

Before We Start...

House Keeping

- Online/Webex Event
- You will be automatically muted
- Use the Chat feature for general questions. Use the Q&A feature for the Q&A segments of today's event.
- If experiencing poor audio quality, please shut down larger applications, such as Chrome
- End Time: 11:00 AM

About Today's Session

- Market research for DMV's needs.
- Presentation of problem statements.
- Each problem statement will be followed by a short Q&A.
- No expectation to provide solutions that solve the problem in its entirety. Ideas to solve a portion of the problem are welcome as well.
- Vendors not registered in California are not prohibited from participating.
- Post session questions may be submitted to dmvpublicaffairs@dmv.ca.gov.



DMV's Digital Transformation Journey

DMV Vendor Day 2020

WebEx Event

9/9/2020



Welcome!

Meet the team of panelists



Amy Tong

Director/State CIO
Department of Technology



Steve Gordon

Director
DMV



Kathleen Webb

Chief Deputy Director
DMV



Ajay Gupta

Chief Digital Officer
DMV



Coleen Solomon

Deputy Director
Field Operations
DMV



Robbie Crockett

Deputy Director
Administrative Services
DMV



Sonia Huestis

Deputy Director
Customer Services
DMV



Marlon Paulo

Deputy Director
Statewide Procurement
Department of Technology

Today's Objective

Invite the vendor community to **partner with DMV** in preparing the organization for the future.

Our challenges continue to evolve in support of employee and customer safety, meeting new demand with reduced resources, and maintaining transportation safety using best practices and innovative industry ideas.

Agenda

Overview of Vendor Day

DMV Services and Operations overview

Current state deep dive

Discuss five broad problem statements

- Appointment Strategies for the field office
 - Workforce scheduling optimization during furloughs and COVID uncertainties
 - Managing and Optimizing Call Center workloads
 - Yield management of our drive test appointments
 - Integration strategy for sharing driver information across states
-

General discussion and next steps

Vendor Day 2019 Results



4

major problem areas



>350

Attendees from 200 vendors



213

Ideas submitted



10

Pitched to Execs and VCs

Your ideas in action



Automated Proctored Knowledge Tests



Mobile Technician



Virtual Field Office



Service Advisor



Unlocking Legacy data to build micro service architecture



Self Service Terminals in the Field Office

DMV Services and Operations

Our Core Functions

Issue Driver Licenses and Identification Cards

Issue Vehicle Titles and Registrations

Promote safety via the Driver Safety Program

Regulate the Motor Vehicle Industry

Our Support Functions

Administrative Services

Budgets, contracts, procurement, HR, facilities, mail, printing

Revenue Collection

\$11.7 billion collected

Information Technology (IT) Services

Program, installation, and maintenance

Enforcement Services

Conducts auditing, monitoring, inspecting, and investigating

Enterprise Risk Management

Independent assessment of risk management, oversight, enterprise planning, auditing, and privacy.

DMV at a Glance



234

Locations



10,259

Employees



186

Auto Clubs



5,454

Business Partner Sites

37M

Registration Transactions



9.5M

Driver Licenses/ID Transactions



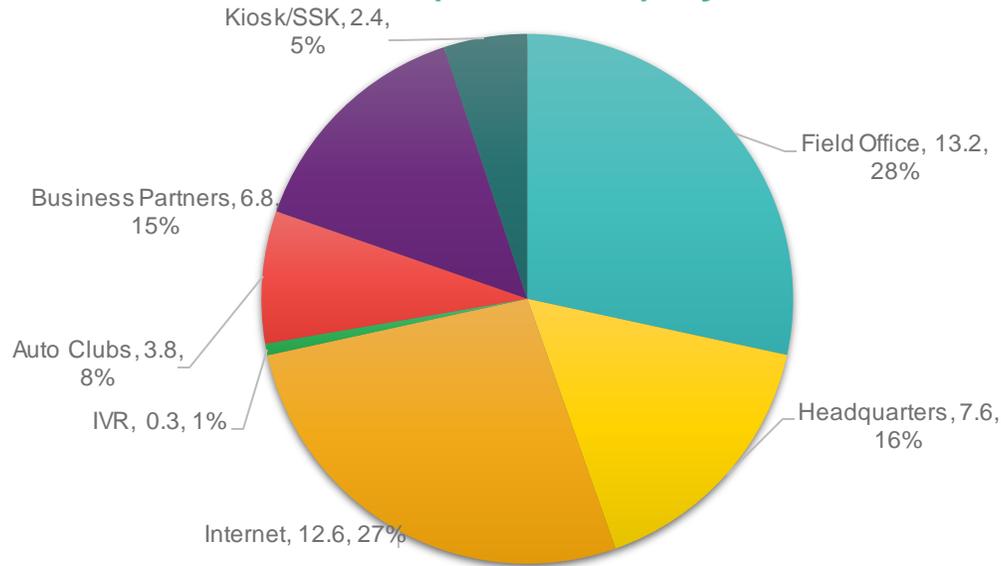
59M

Total Transactions



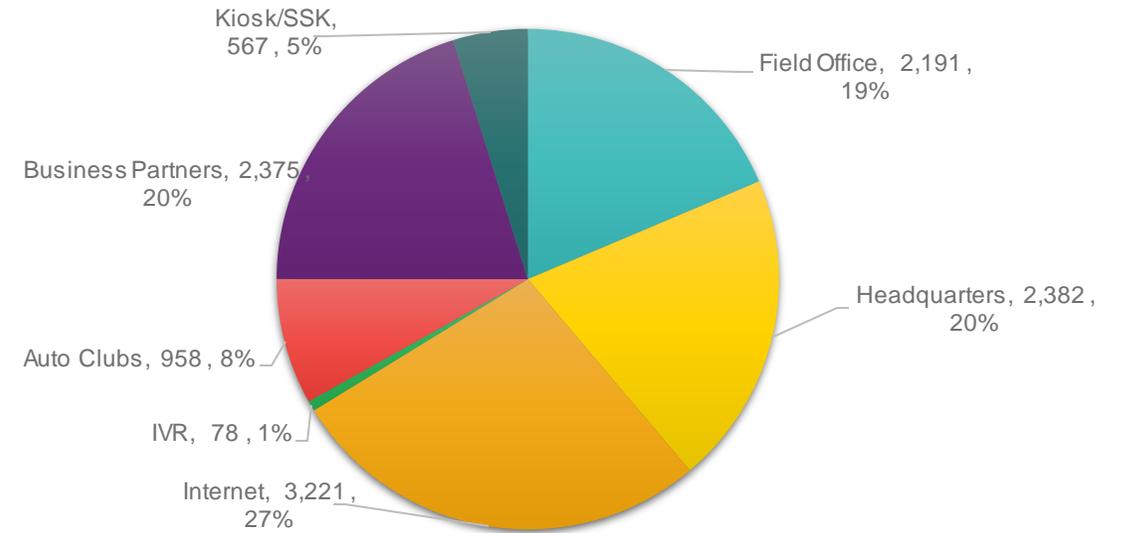
Our Delivery Channels

Transactions (in Millions) by Channel



59M Transactions

Revenue (in Millions) by Channel



\$11.7B in Revenue

DMV Strategic Goals

- Our People
 - Foster a culture of innovation
- Services
 - Add speed and simplicity through digital delivery
- Technology
 - Build flexible and secure systems to enable innovation
- Efficiency
 - Use competitive measures and industry benchmarks to track progress
- Our Customers
 - Become a leader in customer service

What are we up to since the last Vendor Day?

Outcome Based Transformation

Outcomes for Customers

NEW EXPERIENCE	ACHIEVED BY	TRANSFORMING BUSINESS
Improved Online experience	<ul style="list-style-type: none"> Redesigned human-centric navigation Task-based flows through content Identity verification made simple "Mobile first" strategy 	<p>DIGITAL BUSINESS</p> <ul style="list-style-type: none"> Backoffice process optimization via learning and robotic automation Data driven operational decisions Staff management Business process outsourcing to reduce field office visits <p>LEAN IT</p> <ul style="list-style-type: none"> Self Service Devices and Channels to provide more services outside Field Office Soft Containment of Legacy Architecture Updates Network and Platform Modernization Enterprise Customer Relationship Management
More access channels inside and outside DMV office	<ul style="list-style-type: none"> Human centric design Identity optimization Self Service tablets, kiosks 	
Shorter in-person visits	<ul style="list-style-type: none"> AI augmented document verification More steps outside the field office Reduction in RealD processing steps Utilize wait time for productive work 	
Faster processing in paper channels	<ul style="list-style-type: none"> Robotic automation reduces time to process each transaction Virtual document processing 	
Smaller queues, less crowd	<ul style="list-style-type: none"> Business process outsourcing Business partner empowerment More services via Online and Self Service 	
24x7 support	<ul style="list-style-type: none"> Online Virtual assistant VR Smart Assistant 	

Outcomes for Employees/Partners

NEW EXPERIENCE	ACHIEVED BY	TRANSFORMING BUSINESS
Quality over quantity	<ul style="list-style-type: none"> Automation augmented tasks Artificial intelligence to support complex activities Push to self-service 	<p>AUTOMATION@CORE</p> <ul style="list-style-type: none"> Backoffice process optimization via learning and robotic automation Enterprise analytical engine <p>DIGITIZE IT</p> <ul style="list-style-type: none"> Workforce Management Tool Esignature and Workflows Virtual learning platform
Optimized workflows	<ul style="list-style-type: none"> Operations research Process Learning 	
Data driven process efficiencies	<ul style="list-style-type: none"> Process mining KPIs measurements SLA enforcement Event driven process monitoring 	
Paper reduction	<ul style="list-style-type: none"> Robotic automation reduces time to process each transaction Virtual document processing 	
Workforce management	<ul style="list-style-type: none"> Staff scheduling optimization Staff availability/time reporting Workforce redirection Self Service Learning 	
HR process improvements	<ul style="list-style-type: none"> Electronic document workflows Integrated time reporting 	

Front Office Enablers

Service Concepts	Delivery Concepts		Architecture Concepts	
Customer Relationship Mgmt	Service Oriented Architecture	Scaled "Hybrid" Agile	Intelligent Automation	Custom to COTS
Identity Hub	Test Driven Design	Human Centered Design	AI based Verifications	Blockchain
Entirely Virtual Experience	Business Simulation	Design Simulations	Virtual Assistance	KPI Collection
Transparency Champion	Task Automation	Field Office Queue Transparency	Smart Access Channels	Queuing Optimizaition

Back Office Enablers

Teams of the Future	Delivery Concepts		Architecture Concepts	
Innovation COE	Technology Change Management	Identity and Data Sharing Agreements	Enterprise Service Bus	Custom to COTS
Architecture Governance	Model Office Testing	End of Life Toolset Roadmap	Cloud Migration	Blockchain
IT Service Mgmt Centric	Legacy "Transition" Roadmaps	Asset Management	Open Data Support	Platform Upgrade Simplification
Industry/Community Alliances			DevOps	Workflow Automation

Outcome Based Transformation

CUSTOMER: NEW EXPERIENCE



Improved Online experience



More access channels inside and outside DMV office



Shorter in-person visits



Faster mail channels



Smaller queues, less crowd



24x7 support

EMPLOYEE: NEW EXPERIENCE



Quality over quantity



Optimized/sustainable processes



Data driven decisions



Reduced paper workloads



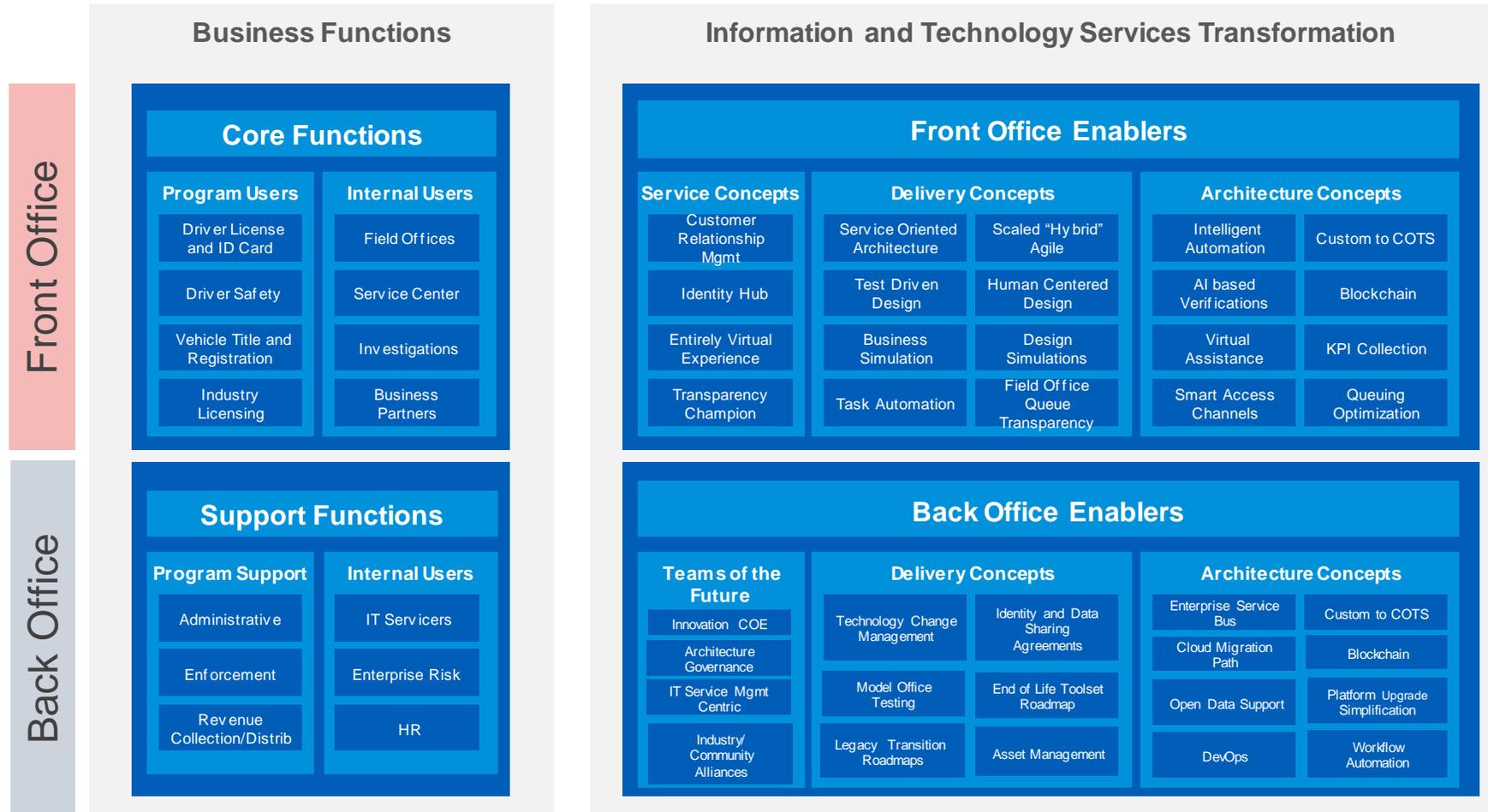
Flexible resource placement



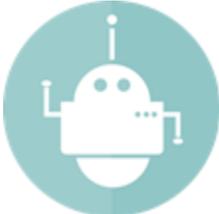
Improved HR processes



Transformation Enablers



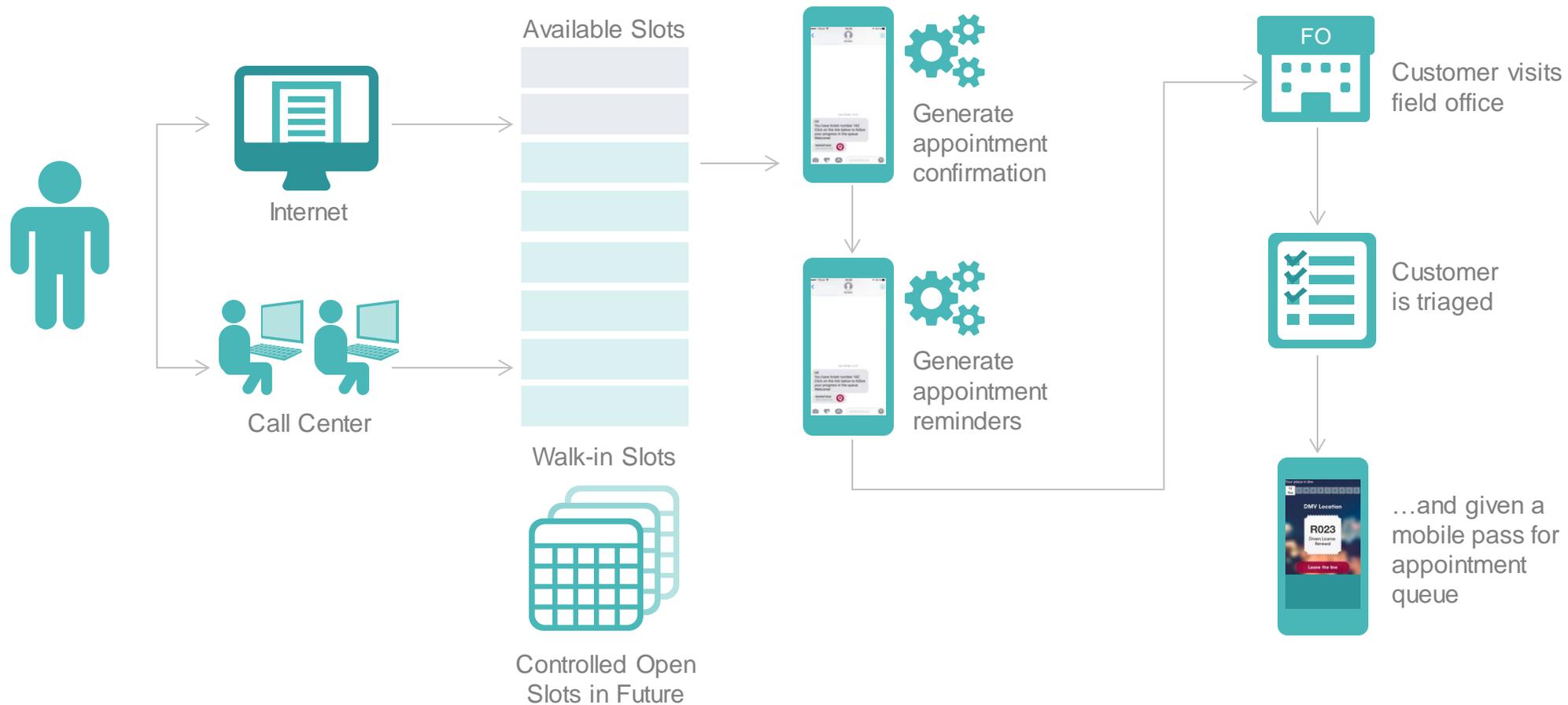
Continuing the Quest: Transformational Initiatives

	Customers	Employees/Partners
Front Office	 Progressive Identity, Federation  Self Service Tablets  Expanded Payment Channels  Transparency Portal	 Intelligent Document Processing  Virtual Field Office  Mobile Technician**
Back Office	 IVR Smart Assistant  AI Proctored Tests**  Digital Mailroom	 Intelligent Automation  Electronic Notices**

**Projects initiated but not yet implemented

Topic 1 – Appointment Strategies for field offices

Far out appointments, reduced capacity, longer waits due to COVID



Appointment Strategies for Field Offices

Some monthly statistics (pre COVID) on non-drive test appointments

1.9M

Non Drive test
 Appointments per
 month



469K

Total customers visiting
 the office



45-60

Days out for
 appointments on typical
 transactions



100%

Reduction in available
 appointment capacity
 due to COVID



1M

SMS appointment
 messages sent



90 day

Span of slots opened
 for future appointment

??

People who wanted the
 appointments but did
 not get

??%

Duplicate appointments

Appointment Strategies for field offices

Problem Statement

Many DMV customers seeking an in-person appointment often experience delays in scheduling and appearing their subsequent appointment.

Availability is impacted by high demand in specific geographical locations, staffing levels, bad actors booking available slots and the need to balance appointment and walk-in services

Scope

DMV is looking for creative ideas to improve appointment availability for planned visits from customers by controlling/limiting the intake of customers, protecting appointment slots from bots, prevent resharing of reserved slots and redirecting service requests to alternate channels

Desired Outcome

Require/promote use of alternate channels to complete the services sought

Only allow in-person services after readiness assessment

A balanced outcome for unplanned and planned for in-person services

Appointment Strategies for field offices

Initial thoughts

Ideas being considered

- When appropriate, redirect customers to alternate channels when seeking appointments
- No appointment model for driver license and registration based services
- Appointments only model for field offices visits
- Only offer appointments for a few days/weeks at a time, allowing customers to "check-in" in advance or on arrival the field office
- Limit appointments to high demand geographical locations
- Reserve specific times of the day for appointments and non-appointments
- Only allow appointment after a customer readiness assessment
- Placing appointments behind an identity management solution

Points to Ponder

- Customer dissatisfaction with decreased appointment options (appointments desirable to work around personal and professional commitments)
- No appointments can result in longer wait times and negative public image
- Metering the flow of walk-ins
- Customer readiness prior to the arrival
- Lack of self service culture among certain demographic

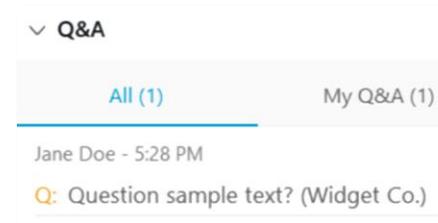
Q&A | Rules of the Road

About Q&A

- Q&A will last for 5 minutes
- Chose one rep per entity to submit your question.
- Submit your question through the Q&A Panel.
- Selected questions may be read by the host, or in some instances, the participant may be unmuted and asked to state or clarify their question.

How to Submit Your Question

- A** Open the Q & A panel by clicking the  at the bottom of the window, then selecting  .
Q&A
- B** In the Q & A panel text box, type your question along with your company name, select 'All Panelists' in the Ask drop down

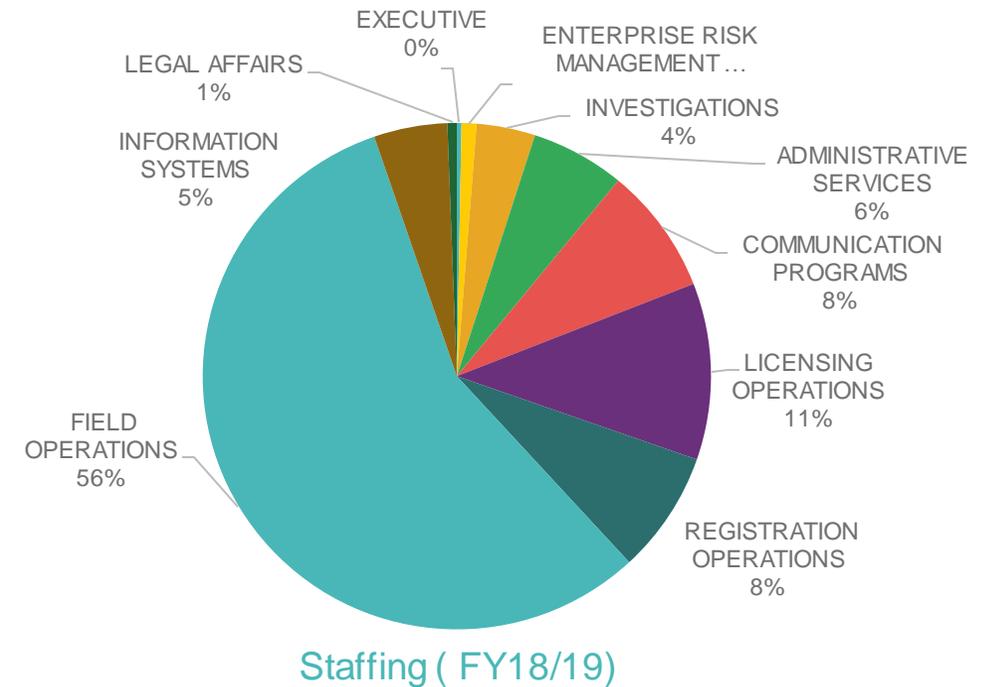


- C** Select Send or hit Enter.

Topic 2 – Workforce Schedule Optimization

An enterprise view of our workforce

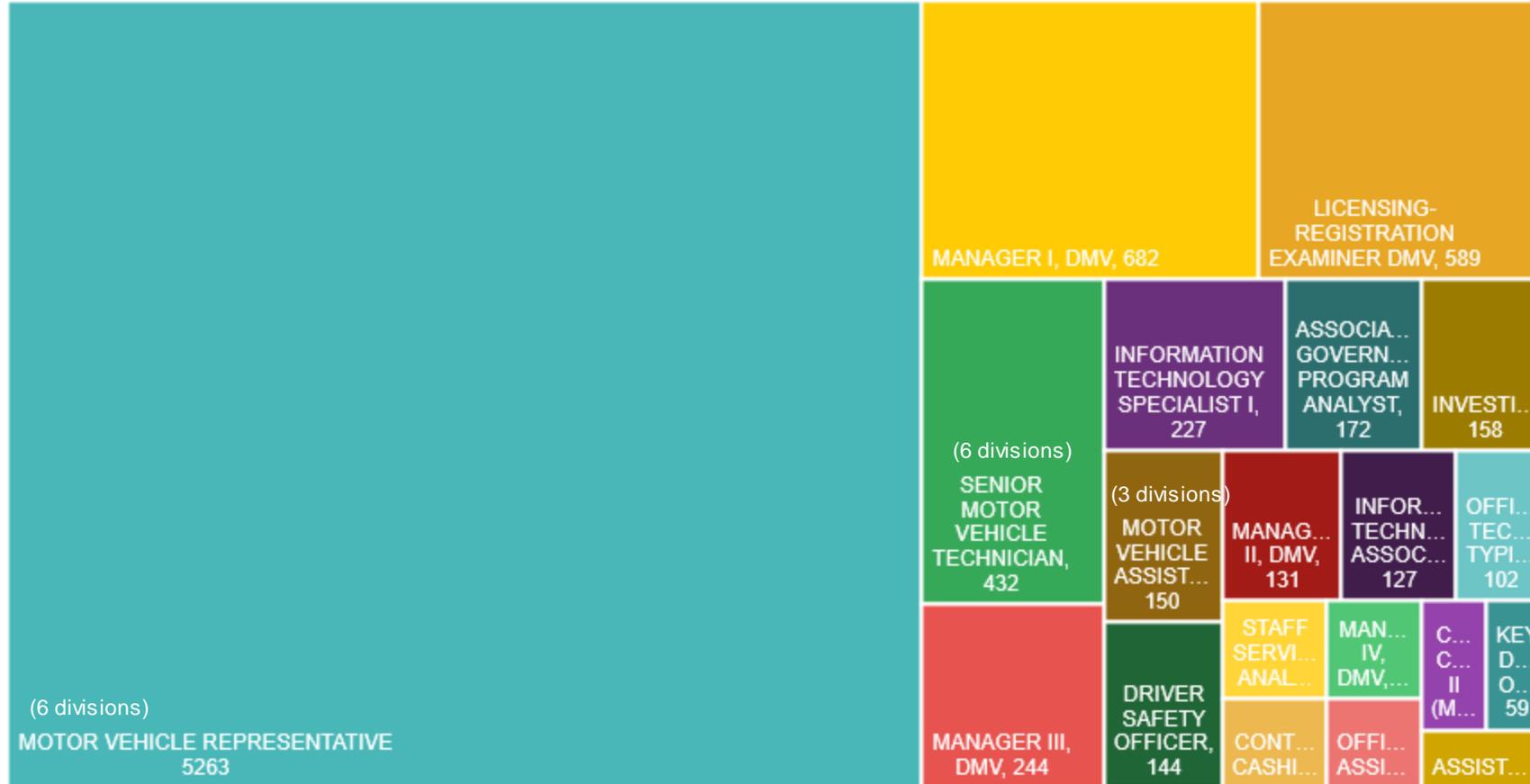
<p>10K Employees</p>	<p>20% Leave hours</p>	<p>10% Furloughs</p>
<p>5 Major operational job classification</p>	<p>234 Locations</p>	<p>5 Divisions with large volume ops jobs</p>



Topic 2 – Workforce Schedule Optimization

Are there opportunities to create a nimble and elastic organization via sharing resources?

Top Classifications



Many job classifications are utilized across multiple divisions, creating an opportunity for sharing a portion of the workforce to “smoothen” peak demand/low supply scenarios

Workforce Scheduling Optimization

Problem Statement

During these uncertain times, with COVID related absences and furloughs and pent up demand for services; Field Office, Headquarters and Call Center, staff scheduling is a huge challenge with all the channels still under pressure to serve the largest DMV in the nation

Scope

DMV is looking for integrated solutions that utilize available HR and operational data and provides optimal models to keep up with the customers demands and fluctuating DMV resource availability, while providing avenues to collect data needed for demand/supply modeling (like time and attendance, skillsets, job classifications)

Desired Outcomes

Optimized work schedules driven by the demand and supply data and customer behavior

Rapid demand management

Workforce Scheduling Optimization

Initial thoughts

Ideas being considered

- Put together a time and attendance system with operational data analytics to make availability decisions
- Implement a workforce management solution complete with time reporting, AI based demand analytics, seasonal trends, talent redeployment modeling, intraday resource management, business rule engine to place resources appropriately in supply gap areas
- Implement an entire HCM solution for the DMV enterprise and a contact center centric solution

Points to Ponder

- Time to market (immediate need)
- Training needs for Interchangeable/loaned staff

Topic 3 – Optimizing Drive Test Availability

608

Licensing-registration examiners (LREs) across 178 locations



151K

Appointments (monthly)



80K

Drive tests (monthly)



75%

Pass rate



12 to 440

Monthly average drive test conducted/LRE by location

21-24 min

Drive test duration



Optimizing Drive Test Availability

Problem Statement

DMV drive test appointments are generally in high demand, and more so due to COVID closures, reschedule request, safety concerns from the public and LRE availability issues

Scope

DMV is looking for creative ideas to optimize how to properly schedule appointments for drive tests to ensure 100% utilization of available resources (i.e. account for no-shows). This might be addressed like the airline industry via over scheduling or by inviting folks to be in some sort of standby queue or by some other creative means

Desired Outcomes

Optimize existing LRE workforce based on geographical demands

Maximize LRE schedules to meet the historical demands for drive tests

Create on-call queue where customers provide availability in the event of a no-show

Optimizing Drive Test Availability

Initial thoughts

Ideas being considered

- Reduce illegal appointment hoarding by the use of identity validation and multiple appt check of the appointment seekers
- Overbook based on previous no-shows. Create a waitlist with appointment day confirmation/cancellation model
- Move LREs to locations with more demand

Points to Ponder

- Friction in appointment scheduling due to identity validation
- Manage LRE location expectations
- Walk-is not permitted for drive tests due to eligibility checks

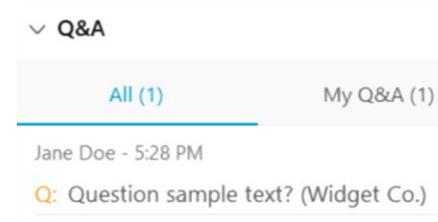
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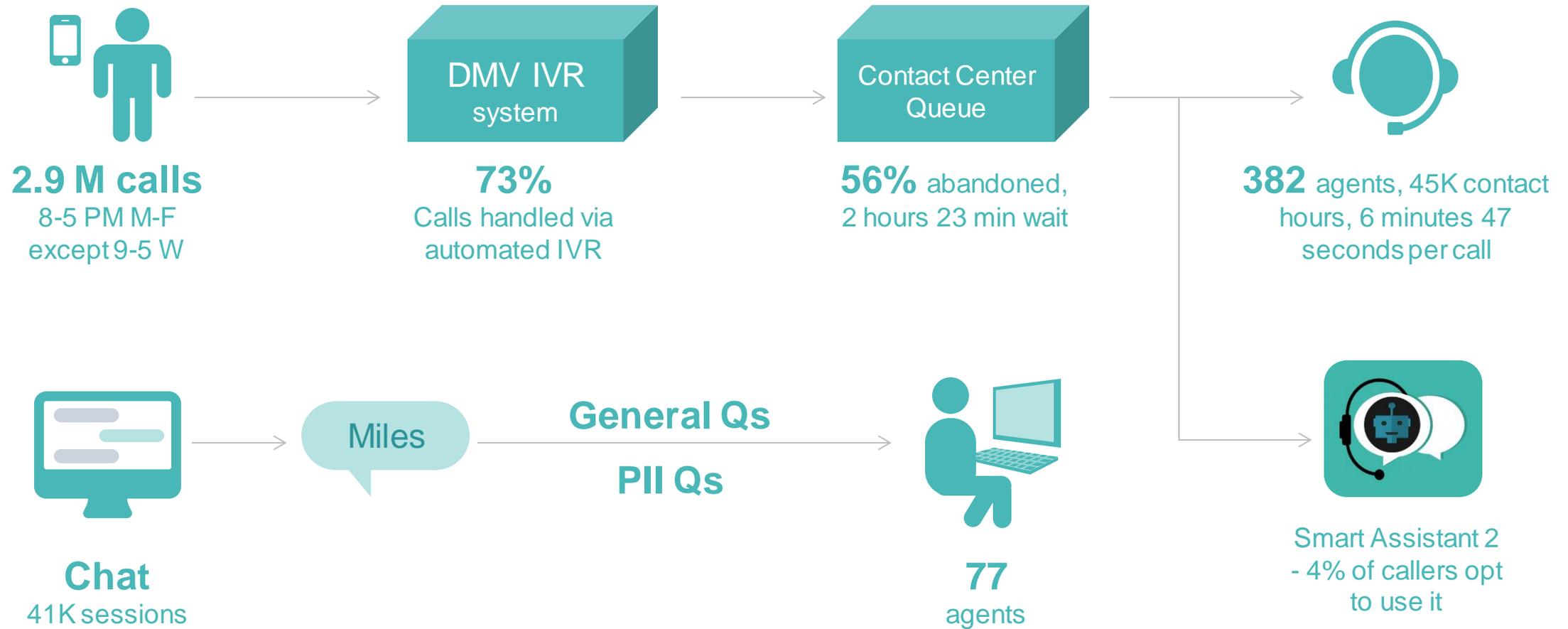
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- C** Select Send or hit Enter.

Topic 4 – Managing and Optimizing Contact Center workloads



All numbers of monthly (for August 2020)

Topic 4 – Managing and Optimizing Contact Center workloads



382 agents across
3 call centers



77 live chat agents

45K

Contact hours

4.8K

Furlough hours



70% Take Rate for Call
Back*



75% agents teleworking



Abandon rate up by 20%
from last year

4.7K

Overtime hours

*Call back feature is available based on availability of agents and remaining hours in a workday

Managing and Optimizing Contact Center Workloads

Problem Statement

DMV Contact center is under constant pressure to answer customer demand during COVID related closures and absenteeism, as more queries on how to complete services while the field offices are providing limited services, resulting in very long wait times and abandoned calls

Scope

DMV seeks to reduce call wait time by introducing data driven tools that facilitate adjusting the contact center operations and voice channel content based on trending queries and trending events

Desired Outcomes

Call wait time less than 15 minutes during peak demand without significant addition to the contact center workforce

Managing and Optimizing Contact Center Workloads

Initial thoughts

Ideas being considered

- Use of smart assistant technology to redirect waiting callers to an automated answer
- Integrate smart assistant technology to fulfill service request using API and bots
- Record and analyze the speech to text transcriptions for call intent analysis and reorganizing the IVR/Smart assistant/channel content, identify services to be offered via alternate channels
- Provide alternate fulfillment channels that reduce call demand for the target demographics
- Perform Just In Time call topic capture and analytics to make adjustments to the IVR, site FAQs and Smart Assistant content

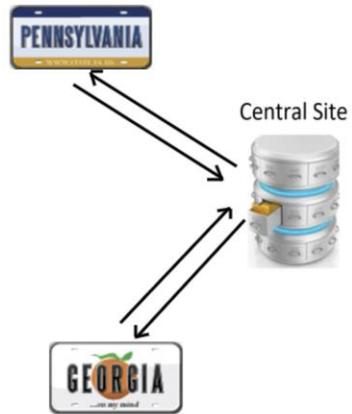
Points to Ponder

- Immediate need to act
- Authenticating caller on the voice channel for personalized services
- Near real time analytics /call intent analytics performance
- Demographics that prefers call channel

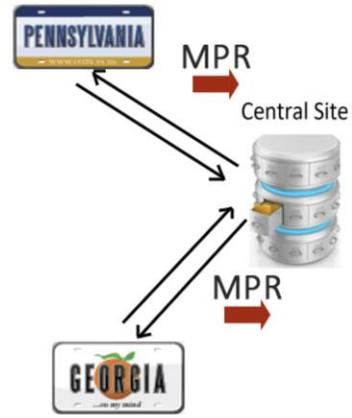
Topic 5a – Sharing Information with other States

- The REAL ID Act requires states to ensure that an Individual only holds one REAL ID compliant DL or ID card.
 - The State to State (S2S) verification service is a means for states to electronically check with all other participating states to determine if an applicant currently holds a driver license or identification card in another state.
 - Each participating state provides the minimum data elements which uniquely identifies each driver license or identification card (DL/ID) cardholder:
 - Full Legal Name, Date of Birth, Last five digits of the social security number (Full SSN is used for secondary verification when other data points are similar), State of Record (SOR), DL/ID Number
 - 27 States with 40% of U.S. licenses already onboarded in the S2S system
- Promotes one person, one record concept
 - Identifies duplicates
 - Participation can assist jurisdiction with components of REAL ID compliance
 - Note: Participation in the Real ID program is voluntary

Topic 5a – Sharing Information with other States



Inquiry:
Search, AKA



Update:
Add, Change, Delete, SOR



Direct Access



Batch/Bulk



Sharing information with other States

Problem Statement

State of California considers our resident information sacred and does not release Social Security information to private and public entities outside the established channel that ensures privacy of our residents. Sharing SSN (or lack thereof) is not an option to allow matching drive information with other states

Scope

California DMV would like to explore alternatives to the use social security number to match driver records nationwide while meeting the spirit of the Real ID Act and limiting the reliance on a social security number. The solution will need to include the ability to interface with states that currently use S2S and rely on SSN as a data source for verification.

Desired Outcomes

Seamlessly match driver records with other States without sharing driver SSN information and without disrupting the existing State2State ecosystem already in place



Sharing information with other States

Initial thoughts

Ideas being considered

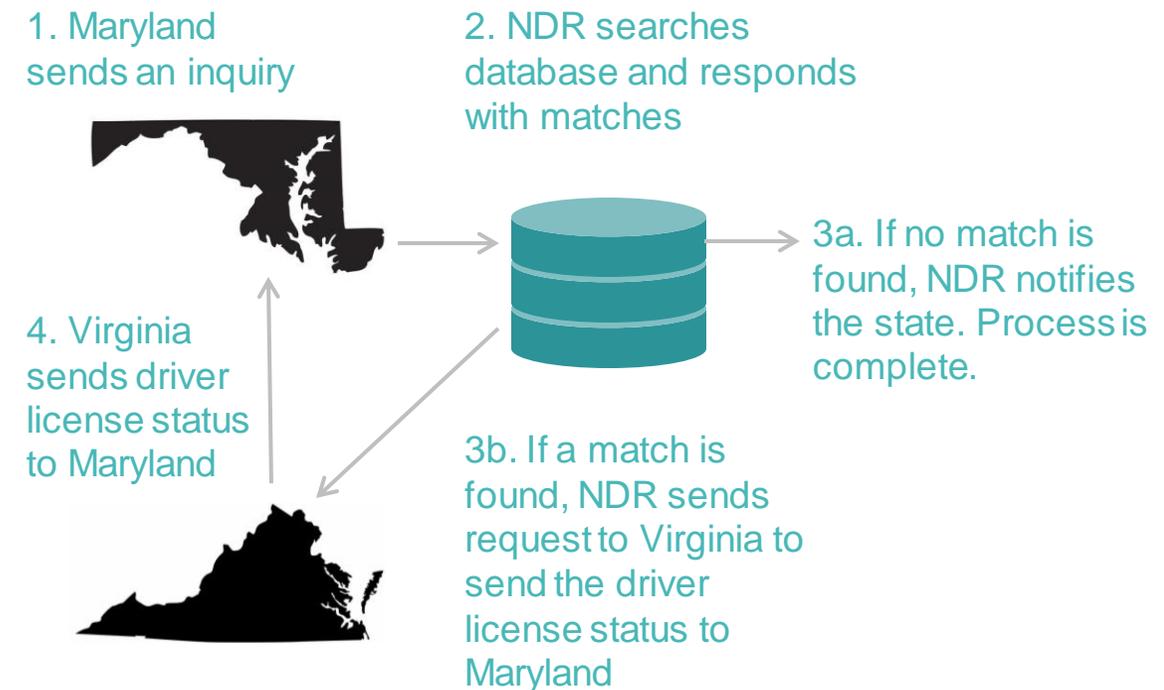
- Use of Pseudo-SSN for all California Residents when matching via the S2S platform
- Creation of a parallel system that is hosted for States with undocumented resident licensing program

Points to Ponder

- Data ownership across States
- Performance considerations

Topic 5b – Sharing Information with other States (near term)

- National Driver Register's Problem Driver Pointer (PDPS) is a mission critical system that directly benefits the States and the driving public in reducing the toll from traffic crashes. When a DWI arrest is made the court sends the conviction to the motor vehicle administration resulting in a record being added to PDPS. If the driver attempts to obtain a license in another State or renew their current license, a search of the NDR will result in a "hit" and denial of the applicant's license.
- 53M pointers exist in the PDPS system
- California has 28M drivers with 3.5M pointers reported by us into PDPS
- Not all the pointers includes Driver Licenses information
- A full match of all the driver pointers matched in NDR for another smaller State (5.2M drivers) took multiple weeks (500K/day match limit). Obtaining driver history for matched records from the State of Record also took multiple weeks (30K/day limit)





Sharing information with other States (near term)

Problem Statement

Non-Commercial Driver query is mostly triggered by a predefined event (original/transfer applications, renewal, duplicate issuance, changes to DL data). If a California non-commercial driver in between the events had a violation in another State, the information may not make it to California DMV timely

Scope

California (and all other States) need to be able to sync with the National Driver Registry data containing “pointer” to the driver violation information accounting for non-exact matches and computing limitations at NDR, and allow for a perioding reconciliation to keep California driver records current. The solution needs to be able to handle request volumes from all 51 jurisdictions

Desired Outcomes

Timely and complete match to ALL California driver records with other States (pre S2S implementation)



Sharing information with other States

Initial thoughts

Ideas being considered

- Do a one time full scan of the NDR to understand the scale of the gap population
- Build a regular cadence with NDR to receive matched data

Points to Ponder

- Performance considerations
- Scheduling conflicts at NDR to complete the matching queries among requesting States

In Closing

After today's session

- Online submission of narrative responses by vendors to address DMV's problem statements
- URL for the online submission posted by COB Friday
- Submissions due in two weeks, by Sep 25th
- Selection/Screening for relevance, executability and viability
- Vendor Pitch Day for vendors to demonstrate the concept/solution
 - Qualified/Selected vendors will be notified on the week of Oct 9
 - Pitch day is mid October. 15 minutes to pitch the idea/solution
 - Presented to State leadership and industry VCs
- Post session questions may be submitted to dmvpublicaffairs@dmv.ca.gov

Thank you for joining us today!