk-ins altogether.

The queuing system previously used by the DLD was flawed because it allowed people to join the line virtually, creating a queue of "ghost" appointments that never materialized. In an interview with Utah DLD[290], they discussed their approach which offers a potential solution: a system that prioritizes appointments while also allowing walk-ins. In this model, walk-in customers can physically check in at the office to join a queue, ensuring their presence and reducing the chances of wasted capacity.

[290] Interview with Utah Driver License Division. May 22, 2024.

7.2.3. Customer Service Center Findings

The Customer Service Center (CSC) handles an enormous number of phone calls and emails regarding Driver License and ID Card, Appointment System, and other DLD related inquiries. The CSC also manages DPS inquiries regarding Enforcement, Driver Records, and other topics. The only methods of responding to customers are through voice or email, which is neither effective nor efficient.

Deficiency: CSC receives an exorbitant number of calls regarding obtaining a driver license or ID card, which highlights a significant level of customer confusion.

The Center receives nearly 21,100 calls, emails, or Interactive Voice Responses contacts per day of which most go unanswered due to a) lack of staff to answer calls manually, b) lack of up-to-date technology to support omni-channel responses, and/or 3) customer confusion around online content on the DPS website. Table 49 shows the number of contacts that were received by the CSC each year from 2020 – 2023 along with the contacts answered by employees or dropped by customers.

Table 49 Customer Service Center Call Statistics 2020 – 2023

Category	FY2023	FY2022	FY2021	FY2020
No. of FTEs	81*	81	81	81
No. of Contacts Received	5,289,131	5,468,010	7,456,454	8,541,966
No. of Contacts Per Day	21,156**	21,872	29,826	34,168
No. of Contacts Answered	584,479	758,861	541,704	623,153
No. of Contacts Dropped	4,704,652	4,790,498	6,914,750	7,918,698
% of Contacts Dropped	88.94%	87.60%	92.73%	92.70%

* Includes 61 employees who answer phones, emails and other inquiries & 10 lead employees who handle escalated contacts, 9 supervisors and managers and 1 administrative assistant.
** Based on 250 working days per year

The cost of operating the CSC which includes salaries, equipment, IT, and contract costs is $6,709,773 per year. The CSC operations have routinely been lacking due to: call center system equipment which comprises a legacy system that is no longer maintained by the vendor; multiple, unintegrated applications that an employee must use to respond to contacts; an extremely high contact rate which is in part due to the inability of the DPS/DLD website to provide customers with clear, easy-to-understand information or a Chat Bot to answer Frequently Asked Questions; and other factors.

Attempting to fully staff a call center is neither effective nor efficient. For customers that want minimal touch, a phone call is much less desirable than a text or a live chat. A 2021 study by Deloitte recommended a cloud-based system to improve the CSC to implement a modern, omni-channel Contact Center that allows voice, web, SMS, live chat, social media, email, and Chat Bot responses to contacts. At the time of conducting this study, DLD has entered into a contract with

Amazon Web Services (AWS) Amazon Connect, which is an easy-to-use omnichannel cloud contact center service.

Presenting information on the website in a clear, visually driven way can reduce the number of calls to the CSC. For example, U.S. Citizenship and Immigration Services[291] has employed a visually heavy approach to establishing the types of documents that are acceptable for establishing both identity and employment authorization. The U.S. Department of State also employs visuals to depict citizenship evidence[292] as shown in the sample image of a U.S. Birth Certificate in Figure 105.

Figure 105 U.S. Birth Certificate Sample Image from Travel.State.Gov

7.2.4. Recommendations to improve customer service and wait times

7.2.4.1. Staffing and Operations

Ensuring a motivated and efficient workforce is crucial for delivering exceptional customer service. These recommendations focus on fostering a positive work environment by establishing clear performance metrics, providing staff with real-time data access, and addressing staffing challenges through competitive salaries and merit-based rewards. Recommendations are:

- Develop and communicate clear performance targets, such as an average transaction speed, to all customer-facing positions. Employees should have easy access to their data on a live dashboard at all times.

[291] Form I-9 Acceptable Documents. U.S. Citizenship and Immigration Services.
[292] Citizenship Evidence. U.S. Dept of State – Bureau of Consular Affairs.

- Increase all LPS pay at least to the midpoint of the salary range, which would take about $5 million and would reduce vacancy rates. In addition to a pay increase, DLD should consider prioritizing permanent merit increases rather than one-time merit payment to improve staff retention.

- Offer higher salaries within range for positions in hard to fill locations to improve staff attraction and retention.

- Implement a combination of appointment limits using PII and a hybrid appointment and walk-in queuing system (like Utah) to significantly reduce no-show rates and maximize its service capacity. This will lead to shorter wait times and improved customer experiences**.**

- Simplify the process for appointment cancellations, reducing barriers to successful cancellation of appointments by customers.

7.2.4.2. Technology

To significantly improve customer experience and operational efficiency, these recommendations focus on modernizing DLD's service delivery model. This includes implementing appointment scheduling limits, a paperless system for electronic submissions, streamlining contact center operations, and enhancing the appointment scheduling process. Recommendations are:

- Enhance appointment solutions to prioritize customers with appointments but integrate it with a queueing system that allows walk-ins to wait in line rather than scheduling them to come at a later time or make them go to a different location.

- Procure a modern paperless system that includes electronic submission of documents and online applications to streamline the process for both customers and staff, which would lead to significant improvements in efficiency and customer satisfaction.

- Incorporate modern payment options, like Tap to Pay. Accelerate implementation of a modern omni-channel contact center and provide funding to hire additional CSC staff.

- Fast-track the implementation of omni-channel communication (voice, web chat, SMS, etc.) and provide funding to hire additional CSC staff. This, coupled with a website content revamp featuring clear visuals for Primary, Secondary, and Supporting Identity documents (in a format similar to USCIS) can significantly reduce unnecessary CSC calls.

- Implement automatic reminders 3 weeks before appointment, 3-5 days before appointment, and three hours before appointment to reduce no show rates.

- Change the policy to only allow customers to check-in once they are physically present on-site to reduce wait times.

- Establish a system where doctors can submit eye exam results and that allows customers to submit photos (similar to how U.S. Dept. of State accepts passport photos) to allow multiple online renewals, which would further alleviate DLO capacity burdens.

7.2.4.3. Communication

To enhance public understanding and streamline the customer experience, these recommendations focus on improving DLD webpage clarity and accessibility, using visuals for document identification, and establishing a dedicated social media presence managed by a DLD-integrated Communications and Social Media Manager (CSMM). Recommendations are:

- A two-pronged approach to improve the user experience of the DL website. 1) Content Revamp: Partner with a professional content editor to streamline website copy, making it concise, clear, and easy to understand. 2) UX Design Optimization: Engage a UX design specialist to redesign the website interface with a focus on intuitiveness, ease of navigation, and reduced user effort, including generating tailored information about what customers in various circumstances need to bring for their visit;

- Establish a dedicated social media presence for DLD. DLD-specific Communications and Social Media Manager (CSMM) should develop new DLD-specific social media pages and manage the content creation. Feature clear visuals for Primary, Secondary, and Supporting Identity documents (in a format similar to USCIS) on DLD/DPS website. This would bolster effective, clear communication with the public. CSMM should operationally report to DLD but be part of the PIO division. The CSMM should be fully integrated with DLD staff to gain in-depth knowledge of the common questions, complaints, and misconceptions from the public, new initiatives, which can be highlighted or addressed in public information campaigns, as well as achievements and contributions of the DLD.

7.2.5. Recommendations to improve procurement of information technology

7.2.5.1. Staffing and Operations

To overcome the current resource limitations hindering DPS IT's ability to fully implement Agile methodologies, recommendations are:

- Provide funding to hire a dedicated AIS-specification technical FTE to speed up procurement processes under the determinations for Best Value to the state.

- Provide funding to hire additional DLD-dedicated FTEs. Create an agile team to fill the staffing gaps required to get DL incorporated into the agile software development framework, which is absolutely critical to enhancing effectiveness and efficiency. These positions should include additional Scrum Masters, aids for Scrum Masters, business analysts, and Agile Integrators.

7.2.5.2. Contracting and Procurement Processes

Procurement and implementation of Technology is a complex, multi-year, and expensive process. State contracting rules, which were developed under a waterfall procurement process rather than today's agile procurement process, also add to the complexity in developing the next generation of software to provide driver license issuance.

- Provide the authority to publish draft RFOs for tech solutions to the vendor community for feedback, prior to the final RFO, to reduce barriers to effective and efficient procurement of technology.

- Implement and integrate agile procurement as a policy at the state level and in DPS/DPS-DLD. Additionally, provide funding for additional DPS IT FTEs to create an Agile team to fill the staffing gaps required to get DL incorporated into the Agile software development framework.

7.2.5.3. Structural and Approval Challenges

These complex statutory/legislative, process, while a function of the size and missions of the DPS, DLD, and DIR, produces structural and approval bottlenecks. The procurement process is structured to ensure the best value in procurement for the state is met, which may not always lead to efficiency in procuring technology. Recommendation is:

- Re-evaluate the TXRAMP requirement to enable agency leadership to document and accept risk in certain cases, including while waiting for vendors to be able to complete the TXR certification process, to enable agencies to enter into a contract that is not considered void statutorily when the risk of not having the contract is greater than the risk of the TXR certification process not yet being complete. This would also require the agency's cyber team to review and weigh-in on risk to ensure it is tolerable.

- Authorize a blanket DIR exemption for DLD for IT services.

- Authorize a higher capital budget authority than the current $500,000 limit given to DPS for information technology purchases.

- Grant automatic UB authority across biennia for technology and construction projects that would apply to the funding and capital authority associated with the project.

- Require LBB to send to the Legislature fiscal impact statements for all proposed legislation that could significantly impact IT resources and budgets. This will allow for a more transparent and collaborative approach to IT project planning and budgeting.

7.2.5.4. Funding

As noted throughout this report, funding of DLD is insufficient to meet the needs and expectations of the Legislature and the residents of Texas in 'getting my driver license.' It is expensive to make

improvements or fixes to the legacy DLS. Therefore, a move to a new system will require significant funds to procure a modern DLS type system.

- Fund modernizing the DLS legacy system. It is the core component for improved efficiency and effectiveness, reducing wait times, improving customer service and facilitating customers shifting to online renewal.

- Increase funding for the DLD in the capital budget.

7.2.6. Recommendations to incentivize online transactions

Streamlining the Driver License (DL) website is crucial for enhancing public access to information and improving the overall user experience. The recommended two-pronged approach focuses on both content clarity and user interface design. Recommendations include the following:

- Content Revamp: Partner with a professional content editor to streamline website copy, making it concise, clear, and easy to understand.

- UX Design Optimization: Provide funding to hire a UX design specialist to redesign the website interface with a focus on intuitiveness, ease of navigation, and reduced user effort.

7.2.7. Timeline considerations

The Study Team in discussions with DLD division and DPS IT, Procurement and IDO divisions, noted that developing a timeline for implementation of recommendations to reach the goals set out in Rider 51 is complex. Given the importance of a driver license as a critical document that legitimizes a person's identity and facilitates participation in many aspects of modern life, mistakes cannot be made in the approaches taken to facilitate improving effectiveness and efficiency in DLD service provisions. Modernizing the DLS is without doubt a critical factor to improving customer service and improved efficiency and effectiveness, reducing wait times, and facilitating customers shifting to online renewal.

The DLS also integrates into other DPS systems for law enforcement purposes, and under interstate compacts and agreements with the Association of Motor Vehicle Administrators (AAMVA) systems and other state to state systems. As an example, Texas is a member of the Driver License Compact. The Driver License Compact (DLC) was created to provide uniformity among member jurisdictions when exchanging information with other members on convictions, records, licenses, withdrawals, and other data pertinent to the licensing process.

Federal mandates must also be considered in this process, as at some points states must modernize their systems to federal regulatory requirements. The Department of Homeland Security has indicated that participation in the State-to-State (S2S) verification service is required for a state to be REAL ID compliant, as the REAL ID Law requires that states ensure that a person holds only one REAL ID credential. S2S is managed by AAMVA, but grants are available to the states to offset costs associated with the implementation and operation of the S2S service. A DLS outage

in September required the addition of infrastructure due to AAMVA's S2S system integration with the DLS and the increased, unanticipated demand in traffic on DLS. DLS was down for a week managing this process.

Multiple factors also interact and play a role in what is realistically achievable. What might be considered quick wins or easy targets could be achieved within a biennium if the legislature provides funding. Looking at the IT Roadmap that was shared with the Study Team, projects are averaging anywhere from four quarters (12 months) to ten quarters (40 months), depending upon complexity. Modernizing DLS is currently placed into FY2027 Q1. Looking at procurement alone, DPS Procurement Division noted that the mean for RFO procurements is 311 days. Add to this developing a business case, developing specifications, negotiating the contract, and then developing, implementing and testing a product.

Chapter 8. Conclusion

The Driver License Division (DLD) faces significant challenges in delivering exceptional customer service. Budgetary constraints, staffing shortages, and outdated technology are major barriers hindering efficiency and creating long booking times to get an appointment. Booking time is the number of calendar days between the date a customer schedules an appointment, and the date of the appointment. However, this report is not just a problem statement; it proposes a comprehensive set of recommendations to improve DLD's effectiveness and efficiency.

The Study Team conducted a comprehensive analysis to identify areas for improvement. This included customer service and DLD employee surveys, interviews, a workshop with the ETG, field visits to Driver License Offices, obtained Business Intelligent Team (BI Team) Reports and other study publications by professional consultants, and obtained data either directly from DLD personnel or using a DPS laptop and the DLS database. Based on this information, the Study Team identified deficiencies that relate to customer service and wait times, procuring technologies to enhance customer facing services, and incentivizing online transactions to reduce in-person visits to DLOs.

The Study Team categorized deficiencies as operational-level if the impact primarily affected DLO operations in the field or as enterprise-level if the impact primarily affected HQ and its ability to plan for the future and manage risk, obtain sufficient funding, conduct budget management, procure technology systems for statewide implementation, forecast future trends, and develop strategies or internal performance measures to meet future needs.

The Study Team identified recommendations to address operational and enterprise deficiencies to improve efficiency and effectiveness related to improving customer service, implementing customer facing technology strategies that can reduce wait times, improve reliability and enhance efficiency by increasing the number of customers served. However, although appointment booking times, no-show rates and employee turnover were not directly cited among the study objectives, the Study Team believes these performance considerations are very important in meeting customer service expectations and improving efficiency and effectiveness.

Though DLD reported average booking times in the Rider 29 Fiscal Year 2023 Driver License Services Report to the Office of the Governor, there is no performance measure for booking time. Booking time is often cited by customers, the media, and in the Study's Customer Survey as a concern. Long booking times can cause frustration and concern among driver license holders who are unable to find an appointment before their driver license date expires. This can affect the ability of a citizen to keep their job or to get a job based on conversations with customers outside mega-centers visited by the Study Team during this study.

High no-show rates further limit appointment availability. The no-show rate is the percentage of customers with an appointment who did not arrive at a DLO on the appointment date (29.9% on

average in 2023 per the Driver Services FY23 Report). High no-show rates artificially lower the number of available appointments.

Also, the Study Team identified recommendations to reduce employee turn-over rates which also can improve customer service and reduce wait times. As stated in the DLD 2023 Report to the Governor's Office:

> "Customer satisfaction follows the count of authorized FTEs. Customers want to complete their business at DLOs quickly and efficiently without long wait times."

In 2023, there were 283 FTE vacancies reported in DLD primarily among the DLO and mega-center staff. The Study Team also found that a high turnover rate exists among LPS IIs.

The Study Team found that although DLD awards one-time merit increases to selected employees who demonstrate high performance, DLD does not have an annual merit-increase budget or plan for awarding merit increases to employees which increases their monthly salary and retirement benefits. LPS employees, who comprise a large percentage of DLD FTEs, typically have the same salary for the same grade level across the state (LPS II, III, IV or V) which also supports that annual merit increases are not awarded. Further, the pay level for LPS employees is in the lower quarter of the salary range for this job title, rather than at the 50% range as is assumed by the SAO when evaluating statewide pay scales. Thus, the Study Team believes that a pay level that is well below 50% of the allowable pay range and lack of a merit system affect high turn-over rates for LPS IIs which exceeds 22% annually. This reduces the ability of an understaffed DLO to serve customers, increases employee training costs, and results in a percentage of LPSs being new and only able to process less complex transactions. The result is longer waiting times, fewer customers processed, and longer booking times.

Moving forward, the path toward DLD effectiveness and efficiency requires a multi-pronged approach:

Budget and Staffing

At the heart of DLD's concerns lie financial limitations. Unfunded legislative mandates compound this issue by further straining the budget. Inadequate salary compensation restricts the ability to hire and retain qualified staff, impeding efficient operations. DLD is further constrained by limited FTE positions in critical areas such as the CSC. By providing additional FTE positions for customer communication positions DLD can address the growing gap in customer demand. Next, tackling staffing issues requires a competitive compensation strategy. Raising the pay for License and Permit Specialist (LPS) positions to the midpoint of the salary range will improve retention rates. This should be coupled with a system for awarding merit increases and incentivizing high performance.

Modern Technology

Technology plays a pivotal role in modernizing DLD. Implementing a paperless process will bring significant efficiency gains. Additionally, establishing appointment scheduling limits will help eliminate long appointment booking times and wasted capacity. Further, enhancing the CSC with omni-channel communication options will provide greater flexibility and convenience to DLD customers and divert calls from customers. The effectiveness of these initiatives can be further maximized by implementing clear performance metrics for staff and providing real-time data access. This can empower employees to continuously improve their service delivery.

Modernizing DLD's legacy systems, particularly the DLS, is critical for long-term efficiency gains. However, complexities surrounding federal mandates and system integrations necessitate a realistic approach. Unspent balance (UB) authority for technology modernization is vital. Further, granting DLD an exemption from standard IT procurement practices, such as ability to publish draft RFOs for technology solutions for vendor community feedback prior to development of the final RFO, will allow greater agility and faster implementation of technology solutions.

Modernizing IT procurement processes requires additional measures. Hiring dedicated IT staff will facilitate agile software development practices, allowing for quicker and more responsive software updates. Streamlining contracting procedures through draft RFO publication and implementing agile procurement practices will eliminate unnecessary delays. Additionally, re-evaluating the TX-RAMP requirements for risk management will ensure sufficient risk mitigation without hindering progress.

Communication

Encouraging online transactions will significantly reduce in-person wait times and streamline the customer experience. To achieve this, DLD website needs a complete overhaul. Content should be clear, concise, and easy to understand, guiding users intuitively through the process. A user-friendly website design, optimized for mobile devices, will further encourage online transactions.

DLD currently lacks a dedicated public communications channel. Establishing a targeted social media presence, managed by a DLD-dedicated Social Media Manager, is critical to address public concerns and disseminate vital information that can impact customer service. This comprehensive communication strategy will not only reduce confusion but also foster a sense of trust and transparency with the public.

Conclusion

Implementing the recommendations within this report necessitates an unwavering commitment from leadership, legislative support, and collaboration between DLD staff and stakeholders. With unwavering dedication to these proposed solutions, DLD can achieve significant progress toward exceptional customer service, reduced wait times, and a more attractive and efficient online experience. This comprehensive strategy aligns with Rider 51's objectives and paves the way for a future-proof DLD that meets the needs of its customers

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Appendix A: Additional Visuals

Table A 1 List of DLD Regions with statistics regarding customers, FTEs, population and operational information

1	2	3	4	5	6	7	8	9	10	11	12
Region	Number of Small, Medium or Large DLOs	Number of Mega Centers	Customers Served in 2023 at DLOS	Nr. of FTEs	FTE Vacancies	Available FTEs	Nr. of BCS Workstations	DLD Region Population	Average Wait Time (this Region) Minutes	Average Original License Booking Time (this Region) (Days)	Average Renewal Booking Time (this Region) (Days)
1A - Garland	14	2	460,704	257	56	201	151	3,524,564	22.8	33.5	12.4
1B - Fort Worth	13	1	545,804	251	47	205	126	2,988,070	27.5	36.3	13.4
1C - Carrollton	20	1	537,160	258	50	208	136	2,725,644	15.3	37.1	16.1
2A - Houston	5	2	459,729	246	43	203	139	4,373,929	15.0	8.7	3
2B - Houston	23	1	631,361	262	44	218	115	2,144,428	15.1	5.5	3.9
2C - Rosenberg	6	2	500,012	260	52	208	121	1,939,377	20.4	2.5	2.3
3 - Weslaco	21	2	504,711	251	36	215	133	2,411,332	14.4	9.5	3.6
4 - El Paso	23	1	343,385	193	43	150	92	1,521,574	10.5	9.3	3.9
5 - Lubbock	48	0	287,364	166	28	138	98	1,406,583	6.6	10.2	5
6A - San Antonio	23	1	511,838	251	56	195	122	3,337,761	21.4	37.3	14.5
6B - Pflugerville	23	1	464,454	243	96	147	124	2,873,746	22.0	35	15.3
Totals or Average	219	14	5,246,522	2638	551	2088	1357	29,247,008	17.4	20.4	8.5

Table A 2 Overall Respondent Characteristics

Characteristic	Value
Sex	*n = 1125*
Male	19.1%
Female	77.6%
Transgender, non-binary, or another gender	0.4%
Prefer to not say	2.9%
Age (years)	*n = 1125*
18-20	0.3%
21-29	7.7%
30-39	22.7%
40-49	26.9%
50-59	28.8%
60-69	13.2%
70-79	0.4%
80 or older	0.1%
Race and Ethnicity (Select all that apply)	*n = 1125*
American Indian or Alaskan Native	4.3%
Asian	3.8%
Black or African American	21.0%
Hispanic or Latino	32.8%
Middle Eastern or North African	0.3%
Native Hawaiian or Pacific Islander	0.7%
White	49.7%
Prefer to Self-Describe	3.1%
How long have you been working for DLD?	*n = 1125*
Less than 1 year	7.7%
1 year to 2 years	5.8%
More than 2 years to 5 years	25.4%
More than 5 years to 10 years	27.3%
More than 10 years to 15 years	21.7%
More than 15 years to 20 years	6.2%
More than 20 years to 30 years	4.9%
More than 30 years	1.0%
Job Title	*n = 1125*
License and Permit Specialist	74.0%
Lead Worker	6.8%
Supervisor	9.8%
Assistant Manager	2.8%
Manager	0.8%
Senior Manager or higher	0.1%
Other (please enter)	6.1%
Do you work at DLO, HQ, or CSC?	*n = 1125*
Driver License Office	85.9%
Headquarters	11.3%
Customer Service Center	2.8%
In your role, do you supervise other employees?	*n = 1125*
Yes	22.3%
No	77.7%

Table A 3 DLO-specific Respondent Characteristics

Characteristic	Value	
Did you work at DLO prior to appointment system (May 26, 2020)?	*n = 1097*	
Yes		69.7%
No		30.3%
*Do you mainly work in a customer facing position?**	*n = 998*	
Yes		87.9%
No		12.1%
Do you make the work schedule for your office?	*n = 998*	
Yes		21.6%
No		78.4%
At which office location do you work? (Region)	*n = 954*	
1A-Garland		10.6%
1B-Fort Worth		9.6%
1C-Carrollton		10.4%
2A-Houston		7.0%
2B-Houston		5.3%
2C-Rosenberg		10.4%
3-Westlaco		11.1%
4-El Paso		5.7%
5-Lubbock		7.2%
6A-San Antonio		8.2%
6B-Pflugerville		8.3%
Prefer to not respond		6.2%

* Also asked to respondents indicating they worked at the CSC

Table A 4 Challenges Logged from BI Team Reports

Challenge Category	No. of Challenges Recorded	Solutions Offered
Appointment Publishing (FIFO/Layered/ratios)	**60**	Expand publishing frequency in APPLUS by publishing appointments in consistent intervals to increase availability for the public. Example: 10% - 180 days out, 20% - 90 days out, 30% - 30 days out, 20% - 7 days out, 20% - same day
		Combine long and short appointments when publishing in TX Scheduler, enabling customers to select based on their needs
		The FIFO method will increase the long appointment ratio to 2:1
		By adjusting the long and short appointments to an approximate ratio of 2:1, the current long appointment availability should decrease over time
		Increase general appointments during higher no-show time slots (e.g. between 09:00-11:00)
Ad-Hoc Messaging	**20**	Expand the use of ad-hoc messaging to include both long and short applicants. Leads can alternative to send ad-hoc messages daily or weekly to customers, to reference documents required and serve as a reminder of the next day or upcoming appointment.
		Utilize the Ad-Hoc messaging feature in APPLUS to provide reminders the day before the appointment regarding required documents
		Establish a routine of sending weekly ad-hoc messages to all customers by appointment type. Send messages once per week for appointments scheduled the following week.
		Streamline the messaging process by utilizing pre-set messages that can be copied and pasted into the message window
Morning Procedures / Vetting	**19**	Customers with appointments should have their documents checked at the information desk to decrease customer wait times
		Provide customer office email to send documents if they have forgotten etc. or wish to check / print when applicable
		Have a second employee or lead / supervisor assist with the morning triage at the kiosks and information desk in the morning
		Create QR codes to hand out to customers and post in visible areas that direct them to the DPS website
		Verify documents of customers with a long appointment at minimum. Vetting reduces customer wait times and decreases employee service times
		Send first round of customers with appointments directly to workstations to avoid congestion at the entrance upon opening. Then direct remaining customers to the information desk for document check
Same-Day Appointments	**17**	Publish the bulk of same-day appointments as Generals for customers to obtain early in the morning and throughout the day at their convenience online
		Make verbal announcements in the morning while outside about same-day appointments; available Monday-Friday starting at 8am. This will help to discourage long lines from forming outside the building in the early morning hours
		Publish Fast Tracks daily to assist local residents at the kiosk, and limit the waiting outside the DLO
Vacancies & Staffing	**13**	Temporarily request personnel assistance from other driver license offices in the area. The Mega Centers typically have more staff available and could assist at the typing stations until new hire training is complete and vacancies are filled

		As vacancies exist, reduce Class C road tests. This will allow the extra employee to work at a station to process customers. The number of long appointments can be increased on the days with reduced road test appointments
		Create a communication system so smaller offices can easily ask large offices and mega centers to provide personnel assistance when short staffed. This provides a good opportunity for an LPS to cross-train and learn operational procedures in a small to medium DLO. This is also another way for supervisors to build strong working relationships with each other and their staff
		While vacancies exist, reduce or temporarily eliminate Class C road tests
Service Time	**11**	Remind staff of the importance of closing tickets appropriately, especially when leaving a station to cover another position, during lunch and breaks and departure for the day.
Staff Recognition	**10**	Highlight the office's successes and areas that can use improvement. Include transaction totals and office Google Reviews.
		Post team activity monthly or quarterly to keep everyone aware of their productivity and the public's perception of the office
		Acknowledge individual achievements with employees one-on-one. This motivates them to continue striving for excellence and setting higher personal goals
		Implement a monthly / quarterly staff recognition program with diverse categories. Candidates can be nominated by staff or chosen by leadership. Examples include: Friendliest LPS, Best Team Player, Most Individual Goals Met. Example Rewards: Workstation or work-shift choice for the day/week, Employee Parking space for the week/month
Appointment Template	**9**	Based on recommendations of appointment changes, the template of appointments can be configured using combined long and short appointments layered publishing from 180 days to Same-Day and a mix between general and kiosk appointments
		Update templates to remove those that are obsolete, making it easier to train others, and quicker to add the newly configured systems
Employee Schedule	**8**	Replace the 4/10 work shift with a global standard 5/8 schedule for all staff
		Rotate staff to different stations weekly (instead of daily).
		Prioritize keeping typing stations and the information desk filled throughout the day
		Ensure staff are ready to handle morning schedule by having 2/3rds of LPSs begin before 8 am
		Prioritize the morning triage and filling the typing stations
		The Class C testers can rotate with counter positions during summer weather
Office Efficiency	**8**	When the lead is acting as the office supervisor for long periods of time during the week, they should be granted further discretion and capacity to make decisions. This can reduce some of the phone calls and red tape for approvals
		Create a mobile information desk with a computer in the lobby to assist with customer questions, pre-typing, vetting applications during peak customer volumes
Return Customers	**8**	Utilize DPS only or Fast Track Appts to give return customers same-day appointments to retrieve documents and reduce customer stress
		Publish DPS Only Appointments (combine longs & shorts) for employees to use for return customers. Set the slot size to 60 minutes for employees to quickly identify in TX Scheduler. These appointments are not available to the public online or at the kiosk in the office. They can provide flexibility for office staff
Leadership	**6**	Rotate Office Duties - Creating a rotating schedule for supervisors and leads to managing the weekly employee schedule, publish appointments, send ad-hoc messages, and maintain monthly reports. This will promote cross-training for everyone
		Visit With Your Direct Reports - Individually meet with employees at least semi-annually to discuss their personal stats, career interests, and goals

		Increase Transaction Volume - Provide clear expectations to motivate staff to process more transactions
		Increase leadership visibility - Make frequent rounds by walking the floor and through the pods each day. This will make leadership more accessible for questions and customer complaints.
		Schedule Regular Supervisor Meetings - Bi-weekly meetings among supervisors will keep everyone on the same page regarding policy interpretation, office procedures and personnel issues
		Schedule Regular Staff Meetings - Quarterly staff meetings keep employees informed and updated regarding office initiatives, encourages participation and problem resolution
		Implement Rotating Schedules - Create a rotating schedule for supervisors and leads to manage the weekly employee schedule, publish appointments, send ad-hoc messages and monthly reports
		Improve Office Efficiency - Work together to improve office flow and keep typing stations filled throughout the day
		Increase Transaction Volume - Motivate staff to increase their transactions processed. Establish personal goals for each employee to achieve over a six-month period and hold them accountable
		Employee Motivation - Encourage healthy competition and recognize top performing employees by metrics. These metrics can include the number of transactions processed, Class C Skills Tests administered, and reduced service times
		Visit Other Mega Centers - Supervisor visits to other high performing mega centers, creates an opportunity to observe and ask questions regarding operations and APPLUS Management. This observation could provide a chance to engage with other supervisors and learn more about other offices of equal size and resources
Class C Road Exams	**5**	Reduce Class C road exams to three days a week. More long appointments could be added on the days when Class C appointments are not scheduled. Road tests could be increased from 6 to 8 appointments on the reduced days. Possibly consider eliminating road tests to focus on processing more transactions

Appendix B: Driver License Employee Survey Questions

Driver License Employee Questions

Department of Public Safety – Driver's License Division Employee Survey

House Bill 1 was passed during the 88th Texas State Legislature and includes a requirement for a study that "examines the deficiencies of the Driver License Services Division and makes recommendations on how to advance the effectiveness of the division including improving customer service, reducing wait times through use of information technology to modernize customer facing services, and methods to incentivize online transactions".

The University of Texas at Austin – Center for Transportation Research has been contracted to perform this study. We are seeking your input to increase our understanding of how the Driver's License Division functions and make recommendations for improvement.

We ask for no personal identifying information. The survey will provide an anonymous snapshot. If you have any questions, you can contact us at the email addresses listed below.

Thank you for your time,

Lisa Loftus-Otway, Attorney, Research Associate

loftusotway@mail.utexas.edu

Carolina Baumanis, Ph.D., Research Associate

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The University of Texas at Austin

Center for Transportation Research

General:

Q3 What is your age group?

○ 18 - 20 (2)	21 - 29 (3)	30 - 39 (4)	40 - 49 (5)
○ 50 - 59 (6)	60 - 69 (7)	70 - 79 (8)	80 or older (9)
○ I prefer not to answer (10)			

Q4 What is your sex?

○ Male (1)	Female (2)	I prefer not to answer (3)

Q5 Please indicate your Race/Ethnicity (check all that apply)

- ☐ American Indian or Alaskan Native (1)
- ☐ Asian (2)
- ☐ Black or African American (3)
- ☐ Native Hawaiian or Pacific Islander (4)
- ☐ White (5)
- ☐ Other Race (6)
- ☐ Hispanic or Latino (7)

Q6 How long have you been working for DPS-DLD?

- Less than 1 year (1)
- 1 - 2 years (2)
- 2 -5 years (3)
- 5 - 10 Years (4)
- 10 to 15 years (5)
- 15 - 20 years (6)
- 20 - 30 years (7)
- More than 30 years (8)

Q8 What is your monthly salary range?

- Less than $2000 (1)
- $2000 - $2199 (2)
- $2200 - 2399 (3)
- $2400 - $2599 (4)
- $2600 - $2799 (5)
- $2800 - $2999 (6)
- $3000 - $3199 (7)
- $3200 - $3399 (8)
- $3400 - $3599 (9)
- $3600 - $3799 (10)
- $3800 - $3999 (11)
- $4000 to $4499 (12)
- $4500 - $4999 (13)
- $5000 - $5999 (16)
- $6000 - $6999 (17)
- $7000 - $7999 (18)
- $8000 - $8999 (19)
- $9000 - $9999 (20)
- More than $10,000 (14)
- I prefer not to answer. (15)

Q7 What is your job title?

- ○ Customer Service Representative
- ○ License and Permit Specialist
- ○ Lead Worker
- ○ Supervisor
- ○ Assistant Manager
- ○ Manager
- ○ Senior Manager or higher
- ○ Other (please enter it here) (11)

_____

- Do you work at a driver license office, HQ, or the Customer Service Center?
  - Driver License Office
  - HQ
  - Customer Service Center
- Do you mainly function in a customer facing position? (SKIP IF HQ == YES)
  - Yes
  - No
- Do you ever make the work schedule? (SKIP IF HQ == YES; only ask to DLO and CS Center)
  - Yes
  - No
- In your role, do you have any responsibilities related to managing or overseeing the work of others?
  - Yes
  - No
- At which office location do you work? (Work at a DLO == YES ONLY)
  - Provide drop down list or ask respondent to provide station number
  - I don't wish to respond
- Did you work at a DLO prior to the appointment system launch (May 26, 2020)?
  - Yes
  - No

Customer Service:

- Please rate the overall quality of customer service at your office on a scale of 1-5
    - 1 very poor
    - 2 poor
    - 3 fair
    - 4 good
    - 5 very good
- To what extent do you feel the current technology allows staff to process applications and serve customers efficiently? (1-5 scale, 1= Not at all efficient, 5= Very Efficient)
    - 1 = Not at all efficient (Current technology significantly hinders staff ability to process applications and serve customers)
    - 2 = Somewhat inefficient (Current technology creates obstacles that slow down processing and service)
    - 3 = Neutral (Current technology neither significantly helps nor hinders efficiency)
    - 4 = Somewhat efficient (Current technology supports efficient processing and service to an extent)
    - 5 = Very Efficient (Current technology significantly aids staff in processing applications and serving customers efficiently)
- How often do the following obstacles hinder your ability to provide accurate and fast customer service? (Work at a DLO == YES & CUSTOMER FACING == YES)

Potential Obstacle	Never (Doesn't hinder)	Rarely	Occasionally	Frequently	Very Frequently (Always hinders)	Does not apply
Difficulty obtaining clear and consistent interpretations of policies and procedures (e.g., receiving conflicting information from supervisors, outdated information in guides)						
Difficulty accessing necessary information (e.g., slow systems, outdated knowledge base)						
Lack of a cloud-based file sharing system (Dropbox, Box, OneDrive) for office employees						
Lack of highly trained staff to handle complex cases or CDLs						
Lack of or inefficient communication (between employees, supervisors, leadership)						

Lack of or inefficient structured training						
Information desk unavailable or understaffed						
Information desk unavailable or understaffed						
Customers emailing documents to print						
Broken, outdated, or poor equipment						
High workload or understaffing						
Dealing with angry or upset customers						

Access to Performance Data:

CUSTOMER FACING == YES

- Do you have specific transaction targets or goals you are meant to hit (i.e. average number of transactions completed or average transaction speed)?
    - A. Yes, I have specific targets or goals to hit.
    - B. No, I don't have specific targets or goals for my performance.
    - C. I'm unsure

CUSTOMER FACING == YES & IF PERFOMANCE TARGETS == YES

- Do you check data on your own individual performance, such as average transaction times or customer satisfaction ratings?
    - Yes, I check the data on my individual transaction performance.
    - No, I do not check the data on my individual transaction performance.
    - I do not have access to any data on my individual transaction performance.
- How often do you check your performance metrics?
    - Multiple times a day
    - Daily
    - Weekly
    - Every two weeks
    - Monthly
    - Less often than monthly
- Do you have access to data on other people's performance, such as average number of transactions completed or average transaction speed?
    - Yes, I have access to the data on other people's performance.

        - I do not have access to any data on other people's performance.
    - How do supervisors or managers assist employees in meeting performance targets, especially when they might be falling behind?
        - A. My supervisors/managers regularly provide coaching and support to help me meet performance targets when I'm falling behind.
        - B. My supervisors/managers offer some assistance with performance targets, but it's not always readily available or consistent.
        - C. My supervisors/managers rarely or never offer any specific guidance or support regarding performance targets.

CUSTOMER FACING == NO & WORK AT DLO = YES

- A. Do you have specific performance targets in place for your team, such as average transaction completion times?
    - A. Yes, I have established specific performance targets for my team, such as average transaction completion times.
    - B. No, I do not have formal performance targets in place for my team.

CUSTOMER FACING == NO & IF PERFOMANCE TARGETS == YES

    - How often do you check your team's performance metrics to see if they are hitting their target?
        - Multiple times a day
        - Daily
        - Weekly
        - Every two weeks
        - Monthly
        - Less often than monthly
    - Do team members have access to their own individual performance data, such as average transaction times or customer satisfaction ratings associated with their work?
        - A. Yes, team members have access to their own individual performance data through reports or dashboards.
        - B. Team members do not have direct access to their individual performance data.
    - How do you typically support your team members in meeting performance targets, especially when someone might be falling behind?
        - I assign them to a different position temporarily.
        - I assign a more experienced worker to help them temporarily.
        - I don't necessarily take an action, but I do talk to them about it.
        - Other _____

Job Satisfaction:

- How satisfied are you with your current job on a scale of 1-5 (1 being dissatisfied, 5 being very satisfied)?
    - 1 Very dissatisfied
    - 2 Dissatisfied
    - 3 Neutral
    - 4 Satisfied
    - 5 Very satisfied
- How satisfied are you with your **pay** on a scale of 1-5 (1 being dissatisfied, 5 being very satisfied)?
    - 1 Very dissatisfied
    - 2 Dissatisfied
    - 3 Neutral
    - 4 Satisfied
    - 5 Very satisfied
- How satisfied are you with your **benefits** on a scale of 1-5 (1 being dissatisfied, 5 being very satisfied)?
    - 1 Very dissatisfied
    - 2 Dissatisfied
    - 3 Neutral
    - 4 Satisfied
    - 5 Very satisfied
- Do you work a job outside of DLD in order to make ends meet?
    - Yes
    - No
- Do you feel valued and appreciated by your manager? What about your supervisor? What about colleagues?

Relationship	Not at all appreciated	Somewhat appreciated	Neutral	Appreciated	Highly appreciated	Not applicable
Direct Supervisor						
Manager						
Colleagues						

Workload Management:

- Work at DLO == NO & CUSTOMER FACING == NO What are the biggest obstacles that hinder your ability to perform your work efficiently and effectively?

Potential Obstacle	Never (Doesn't hinder)	Rarely	Occasionally	Frequently	Very Frequently (Always hinders)
Lack of continuing education and training					
Outdated technology or equipment					

Unclear or poorly defined procedures					
Insufficient staffing					
Ineffective communication within the organization					
Limited decision-making authority					
Unrealistic workload or deadlines					
Difficulty accessing necessary data to make data-driven decisions					
Misalignment between DLD goals & DPS strategy					
Lack of clear performance expectations					
Lack of knowledge sharing					
Ineffective performance feedback					
Resistance to change within the organization					
Low employee morale and engagement					

- WORK AT CUSTOMER SERVICE CENTER == YES & CUSTOMER FACING == YES

Obstacle	Never Hinders (1)	Seldom Hinders (2)	Sometimes Hinders (3)	Often Hinders (4)	Always Hinders (5)
Limited access to customer information (e.g., past interactions, account details)					
Lack of training on new products or procedures					
Insufficient staffing levels to handle call and email volume					
Outdated technology or software (e.g., slow systems, limited functionality)					
Difficulty obtaining clear and consistent interpretations of policies					

and procedures (e.g., receiving conflicting information from supervisors, outdated information in guides)					
Ambiguous or difficult-to-understand customer requests					
Disruptive or hostile customer interactions					
Lack of clear communication between call center and email support teams					

- In your role, do you ever find yourself assisting with tasks that seem to fall under a different area of responsibility?
    - 1 Never
    - 2 Rarely
    - 3 occasionally
    - 4 frequently
    - 5 very frequently
        - If assisting with tasks == frequently or very frequently Can you please tell us about what tasks you regularly take on that should fall under a different area of responsibility?
            - _____Add fill in the blank
            - Not sure
- How often are workstations not fully staffed when they otherwise could be because staff are completing other non-customer facing duties? (CUSTOMER FACING == YES & DLO ==YES)
    - 1 Never
    - 2 Rarely
    - 3 Occasionally
    - 4 Frequently
    - 5 Very frequently

Communication and Feedback Loops:

- (SHOW TO ALL POSITIONS) When I have feedback for my supervisor OR manager, such as suggestions for improvement or concerns about a process, I feel:
    - A. Comfortable and respected, and my supervisor is open to hearing my perspective.
    - B. Somewhat hesitant, and I'm unsure if my feedback will be well-received.
    - C. Uncomfortable or unsupported, so I avoid providing feedback to my supervisor.
- Are there established channels for employees to provide feedback on how to improve the efficiency and effectiveness of policies, procedures, or new initiatives?

- A. There are well-established channels for employees to provide feedback on policies, procedures, or new initiatives
- B. There are some opportunities for feedback (e.g., occasional meetings), but they may not be readily accessible or consistent.
- C. There are few or no formal channels for employees to provide feedback on DLD operations.
    - If there are well-established channels (ONLY SHOW TO MANAGERING OR OVERSEEING OTHERS = YES)Do you follow up on feedback and provide updates on whether it's being addressed?
        - 1 Never
        - 2 Rarely
        - 3 Sometimes
        - 4 Typically
        - 5 Always
    - (ONLY SHOW TO MANAGERING OR OVERSEEING OTHERS = NO)Does leadership follow up with you on your feedback and provide updates on whether it's being addressed?
        - 1 Never
        - 2 Rarely
        - 3 Sometimes
        - 4 Typically
        - 5 Always

Part-time versus Full-time:

In your experience, have you encountered people who might be interested in transitioning from a full-time to a part-time role?

Yes

No

Are you aware of anyone that has left their job because they couldn't drop down to part-time?

Yes

No

From your perspective, do you think offering part-time positions within the DLD offices would be an attractive option to help attract employees?

Yes

No

Wait Times and Appointment Duration:

Work at DLO == YES

How would you rate the current average wait times at your office?

- 1 Very long
- 2 Long

- 3 Moderate
- 4 Short
- 5 Very short

What are the most frequent contributors to longer service times for customers? Please rank the following (1 being most frequent contributor).

- Incomplete applications/missing information
- Adjusting camera and where person is standing for photo
- Multiple tries to get good fingerprint
- Needing to go to a different area to make change for a customer
- Trying to translate a foreign language
- Waiting for customer to walk up to counter
- Credit card reader issues

Do you have any ideas for technology that could help reduce service times times?

- Yes
- No
    - If yes, fill in the blank _____

Appointments versus Walk-ins:

How effective is the current appointment system overall?

- 1 = Not at all effective (appointment system creates significant obstacles)
- 2 = Somewhat ineffective (appointment system has some shortcomings)
- 3 = Neutral (appointment system has both strengths and weaknesses)
- 4 = Somewhat effective (appointment system generally works well)
- 5 = Very effective (appointment system is efficient and user-friendly)

How effective is the current appointment system in allowing customers to obtain their driver's license or ID card when they need it?

- 1 = Not at all effective (Appointment system creates significant delays and makes it difficult to obtain a license or ID in a timely manner)
- 2 = Somewhat ineffective (Appointment system often leads to long wait times or difficulty scheduling appointments)
- 3 = Neutral (Appointment system has some limitations, but also allows for scheduling convenience)
- 4 = Somewhat effective (Appointment system generally allows for obtaining a license or ID within a reasonable timeframe)
- 5 = Very effective (Appointment system is efficient and allows residents to obtain a license or ID promptly when needed)

How effective is the current appointment system in helping walk-in customers with no prior appointment?

- 1 = Not at all effective (Walk-in wait times are excessively long and unpredictable.)
- 2 = Somewhat ineffective (Walk-in wait times are often long and frustrating.)
- 3 = Neutral (Walk-in wait times are sometimes acceptable, sometimes long.)
- 4 = Somewhat effective (Walk-in wait times are usually reasonable.)
- 5 = Very effective (Walk-in wait times are minimal and well-managed.)

Do you have any suggestions for improving the appointment system or the balance between appointments and walk-ins?

- Yes (fill in the blank)_____
- No

Thinking about how the current appointment system works, what additional feature or functionality would you find most helpful?

- Option to join a virtual queue for walk-in appointments and receive updates on wait times.
- Ability to pre-fill out forms online before the appointment to expedite the process.
- Automated appointment reminders via email or text message.
- Option to reschedule or cancel appointments online or through a mobile app.
- Integration with video conferencing tools for virtual appointments.
- Option to identify specific transactions that last longer than average.
- Other _____

APPLUS vs Walk-ins:

Were you working here prior to the appointment system being launched? *If yes, ask the following:*

How has the appointment system impacted the number of customers served per day?

- 1 = Significantly decreased: The appointment system has noticeably reduced the daily customer volume.
- 2 = Somewhat decreased: There's been a slight decrease in the number of customers served daily.
- 3 = Neutral: The appointment system hasn't significantly impacted the daily number of customers served.
- 4 = Somewhat increased: The appointment system has led to a slight increase in the number of customers served daily.
- 5 = Significantly increased: The appointment system has noticeably increased the daily customer volume.

Worked at DLO prior to appt system == YES ONLY How effective is the current appointment system compared to the walk-ins/first-come first-served in servicing the most amount of people as possible in a day (within normal working hours)?

- 1 = Walk-ins are much more effective: A first-come first-served system allows **more** people to be served throughout the day.
- 2 = Walk-ins are somewhat more effective: There's a *slight* advantage to having a walk-in system for maximizing daily customer service.
- 3 = Neutral: The appointment system and walk-in system are **equally** effective in serving the most people per day.
- 4 = Appointment system is somewhat more effective: The appointment system allows for a more efficient flow and potentially serves more customers.
- 5 = Appointment system is much more effective: The structure and planning of appointments allows for maximizing the number of customers served within working hours.

Additional:

DLO == YES ONLY
Do you have any other suggestions or feedback you would like to share on how to improve efficiency, wait times, or customer service?

- Yes (fill in blank)
- No

- What are the most common reasons why you work longer than your scheduled shift? (e.g., high customer volume, complex cases, unfinished tasks)
  - High customer volume requiring additional time to serve everyone.
  - Complex cases taking longer than anticipated to complete.
  - Unfinished tasks that need to be carried over to avoid impacting the next shift.
  - Lack of clear handoff procedures, leading to delays in transitioning tasks.
  - Pressure from managers to stay late to meet deadlines or quotas.
  - Feeling personally responsible for completing tasks and not wanting to leave them for colleagues.
  - I rarely work longer than my scheduled shift.

Additional Questions for Managers and Supervisors ONLY:

Scheduling and Staffing:

In your role, do you have any responsibilities related to managing or overseeing the work of others? == YES, ask the following:

- Which of the following statements BEST represents how you determine staffing needs and the typical shift structure?
  - Standard schedule with fixed hours for all employees (e.g. everyone enters at 8am and leaves at 5pm).

- Multiple standard fixed shifts based on availability/preference that do not change throughout the year (e.g. morning shift and afternoon shift).
- Multiple shifts that are adjusted by "season" based on historical information on customer demand.

- How often do you encounter situations where you lack sufficient staff coverage?
  - 1 Never
  - 2 Rarely
  - 3 occasionally
  - 4 frequently
  - 5 very frequently
- Would the ability to have part time positions help you or make it more difficult for you to ensure appropriate staff coverage?
  - It would help
  - Neither help or make it more difficult
  - Make it more difficult
- Which of the following statements most accurately represents your office's policy on senior staff availability during breaks and lunch periods to ensure customer wait times remain low?
  - At least one or more senior staff members is **expected** to be available during breaks and lunch periods.
  - Senior staff are **encouraged** to be available during breaks and lunch periods to assist LPSs with complex cases, but it's not mandatory.
  - Senior staff are not expected to be available during breaks and lunch periods.
  - The office has no specific policy regarding senior staff availability during breaks and lunches.
- What are the most common reasons for unexpected staffing shortages? Rank the following (1 = most common reason).
  - Call-outs (short notice absences without prior notification)
  - Planned vacations and leaves of absence
  - Employee illness or injury
  - High workloads leading to burnout and unplanned absences
  - Scheduling errors or miscommunication

  Were you working at a DLO prior to the appointment system? *If yes, ask the following:*
    - What were the most common reasons prior to the appointment system for employees staying longer than their scheduled shift?
      - Unpredictable customer traffic with sudden surges in demand.
      - Complex cases requiring more time than initially allocated.
      - Call-outs affecting the workload of others.
      - Other____
    - Our team learned that prior to the appointment system, DLO employees frequently worked overtime. Is there anything that could've been done differently to get them off on time? Select all that apply.
      - Modifying office hours to better align with typical customer traffic patterns.

- Modifying work schedules and shift structure that guarantee sufficient coverage during busy periods to prevent employees from being overwhelmed and needing to stay late.
- Utilizing part-time staff to address peak customer traffic periods or have them "on-call".
- Establishing a cut-off time for accepting walk-in customers to manage workload.
- Improving handoff procedures to ensure unfinished tasks could be efficiently transferred to colleagues at the end of shifts.
- Providing additional training to equip employees with better time management skills.
- Other _____

- Do you have any additional comments you would like to share regarding how DLD's effectiveness and efficiency could be advanced by improving customer service, reducing wait times, procuring additional information technology, and incentivizing online transactions?
  - Yes (fill in blank)
  - No

Appendix C: Customer Survey Questions

Customer Survey Questions: English

DLD Study Customer Survey

Start of Block: Introduction

This survey is being conducted by The University of Texas at Austin - Center for Transportation Research (UT-CTR) and LBJ School of Public Affairs for Texas Department of Public Safety (TxDPS) at the direction of the Texas State Legislature. We are very interested in your experiences and opinions about having your driver license, Texas Election Identification Certificate or Texas ID card processed or renewed with TxDPS Driver License Division.

Your responses are anonymous and cannot be traced back to you, your email address or other personal information, or to the device you use to take the survey. **Your experiences and opinions are very important.**

The survey will take approximately 10 - 15 minutes to complete; we do very much appreciate your time and patience. If you choose, you can complete part of the survey now, close it and reopen it later to complete the survey, though completion must be within 1 week.

If you have any questions or comments, please feel free to contact us at the following email address or telephone number. The CTR and LBJ School websites are listed at the bottom of the page for your reference.

Thank you very much.

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CTR Website: https://ctr.utexas.edu/
LBJ School Website: https://lbj.utexas.edu/

Q1 Please indicate your gender

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ I prefer not to answer (4)

Q2 Please indicate your age group

- ○ 17 or younger (1)
- ○ 18-20 (2)
- ○ 21-29 (3)
- ○ 30-39 (4)
- ○ 40-49 (5)
- ○ 50-59 (6)
- ○ 60-69 (7)
- ○ 70-78 (8)
- ○ 79-84 (9)
- ○ 85 or older (10)

Page Break

Q3 Highest level of education and/or training completed to date

- ○ Up to High School level, no diploma (1)
- ○ High School Diploma or equivalent, such as a GED (2)
- ○ Technical, Vocational, or Trade School Training (3)
- ○ Some college, no diploma (4)
- ○ 2-year college degree (5)
- ○ 4-year college degree (6)
- ○ Graduate degree (7)
- ○ I prefer not to answer (9)

Q4 Please indicate your Race and Ethnicity. Select all that apply.

- ☐ American Indian or Alaskan Native (1)
- ☐ Asian (2)
- ☐ Black or African American (3)
- ☐ Native Hawaiian or Other Pacific Islander (4)
- ☐ White (5)
- ☐ Hispanic or Latino (6)
- ☐ Not Hispanic or Latino (7)
- ☐ I prefer not to answer (8)

Page Break

Q5 Do you identify as a person with a disability or other chronic condition that you feel impacted your visit to the Driver License office?

- ○ Yes, I identify as someone with a disability and yes, it impacted my visit. (1)
- ○ Yes, I identify as a person with a disability and no, it did not impact my visit. (2)
- ○ No, I do not identify as a person with a disability. (3)
- ○ I prefer not to answer (4)

Q6 Please indicate your total annual household income before taxes

- ○ Less than $15,000 (1)
- ○ $15,000 - $25,999 (2)
- ○ $26,000 - $35,999 (3)
- ○ $36,000 - $45,999 (4)
- ○ $46,000 - $55,999 (5)
- ○ $56,000 - $65,999 (6)
- ○ $66,000 - $75,999 (7)
- ○ $76,000 - $85,999 (8)
- ○ $86,000 - $95,999 (9)
- ○ $96,000 - $105,999 (10)
- ○ $106,000 - $115,999 (11)
- ○ $116,000 - $125,999 (12)
- ○ $126,000 or more (13)
- ○ I prefer not to answer (14)

Page Break

Q7 When was the last time you completed or tried to complete a transaction with TxDPS? (MM/YYYY)

- ○ Month (1) _____
- ○ Year (2) _____

Q8 Please indicate the service type you needed from TxDPS last time? Select all that apply.

- ☐ New Texas Driver License (1)
- ☐ New Texas Driver Permit (11)
- ☐ New Texas Identification Card (2)
- ☐ Renewal of Driver License (3)
- ☐ Renewal of Identification Card (4)
- ☐ A Road Driving Skills Test (5)
- ☐ Address Change (6)
- ☐ Name Change (7)
- ☐ Gender Change (8)
- ☐ Transferring an Out of State Driver License to Texas (12)
- ☐ Replacement of a Lost/Stolen Card (10)

Q9 Does your current driver license or ID card have a gold star? (Gold star is displayed on the card if REAL ID compliant)

- ○ Yes (1)
- ○ No (2)
- ○ I do not know if my card has a gold star or not (4)

Q10 For the last time you completed or tried to complete a transaction with the Texas Driver License Office, you did it:

- ○ In-person (1)
- ○ Online (2)
- ○ By mail (3)
- ○ By telephone (4)

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = In-person

Q11 When visiting a driver's license office in person, which of the following options do you prefer?

- ○ Appointment only (1)
- ○ Walk-ins only (2)
- ○ Both appointments and walk-ins without appointment accepted (3)

End of Block: Introduction

Start of Block: In-Person

Q12 Please indicate the name and/or location of the Driver License Office you last visited.

- ○ Name (e.g., Pflugerville Mega Center) (1) _____
- ○ City (2) _____
- ○ County (3) _____

Q13 When you last visited a Texas Driver's License Office, what was the zip code of your home address at that time?

- ○ Zip Code (1) _____

Q14 For your last visit to the Texas Driver License office, did you manage to complete your transaction?

- ○ Yes (1)
- ○ Yes, but it took more than one visit (2)
- ○ No (3)

Q15 For your last visit to the Texas Driver License office, you:

- ○ Booked an appointment online in advance (1)
- ○ Booked a **same-day** appointment online (2)
- ○ Booked an appointment in-person for a future date or different location (4)
- ○ Booked a **same-day** appointment in-person for later that day (6)
- ○ You walked in and were seen with no scheduled appointment (3)
- ○ Other (5) _____

Display This Question:

If Appointment or Walk-in != You walked in and were seen with no scheduled appointment

Q16 Were you able to schedule an appointment the first time you visited the website or office?

- ○ Yes (1)
- ○ No (2)

End of Block: In-Person

Start of Block: In-Person and "Appointment in Advance"

Q17 When you booked your appointment online, how long did you have to wait until your scheduled appointment?

- ○ 1 week or less (1)
- ○ 1 to 2 weeks (2)
- ○ 2 to 3 weeks (3)
- ○ 3 weeks to 1 month (4)
- ○ 1 to 2 months (5)
- ○ 2 to 3 months (6)
- ○ 3 to 4 months (11)
- ○ 4 to 5 months (7)
- ○ 5 to 6 months (8)
- ○ More than 6 months (10)

Q18 Did you make multiple online appointments through Texas Scheduler ahead of your last visit? If so, how many appointments did you make?

- ○ No. I only made 1 appointment (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 or more (5)

End of Block: In-Person and "Appointment in Advance"

Start of Block: User Experience (In person)

Q19 For the **last time** you were at the Driver License office:

How long did you have to wait from the moment you arrived until you checked in or took a ticket?

- [ ] Under 5 minutes (1)
- [ ] 5 - 15 minutes (2)
- [ ] 15 - 30 minutes (3)
- [ ] 30 minutes to an hour (4)
- [ ] Over an hour (5)
- [ ] I waited in line outside the Driver License office before it was open to get a same day appointment (6)

Q20 For the **last time** you were at the Driver License office:

How much time, **in total**, did you spend at the office until you left?

- ○ Under 30 minutes (1)
- ○ 30 to 45 minutes (2)
- ○ 45 minutes to an hour (3)
- ○ 1 to 2 hours (4)
- ○ 2 to 3 hours (5)
- ○ Over 3 hours (6)

Q21 What challenges, if any, did you face during your last visit to the Driver License Office? Select all that apply.

- [ ] I did not experience any challenges at all. I am satisfied with my last Driver License Office visit. (1)
- [ ] I did not have all the required documents (2)
- [ ] I waited for a very long time even though I had an appointment (3)
- [ ] The driver license staff stopped serving before closing time even though customers were still waiting (4)
- [ ] The DPS computer system or other equipment stopped working during my visit (5)
- [ ] The DL office did not have enough seating (6)
- [ ] None of the above (7)
- [ ] Others: (8) _____

Q22 Which of the followings are true about your experience with the staff at the DPS Driver License office? Select all that apply

- ☐ The staff were very helpful and delivered excellent service (1)
- ☐ The staff served people out of order (2)
- ☐ The staff was unfriendly (3)
- ☐ The staff was unprofessional (8)
- ☐ The wait time to be served by staff was unreasonable (4)
- ☐ There was not enough staff covering the workstations to help waiting customers (5)
- ☐ The staff were very slow processing customers (6)
- ☐ Other comments: (7) _____

Q23 How would you rate the overall performance of the Driver License office based on your last visit?

- ○ Very good (1)
- ○ Good (2)
- ○ Fair (3)
- ○ Poor (4)
- ○ Very poor (5)

Q24 I prefer to go to the DPS Driver License Office for business even if I am eligible to complete the transaction online.

- ○ Strongly Agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (3)
- ○ Disagree (4)
- ○ Strongly disagree (5)

End of Block: User Experience (In person)

Start of Block: "Strongly Agree", "Agree" or "Neither Agree nor Disagree" to Question 25

Q25 I prefer conducting my DPS transactions in person because (Select all that apply)

- ☐ It's difficult to understand how to complete my transaction using any other method (1)
- ☐ I am not eligible to renew online according to DPS website (2)
- ☐ In-person payment feels more secure than any other method (3)
- ☐ I don't have reliable access to a phone, printer or the internet (4)
- ☐ I don't like entering any information online (5)
- ☐ I am not comfortable using a computer on my own (6)
- ☐ It's just easier than any other method (7)
- ☐ Other: (8) _____

Q26 What kind of incentives would motivate you to complete your transaction online versus in-person? Select all that apply

- ☐ A cheaper transaction fee (1)
- ☐ Faster processing time (2)
- ☐ Step-by-step instructions on how to complete the transaction online (3)
- ☐ Other: (4) _____

End of Block: "Strongly Agree", "Agree" or "Neither Agree nor Disagree" to Question 25

Start of Block: Mail/Phone Transactions

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = By mail

Or For the last time you completed or tried to complete a transaction with the Texas Driver License... = By telephone

Q27 How would you rate your overall **mail or phone** transaction experience with Texas Driver License Division?

- ○ Very good (1)
- ○ Good (2)
- ○ Fair (3)
- ○ Poor (4)
- ○ Very Poor (5)

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = By telephone

Q28 The DPS phone operator you spoke with was attentive to providing excellent customer service

- Strongly agree (1)
- Agree (2)
- Neither agree nor disagree (3)
- Disagree (4)
- Strongly disagree (5)

Q29 How long did it take you to complete the application by mail or phone?

- Less than 15 minutes (1)
- 15 - 30 minutes (2)
- 30 - 45 minutes (3)
- 45 minutes to 1 hour (4)
- More than 1 hour (5)

Q30 How long did it take you to receive the renewed driver license or ID card?

- Less than 1 week (1)
- 1 -2 weeks (2)
- 2 - 3 weeks (3)
- 3 - 4 weeks (4)
- More than 1 month (5)

End of Block: Mail/Phone Transactions

Start of Block: Try to complete online?

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... != Online

Q31 Did you try to complete your last transaction online?

- Yes (1)
- No (2)

Display This Question:

If Did you try to complete your last transaction online? = Yes

Or For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q32 Which devices did you use to complete the online transaction?

- Mobile phone (1)
- Desktop or laptop (2)
- Both (3)

End of Block: Try to complete online?

Start of Block: Online or TRIED to use Online

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q33 How would you rate your overall online transaction experience with Texas Driver License Division?

- ○ Very good (1)
- ○ Good (2)
- ○ Fair (3)
- ○ Poor (4)
- ○ Very Poor (5)

Q34 Did you find that the DPS website was well-designed and user-friendly?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Did you find that the DPS website was well-designed and user-friendly? = No

Q35 Why did you find the website to not be well-designed or user-friendly? Select all that apply

- ☐ The layout was confusing or cluttered (1)
- ☐ The text was hard to read (e.g., small font size, poor color contrast) (2)
- ☐ There was too much text to read through (3)
- ☐ I couldn't find the information I was looking for (4)
- ☐ I had to click through too many pages to find the information I needed (5)
- ☐ The buttons or links were difficult to find (6)
- ☐ The website took too long to load (7)
- ☐ The mobile experience was not good (8)
- ☐ The website seemed to provide contradicting information (9)
- ☐ Others: (10) _____

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... != Online

Q36 Did the website tell you that you were **NOT** eligible for online transactions?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... != Online

Q37 What was the reason that you didn't end up completing your transaction online? Select all that apply

- [ ] DPS website told me I was ineligible for online transaction (1)
- [ ] I didn't have the audit number on my drivers license available to me (3)
- [ ] I did not have the information I needed to complete the online process (4)
- [ ] The website was difficult to navigate and understand (5)
- [ ] I couldn't figure out how to renew online (7)
- [ ] I wasn't able to answer security questions to login to my account (8)
- [ ] Other reasons (6) _____

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q38 Compared to an in-person visit, what did you like about your online transaction? Select that all apply.

- ☐ Quick and easy process to renew my license online (4)
- ☐ Saved time by not having to visit a Driver's License Office in person (8)
- ☐ Flexible - could renew my license at my own convenience (9)
- ☐ Mobile-friendly website/app made the process easy to complete on the go (10)
- ☐ No problems navigating the website/app to complete the renewal (11)
- ☐ Felt secure entering my personal information online (12)
- ☐ Other (7) _____

Display This Question:

If How would you rate your overall online transaction experience with Texas Driver License Division? = Poor

Or How would you rate your overall online transaction experience with Texas Driver License Division? = Very Poor

Q39 What do you dislike about your online transaction experience? Select all that apply

- ☐ Website/app was difficult to navigate and complete the renewal process (1)
- ☐ Instructions for renewing my license online were unclear or confusing (2)
- ☐ Encountered technical problems during the online renewal process (e.g., error messages, freezing) (3)
- ☐ Online renewal process took longer than expected to complete (4)
- ☐ Felt uncomfortable entering personal information online for renewal (6)
- ☐ Prefer to renew my license in person at a Driver's License Office (5)
- ☐ Other (7) _____

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q40 Would you recommend the online renewal process to your friends, family, or coworkers?

- ○ Yes (1)
- ○ No (2)

End of Block: Online or TRIED to use Online

Start of Block: "Renewal" in Question 9 AND Q10 not online AND "yes" In Question 29

Q41 Below are the requirements for online renewal. Please select **ALL** of the statements that were true for the last time you renewed your license or ID card:

- [ ] I renewed in person at a driver license office last time (12)
- [ ] My driver's license or ID card expires in less than two years OR has expired for less than two years. (1)
- [ ] I am a U.S. citizen (2)
- [ ] My Social Security Number is already on file with Texas DPS - Driver License Division. (3)
- [ ] I have my most recently issued Texas driver's license or ID, OR can answer security questions to verify my identity. (4)
- [ ] My Driver License is a provisional or learner license, and I am at least 30 days from turning 18 years of age (Driver license ONLY) (5)
- [ ] I am younger than 79 years old (Driver license ONLY) (6)
- [ ] I am renewing a Class C, M, OR CM driver license (Driver license ONLY) (7)
- [ ] My vision, physical, and mental conditions have not changed in a way that affects my ability to drive safely since my last renewal. (Driver license ONLY) (8)
- [ ] My valid, unexpired Medical Certificate is on file. (Driver license ONLY) (9)
- [ ] I have a valid driver's license (not suspended or revoked), and no warrants OR unpaid tickets. (Driver license ONLY) (10)
- [ ] All of the above (11)

End of Block: "Renewal" in Question 9 AND Q10 not online AND "yes" In Question 29

Start of Block: "Address Change" in Question 9 AND Q10 not online AND "Yes" In Question 29

Q42 Below are the requirements for online address change. Please select **ALL** of the statements that were true for the last time you changed your address.

- ☐ My Driver License, Commercial Driver License or ID card is not expired (1)
- ☐ I am at least 18 years of age (2)
- ☐ My Driver License is NOT a provisional or learner license (3)
- ☐ My Social Security number is on file with DPS (4)
- ☐ All of the above (5)

End of Block: "Address Change" in Question 9 AND Q10 not online AND "Yes" In Question 29

Start of Block: Last

Q43 Are there any additional comments you would like to make regarding Driver License efficiency and how to improve it?

_____

_____

_____

_____

_____

End of Block: Last

Customer Survey Questions: Spanish

DLD Study Customer Survey

Start of Block: Introduction

Esta encuesta está siendo realizada por la Universidad de Texas en Austin - Centro de Investigación del Transporte (UT-CTR) para el Departamento de Seguridad Pública de Texas (TxDPS) bajo la dirección de la Legislatura del Estado de Texas. Estamos muy interesados en sus experiencias y opiniones sobre cómo procesar o renovar su licencia de conducir, Certificado de Identificación Electoral de Texas o tarjeta de identificación de Texas con la División de Licencias de Conducir de TxDPS.

Sus respuestas son anónimas y no pueden ser rastreadas hasta usted, su dirección de correo electrónico u otra información personal, ni el dispositivo que utilice para realizar la encuesta. Sus experiencias y opiniones son muy importantes y ayudarán a **identificar las deficiencias de la División de Licencias de Conducir** y **a hacer recomendaciones sobre cómo mejorar la eficacia de la división** .

La encuesta tardará aproximadamente entre 10 y 15 minutos en completarse; Apreciamos mucho su tiempo y paciencia. Si lo desea, puede completar parte de la encuesta ahora, cerrarla y volver a abrirla más tarde para completarla, aunque debe completarla dentro de los 5 días.

Si tiene alguna pregunta o comentario, no dude en contactarnos a la siguiente dirección de correo electrónico o número de teléfono. Los sitios web de las escuelas CTR y LBJ se enumeran en la parte inferior de la página para su referencia.

Muchas gracias.

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Sitio web de CTR: https://ctr.utexas.edu/
Sitio web de la escuela LBJ: https://lbj.utexas.edu/

Page Break

Q1 Por favor, indique su género

- ○ Masculino (1)
- ○ Femenino (2)
- ○ No binario / tercer género (3)
- ○ Prefiero no contestar (4)

Q2 Por favor, indique su grupo de edad

- ○ 17 o menos (1)
- ○ 18-20 (2)
- ○ 21-29 (3)
- ○ 30-39 (4)
- ○ 40-49 (5)
- ○ 50-59 (6)
- ○ 60-69 (7)
- ○ 70-78 (8)
- ○ 79-84 (9)
- ○ 85 o más (10)

Page Break

Q3 Nivel más alto de educación y/o formación completado hasta la fecha

- ○ Hasta nivel secundaria, sin diploma (1)
- ○ Diploma de escuela secundaria o equivalente, como un GED (2)
- ○ Formación escolar técnica o vocacional (3)
- ○ Algo de universidad, sin diploma (4)
- ○ Título universitario de 2 años (5)
- ○ Título universitario de 4 años (6)
- ○ Título de posgrado (7)
- ○ Prefiero no contestar (9)

Q4 Por favor, indique su raza y origen étnico. Seleccione todo lo que corresponda.

- ☐ Indio americano o nativo de Alaska (1)
- ☐ Asiático (2)
- ☐ Negro o Afroamericano (3)
- ☐ Nativo de Hawai u otra isla del Pacífico (4)
- ☐ Blanco (5)
- ☐ Hispano o Latino (6)
- ☐ No Hispano o Latino (7)
- ☐ Prefiero no contestar (8)

Page Break

Q5 ¿Se identifica como una persona con una discapacidad u otra condición crónica que cree que afectó su visita a la oficina de licencias de conducir?

- ○ Sí, me identifico como alguien con discapacidad y sí, eso afectó mi visita. (1)
- ○ Sí, me identifico como persona con discapacidad y no, no afectó mi visita. (2)
- ○ No, no me identifico como una persona con discapacidad. (3)
- ○ Prefiero no contestar (4)

Q6 Indique el ingreso total anual de su hogar antes de impuestos

- ○ Menos de $15,000 (1)
- ○ $15,000 - $25,999 (2)
- ○ $26,000 - $35,999 (3)
- ○ $36,000 - $45,999 (4)
- ○ $46,000 - $55,999 (5)
- ○ $56,000 - $65,999 (6)
- ○ $66,000 - $75,999 (7)
- ○ $76,000 - $85,999 (8)
- ○ $86,000 - $95,999 (9)
- ○ $96,000 - $105,999 (10)
- ○ $106,000 - $115,999 (11)
- ○ $116,000 - $125,999 (12)
- ○ $126,000 o más (13)
- ○ Prefiero no contestar (14)

Page Break

Q7 ¿Cuándo fue la última vez que completó o intentó completar una transacción con TxDPS? (MM/AAAA)

- ○ Mes (1) _____
- ○ Año (2) _____

Q8 Por favor, indique el tipo de servicio que necesitó de TxDPS la última vez. Seleccione todas las que correspondan

- [ ] Nueva Licencia de Conducir (1)
- [ ] Nuevo Permiso de Conducir de Texas (11)
- [ ] Nueva Tarjeta de Identificación (2)
- [ ] Renovación de Licencia de Conducir (3)
- [ ] Renovación de Tarjeta de Identificación (4)
- [ ] Una prueba de habilidades de conducción en carretera (5)
- [ ] Cambio de dirección (6)
- [ ] Cambio de nombre (7)
- [ ] Cambio de género (8)
- [ ] Transferencia de una licencia de conducir de otro estado a Texas (12)
- [ ] Reemplazo de tarjeta por pérdida o robo (10)

Q9 ¿Su licencia de conducir actual o tarjeta de identificación cumple con REAL ID? (Se muestra una estrella dorada en la tarjeta si es compatible con REAL ID)

- ○ Sí (1)
- ○ No (2)
- ○ No sé qué es compatible con REAL ID (4)

Q10 La última vez que completó o intentó completar una transacción con la Oficina de Licencias de Conducir de Texas, lo hizo:

- ○ En persona (1)
- ○ En línea (2)
- ○ Por correo (3)
- ○ Por teléfono (4)

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = In-person

Q11 Al visitar personalmente una oficina de licencias de conducir, ¿Cuál de las siguientes opciones prefiere?

- ○ Solo con cita (1)
- ○ Solo sin cita previa (2)
- ○ Ambas: Con cita previa y también sin previa cita (3)

End of Block: Introduction

Start of Block: In-Person

Q12 Indique el nombre y la ubicación de la Oficina de Licencias de Conducir que visitó por última vez.

- ○ Nombre (por ejemplo, Pflugerville Mega Center) (1)
  _____
- ○ Ciudad (2) _____
- ○ Condado (3) _____

Q13 ¿ Dónde vivía usted la última vez que visitó la Oficina de Licencias de Conducir de Texas? Por favor, proporcione el código postal.

- ○ Código postal (1) _____

Q14 ¿ Logró completar su transacción en su última visita a la Oficina de Licencias de Conducir de Texas?

- ○ Sí. Completé la transacción en un solo viaje. (1)
- ○ Sí, pero tuve que visitar la oficina varias veces. (2)
- ○ No, todavía estoy activamente en el proceso de intentar completar mi transacción. (3)

Q15 Sobre su última visita a la Oficina de Licencias de Conducir de Texas, usted:

- ○ Reservó una cita en línea con anticipación (1)
- ○ Reservó una cita en línea **para el mismo día** (2)
- ○ Reservó una cita en persona para una fecha posterior o una ubicación diferente (4)
- ○ Reservó una cita en persona para **el mismo día pero para la tarde** (6)
- ○ Ingresó y fue atendido sin cita programada (3)
- ○ Otros (5) _____

Display This Question:

If Appointment or Walk-in != You walked in and were seen with no scheduled appointment

Q16 ¿Pudo programar una cita la primera vez que visitó el sitio web?

- ○ Sí (1)
- ○ No (2)

End of Block: In-Person

Start of Block: In-Person and "Appointment in Advance"

Q17 Cuando reservó su cita en línea, ¿Cuánto tiempo tuvo que esperar hasta su cita programada?

- ○ 1 semana o menos (1)
- ○ 1 a 2 semanas (2)
- ○ 2 a 3 semanas (3)
- ○ 3 semanas a 1 mes (4)
- ○ 1 a 2 meses (5)
- ○ 2 a 3 meses (6)
- ○ 3 to 4 months (11)
- ○ 4 a 5 meses (7)
- ○ 5 a 6 meses (8)
- ○ Más de 6 meses (10)

Q18 ¿Hizo varias citas en línea a través del Programador de Texas antes de su última visita? Si es así, ¿Cuántas citas concertó?

- ○ No. Solo hice 1 cita (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 o más: (5)

End of Block: In-Person and "Appointment in Advance"

Start of Block: User Experience (In person)

Q19 ¿Cuánto tiempo tuvo que esperar desde el momento en que llegó a la oficina de licencias de conducir hasta que se registró o tomó un boleto?

- ☐ Menos de 5 minutos (1)
- ☐ 5 - 15 minutos (2)
- ☐ 15 - 30 minutos (3)
- ☐ 30 minutos a una hora (4)
- ☐ Más de una hora (5)
- ☐ Esperé en la fila afuera de la oficina de Licencias de Conducir antes de que abriera para conseguir una cita el mismo día. (6)

Q20 ¿Cuánto tiempo, **en total** , pasó en la Oficina de Licencias de Conducir hasta completar el propósito de su visita?

- ○ Menos de 30 minutos (1)
- ○ 30 a 45 minutos (2)
- ○ 45 minutos a una hora (3)
- ○ 1 a 2 horas (4)
- ○ 2 a 3 horas (5)
- ○ Más de 3 horas (6)

Q21 ¿Qué inconvenientes, si los hubo, enfrentó durante su última visita a la Oficina de Licencias de Conducir? Seleccione todas las que correspondan.

- ☐ No experimenté ningún inconveniente en absoluto. Estoy satisfecho con mi última visita a la Oficina de Licencias de Conducir. (1)
- ☐ No tenía todos los documentos requeridos. (2)
- ☐ Esperé mucho tiempo a pesar de que tenía una cita. (3)
- ☐ El personal de licencias de conducir dejó de atender antes de la hora de cierre a pesar de que los clientes todavía estaban esperando. (4)
- ☐ El sistema informático del DPS u otro equipo dejó de funcionar durante mi visita. (5)
- ☐ La oficina de DL no tenía suficientes asientos (6)
- ☐ Ninguna de las anteriores (7)
- ☐ Otros: (8) _____

Q22 ¿Cuál de las siguientes afirmaciones son ciertas sobre su experiencia con el personal de la oficina de licencias de conducir del DPS? Seleccione todas las que correspondan

- [ ] El personal fue muy servicial, presentó un comportamiento profesional e hizo un muy buen trabajo. (1)
- [ ] El personal atendió a la gente fuera de servicio. (2)
- [ ] El personal era antipático o poco profesional. (3)
- [ ] El personal no fue profesional. (8)
- [ ] El personal dedicó demasiado tiempo a mi caso. El tiempo de atención no fue razonable. (4)
- [ ] No había suficiente personal cubriendo las estaciones de trabajo para ayudar a los clientes en espera. (5)
- [ ] El personal fue muy lento al atender a los clientes. (6)
- [ ] Otros comentarios: (7) _____

Q23 ¿Cómo calificaría el desempeño general de la oficina de licencias de conducir según su última visita?

- ○ Muy bueno (1)
- ○ Bueno (2)
- ○ Regular (3)
- ○ Malo (4)
- ○ Muy malo (5)

Q24 Prefiero ir a la Oficina de Licencias de Conducir de DPS para realizar mi trámite, incluso si soy elegible para completar la transacción en línea.

- ○ Totalmente de acuerdo (1)
- ○ De acuerdo (2)
- ○ Ni de acuerdo ni en desacuerdo (3)
- ○ En desacuerdo (4)
- ○ Totalmente en desacuerdo (5)

End of Block: User Experience (In person)

Start of Block: "Strongly Agree", "Agree" or "Neither Agree nor Disagree" to Question 25

Q25 Prefiero realizar mis transacciones de DPS en persona porque (Seleccione todas las que correspondan)

- ☐ Es difícil entender cómo completar mi transacción usando cualquier otro método. (1)
- ☐ No soy elegible para renovar en línea según el sitio web de DPS (2)
- ☐ El pago en persona parece más seguro que cualquier otro método (3)
- ☐ No tengo acceso confiable a un teléfono, impresora o Internet (4)
- ☐ No me gusta ingresar ninguna información en línea. (5)
- ☐ No me siento cómodo usando una computadora por mi cuenta (6)
- ☐ Es simplemente más fácil que cualquier otro método. (7)
- ☐ Otras razones: (8) _____

Q26 ¿Qué tipo de incentivos lo motivarían a completar su transacción en línea en lugar de hacerlo en persona? Seleccione todas las que correspondan.

- ☐ Una tarifa de transacción más barata (1)
- ☐ Tiempo de procesamiento más rápido (2)
- ☐ Instrucciones paso a paso sobre cómo completar la transacción en línea (3)
- ☐ Otros: (4) _____

End of Block: "Strongly Agree", "Agree" or "Neither Agree nor Disagree" to Question 25

Start of Block: Mail/Phone Transactions

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = By mail

Or For the last time you completed or tried to complete a transaction with the Texas Driver License... = By telephone

Q27 ¿Cómo calificaría su experiencia general en transacciones **por correo o teléfono** con la División de Licencias de Conducir de Texas?

- ○ Muy bueno (1)
- ○ Bueno (2)
- ○ Regular (3)
- ○ Malo (4)
- ○ Muy malo (5)

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = By telephone

Q28 ¿El operador telefónico de DPS con el que habló estuvo atento a brindar un excelente servicio al cliente?

- ○ Totalmente de acuerdo (1)
- ○ De acuerdo (2)
- ○ Ni de acuerdo ni en desacuerdo (3)
- ○ En desacuerdo (4)
- ○ Totalmente en desacuerdo (5)

Q29 ¿Cuánto tiempo le llevó completar la solicitud por correo o por teléfono?

- ○ Menos de 15 minutos (1)
- ○ 15 - 30 minutos (2)
- ○ 30 - 45 minutos (3)
- ○ 45 minutos a 1 hora (4)
- ○ Más de 1 hora (5)

Q30 ¿Cuánto tiempo le tomó recibir su licencia de conducir o tarjeta de identificación renovada?

- ○ Menos de 1 semana (1)
- ○ 12 semanas (2)
- ○ 2 - 3 semanas (3)
- ○ 3 - 4 semanas (4)
- ○ Más de 1 mes (5)

End of Block: Mail/Phone Transactions

Start of Block: Try to complete online?

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... != Online

Q31 ¿Intentó completar su última transacción en línea?

- ○ Sí (1)
- ○ No (2)

Display This Question:

If Did you try to complete your last transaction online? = Yes

Or For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q32 ¿Qué dispositivos utilizó para completar la transacción en línea?

- ○ Teléfono móvil (1)
- ○ Computadora de escritorio o portátil (2)
- ○ Ambos (3)

End of Block: Try to complete online?

Start of Block: Online or TRIED to use Online

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q33 ¿Cómo calificaría su experiencia general de transacciones en línea con la División de Licencias de Conducir de Texas?

- ○ Muy bueno (1)
- ○ Bueno (2)
- ○ Regular (3)
- ○ Malo (4)
- ○ Muy malo (5)

Q34 ¿Considera usted que la página web de DPS es amigable y bien diseñada?

- ○ Sí (1)
- ○ No (2)

Display This Question:

If Did you find that the DPS website was well-designed and user-friendly? = No

Q35 ¿Por qué considera usted que el sitio web no estaba bien diseñado ni fue fácil de usar? Seleccione todas las que correspondan

- ☐ El diseño era confuso o desordenado. (1)
- ☐ El texto era difícil de leer (p. ej., tamaño de fuente pequeño, contraste de color deficiente) (2)
- ☐ Había demasiado texto para leer (3)
- ☐ No pude encontrar la información que estaba buscando (4)
- ☐ Tuve que hacer clic en demasiadas páginas para encontrar la información que necesitaba (5)
- ☐ Los botones o enlaces fueron difíciles de encontrar. (6)
- ☐ El sitio web tardó demasiado en cargarse. (7)
- ☐ La experiencia a través del móvil no fue buena. (8)
- ☐ El sitio web parecía proporcionar información contradictoria. (9)
- ☐ Otros: (10) _____

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... != Online

Q36 ¿Le dijo el sitio web que **NO** era elegible para transacciones en línea?

- ○ Sí (1)
- ○ No (2)

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... != Online

Q37 ¿Cuál fue la razón por la que no finalizó su transacción en línea? Seleccione todas las que correspondan

- ☐ El sitio web de DPS me dijo que no era elegible para realizar transacciones en línea (1)
- ☐ No tenía a mi disposición la documentación requerida para completar el proceso en línea (3)
- ☐ No tenía la información que necesitaba para completar el proceso en línea (4)
- ☐ El sitio web era difícil de navegar y comprender. (5)
- ☐ No pude encontrar la forma de cómo renovar en línea (7)
- ☐ No pude responder las preguntas de seguridad para iniciar sesión en mi cuenta (8)
- ☐ Otras razones (6) _____

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q38 En comparación con la visita en persona, ¿Qué le gusta de las transacciones en línea? Seleccione todas las que apliquen

- ☐ Sin impacto en el horario de trabajo. (4)
- ☐ Ahorro de tiempo al no tener que acudir personalmente a una Oficina de Licencias de Conducir (8)
- ☐ Flexible: podría renovar mi licencia cuando me convenga (9)
- ☐ El sitio web/aplicación compatible con dispositivos móviles hizo que el proceso fuera fácil de completar sobre la marcha (10)
- ☐ No hay problemas para navegar por el sitio web/aplicación para completar la renovación (11)
- ☐ Me sentí seguro ingresando mi información personal en línea (12)
- ☐ Otros (7) _____

Display This Question:

If How would you rate your overall online transaction experience with Texas Driver License Division? = Poor

Or How would you rate your overall online transaction experience with Texas Driver License Division? = Very Poor

Q39 ¿Qué es lo que no le gusta de su experiencia de transacción en línea? Seleccione todas las que correspondan

- ☐ El sitio web de renovación en línea es difícil de usar. (1)
- ☐ Los criterios de elegibilidad fueron difíciles de encontrar. (2)
- ☐ No tengo acceso confiable a Internet (3)
- ☐ No está claro qué documentos se requieren (4)
- ☐ No me siento seguro(a) al proporcionar mi información de pago en línea (6)
- ☐ No puedo interactuar con un empleado de DPS para hacer preguntas (5)
- ☐ Otros (7) _____

Display This Question:

If For the last time you completed or tried to complete a transaction with the Texas Driver License... = Online

Q40 ¿Recomendaría el proceso de renovación en línea a sus amigos, familiares o compañeros de trabajo?

- ○ Sí (1)
- ○ No (2)

End of Block: Online or TRIED to use Online

Start of Block: "Renewal" in Question 9 AND Q10 not online AND "yes" In Question 29

Q41 A continuación se detallan los requisitos para la renovación en línea. Seleccione **TODAS** las afirmaciones que fueron verdaderas la última vez que renovó su licencia o tarjeta de identificación:

- ☐ La última vez renové en persona en una oficina de licencias de conducir. (12)
- ☐ Mi licencia de conducir o tarjeta de identificación vence en menos de dos años o ha vencido hace menos de dos años. (1)
- ☐ Soy ciudadano estadounidense (2)
- ☐ Mi número de Seguro Social ya está archivado en el DPS de Texas, División de Licencias de Conducir. (3)
- ☐ Tengo mi licencia de conducir o identificación de Texas emitida más recientemente, o puedo responder preguntas de seguridad para verificar mi identidad. (4)
- ☐ Mi licencia de conducir es provisional o de aprendizaje y me faltan al menos 30 días para cumplir 18 años (SOLO licencia de conducir) (5)
- ☐ Soy menor de 79 años (SOLO licencia de conducir) (6)
- ☐ Estoy renovando una licencia de conducir Clase C, M o CM (SOLO licencia de conducir) (7)
- ☐ Mi visión y mis condiciones físicas y mentales no han cambiado de una manera que afecte mi capacidad para conducir de manera segura desde mi última renovación. (SOLO licencia de conducir) (8)
- ☐ Mi certificado médico válido y vigente está archivado. (SOLO licencia de conducir) (9)
- ☐ Tengo una licencia de conducir válida (no suspendida ni revocada) y no tengo órdenes judiciales ni multas impagas. (SOLO licencia de conducir) (10)
- ☐ Todas las anteriores (11)

End of Block: "Renewal" in Question 9 AND Q10 not online AND "yes" In Question 29

Start of Block: “Address Change” in Question 9 AND Q10 not online AND “Yes” In Question 29

Q42 A continuación se detallan los requisitos para el cambio de dirección en línea. Seleccione **TODAS** las afirmaciones que fueron verdaderas la última vez que cambió su dirección.

- ☐ Mi licencia de conducir, licencia de conducir comercial o tarjeta de identificación no está vencida (1)
- ☐ Tengo al menos 18 años (2)
- ☐ Mi licencia de conducir NO es una licencia provisional o de aprendizaje (3)
- ☐ Mi número de Seguro Social está archivado en DPS (4)
- ☐ Todas las anteriores (5)

End of Block: “Address Change” in Question 9 AND Q10 not online AND “Yes” In Question 29

Start of Block: Last

Q43 ¿Hay algún comentario adicional que le gustaría hacer sobre la eficiencia de la Oficina de Licencia de Conducir y cómo mejorarla?

_____

_____

_____

_____

_____

End of Block: Last

Appendix D: DLD Region Maps

DPS DLS Region Maps

Appendix E: Houston North Site Visit Write Up

Houston North Site

Appendix F: Spring Site Visit Write Up

Spring Site

Appendix G: Midland Site Visit Write Up

Midland Site

Appendix H: Dallas South Site Visit Write Up

Dallas South Site

Appendix I: Fort Worth Site Visit Write Up

Fort Worth Site

Appendix J: Austin South Site Visit Write Up

Austin South Site

Appendix K: Austin North Site Visit Write Up

Austin North Site

Appendix L: Austin North West Site Visit Write Up

Austin Northwest Site

Appendix M: Leon Valley Site Visit Write Up

Leon Valley Site