



CONNECTICUT **CREATES** report

Opportunities for the Government of Connecticut to improve service quality, delivery, and equity for residents and businesses, mitigate retirement risks, and reduce costs.

2021

Introduction

Executive Summary

The Government of Connecticut must operate more efficiently to respond to an anticipated wave of employee retirements by 2022 and recover from the significant economic challenges brought on by the COVID-19 pandemic. Improving efficiency will enhance the quality of services provided by the State to residents and businesses, empower state employees, and simplify interactions with the non-profits and private enterprises that do business with the State. Doing so will also allow the State to maintain a reasonable cost while investing in improving equity and access to services for those most in need.

Governor Ned Lamont, the Office of Policy and Management (OPM), and the Department of Administrative Services (DAS) commissioned Boston Consulting Group (BCG) to produce this study – titled the CREATES project – to evaluate workforce efficiency and organizational design to generate recommendations about how to best mitigate the risk to service continuity brought about by the anticipated retirements among state employees in 2022. This study also responds to a request in the 2017 budget in which the legislature directed the Governor to identify efficiency opportunities that would reduce state spending.



The goals of this study were to generate proposals to:

- Ensure continuity of state services to residents.
- Modernize state government operations to be more efficient and cost less.
- Improve the quality of state services for residents.

The CREATES project took place while government at all levels (federal, state, and local) continues to address the COVID-19 pandemic. The pandemic has challenged state government in many ways, and Connecticut responded quickly. The State took decisive action in instituting public health measures to curtail the spread of the virus and rapidly stood up an effective testing and contact tracing program. At present, the State is planning for widespread distribution of a vaccine that provides hope for a return to pre-COVID-19 ways of living and working. However, the economic recession brought on by the





pandemic will impact the State's finances even after the vaccine has been widely administered, leading to greater need for the State to realize efficiencies in its operations to continue to deliver the same level of services to residents.

Beyond the pandemic, the environment in which state governments operate is evolving. Public trust in government at all levels remains low – Gallup polls indicate that trust in state government has yet to recover to pre-recession levels, while Pew polls show that trust in the Federal Government remains at historic lows that have been sustained for over a decade. Increasing political polarization means that stakeholder engagement is both more necessary and may become more challenging. Continued inequalities in income, race, gender, and other factors such as unequal access to healthcare mean that governments must consciously and actively work to design policies and deliver services to address these inequalities.

Citizens' expectations of their government are also increasing. Over the past decades, Connecticut residents have grown accustomed to e-commerce and mass customization, and they expect to be able to interact with government seamlessly, digitally, and quickly.

Taken together, these factors provide a timely rationale for Connecticut's state government to redesign its services and how they are delivered. Rather than looking to patch existing

operations or backfill teams that were designed for another period, the 2022 retirement surge represents both an imperative and an opportunity to modernize.

Research for the CREATES project was conducted from September 2020 to March 2021, with extensive input from state government agencies and more than 200 state employees. The team interviewed leaders from 41 executive branch agencies, examined current operational and financial data, benchmarked Connecticut's performance against other states, and met with other stakeholders in Connecticut. The scope of work included state executive agencies except for constitutional offices, state universities, and the State hospital system.

By implementing the opportunities detailed in this report, Connecticut will become leaner and more efficient while ensuring that 2022 retirements do not disrupt its ability to provide high-quality services to residents. In many cases, the opportunities identified will help the State improve the quality of the services it offers, simplify access to those services, and provide them more equitably to all residents and businesses. Finally, the opportunities identified could have a net financial impact of up to \$1b against a total budget of about \$14b for agencies in scope.

The project identified hundreds of efficiency opportunities, the most significant of which are:

Opportunity:
Modernize management of the State workforce

Improving management of the State's workforce will improve working conditions for state employees and help attract and maintain talent and could generate \$70m-\$100m of cost savings and avoidance

Opportunity:
Streamline services and pool resources

Streamlining services and resources will simplify resident interactions with the State, improve coordination across programs and agencies, reduce administrative effort, and could generate \$20m-\$40m of cost savings and avoidance.

Opportunity:
Digitize resident services and internal processes

Digitizing services and processes will streamline interactions with providers and residents, increase State staff capacity, improve service quality, and could generate \$190m-\$300m of value, largely through cost savings

Opportunity:
Optimize sourcing

Optimizing sourcing of State services will allow the State to maximize service quality by leveraging best-in-class private and non-profit providers and could generate \$150m+ of cost savings, with potential for significantly more if certain legislative changes are enacted.

Opportunity:
Design services to meet residents' needs

Aligning service provision to residents' needs will improve health outcomes, improve allocation of resources to underserved geographies and programs, and generate additional revenue to reinvest in expanded service provision, and could generate \$300m+ of value from increased revenues and cost savings, with potential for significantly more based on long-term reform

Opportunity:
Rationalize State assets

Rationalizing the State's assets will help it better monitor facility and equipment quality and decrease its carbon footprint and could generate \$50m-\$70m of cost savings and avoidance, without accounting for one-time proceeds from selling assets.

Pages 18-36

Key opportunities include:

- Streamline the hiring process
 - Improve manager value proposition and retention
 - Manage overtime / absenteeism
 - Worker's compensation
 - Return corrections staffing to previous levels
 - Setting an optimal Connecticut State Police (CSP) trooper target and civilianizing administrative functions
 - Optimize CTECs administrative and teacher levels
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Pages 36-44

Key opportunities include:

- Integrate agencies with similar missions
 - Further centralize shared services
 - Streamline similar human service programs and support functions
 - Strengthen coordination of human service operations via a central office
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Pages 45-60

Key opportunities include:

- Common payment platform
 - Common document management platform
 - Automate Affirmative Action reporting
 - Common contracting and grant platform
 - Department of Motor Vehicles (DMV) digitization
 - Complete revenue services digitization program
 - Unemployment insurance (UI) modernization
 - Digitize DMHAS patient records
 - New maintenance and inspection tools
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Pages 60-68

Key opportunities include:

- Non-profit engagement for providing LMHAS
 - Expand non-profits for group homes
 - Competitive bid for rail and bus contracts
 - Contract operations of veterans' convalescent care
 - Transportation structure and maintenance contracting
-

Pages 68-78

Key opportunities include:

- Align rail and bus service to resident needs
 - Adopt value-based health payments
 - Control health spending and maximize federal funding
 - Improve tax compliance
 - Cut film and tax programs with low Return on Investment (ROI)
 - Find new transportation revenues
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Pages 78-81

Key opportunities include:

- Increase office co-location
- Match prison footprint to current population
- Consolidate specialized assets

Sections 3 and 4 provide detail on the opportunities identified.

Many of these opportunities will be difficult to implement because they require coordination across multiple agencies, legislative change, bargaining with state employees' labor unions, investment in new technology, and more. In some cases, the investment in new technology, training, or service development may be significant, but these investments will pay dividends in the long run through improved efficiencies. The State can reinvest these savings in efforts to improve equity and services to residents and businesses.

Given the challenges outlined above, the State will need to prioritize to achieve the highest return, as measured by quality of services, service equity, and financial impact. The State will need a dedicated team that has the capability to lead, execute, and coordinate the delivery of these opportunities in a series of waves. Doing so can ensure that the highest-priority opportunities are effectively implemented. However, some of the changes may not be welcomed by all stakeholders. Nonetheless, all of the identified opportunities are worth the State's consideration, given the scale of the challenges it faces and the opportunity to modernize operations to deliver high-quality services to State residents.



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CONNECTICUT

State Employee 2022 Retirement Surge



State Employee 2022 Retirement Surge

Connecticut state government employees provide essential services to Connecticut residents – from building and maintaining the State’s transportation network to providing vital social services for vulnerable people. The State’s executive agencies employ approximately 30,000 people. About 20,000 additional employees work at the State’s university, hospital systems, and the courts and legislature, which were not in scope for this report.

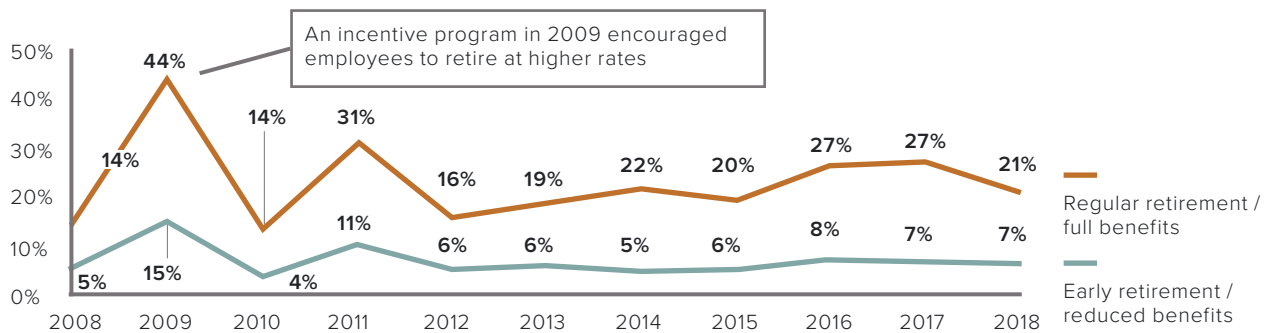
The role of state government has changed over the last 10 years, and the number of people employed by state government has decreased from 59,678 in 2009 to 56,437 in 2014, to 50,421 in 2019. This decrease is due to a multitude of reasons, including the transition of some services (e.g., conversion of group homes for people with intellectual disability and transport maintenance) to private non-profit partners and cost control measures imposed to limit the size of state government.

State Employee Retirements

Every year, thousands of workers join and leave state service. The level of turnover varies from year to year due to factors such as the number of retirement-eligible employees and general economic conditions in the State. Typically, around 25% of employees who are eligible for

retirement with full benefits (i.e., those who can receive their pension’s full value) choose to retire. Other employees are eligible to retire early, with reduced benefits, and about 7% of them choose to retire in a given year.

Retirement take-rates by workers eligible for full and early benefits



Leading up to 2022, the turnover rate may increase because a greater than usual number of employees will be retirement-eligible. Moreover, more retirement-eligible employees are expected to choose to retire.

This situation presents a challenge to the State’s mission to provide high-quality services

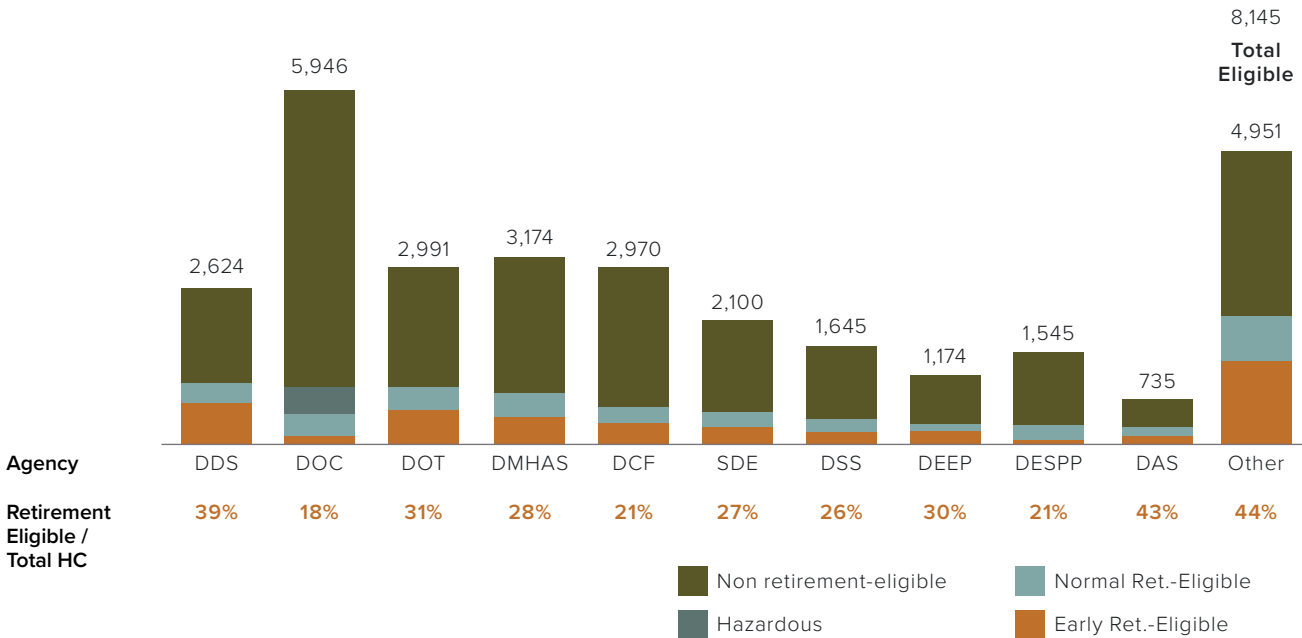
to residents. When employees leave and are not replaced, the existing workforce may be stretched further – potentially through overtime hours – or there could be a risk of degradation in the quality or quantity of services provided. Despite these risks, retirements provide a unique opportunity for the State to re-think how it provides services and manages its workforce.

Number of Employees Eligible for Retirement

More employees are retirement-eligible because the average age (currently 47) of the State's workforce is rising. The lengthy tenure of current state government employees means that 8,145 state employees, or about 27% of the workforce, are expected to be retirement-eligible in the next 2 years (by July 2022). A

decade ago, only about 20% of state employees were eligible for retirement in a given year. Both today and a decade ago, approximately half of these employees will be retirement-eligible with full benefits; the other half will be eligible for early retirement with reduced benefits.

Number of retirements varies by agency



All state executive branch agencies employ people who are eligible for retirement. However, the number and share of potential retirements varies by agency. For example, the Department of Developmental Services (DDS) has the greatest number of potential retirements (1,027). Of agencies with more than 100 employees, the Department of Labor (CTDOL) has the greatest share of employees (48%) expected to be retirement-eligible.

Employee Survey

Employees choose to retire for a variety of reasons, including their years of experience in their current job, general economic conditions, benefits they will receive at retirement, or personal reasons.

Employee retirement could accelerate in the near term because for employees who retire after June 30, 2022, the formula for calculating pension and health benefits will be different than for those who retire earlier. This creates a potential incentive for employees who may have otherwise retired after June 30, 2022 to retire earlier to lock into different and potentially richer benefits. Specific details on these changes are provided in the next section. To better understand how current employees are thinking about their retirement options ahead of the June 30, 2022 deadline, the State conducted an employee survey asking employees to indicate when they intended to retire. The survey also asked employees to rank the factors driving their retirement decisions and identify their retirement eligibility (full or

¹. DOC Normal includes employees eligible for retirement under Hazardous Duty
Source: CT STARS database as of 1/5/2021

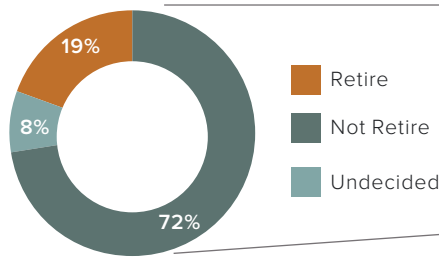
partial benefits), agency, and job function. While respondents may be over-inclined to self-report an intention to retire more than a year from a binding decision, survey results indicate that a majority (72%) of retirement-eligible employees are planning to retire (note that these results are not adjusted to normalize for the split between normal- and early-eligible employees state-wide). There is a gap between those who would be eligible to retire with full benefits (84% plan to retire) and those who would be eligible for partial benefits under early

retirement (50% plan to retire).

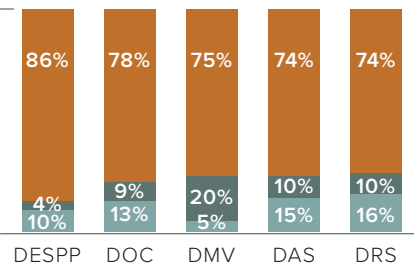
Several agencies saw significantly higher rates of retirement intention, including those in high-stress work environments (e.g., Department of Emergency Services and Public Protection [DESPP], Department of Corrections [DOC]) and those with significant resident-facing interactions (DMV, Department of Revenue Services [DRS]). Several difficult-to-replace job functions (e.g., healthcare workers) saw higher-than-average retirement intent rates.

Employee retirement survey results

Retirement intent of those who are eligible¹



Five agencies with the highest retirement intention²



50% Uptake among Early Retirement eligible

75%+ Intent among State Police, Corrections, Health Non-Professionals, Service / Maintenance and Protective Services job functions

50% Intent to move out of CT upon retirement

Most common reasons cited for retirement include

- Changes to COLA ranked as top reason by 46% and as a factor by 75%
- Health benefits ranked as top reason by 24% and a factor by 64%
- Concerns surrounding COVID-19 cited by just 19% - vaccine unlikely to be a catalyst for changing intentions

Most common factors cited for being undecided about retirement include

- Having a better understanding of the retirement benefit changes named the top factor by 77% and named as a factor by 91%
- Continued enjoyment of the job cited by 58%

Of the respondents who said they intend to retire by the deadline, a majority (75%) cited changes to the pension benefits as a factor in their decision, including 46% who cited it as the primary factor. Changes to health benefits was the second leading factor (24% cited it as the primary factor), while COVID-19-related health risks at the workplace was a relative non-factor. Analysis indicates that even a return

to “normal” (pre-pandemic) working conditions would be unlikely to lead employees to change their decision, while further education about the financial impact of pension changes could have a major impact on decision-making.

For respondents who do not intend to retire, the most cited reasons were:

1

The ability to increase pension benefits through additional time in service (71%).

2

The desire to maintain their current job (61%).

3

The potential to earn higher income in upcoming years, leading to an increase in future pension benefits (60%).

¹. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits) ². Filters for agencies with at least 30 responses

Of undecided employees, 91% cited the need to better understand how changes to the calculation of pension benefits would impact their future financials before they could make a retirement decision.

Interestingly for the long-term financial health of the State, 31% of employees who intend to retire also plan to leave Connecticut. While similar figures do not exist for previous years, engagement with state leaders suggests this figure is much higher than in previous years. Such an outcome could have implications across various state tax bases (e.g., sales tax, capital gains, property tax).

The survey, as well as direct consultations with employees, indicate that the State may face a significantly larger share of eligible workers who retire than in past years. Moreover, analysis indicates that financial changes to retirement benefits are the primary factor in the decision to

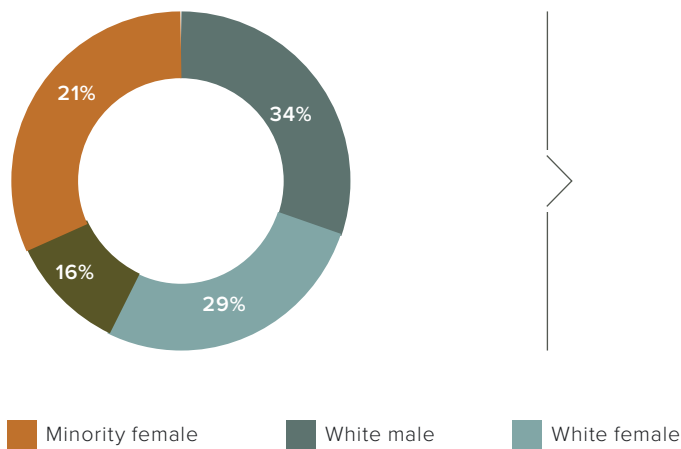
retire or continue working.

Impact of Retirements on Representation of Women and Minorities in State agencies

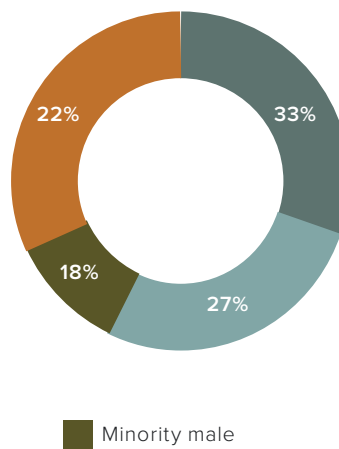
The retirement surge among state employees will cause changes in representation by race and gender. Vacancies create an opportunity for the State to expand its workforce diversity. Of state employees currently in executive agencies, 34% are white males, 29% are white females, 21% are minority females, and 16% are minority males. Employee representation varies significantly by state agencies. Staff at health and human services agencies such as the Office of Early Childhood (OEC), the Department of Children and Families (DCF), and the Department of Social Services (DSS) are primarily women, whereas staff at enforcement and security agencies, such as DESPP, DOC, and Military are primarily men. At administrative agencies such as DAS and DRS, there is an equal representation of women and men.

2022 retirement surge impact on representation in the state workforce

Current representation by gender and ethnicity as of December 2020



Potential representation by gender and ethnicity following retirement surge

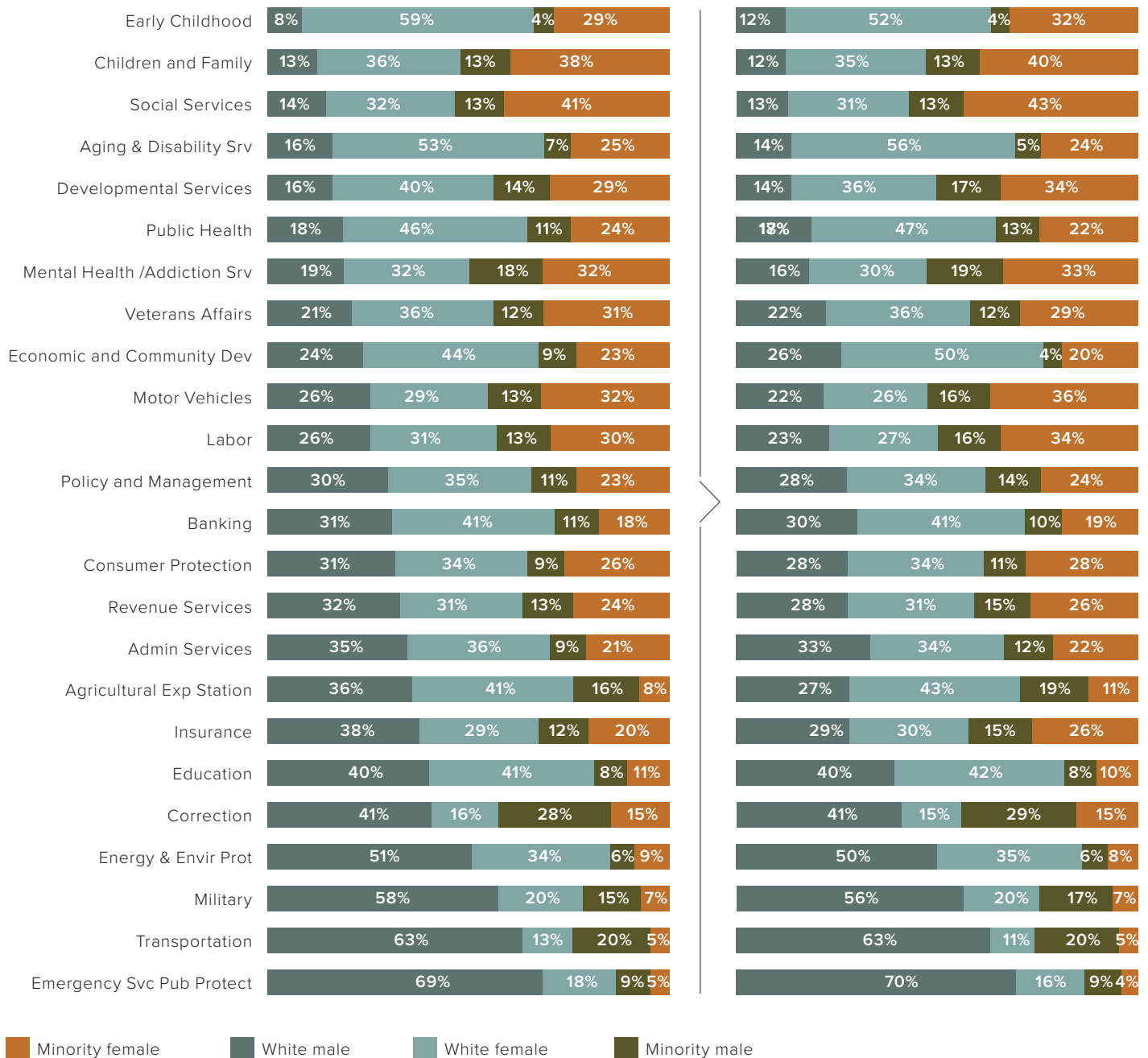


If all eligible employees were to retire in 2022, the overall classification of the State's workforce would be marginally affected: the future workforce would be 31% white males, 27% white females, 22%

minority females, and 18% minority males. Although the impact is minimal, the State will potentially see a slight decrease in white representation and a slight increase in minority representation.

Note: Assumes that 100% of all employees currently expected to be eligible for retirement as of 1 July 2022 choose to retire (including early retirement at reduced benefits)
Source: CT STARS

Impact of retirements on workforce by state agency



The surge presents Connecticut with an opportunity to further diversify its workforce. As the State looks to backfill roles, it can implement strategies to increase minority and female representation in the workforce. Strategies for diversification should be implemented on an agency-by-agency basis, understanding that some agencies have limited flexibility to diversify

(e.g., one out of 14 DOC-operated prisons is for female inmates and employment of women corrections officers is concentrated there). Continuing to ensure a diverse and inclusive workforce will enable the State to be more responsive to the public and improve service delivery across agencies by reflecting the population they serve.

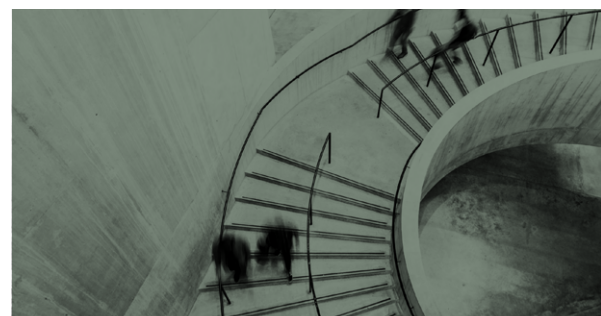
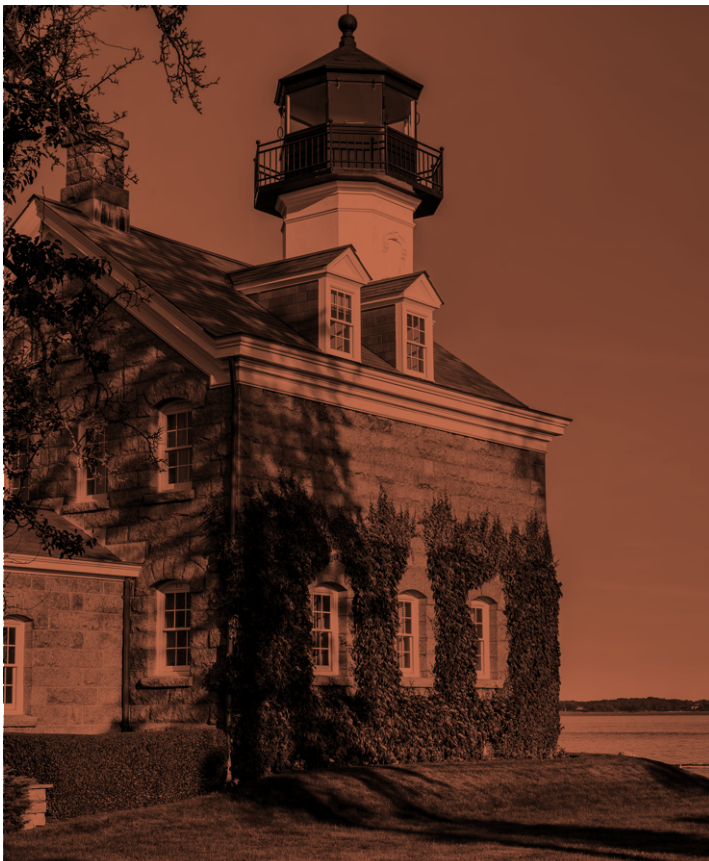
Changes to State Employee Pensions

In most years since 2008, fewer than 20% of retirement-eligible employees chose to retire. The rates differed for those who were retirement-eligible with full benefits and those who were eligible to retire with partial benefits: typically, about 25% of employees eligible for full benefits chose to retire, and 7% of employees eligible to retire with reduced benefits will do the same. In 2022, however, changes to the state employee pension plan, which were part of the 2017 State Employee Bargaining Agent Coalition (SEBAC) agreement between the State and its employee unions, will take effect. These changes to state employee benefits are expected to incentivize a larger-than-typical share of retirement-eligible employees to retire.

The most significant changes agreed in the 2017 SEBAC agreement alter the way pension benefits are calculated for employees who retire after July 1, 2022. Many pension plans periodically increase the value of payments to

account for inflation as part of Cost-of-Living Adjustment (COLA) increases. Prior to the 2017 SEBAC agreement, employees were guaranteed an annual COLA increase to their benefits of at least 2%. After July 1, 2022, retiring employees may see their benefits increase by less than 2%, according to a formula agreed between the State and SEBAC. Moreover, the first COLA increase for which employees are eligible would be 30 months after their retirement instead of approximately 12 months for employees who retire before July 1, 2022. The SEBAC agreement also made changes to employee health benefits that would require some retirees to contribute more.

While data modeling demonstrates that changes to the COLA are unlikely to provide a clear economic incentive for employees to retire earlier than they would have otherwise, the survey of state employees indicated that 72% are currently considering retirement by 2022 (see previous section).





Challenges and Opportunities for Connecticut

The surge in state employee retirements creates a challenge to the State's ability to continue to provide high-quality services to its residents. For example, with fewer social workers, services to people with disabilities may be reduced or compromised. To cite another example, without transportation engineers, the State cannot repair existing highways or build new ones to alleviate Connecticut's traffic congestion. This challenge is due in part to the declining number of employees, which results in fewer personnel being available to provide services. Moreover, established processes can be disrupted if retiring employees with years of experience and institutional knowledge do not engage in knowledge transfer.

The State will need to backfill many positions created by the surge in retirements. Hiring for some jobs may be a challenge due to the technical skillset required (e.g., transportation engineers), competition from the private sector (e.g., nurses), or the intense nature of the work and care settings (e.g., mental health assistants).

The large number of potential vacancies may result in a challenge to backfill open positions. The State has an opportunity to use the projected turnover to re-imagine its operations, implement innovative solutions, and invest in the capabilities required to drive more efficient service delivery. Such a move on the part of the State will ensure that it continues to deliver high-quality services to Connecticut residents. These actions would also ensure that the State's remaining employees – who are already

stretched – are not further overburdened.

The mix of challenges and opportunities to modernize state government operations varies by job and agency. The 10 job groups with the greatest number of retirements are presented in the table below, along with the unique challenges associated with finding new hires to fill vacancies in those roles. The table also highlights opportunities to address the risk of retirement surge in other ways. Altogether, these 10 job groups represent 44% of the total potential retirements for the State.

In addition to the job group-specific opportunities to address the retirement surge, state government agencies will need to implement knowledge-transfer measures and optimize hiring and onboarding processes to backfill the necessary number of retiring employees. Section 1 contains more detail on how these processes can be made more efficient and effective.

In addition to the opportunities aligned to specific job groups, the risks associated with the retirement surge for all employees could be mitigated by improvements to the State's people-management processes (e.g., accelerating hiring), increased adoption of teleworking, and digitization of state government processes.

The following section contains details on key efficiency opportunities.

Job group	Agencies impacted	Employees eligible for retirement	Challenges in filling vacancies	Key opportunities to address retirement surge risk (not exhaustive)
Social workers	DCF, DDS, DMHAS, DSS, DOC, SDE, ADS	822 (22%)	<ul style="list-style-type: none"> Minimum client/staff ratios required by DCF consent decree Increased workload as a result of COVID 	<ul style="list-style-type: none"> Engage non-profits to provide state services
Secretaries, clerks, and administrators	All	506 (43%)	<ul style="list-style-type: none"> Changes in skills required due to new technology 	<ul style="list-style-type: none"> Build central digital capability/model to accelerate digitization of manual processes Develop common grant, document management, and payment platforms Centralize further shared services (e.g., payroll and business management, CTECs administration across schools)
Corrections officers	DOC	350 (10%)	<ul style="list-style-type: none"> Challenging work environment Background check and training requirements 	<ul style="list-style-type: none"> Return inmate-to-corrections officer staffing ratios to previous levels Close prison facilities which are no longer needed
Nurses	DMHAS, DOC, DDS, DCF, DVA, DPH, SDE, DSS, ID, OEC	396 (25%)	<ul style="list-style-type: none"> Competition from the private sector for workers 	<ul style="list-style-type: none"> Use non-profits to deliver some elements of State healthcare or consultation services
Transportation engineers	CTDOT	279 (35%)	<ul style="list-style-type: none"> Competition from the private sector for workers, particularly those with experience 	<ul style="list-style-type: none"> Digitize project data to allow smaller teams to manage state projects Use technology such as drones to complete tasks such as bridge inspections, thereby reducing number of required personnel Adopt lean engineering processes
High school instructors	SDE	273 (21%)	<ul style="list-style-type: none"> Specific vocational training required for some positions; teachers can only teach subjects for which they are qualified 	<ul style="list-style-type: none"> Increase class sizes to allow same number of students to be taught by fewer teachers
Transportation maintainers	CTDOT	240 (25%)	<ul style="list-style-type: none"> Workforce shortages in some areas 	<ul style="list-style-type: none"> Optimize job grades and descriptions to make the best use of employees at all levels Procure additional support for road maintenance services
Mental health assistants	DMHAS	178 (23%)	<ul style="list-style-type: none"> Challenging work environment 	<ul style="list-style-type: none"> Use non-profits to deliver some elements of state mental health services
Eligibility services workers	DSS, DCF, ADS	171 (18%)	<ul style="list-style-type: none"> Changes in skills required for role due to new technology 	<ul style="list-style-type: none"> Implement cross-training across functions Drive increased data-sharing across agencies
State Police troopers	DESPP	128 (14%)	<ul style="list-style-type: none"> Background checks Lengthy academy training required for new troopers 	<ul style="list-style-type: none"> Civilianize CSP administrative functions to lessen burden on troopers Set police academy sizes to meet target trooper numbers

3

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Key State-Wide Opportunities



Key State-Wide Opportunities

Despite Connecticut's strengths in many areas, there are opportunities to serve residents more efficiently and proactively address the risks associated with the upcoming retirement surge. The project team identified hundreds of discrete opportunities across 41 executive agencies; this section highlights the most significant ones. If the State were to implement all of these opportunities, the total financial impact of expense reduction, increased revenue and cost avoidance could total as much as \$600m-\$900m. Though many of these opportunities could be completed quickly – in time to address the retirement surge – and have already been incorporated into the Governor's proposed budget for FY22-23, some opportunities are longer-term.

The opportunities identified cluster into six main themes:

1

Modernize management of the State workforce: improving the way the State conducts hiring, compensates employees, manages overtime and workers' compensation costs, and structures teams could generate \$70m-\$100m of cost savings and improve conditions for state employees. **Page 18**

2

Streamline services and pool resources: streamlining services offered to residents and creating common platforms across agencies could generate \$20m-\$40m of cost savings and avoidance for the State and improve coordination state-wide. **Page 36**

3

Digitize resident services and internal processes: using technology to accelerate and automate could generate \$190m-\$300m of value for the State, largely through cost savings, while improving the quality of services offered. **Page 45**

4

Optimize sourcing: making better use of non-profit and private partnerships could generate \$150m or more in cost savings for the State, and significantly more with legislative change, and maximize overall service quality. **Page 60**

5

Design services to meet residents' needs: improving alignment of state services to residents' needs can generate \$300m in increased revenues and cost savings and improve outcomes for residents. With longer-term reform, this value could be significantly higher. **Page 68**

6

Rationalize State assets: matching the State's asset portfolio to its current needs could create \$50m-\$70m in cost savings and avoidance without accounting for one-time proceeds from selling assets and improve facility and equipment quality. **Page 78**

While many of the opportunities discussed in this section are within the domain of a single agency, several are complex and cross multiple agencies (e.g., managing overtime costs). Implementing these opportunities will require clear accountability, a dedicated and empowered team, and ongoing monitoring to ensure delivery. Thus, the State will need to invest in building a cross-government program/project delivery capability such as a Program Management Office.

To develop the scope of these opportunities, the team engaged with each executive agency in the state government at least once and had more than 12 interactions with the agencies most impacted by the retirement surge or with the greatest efficiency opportunities. The team validated the data by conducting external benchmarking of Connecticut against other states, particularly those in New England, to compare performance and identify best practices that could be applied in Connecticut. The team also consulted with experts outside of government, in Connecticut, across the nation, and internationally.

In addition, the team asked state employees to provide their input on what could drive efficiencies across state government, as well as how to improve government interactions with residents and businesses. The comments indicate the following themes:

HR, Hiring & Career Development – There was a strong sentiment that the State must fill vacancies more quickly than the current process allows. This will be especially important to address with the looming retirement surge. Many

employees also cited the desire for the State to provide more training and recognition to strong performers, while ensuring that promotions are merit-based.

Teleworking – A significant number of responses highlighted the benefits of teleworking during the pandemic. While some respondents raised concern over the lack of ways to monitor whether people were truly working effectively from home, most spoke favorably about their experience working remotely and expressed a strong desire to continue doing so post-pandemic.

Process Improvements – There were frequent mentions of the need to reduce paperwork, eliminate redundant tasks and positions, and streamline reporting (e.g., hiring, Equal Employment Opportunity [EEO], contracting).

Automation and Technology – Workers cited the need for increased automation and digitization of workflows to enable them to focus on more complex transactions and processes. Many workers expressed a desire for more do-it-yourself services online (e.g., DMV, DRS), better data sharing across government, and improved electronic records.

Management Retention – While some workers expressed the belief that the state workforce is “too top heavy,” many more noted the lack of incentive to become a manager. Reasons cited included the lack of pay raises (many employees cited a pay-inversion among managers and the employees they supervise) and recognition.



Opportunity 1: Modernize Management of the State Workforce

The state government is one of Connecticut's largest employers. Changing the way any large organization works is difficult. However, the state government has much less flexibility in managing its workforce than other organizations, particularly when compared to the private sector. This is because the State provides essential services to residents – and therefore must avoid risk – and because it faces regulations from legislation, requirements from the Federal Government, internal policies, and work rules agreed with labor unions. These constraints limit the actions available to the State in managing its workforce.

As a result, the State faces several challenges, including:

- Few tools to reward or incentivize employee performance.
- Inability to nimbly change the size and structure of agencies.
- Tightly defined jobs and roles with high fringe benefit costs, particularly for older employees.
- The need to bargain most changes with labor union leadership.

Though the State's workforce is largely high-performing and dedicated, it has limited mechanisms to reward good performance or sanction poor performance. The fact that many employees work exceptionally hard is a testament to their dedication to the State and its residents, not to the rewards they hope to receive. Beyond on-the-job praise, managers largely lack the tools to reward those who make an exceptional effort in their roles. Discretionary pay (e.g., performance bonuses) is largely non-existent. On the other hand, the process of removing a low-performing employee from a role is complex and can take years. Several managers indicated that they instead look for ways to minimize the impact of a low performer or find a way to move them onto another team.

The State also has difficulty in changing the size and structure of its organizations. State-provided services are defined by legislation, which in some cases also prescribes the nature

of the teams required to perform those roles. Limitations such as the consent decree under which the Department of Children and Families operates or other work rules on staffing ratios can limit the State's ability to change the size of teams. Furthermore, the agreement reached with SEBAC in 2017 prevents the State from eliminating jobs without providing those employees other positions within the State, although this provision will expire by 2022. Until these provisions expire, the State can only reduce the workforce when employees retire.

The job classes occupied by state employees are organized in a relatively rigid classification system inherently designed for order and equity rather than flexibility. The sheer volume of job classes and their associated minimum qualifications is another complicating factor. For example, it is difficult to move employees between agencies, even if there is a role that would be a good fit for an employee (e.g., an accountant working for one agency is difficult to move to another) or an urgent need to fill (e.g., a surge of employees is needed to handle unemployment claims resulting from COVID-19). Combined with work rules agreed with the labor unions (see below), this can lead to underutilization of workers. For example, maintenance employees working in one building may be prohibited from working in the building next door, even if they are qualified to work on the relevant equipment, without a specified process being followed prior to re-assignment. Job classifications can be difficult to create if they do not exist and require significant internal approvals and collective bargaining, creating challenges for agencies to modernize. For example, DMV is digitizing its resident services (and has received positive news coverage for it) but has been unable to hire an IT systems architect – a key role in managing an organization's technology.

The work rules restrictions agreed with the unions and legislation can lead to extremely high fringe benefit costs (e.g., for overtime, vacation leave, workers compensation, and perks). For example, rules for shift scheduling

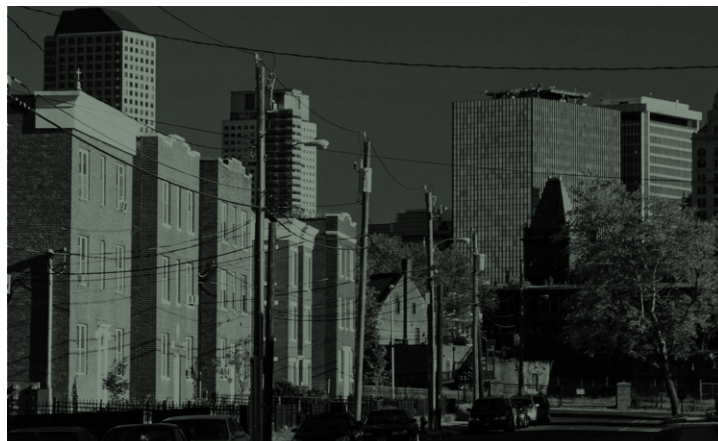
mean that schedulers may have little notice of when an employee is unable to attend their shift and therefore need to resort to mandatory overtime (for which an employee could be paid twice their salary for working more than 37 or 40 hours that week). There is also the opportunity for schedulers in the same bargaining unit to manipulate the process in favor of their friends. OPM, which is responsible for the State's budget, assumes that each new regular employee will receive fringe benefits equal to 50% of their salary without including pension benefits and more than 90% including those benefits. To illustrate, that means a new hire with an annual salary of \$40,000 will receive more than \$77,000 in total compensation. The fringe benefit costs are even higher for employees on hazardous duty.

All the elements of state employees' jobs discussed above are subject to collective bargaining. That means that the State must agree with the labor unions representing state employees before it can make changes to factors like work hours or job responsibilities. The State's labor unions have been effective in advancing state employees' interests, contributing to high levels of unionization (more than 90% of State of Connecticut employees are unionized, compared to 35% of government workers nationwide). Collective bargaining is important in protecting state employees, but the scale and power of Connecticut's unions mean that modernization – which is critical to ensuring that state services meet residents' needs – often happens very slowly, if at all.

The projected retirement surge represents a major workforce planning challenge for the State that requires action. It also presents opportunities for the State to optimize its people processes, either operating within the constraints outlined above or relieving them.

These opportunities include:

- Streamlining the hiring process: **Page 22**
- Improving manager value proposition and retention (i.e., the total set of benefits and offerings that incentivize workers to seek out promotions to managerial positions and existing managers to remain in their roles): **Page 26**
- Managing overtime/absenteeism: **Page 29**
- Improving management of workers' compensation expenses: **Page 32**
- Updating corrections staffing to match current needs: **Page 35**
- Lowering Connecticut State Police (CSP) trooper target and civilianizing administrative functions: **Page 36**
- Optimizing CTECs administration and teacher levels: **Page 37**
- Evaluating employee classifications and using a position-grading system to enable classification of positions in a more uniform manner across bargaining units and agencies. This was previously recommended by the Governor's Council on Women and Girls and has the benefit of ensuring fair compensation and increasing job mobility for employees across state agencies: **Page 38**



Streamline the Hiring Process

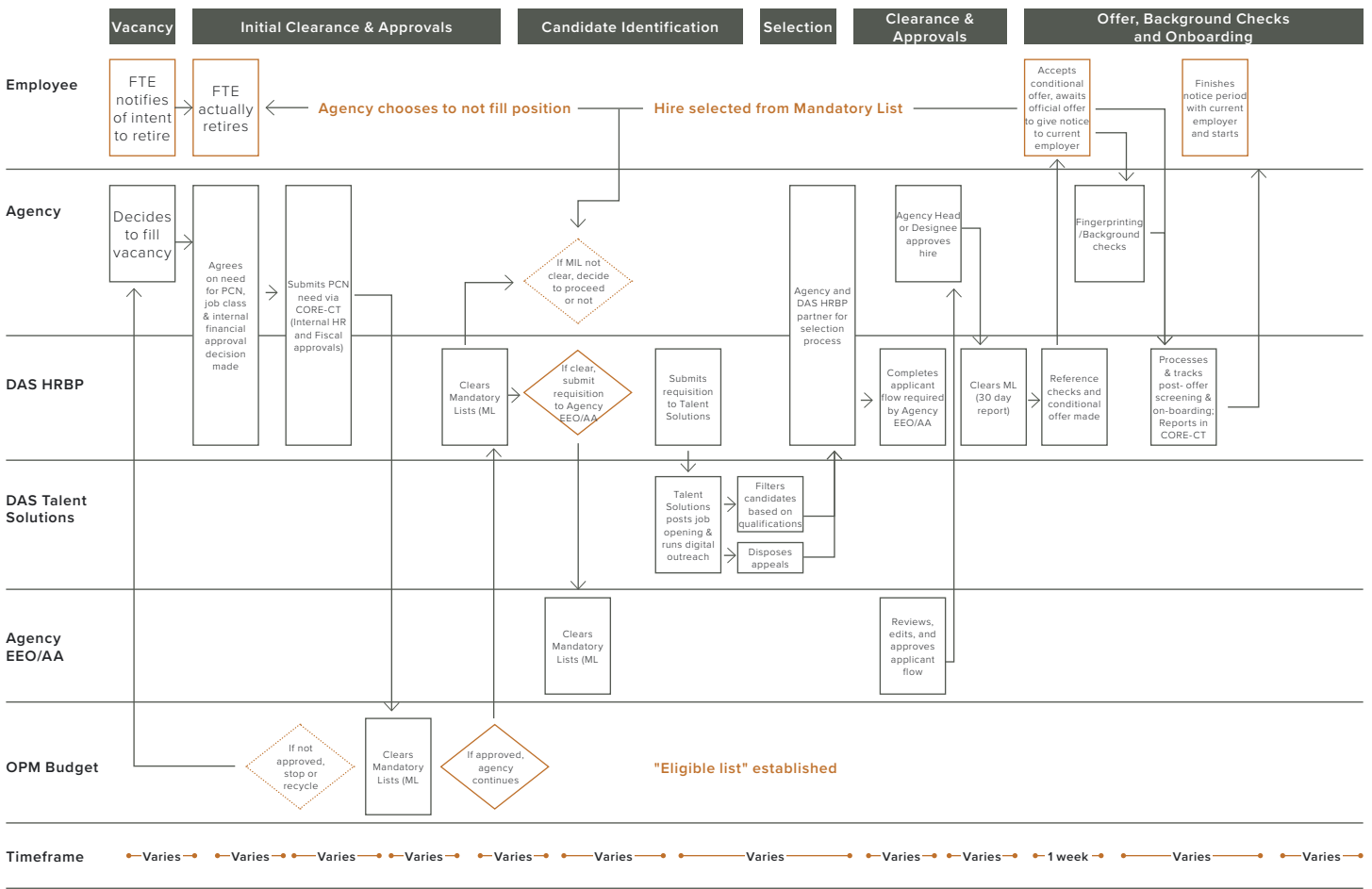
Each year, the State of Connecticut manages the hiring and onboarding of approximately 2,500 new employees. To streamline the process, most HR functions have been centralized within DAS. While the State has made investments in new tools such as Artificial Intelligence (AI)-driven application screening to help reduce the time needed to review and screen candidate applications, this process is still time-consuming and complex: it can take up to 33 weeks to hire a new employee. There are several opportunities to further simplify the hiring process, add flexibility, and shorten time-to-hire.

The pay grades associated with certain job classes should be evaluated to ensure that they are attractive to potential hires. Some agencies note that they often overpay workers who

handle clerical tasks but cannot pay enough to be competitive with private-sector organizations in hiring high-skilled workers. These obstacles hinder agencies' ability to modernize and become more efficient.

Even when agencies can begin hiring, the hiring process remains long – far beyond what would be acceptable in the private sector. While the time from the initial identification of a vacancy to onboarding a new hire can vary dramatically, agency leaders consistently cited an average of at least 5-6 months to complete the process; in many cases, the process takes up to 33 weeks (7-8 months). This already-lengthy process will be further strained as the retirement surge requires the State to make more hires than normal.

Current hiring and onboarding process flow



Average Duration

TOTAL: 33+ weeks

The length of the hiring process creates multiple challenges, including:

- Overburdening remaining employees who must take on the workload of the vacant positions (in addition to their own responsibilities).
- Requiring the use of expensive outside consultants/surge support to handle the work of vacant state workers.
- Requiring the use of Temporary Worker Retirees (TWRs) to return to their old positions to bridge the gap until new hires are brought on.
- Discouraging external talent who are often unable and/or unwilling to go through this lengthy process, making it more difficult to attract these workers from the private sector.

While some obstacles are necessary safeguards for Connecticut employees, residents, and customers (e.g., background checks and security reviews), many bottlenecks exist. The following are key drivers of the unnecessarily lengthy process:

- The refill justification and approval process is cumbersome, ineffective, and outdated.
- The three-step internal approval process should be revised to a single approval step that eliminates excess exchanges of information and additional delaying factors.
- The approval can be perceived by agencies as micromanagement, which hinders their ability to quickly decide what their agencies need; enhanced coordination ahead of the vacancy would create a true partnership.
- Hires are effectively approved at two points because OPM approves the position in an agency's budget and then approves the use of the budgeted funds to hire the position.
- Even after modernization plans are approved, the agencies often find it difficult to obtain approval for the workers needed to implement those initiatives.

Controlling Spending on New Hires

One solution is to use the upcoming turnover of employees to set hard refill figures that allow agencies to fill a specific pre-determined ratio of vacant positions (i.e., Agency A is informed they can only refill three of every four upcoming

vacant positions based on budget constraints). The agency head would then be charged with determining which positions to refill, which to repurpose for better operational functionality, and which to eliminate. This approach would accelerate the hiring and refill process by placing decision-making responsibility and accountability on the agency executive team. It would accelerate hiring timeframes by removing steps in the current refill process while meeting bottom-line reduction of headcount goals. OPM could ensure, with at least monthly reviews, that specific agency budgetary goals were being met. This approach could also provide additional transparency to the agencies while maintaining OPM oversight.

Another solution would be to have updated, allowable job classes approved by OPM as part of program approval processes. Initiative plans would include broadly what jobs or skills are required for implementation, and agencies would not require additional approval for those jobs once the program was approved.

A final solution for all agencies is to have broad approval to hire any job class they have been authorized to use. Technological advances do not evolve in silos, and all agencies are likely to need similar skillsets at different points in time. Rather than individually approving each job class for every agency, providing agencies the autonomy to hire jobs already approved elsewhere gives them the flexibility to be more responsive and execute their initiatives more effectively.

Centralization of Affirmative Action (AA) Processes

Centralizing AA staff and restructuring would also allow for more staff to be assigned to the applicant-flow approval process, which needs to be streamlined. Two other benefits would be the pooling of AA staff to investigate discrimination issues, as volume currently varies widely across agencies, and the use of AA staff to assist proactively in developing more robust recruiting and outreach efforts to create larger and more diverse applicant pools and execute on diversity training programs.

Use of Hiring Pools

For frequently hired job classes (e.g., Transportation Maintainers, Corrections Officers, Healthcare Workers, Motor Vehicle Examiners), the creation of large pools of approved selected candidates for “ready hiring” is critical to improving hiring timeframes. The requirements to offer a position prior to physical examinations and criminal background checks, as dictated by legislation, would need to be factored into the definition of “hire ready” candidates and timing. State-wide postings, without particular locations identified, should be allowed for these types of positions, as contractual transfer lists and other factors can affect final destinations and can result in multiple postings.

State-wide candidate pools, based on candidates’ location preferences, would result in faster hiring processes and would provide for better workforce planning. Relaxing current restrictive statewide posting rules would allow for hiring in areas of anticipated need. Allowing agencies to post for frequently utilized or critical positions in anticipation of future approved vacancies would go a long way toward building applicant pools in anticipation of agency talent needs. Currently, agencies must have an approved vacancy to post for positions, except in very rare cases. Allowing agencies to post earlier would allow them to better meet major future challenges, such as implementing succession plans to address the large number of staff anticipated to retire in the next 18 months.

By shortening the hiring process and posting job openings sooner, the State could operate similarly to the private sector, where departing employees often overlap for a week or two when necessary to properly transition and train new hires. This approach accelerates the new hire’s learning curve, mitigates build-up of backlogs, and reduces the need for consultants and TWRs.

Reexamining Mandatory Lists

Certain steps in the hiring process disincentivize or even block the ability to hire non-State workers. In particular, the Mandatory Lists comprise existing and former State bargaining

unit employees who have the right to accept particular job openings, thereby prohibiting the hiring of fresh external talent. Agency leaders indicate that in many cases, they would rather leave a position vacant than hire from the Mandatory List, as some of the workers on the list are poor fits for the agency and/or role. In addition, many positions must be posted exclusively to State workers for 2 weeks before they can be publicly announced.

Even more burdensome is that the Mandatory List must be cleared twice in the hiring process, meaning that some processes go weeks (or months) into the recruiting and interviewing stages, only for the agency to have to hire someone from the Mandatory List or leave the position vacant. Often, the workers on the Mandatory List only loosely meet the job qualifications, yet once they are on the job, it is difficult to move them from their new position to one which would be a better fit.

These rules, while beneficial to bargaining-unit employees, extend hiring timelines, disincentivize agencies from filling vacant positions, result in excess work for existing employees, and hamper agencies’ ability to hire the best candidates in a timely fashion. As a result, the Mandatory Lists should be eliminated from the hiring process. They can be substituted with “one-shot” job fairs similar to those used by DDS to continue to provide a mechanism for internal workers to apply for other state opportunities for which they are qualified.

Other Ways to Streamline the Process

Finally, several other recommendations, when combined with those presented above, can help reduce the hiring timeline by approximately 17 weeks (50%) – still an unusually long timeline by private-sector standards. These recommendations include:

- Improve clarity regarding hiring process state-wide: Many agencies are not fully aware of when positions can be posted, what exceptions are permitted, or the ability to hire Per Diem workers.
- Incentivize employees to retire on the date they agreed to retire on: Many

employees rescind on their election to retire, complicating the ability to properly conduct accurate workforce planning.

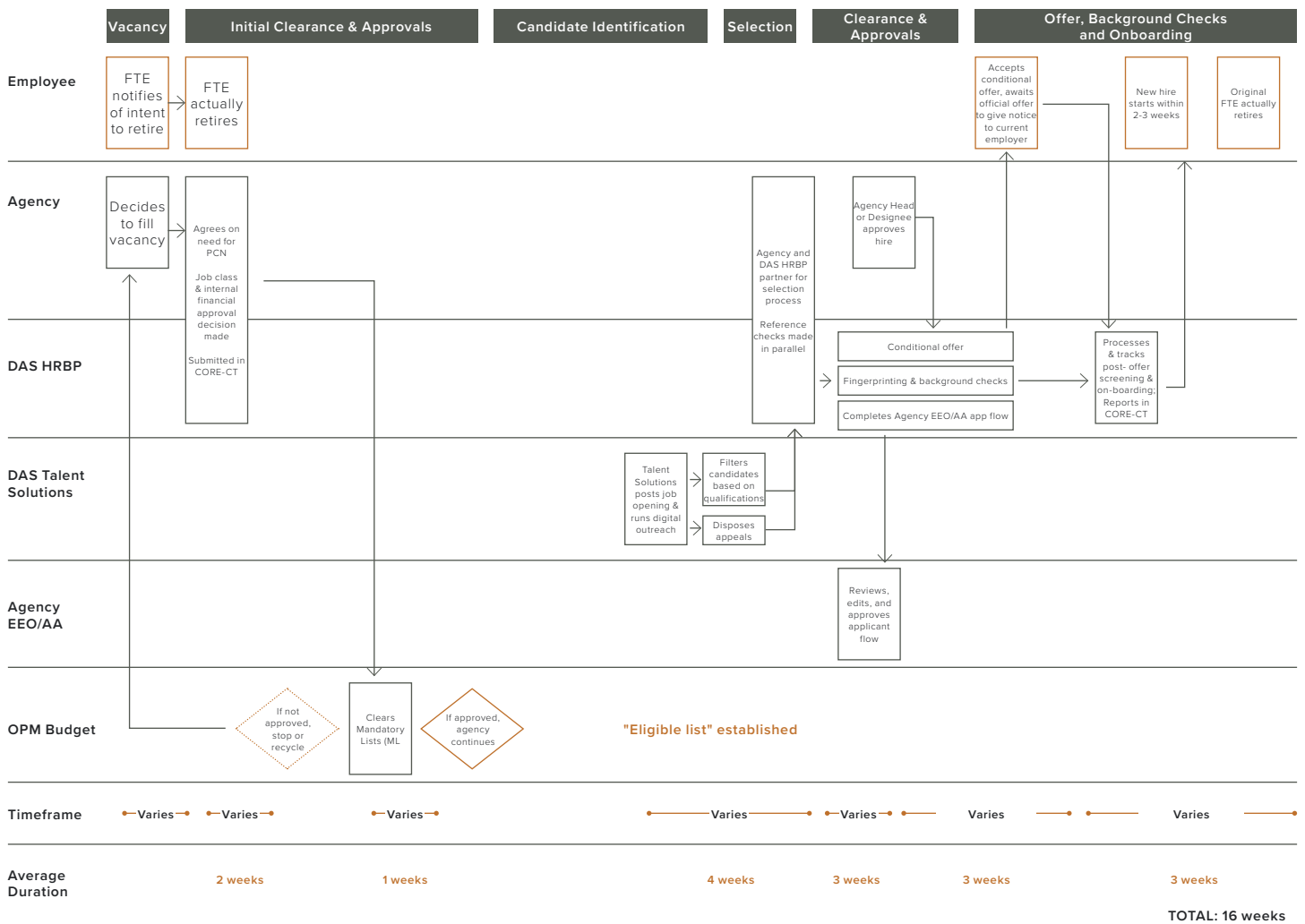
- Institute more stringent deterrents to retiring/ quitting on short-notice or at inconvenient times: While those who leave their jobs suddenly or at inappropriate times will receive a negative mark on their state employment file, nothing precludes agencies from re-hiring those employees. Likewise, employees face no real consequence for retiring at inconvenient times (e.g., a teacher retiring in October).
- Standardize offer-acceptance and start-date

windows – no standard policy on how long new hires can delay offer acceptance and start dates, resulting in increased backlogs or usage of TWRs/consultants.

- Introduce parallel processing steps that do not require sequential completion (e.g., background checks while conditional offers are sent, and EEO/AA workflow is processed).

Following these recommendations would save the State 17 weeks per hire, on average, and millions of dollars on consultants and TWRs.

Recommended future-state hiring and onboarding process flow



Improve Manager Value Proposition and Retention

The State faces a significant “brain drain” at the managerial level. With 45% of managers eligible to retire by July 1, 2022, the lack of experienced leadership could become problematic. Although a few agencies are currently top-heavy and could benefit from attrition, the risk of losing managers’ knowledge and expertise in leading operations will impact the State in the years to come.

There is little incentive for anyone to become a manager in a state agency, as they lose the benefits of being part of a bargaining unit without significant gain in return. In fact, the value proposition has become so unbalanced that dozens of managers continue to transition out of manager roles and into bargaining unit positions, a phenomenon rarely seen elsewhere in the public or private sectors. Indeed, the statutory definition of “Manager” per the State Employee Relations Act strictly limits who can be excluded from a bargaining unit. This has led to many employees who were formerly designated as managers to accrete into existing bargaining

units or organize new units, e.g., the DOC Deputy Wardens.

This high rate of employees opting to be included in bargaining units rather than designated as managers is due to several factors, most notably the low compensation managers often receive relative to the private sector and their subordinate bargaining unit employees. For example, within CTDOT, an Assistant Chief Engineer earns less than almost everyone below them in the immediate reporting chain, including employees as many as four reporting levels lower. Other agencies cite examples of bargaining unit employees making as much as 40% more than their supervisors. Understandably, many employees openly state that they would have to take a pay cut if promoted, so they actively avoid earning or seeking out promotions.

Four additional key factors lead to the poor value proposition for the State’s managers:

Factors leading to poor value proposition for managers



Effective base pay reductions

Many managers have seen comp outpaced by inflation, while some earn less in base pay than bargaining level employees



Reduced earning potential

Lack of overtime means loss of significant earnings upside



More hours and stress

Increased hours and accountability without commensurate rewards



Less job security

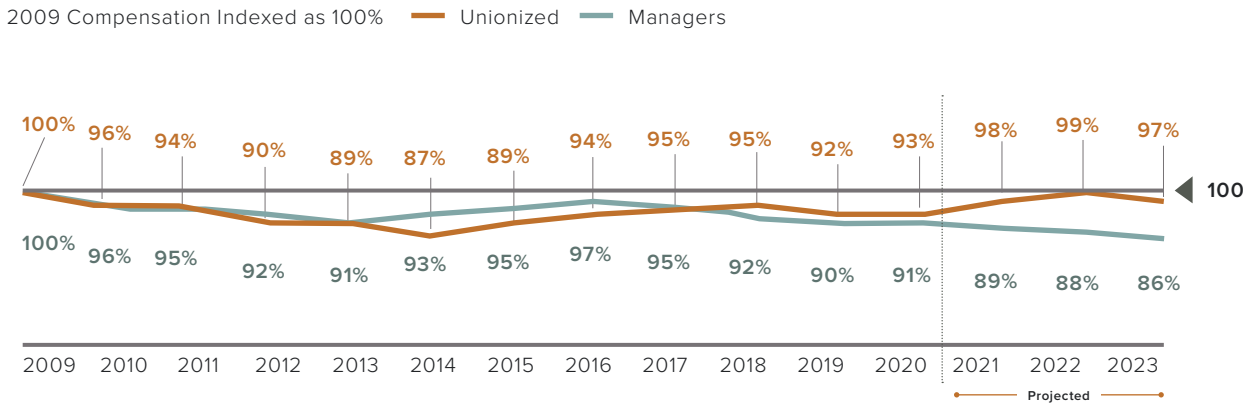
Lack of bargaining agreements means no protection from layoffs



Lack of ancillary benefits

Inferior non-cash benefits (e.g., telework, per diems/stipends, etc.) and higher costs for similar healthcare

Indexed base compensation for union employees and managers (inflation adjusted)



Using DAS more conservative data, managers' still see relative premium reduction

Unionized employees received additional COLAs plus lump sums (not included in analysis) not received by management

Managers given one PARS since 2009 vs. five for unionized workers

The following recommendations would remedy current inequities:

- One-time salary increases for managers.**
 The last positive adjustment to managers' pay was a 3.5% increase in 2019 – the first since 2015 – which was reported to have cost the State \$4.5m. Because bargaining unit employees received three separate adjustments since the last managerial increase, the State may also want to look at utilizing the current year's \$70m estimated budget surplus (as of January) to retroactively implement an increase for the current fiscal year. In addition, the State can utilize longstanding DAS compensation procedures (e.g., "the Rule of 34") to address inequities.
- Assist and encourage bargaining unit employees to seek internal promotions into currently vacant managerial positions.** To do this, the State should consider increasing the maximum salary ranges by 5% to address current compression issues that result in promoted employees being unable to receive the normal full minimum 5% increase for the promotion. This is because current lower-level salaries are near the maximum of that of the managerial position

that candidates are seeking. This situation, coupled with the uncertainty of future managerial raises, discourages talented candidates from applying for or accepting promotions to management.

- Match managers' health insurance premium costs to bargaining unit employees.** Current provisions require managers to pay more for healthcare, further disincentivizing promotions.

To prevent future inequities for managers, the State should consider instituting one or several of the measures below. These should be matched with increasing expectations for managers – in exchange for increased compensation, managers should be willing to undergo more rigorous performance reviews that continually raise performance goals.

- Pay increases should match those of bargaining unit employees.** A DAS item that addresses Confidential Clerical salaries (Originally Item NO. 1624 -E, which was later superseded by Item No. 1937 – E) should be enacted and applied to managers to make this happen.
- Legislative changes to the Connecticut General Statutes for managerial salaries.**

Based on the process involved, this may be more cumbersome than the option above, but would allow a one-time shift in the compensation for managers.




- **Legislative changes to the definition of a “manager.”** The current definition that must be met to demonstrate that a classification is managerial is very difficult to meet, which allows for current managers to petition to join bargaining units.
- **Investment in managers by providing meaningful leadership and career development programs.** Tuition reimbursement funding for managers needs to be restored, increased, and consistently budgeted, while mentorship programs should be implemented to provide agency commissioners with the ability to train the State’s next generation of leaders.
- **Telework opportunities.** Remote work should be continued in areas where telework has proven successful. In addition to improving work-life balance for employees, it will also make the State more competitive with private-sector employers who offer more telework flexibility.
- **A review of the current Performance Assessment and Recognition System (PARS).** The evaluation process, as it stands, is not universally effective in ensuring performance accountability processes for supervising managers. This system could be utilized to reward managers with additional compensation based on superior performance and to better identify and

sanction poor performers.

- **Improved intangibles.** Increased recognition of top performers and visibility with leadership is a positive step forward. While more equitable pay for managers should be the primary focus, external surveys indicate that most employees agree that the quality of their company’s recognition program affects their job performance. However, nearly 90% of such programs focus primarily on tenure. Beyond boosting morale, increased recognition can also lead to lower turnover and higher productivity. The State should implement a combination of the following rewards through a structured recognition program, supported by clear, achievable, and objective metrics:
 - Non-cash awards such as peer-review “kudos,” additional paid-time off or sabbaticals, small gift cards, uniform decals, and symbolic tokens
 - Career-focused rewards, including tuition reimbursement, increased learning and development opportunities (e.g., seminars, industry conferences, LinkedIn Learning), earlier promotions, and titles more in line with the private sector for improved “signaling” of employees’ abilities
 - Recognition from agency and State leadership, spanning quarterly “Lunch with Leadership” events, annual awards (e.g., Federal Government’s annual event known as “The Sammies”)



Numerous opportunities exist to improve managers' retention beyond pay alone

	Rationale	Possible actions	Additional considerations
 Rewards	<ul style="list-style-type: none"> Non-monetary rewards can remain with employees and remind them of their accomplishments and the recognition it earned 	<ul style="list-style-type: none"> Agency swag or symbolic tokens Additional paid time off Small gift cards Peer-earned "kudos" Educational reimbursement (for worker and/or family) Uniform decals (where applicable) 	<ul style="list-style-type: none"> Regulatory limits on non-cash rewards
 Recognition	<ul style="list-style-type: none"> 69% of employees would work harder if they felt their efforts were better appreciated 31% lower voluntary turnover at companies effective at driving employee engagement¹ 	<ul style="list-style-type: none"> Public announcement of top managers (e.g., written comms, visual photo displays on websites and at office entry points) Lunch / dinner with agency leadership Top performers statewide invited to outing with Governor Lamont Earlier promotions, new titles 	<ul style="list-style-type: none"> Important to set attainable goals and acknowledge employees often
 Intangibles	<ul style="list-style-type: none"> 69% of employees would work harder if they felt their efforts were better appreciated 31% lower voluntary turnover at companies effective at driving employee engagement¹ 	<ul style="list-style-type: none"> Flexible work locations & schedules Supplemental training/leadership & development programs (including reskilling) Opt-in internship programs to reduce burden of small tasks while also providing mentoring opportunities More discretion (e.g., hiring decisions, budget control) Access to family and financial planning workshops 	<ul style="list-style-type: none"> Also helps compete for young talent and versus private sector Antiquated sentiment pre-COVID prevented managers from working from home

Manage Overtime / Absenteeism

Connecticut spends more on overtime than its peer states. High spending on overtime (OT) is a major driver of the State's high fringe benefit costs (see above). Because of the link between vacant positions and overtime (existing workers often need to work extra hours to cover for vacant positions), the upcoming retirement surge could drive these high overtime costs even higher. Addressing these costs must be a key objective for the State.

The State spends more than \$250m per fiscal year on OT. The bulk of this spend (~80%) is derived from four agencies: \$80m from DOC; \$56m from the Department of Mental Health and Addiction Services (DMHAS); \$39m from DDS; and \$29m from DESPP.

These agencies largely provide 24/7 services to residents across the State, and therefore should be expected to be among the largest drivers of OT across state government. In addition to around-the-clock services, these agencies also

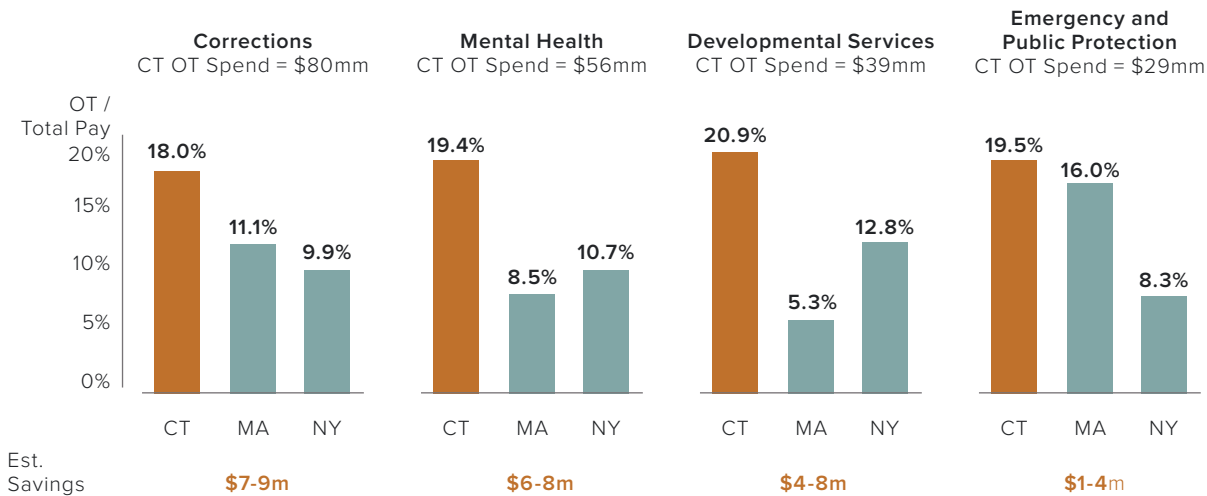
require a high degree of physical interaction with residents, many of whom may require physical assistance or who are physically and/or mentally unstable. As a result, these employees are susceptible to both physical injuries and mental fatigue.

There are four primary drivers of OT usage across state agencies:

- Vacancies
- Absenteeism
- Suboptimal scheduling
- Statutes and labor regulations

Though the State's goal should not be to fully eliminate OT (some OT is good due to its inevitability as need for workers sometimes varies and because it helps contribute to flexible workforce planning), the State must bring these costs more in line with neighboring states, such as Massachusetts and New York, where the levels of overtime for the same types of services are lower.

Overtime spend by state across major service categories



Not all OT is equal, nor is it all costly. First, OT costs can be straight-pay (standard wage rates), time-and-a-half (1.5x wages), double OT (2x wages) and, on rare occasions, more than double OT. In addition, OT is a valuable tool in handling unpredictable spikes in labor demand, where the alternative is to conduct a recruitment and training process for new hires who also accrue non-salary benefits and who may not be needed for FTE hours. Therefore, where the State can use straight-time OT to meet short-term demand spikes, OT should be prioritized over filling full-time positions. Hiring more part-time workers, including recent retirees, is another option for the State to consider if it avoids time-and-a-half or double OT.

Closing vacancies

One department with significant OT savings potential from increasing the number of staff is the Connecticut State Police. With an OT spend of nearly \$30m, an additional 100-200 troopers could result in declines of \$5m-\$10m in OT expenses while decreasing stress on the force. Moreover, 3,600 non-pensionable OT shifts went unfilled last fiscal year. The State receives

an additional portion of this pay, offsetting part of the overtime cost.

Where OT is caused by a high level of vacancies, the State should consider more broadly implementing best practices at DDS. By hosting “one-shot” job fairs and avoiding the Mandatory List clearance, the agency was able to continue to offer jobs – first to internally eligible employees – while shortening their hiring timelines. Doing so resulted in a 10% reduction in OT expenses year-over-year and boosted employee morale.

For agencies that require many workers with similar educational qualifications and skills to fill vacancies, the State should conduct more systematic recruitment and onboarding. Nurses and IT personnel are difficult-to-replace positions where large numbers of high-quality candidates can be found in targeted locations (e.g., campus recruiting). However, given that agencies find it difficult to prevent these high-demand employees from being poached by the private sector or other State agencies, the State should prevent new hires from transferring to

Note: Total payroll includes full-time salary, part-time salary, other compensation and overtime
Source: State comptroller's office (CT, 2020; NY, 2018; MA, 2018), Office of Civil Service Commission (NJ, 2018)

agencies for a period after their hire without mutual agreement between the two agencies. This change may require bargaining.

Reducing absenteeism

Absenteeism is when an employee is unable to work and their time away from work was not planned, including sick leave, family leave, and the need to take workers' compensation to recovery from a workplace injury. Absenteeism rates for Connecticut state employees are high relative to the private sector and to other states' governments.

Additional investment in detecting and investigating fraudulent use of leave time would result in a significant decline in OT. Similarly, case management can help those employees who are injured recover faster and return to work sooner. For example, DOC has found that when wardens or captains check in on workers out on workers' compensation leave, those workers tend to return more quickly.

Likewise, additional training is needed to ensure that the limited number of managers and their bargaining unit staff are aware of which documents and information can be requested to validate leave. To protect both employees and managers, external third parties, such as the Third Party Administrator (TPA) for the workers' compensation fund, could take on this responsibility and therefore avoid conflicts of interest (see next section for more detail on workers' compensation). While centralizing HR was intended to assist agencies with monitoring leave-related issues, the TPA would be accountable for reducing absenteeism and unplanned leave with more aggressive resolution, enhanced data analytic capabilities, and best-practices from a broader body of work.

Family leave and sick leave are significant drivers of OT. Without a TPA, managers feel even less empowered to investigate abuse of well-intended programs. While block family leave enables management to properly plan for workforce fluctuations, intermittent FMLA causes short-term mandatory OT spikes. In addition, some employees submit requests for paid family leave, which leads to a reduction

in their expected caseload. However, once the leave is approved, some workers do not take leave yet maintain their reduced caseloads, effectively shifting their work to colleagues who subsequently may suffer from burn-out. This situation leads to additional time off requests and results in more OT needs from an already strained staff, creating a vicious circle. Many managers also observe a tendency of some workers to take sick leave around weekends or single days off, unnecessarily driving additional overtime needs without good cause.

One solution is to leverage advanced data analytics to detect patterns of abuse of benefits. For example, there are instances where employees state that they require irregular shift times, yet ad hoc reviews of past schedules indicate that those employees frequently work the hours they previously deemed unworkable, thereby earning OT for what should be regularly scheduled shifts. Similarly, a small number of workers abuse the system and consistently call out on days that would provide extended weekends, creating a burden on the others. Therefore, the State should consider a central OT oversight function or external TPA-like party that can assist those agencies that lack the capability to monitor their own OT usage. Moreover, putting this responsibility into the hands of an objective external party alleviates potential conflict of interest from members of the same collective bargaining group overseeing each other's overtime.

Expanding the role of the State's TPA to include family leave and OT, along with workers' compensation, would provide a dedicated team capable of using advanced analytics and AI to identify fraudulent behavior across state agencies. This would also facilitate the ability to ask for second medical opinions, thereby minimizing abuse from clinicians who are more willing to provide medical letters without sufficient proof of examination or diagnosis.

Scheduling and other factors

Suboptimal scheduling is caused by poor behavior, lack of data, and the rigidity of existing statutes and labor rules. Some 24/7 agencies are staffed by employees on 35-hour work

weeks. Given that those employees work 7-hour days, 3 hours of OT or overlapping hours are required every day.

Examples of the statutes and labor rules that drive unnecessary OT and absenteeism include:

- DESPP: rules state that once a labor union worker is used for a task, that job class must continue to be used for that task moving forward. However, many tasks could be shifted to lower-cost employees or to local authorities. For example, rules require the use of State Police to provide security for mixed martial arts (MMA) fights, oversee fireworks displays and acting as greeters at events, all roles which could be done by other workers.
- DCF: Employees who take time off early in their pay period can then work double shifts in the back half, which counts as OT. This

drives up their calculated average wages, which their overtime in subsequent periods is based.

- DCF: 10-day work patterns result in staff frequently requesting a second two-plus-day consecutive break within each pay period. Moving to a 9-day pay period would discourage intermittent absenteeism.
- DOC: Relief factors exclude paid time off, thereby calculating too few employees needed to actually cover shifts without OT usage.
- DMHAS: Scheduling, including overtime distribution, is managed by employees in the same bargaining unit receiving the overtime. Additionally, in large inpatient facilities schedules and scheduling would benefit from modernization and automation.

Making changes to many of these rules requires bargaining with labor unions.



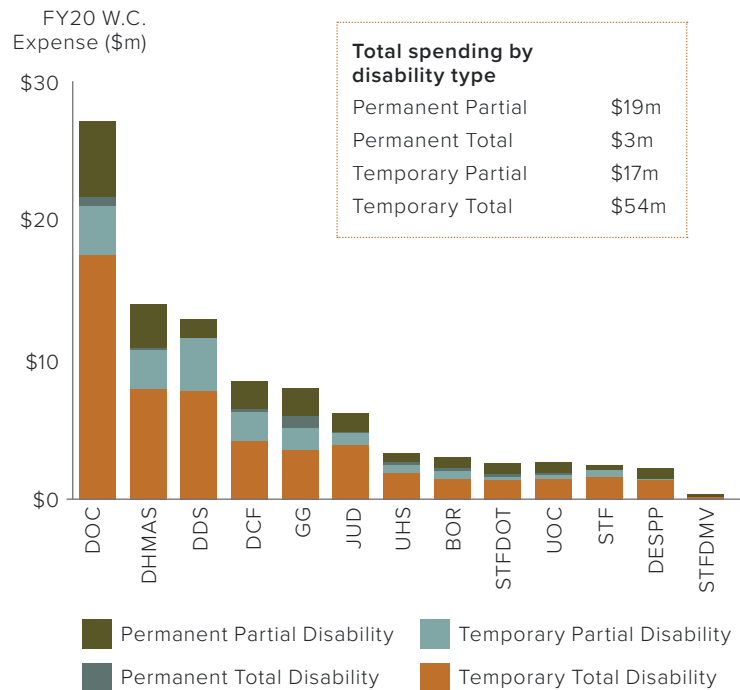
Worker's Compensation

The state of Connecticut spends approximately \$100m annually on workers' compensation claims, primarily driven by four agencies: DOC, DDS, DMHAS, and DCF. It is unsurprising that these agencies would have the highest claims,

given the hazardous nature of their work. However, a review of Connecticut workers' compensation benefits compared to other states reveals that Connecticut is far more generous than other states.

Workers' compensation benefits and spend by disability type

	Maximum duration of temporary partial disability	Maximum duration of temporary total disability
CT	Life	Life
MA	156 weeks	260 weeks
NJ	400 weeks	450 weeks
NY	< 525 weeks	< 525 weeks



Given these more statutorily generous benefits, it is understandable that Connecticut has a higher frequency of claims than peer states that have similar weather, demographics, and nature of work. There are several changes the State can implement to reduce workers' compensation costs, including:

Increasing accountability for workers' compensation claims

Establishing a Workers' Compensation/absenteeism/overtime "Czar" would ensure that there is a single office in the State monitoring these costs, which are larger than most agency budgets. All three categories are interrelated and have common causes and challenges (e.g., suboptimal scheduling, confusion over who holds authority to evaluate claims, grey or fraudulent behavior). By assigning an individual to lead organizational and cultural transformation who can be held accountable to drive change, Connecticut can begin to address the issues. Many personnel best practices should be scaled across agencies and become more standardized (e.g., AI analytics on absenteeism).

Limit the duration of claims

One major factor in Connecticut's costs being higher than peer states is that Connecticut allows workers to receive lifetime benefits for temporary (partial and total) disability. Given the definition of "temporary" disability, the State should match its peers and implement common-sense reform by time-limiting these benefits, which constitute 76% of the total workers' compensation expenses. Those workers who continue to indicate disability should be examined for eligibility for permanent disability or managed appropriately.

To achieve this, the State should:

- Revise Worker's Compensation Statute to limit total disability maximum from current unlimited period to equal Massachusetts' maximum of 256 weeks (5 years).
- Revise Worker's Compensation Statute 31-308 to limit partial disability maximum from current maximum of 520 weeks (10 years) to equal Massachusetts' maximum of 156 weeks (3 years).
- Limit temporary disability from current no-maximum duration to 156 weeks for partial and 260 weeks total, equal to Massachusetts. Connecticut currently pays

~\$13m per year in temporary indemnity benefits beyond these recommended caps. Given that these claims are temporary by name, lifetime benefits should not be permitted.

Improve case management and return-to-work programs

Case management should be viewed as an investment in employees' return to health, not simply as a watchdog against wrongdoing, and should be used more systematically. Today, case management of disability claims is relatively ad hoc, yet injured workers return to work more quickly when case managers begin to follow up.

The State should create more robust return-to-work programs, including an option to return to light-duty roles. Where it is not possible to find such a role internally, the State should seek light-duty roles within a similar distance and work environment at other agencies where employees can contribute.

Improve management of workers' compensation costs

An annual budget should be set for the Attorney General (AG) to strategically settle cases as full and final for a lump sum on projected high-cost and long-duration cases. In FY20, \$12m (10%+) of total workers' compensation expenses were for claims on incidents that happened in 2005 or earlier. In many instances, the State could potentially save money by providing a lump sum settlement offer to some beneficiaries who may prefer to take a discounted upfront payment.

The State should also increase the role and accountability of the TPA. The State should receive annual or quarterly spend benchmarks by agency and/or work function and FTE across other peer states. In addition, the TPAs should increase usage of advanced analytics,

In order to maintain transparency on workers' compensation costs, each agency's specific appropriations to cover these costs should remain separate appropriations.

Preventing injury and better supporting employees' return to work

Increased attention and resources are needed on employee safety and injury prevention. Teleworking may assist in incident reductions, but incidents should be investigated and reported centrally to help identify common sources of injuries (e.g., specific areas, work hours). This can help shape safety training, investment in equipment or facility upgrades, and wellness programs. The State can implement programs that incentivize managers who reduce incidents.

The State should use formularies to control outliers and cap reimbursements, while conducting medical bill reviews to minimize rack-rate payments. The TPA can be an instrument for this. Likewise, the State should partner with Medicaid programs to establish Preferred Drug Lists and leverage evidence-based drug review process. A review of data and results for network-approved medical providers should be conducted to determine effectiveness of treatment in relation to length of absence, cost, and the need for repeated procedures on the same body parts (i.e., repeated surgical procedures because the first one did not produce expected results). Ineffective providers should be removed from the network.

The State should also standardize compensation coverage and exclude ancillary benefits (e.g., uniforms, per diem / meals, work boots) as injured workers do not need these funds that are meant to reimburse them for certain work activities and/or requirements.



Return Corrections Staffing to Previous Levels

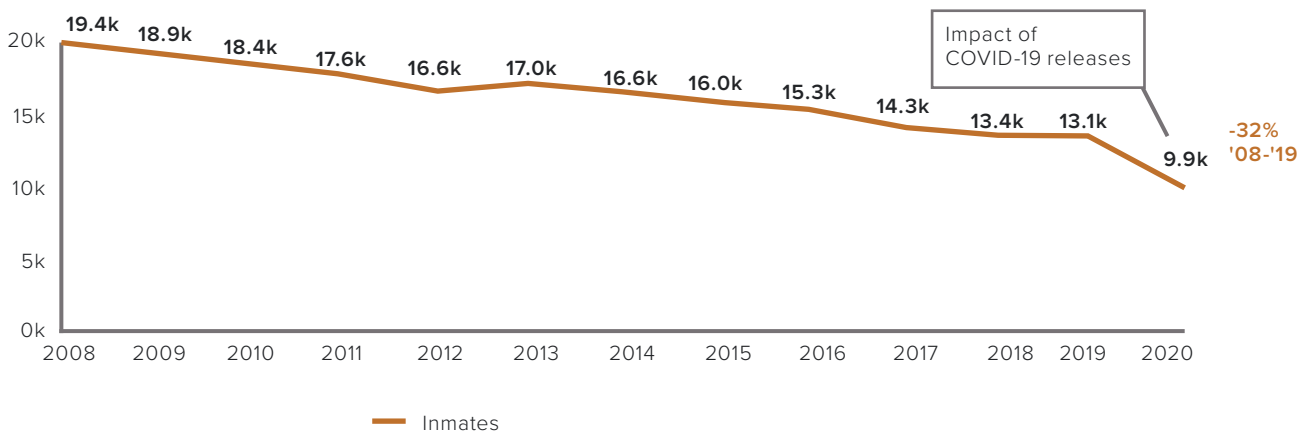
Connecticut’s prison population has decreased over the last 5 years and has been further reduced in size due to COVID-19. In 2015, the prison population was more than 15,000; it is now fewer than 10,000 inmates (a 40% decrease). The size of the imprisoned population is the primary driver of cost for the agency because it sets the required staffing, facilities, and services required to house and serve the inmate population. While Connecticut’s prison population has decreased significantly, the State’s number of authorized corrections officer positions does not reflect the reduction in

inmate population. In 2010, the number of filled positions was 5,878; as of 2018 the number of filled positions is 5,753 (a decrease of 2%).

DOC has approximately 5,946 employees. Most of the agency’s employees work in custody (>75%), health and addiction services (9%), and programs and treatment services (6%). 968 employees are currently eligible for retirement in 2022. The high levels of current staffing relative to the inmate population create an opportunity for the State to avoid backfilling all of the positions that become vacant.

Prison population has declined over the past decade, to 9,946 at end of 2020

DOC inmates and authorized COs



The agency has an inmate-to-correctional officer (CO) staffing ratio of 2.8 as of 2020 – it should be noted that this is not the same figure as the 2.8 cited in the exhibit above, which indicates the 2008 ratio of inmates to all staff, including those that are not correctional officers. The 2020 ratio is reflective of the policy changes enacted due to COVID-19 to prevent over-populating prisons. Prior to the pandemic, the State had a staffing ratio of 3.6 inmates per CO. This is comparable to the national average of 4.0

inmates per CO. By returning to a pre-COVID-19 staffing ratio of 3.6 (still lower than the national average), the State can save tens of millions in annual personnel costs while still ensuring staff and inmate safety.

Changing staffing levels to be more in line with neighboring states and the national average could face several challenges. Staffing ratios are strongly tied to labor contracts and infrastructure requirements. For example, facilities with lower

Note: W.C. expense includes medical and indemnity spend
Source: DAS Workers Compensation Unit

security levels may be designed to have more common areas in which minimal CO supervision is required. Facilities housing higher security levels (e.g., level 4 or 5) may be designed to limit the number of inmates in a common area, requiring additional CO for supervision due to

infrastructure constraints. While infrastructure influences CO staffing, any changes in ratios will be challenged by labor contracts. The Department of Corrections will need to consider these factors and others when determining which facilities to close.

Optimal Connecticut State Police (CSP) Troopers and Civilianizing Administrative Functions

145 personnel in the Connecticut State Police are eligible for retirement, creating a potential strain on the CSP. Over the past 3 years, the total number of active-duty state troopers has decreased from 1,100 to 923. Connecticut is one of the few states in the country where state troopers also function as county police because the State lacks traditional county-level policing (e.g., a county sheriff). Compared to peer states, such as MA, MD, NY, and RI, the State's trooper level is low relative to their population and highway miles, as demonstrated below:

- Connecticut staffs 2.7 protective personnel for every 10,000 residents, compared to the neighboring states' average of 5.1 personnel.
- Connecticut staffs 3.9 protective personnel for every 100 highway miles, compared to neighboring states' average of 7.1 personnel.
- Primary law enforcement for 79 out of 169 towns, including 53 Resident Trooper towns.

The State should focus on building staffing numbers to a sustainable level and reducing administrative and non-police duties currently performed by CSP personnel. This will allow the State to make better use of its Police and reduce overtime costs (see previous section).

The State should strive to increase the number of CSP officers to a level near prior staffing levels, which is less than the maximum authorized by legislation, but a significant increase over current staffing levels. Currently, the CSP uses troopers for administrative functions due to work rules and limited administrative support. Civilianizing these administrative roles will allow the CSP to

increase capacity for patrolling services with less effort than additional academy classes. Note that CSP troopers serve as local police forces for a number of unincorporated towns without their own forces.

To reach this optimal number of CSP troopers, the State should increase police academy class sizes. In recent years, the agency has experienced challenges in retaining cadets, demonstrating the need for advanced planning in addressing low trooper levels. Currently, the academy adds approximately 80-100 new troopers to their active roster after candidates complete a nine-month program. Given the expected number of dropouts and the complexity in the academy's structure, the agency should increase academy class sizes to mitigate potential retirement and service continuity risks to CSP.

Civilianizing non-enforcement and administrative activities (e.g., clerical work) will enable increased trooper capacity from the same number employees. Examples of duties that can be civilianized include managing the sex offender registry, overseeing fingerprinting services, fleet administrative services, and infrastructure planning and management services. Some duties could be transferred to other agencies better suited for them, such as transferring oversight of weigh stations and management of fleet garages to the Department of Transportation. In the long run, alternative policing models that deploy other types of personnel instead of armed protective officers (e.g., sending social or mental health workers to respond to some crises), can help increase trooper capacity and improve outcomes.

Optimize CTECs Administrative and Teacher Levels

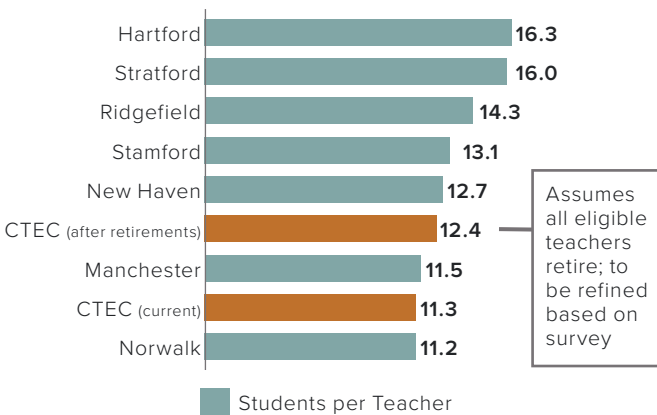
Most of the State Department of Education’s (SDE) employees work in the Connecticut Technical High School System (CTTHS), (also called Connecticut Technical Education and Career System, or CTECs) and its associated and administrative services. The CTECs system provides vocational education to high school students interested in pursuing careers in fields ranging from metallurgy to biotechnology, through a system of 20 schools. Unlike most states, these schools are funded and operated by the Connecticut government, where vocational education is operated on a municipal

or regional basis, even if funded by the State.

Currently, the State’s CTECs student-to-instructor ratio is 11.3 students per instructor, which is a low number of students per instructor compared to other secondary schools in Connecticut or vocational educational systems in other states. If all retirement-eligible CTECs instructors retire, this ratio would rise to 12.4, which would be similar to other Connecticut school districts of similar size (e.g., Hartford, Stratford, Ridgefield, and Stamford have ratios greater than 13 students per instructor).

CTEC is well positioned to accept instructor retirements; after retirements student/teacher ratios would be more in line with peers

Student/teacher ratios for Connecticut districts



To accept instructor retirements without rehiring CTEC should consider sharing instructors

Opportunity	Considerations
Share instructors with municipalities in same geography	Financial arrangements with municipalities would be complex; CTEC teachers are state employees
Share instructors among similar programs	Program offerings vary by location; with inducing teachers to travel to nearby schools



CTECs could absorb many instructor retirements and continue to provide high-quality education to students. There are several ways that the system could manage any resulting capacity challenges. For example, the State can share vocational instructors between CTECs schools where they are close to one another.

Another approach CTECs can potentially leverage is to share non-vocational instructors (e.g., English teachers) with the municipalities near where a CTECs school is located. Sharing instructors across municipalities will be complex, given that CTECs instructors are state employees. The agency will need to coordinate closely with local districts to ensure program continuity.

The State also has an opportunity to restructure CTECs' administrative functions through further centralization. Administrative employees are >10% of CTECs headcount, compared to peer districts of similar size, where administrators represent <5%. This does not include the administrative support provided by the State Department of Education's central office, which would further increase the 10% figure.

Currently, administrative services are performed on a school-by-school basis; for example, many schools have their own business or financial officers. CTECs should centralize administrative services at a "district" rather than housing them in individual schools.

Opportunity 2: Streamline Services and Pool Resources

Connecticut's 66 executive branch agencies provide a wide range of unique services to the State's residents, from straightforward tasks such as repairing potholes to intensive medical care. The breadth of services often results in overlapping service provision. Separate agencies sometimes offer similar services, such as nutritional support. Residents will interact regularly with multiple agencies, even if they are not directly receiving services from them, such as receiving a driver's license from the DMV and driving on roads maintained by CTDOT.

In addition to resident-facing services, there are numerous middle- and back-office functions that are crucial to maintaining day-to-day agency operations that have historically existed separately in each agency. Examples of these functions include human resources (HR), information technology (IT), payroll process, facility management, and finance – collectively, they are commonly referred to as shared services.

The State has opportunities to consolidate similar types of work, whether resident-facing or internal. This includes consolidating and/or jointly administering similar services across departments and streamlining duplicative

processes in State shared-services operations. In some cases, there are opportunities to bring together departments to mitigate the risk of retirements and deliver services to residents more efficiently.

The key streamlining opportunities for the State are to:

- Integrate agencies with similar missions: **Page 39**
- Further centralize shared services, such as payroll: **Page 41**
- Streamline similar human service programs and support functions: **Page 43**
- Strengthen coordination of human service operations via a central office: **Page 45**

When evaluating such opportunities, it is critical to consider the balance between the benefits of streamlining and the need for agency-specific activities and services. While there is often overlap in services offered and potential to simplify residents' experiences, the State must be able to cater effectively to residents with different sets of needs. The expertise of individual agencies should not be minimized in any efforts to achieve greater efficiency across agencies.

Furthermore, due to labor union agreements, it can be challenging to make large-scale changes to the structure of departments or agencies. Job functions are often pre-prescribed, with little flexibility compared to what might be seen in

the private sector. Any major structural changes should be evaluated accordingly through the lens of labor agreements to ensure that they are feasible and that they will realize legitimate efficiencies in service delivery and cost savings.



Integrate Agencies with Similar Missions

The State of Connecticut has a large number of executive offices, departments, and agencies that changes as new entities are created or disbanded. The State currently has 66 entities in its executive branch, including hospitals, universities, and parks. This number is lower than peer states such as Massachusetts (104) and New York (100), but Connecticut stands out in that most of these agencies report individually to the State's Chief Operating Officer (COO), whereas in Massachusetts, similar agencies report into secretaries. New York's constitution limits the number of full civil departments. By reporting into a narrower set of secretaries who then report directly to the Governor, Massachusetts can more easily synchronize

policy for agencies with overlapping customers or missions.

Integrating similar agencies would provide the State the opportunity to gain administrative efficiencies, clarify accountabilities, and better synchronize policy-decisions while also delivering better services and experience for residents. In addition, integrating agencies with similar missions and service overlap could mitigate risks to service continuity posed by the 2022 retirement surge.

Beyond these specific benefits, agency integration could help simplify agencies' reporting to the COO and Governor. As noted

above, Connecticut's agency reporting structure is unique relative to Massachusetts and New York in that all 66 of its executive branch agencies report individually to the COO. In Massachusetts, only nine secretaries report directly to the Governor – the Department of Transportation and eight Executive Offices, each of which oversees a group of agencies. In New York, 20 agencies report to the Governor, a figure dictated by its constitution. While the opportunities discussed above would not dramatically alter Connecticut's existing structure, there is room for the State to explore coordinating additional functions across agencies and streamline reporting. One

such area the State could explore is vocational services, which are currently provided across CTDOL, various human services agencies such as Aging and Disability Services (ADS) and DDS, and educational agencies such as OHE. While the ongoing P20 WIN project represents a first step towards providing holistic vocational support over the course of residents' lives, combining these services within a single agency could help coordinate the State's strategy, streamline the resident experience, and lead to improved outcomes for residents. The following sections address this topic with regard to additional services and functions, including those of health and human services agencies.

Further Centralize Shared Services

Today, each of Connecticut's agencies has individuals who manage payroll and benefit functions for that agency's employees. In total, there are more than 80 employees with payroll responsibility. Some of these are exclusively responsible for their agency's payroll and others perform payroll functions in addition to other financial and administrative tasks. This mixing of responsibilities has meant that payroll functions are often taken up by workers from other functions (e.g., HR) at higher pay rates. Many of these workers performing these functions are retirement-eligible, and the State faces significant risk of not being able to manage basic payroll processes following the retirement surge. As a result, steps need to be taken to ensure that state employees are paid on time.

Moving forward, the State should centralize payroll functions within the Office of State Comptroller (OSC). OSC has analyzed workflows and task processing across payroll responsibilities and determined that these can be managed by a much smaller number of FTE in a centralized function. By centralizing this function, spikes in workload could be distributed across a larger number of dedicated payroll workers, rather than needing a small

number of workers in a given agency to work overtime or receive assistance from colleagues whose primary responsibilities are outside of the payroll department. Centralizing payroll would reduce overtime and decrease the need for more costly personnel while also ensuring standardization of processes across agencies. Because most State workers involved in payroll activities are eligible for retirement, the State should manage the reduction through attrition and redeploy staff currently involved in payroll to other activities which better utilize their administrative skills. There are several additional shared services that could be centralized to mitigate retirement risks, improve coordination, and realize financial savings, including:

- AR/AP (Accounts Receivable / Accounts Payable): Accounting processes are currently duplicated across agencies, resulting in redundant work and unnecessary expenditure. Centralization would streamline activities and reduce operational costs due to consolidation.
- Internal facility maintenance: By coordinating maintenance across agencies and leveraging centralized contracting,



the State could establish a consistent set of standards and procedures across all facilities. This would ensure that all the State's facilities and equipment meet quality and reliability metrics and form the basis for a more cohesive strategy for managing property, as well as generate cost savings from consolidation and economies of scale.

- Fleet management: The State should conduct a thorough review of its fleets, particularly those operated by DAS and CTDOT, and examine opportunities to further consolidate them. By doing so, the State could lower its carbon footprint and reduce spend on vehicle repairs, garage space, and more.
- Internal site security: Similar to facility maintenance, the State should establish a central security team and centralize its contracting efforts. This would improve quality control, allow for more effective coordination in managing State properties, and generate cost savings due to economies of scale.
- The State currently allocates significant resources across agencies to these functions, with roughly 300 FTE working in payroll and AR/AP, 150 in facility maintenance, and 25 in security.

When considering an approach to centralization, the State should draw on the experience of its current efforts to centralize HR and IT and ensure that the efforts are aligned in order to prevent excessive disruption to agency activities. In addition, the State is undergoing a procurement transformation scheduled to be completed in 2022. This effort will result in a centralized, leaner procurement team – with specific teams for a few individual agencies, such as OPM and CTDOT – that will improve the State's digital capabilities and operating model for procurement. Once this effort is complete and the State has better visibility into its procurement spend, it should conduct a thorough review to ensure spend by category is in line with external benchmarks, which will likely identify substantial savings opportunities.

Centralizing these functions would complement ongoing centralization efforts, mitigate the risks posed by retirements, especially among senior finance management, improve the quality and security of state facilities, reduce the amount of redundant work that currently occurs across agencies, and could generate millions of dollars in annual savings for the State and taxpayers through consolidation and economies of scale.



Streamline Similar Human Service Programs and Support Functions

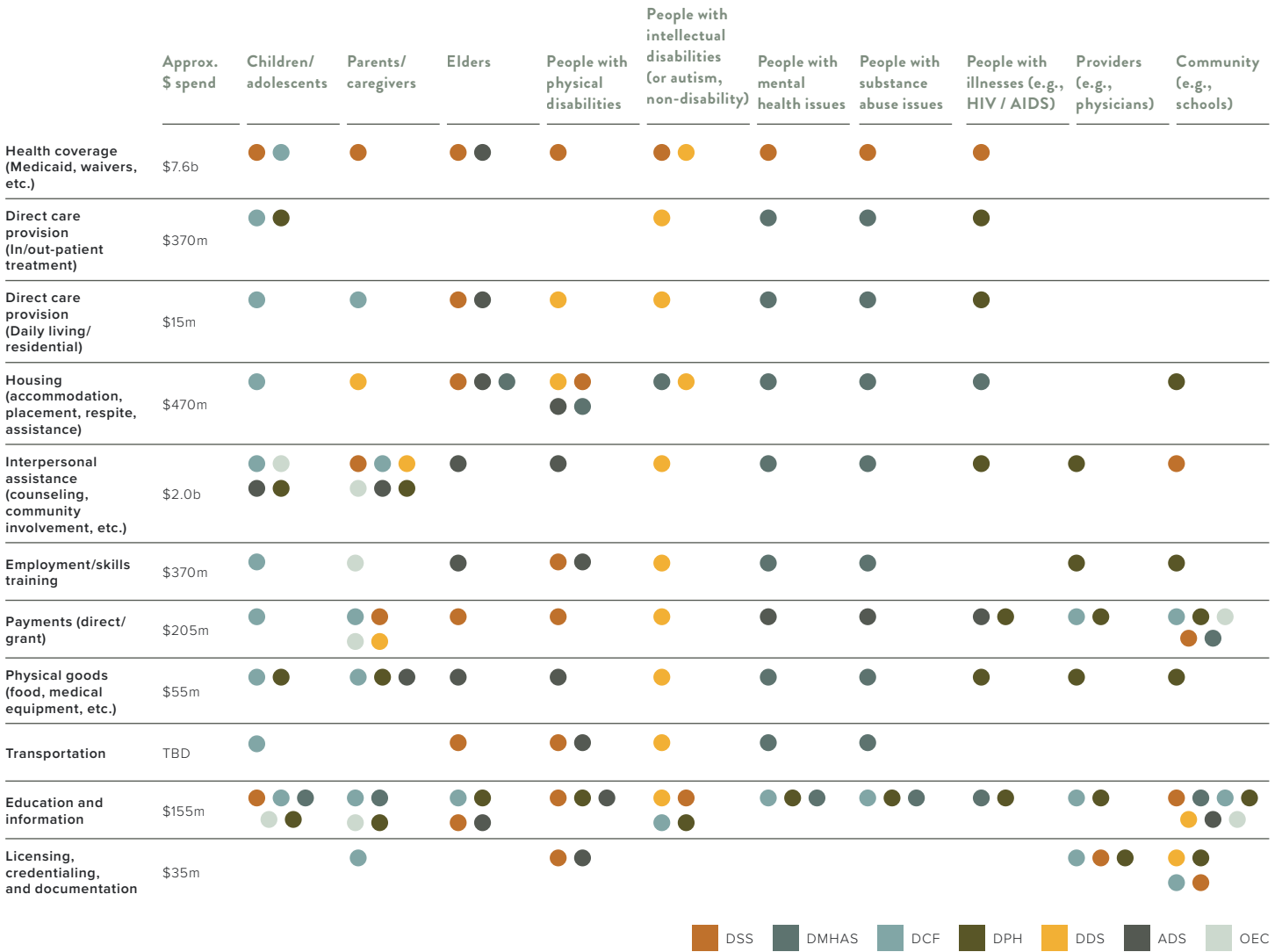
Connecticut’s seven largest health and human services (HHS) agencies serve hundreds of thousands of residents annually. Collectively, these agencies administer hundreds of programs and services and account for more than a third of the State’s employee headcount and total expenditure.

Due to the breadth of the State’s offerings, residents frequently use the services of multiple agencies, both simultaneously and over the course of their lives. The below chart details the overlapping services provided by Connecticut’s health and human services agencies by

population (e.g., children; the elderly) and service type (e.g., housing; employment training). To streamline service delivery to residents and improve outcomes, Connecticut should consider jointly administering or consolidating overlapping programs. In addition, the State should work to make distinct services accessible via a single “front door,” with dedicated resources to help residents navigate the services available to them. Finally, the State should consider implementing common, cross-agency platforms for key support functions such as eligibility determination and program monitoring.



Overlap in population served and service type by agency



²The Department of Social Services, the Department of Developmental Services, the Department of Children and Families, the Department of Mental Health and Addiction Services, the Office of Early Childhood, the Department of Public Health, and the Department of Aging and Disability Services

Source: CT biennial budget FY2020-21 Addendum; agency and OPM input

Jointly administering or consolidating similar programs provides potential benefits for both residents and the State. Closer collaboration between program administrators could enhance policy coordination and improve outcomes for residents through a more integrated approach. Reduced administrative effort and increased scale when procuring goods, physical space, provider services, and other elements of the programs in question provide opportunities for additional cost savings. For those programs not well-suited to consolidation (most programs), a single “front door” would increase visibility into available services for residents and help them best utilize the breadth of the State’s offerings. The State is developing this offering through the No Wrong Door initiative, which currently offers a designated website – MyPlaceCT – and phone number for older adults and people with disabilities to explore the services available to them. The State should expand these efforts to reach and inform additional groups of residents, including those who may not have regular access to a computer.

Some of the service categories (relevant agency abbreviations listed in parentheses) that could benefit from consolidation or joint administration are:

- Nutritional assistance programs such as Elderly Nutrition and the Supplemental Nutrition Assistance Program, or SNAP (ADS, DPH, DSS).
- Care provision for children with special healthcare needs (DCF, DPH).
- Teenage pregnancy prevention and education programs (DPH, DSS).
- Interpersonal support for at-risk pregnant women and new mothers such as the Special Supplemental Nutrition Program for Women, Infants, and Children, or WIC, and Healthy Choices for Women and Children (DCF, DPH).

For many programs, federal funding and associated requirements often dictate spend, limiting the potential for significant structural change. However, understanding potential overlap with other programs can result in improved communication with Connecticut residents about the range of services available

to them. In addition to the services listed above, Connecticut’s agencies should be mindful of potential synergies with existing services and programs when seeking to expand service provision, especially via state-funded programs. Rather than creating entirely new programs for services that already exist in another agency, agencies could direct residents to those services and avoid additional overhead and startup costs while ensuring that residents are aware of, and receive, new services quickly and minimizing confusion. This would also allow agencies to take advantage of the existing collaboration between agencies that helps coordinate resident care across programs and agencies. For example, DCF, DSS, DMHAS, DDS, and DOC all participate in the Behavioral Health Partnership to provide behavioral health support to residents across their entire lives without disruption when they transition from one agency to another. Similarly, DCF collaborates closely with DMHAS, DDS, and DOC (depending on the resident and their needs) for high-risk youth transitioning from DCF to ensure they receive continued support. Agency Commissioners also meet regularly to discuss cross-agency issues.

In addition, common platforms could be utilized for functions that are crucial to agencies’ day-to-day operations and ensure residents receive access to high-quality services. One such example is determining which residents are eligible for which state-provided services. DSS utilizes an eligibility platform called ImpaCT for programs such as HUSKY (Medicaid) and SNAP (food assistance), which also supports OEC’s Care 4 Kids program. ImpaCT is also used for sharing certain data across agencies – for example, providing information to DCF about whether a child is enrolled in various programs to help DCF best offer support. Eventually, the ImpaCT platform could be expanded to house eligibility determination for additional health and human services programs, thus streamlining the eligibility process across agencies. Given the technical complexity involved with expanding ImpaCT, as well as the need for rigorous data-sharing agreements, this is a longer-term opportunity for the State. In the shorter term, the State could expand the functionality and use of the 2-1-1

Navigator, which uses a survey to generate a list of certain programs (both federal and State) for which residents may be eligible. Currently, only 23 programs are included in the survey process.

Another common platform could be implemented for program monitoring and evaluation – the process by which agencies determine whether the various programs they administer (or contract third parties for) are providing quality services to residents and leading to positive outcomes. Currently, individual agencies are primarily responsible for monitoring both their own programs and the third-party providers they contract, which can occasionally lead to tension with those providers. To effectively centralize this function, the State would need to develop rigorous standards and policy for data collection and analysis. These activities could then be

performed by central staff, and the results stored on a shared platform. As a result, the State would be able to objectively assess service delivery state-wide, not just at individual agencies, and target areas for improvement. Pennsylvania recently took a similar approach to assess the programs that are part of its Workforce Development system.

Currently, OPM has statutory authority to collect and analyze program data across agencies but does not do so to any great extent. However, the ongoing expansion of the P20 WIN system will lead to increased data gathering, which could provide the foundation for a common platform either built off P20 WIN or closely compatible with it. Certain elements of this platform could also be conducted through a centralized grant-making and contracting hub, which is discussed in detail in Section 3.3.9.



Strengthen Coordination of Human Service Operations via a Central Office

As previously discussed, Connecticut’s health and human services landscape is complex, with numerous agencies and stakeholders working to deliver services to residents. Meeting the needs of vulnerable populations such as children and the elderly requires widespread interagency coordination on areas such as healthcare delivery, social services, and disabilities. This coordination must occur with respect to both policy and day-to-day operations. Policy decisions are at the heart of any strategic reform effort to improve outcomes for residents, but daily operations such as communications, compliance, and performance

monitoring are critical to ensure success. To that end, Connecticut could consider making structural changes to improve coordination across policy and operations for the State’s health and human services.

Many of the tasks associated with these activities are performed by clerical and administrative staff at individual agencies. These employees are projected to be significantly impacted by the potential 2022 retirement surge – 45% of secretaries, clerks, and office administrators at Connecticut’s seven largest health and human services agencies

are retirement-eligible in 2022. Responses to the retirement intent survey indicate that 70% of those eligible are likely to retire, implying an overall retirement rate of just over 30%. The potential loss of institutional knowledge caused by retirement of experienced employees represents a risk to service continuity that must be addressed, but also provides an opportunity to reform the State's cross-agency coordination.

There are multiple approaches to achieve this goal. The State could adjust the mandate of existing organizations that interact across health and human services agencies such as the Health and Human Services Policy and Planning Division of OPM and the Office of Health Strategy (OHS). It will be critical to clearly define the roles of any entities involved so as not to further complicate agencies' responsibilities and disrupt the strong culture of collaboration that currently exists.

OHS and OPM both have roles ensuring coordination of healthcare policy and alignment of federal and state efforts, with less focus on day-to-day operations. OHS does not currently mandate activities at individual agencies – it is charged with developing a comprehensive and cohesive vision for health care for the State, with additional support for healthcare-related operations such as systems planning and IT. To achieve this, OHS works with agencies to improve access to quality health care services for State residents, reduce waste and costs, and facilitate discussions both across State agencies and with stakeholders outside Connecticut, such as other states.

OPM or a central human services office could have a more substantial role in overseeing operations, with potential to supplement OHS's activities with policy oversight in non-healthcare areas; e.g., employment support. Accordingly,

it would have authority to mandate change. In parallel, a similar authority could be extended to OHS to ensure the two entities could effectively complement one another. In general, there is already significant collaboration between health and human services agencies, but individual leaders and agencies may not be able to fully represent the various interests of the State at, for example, nationwide conferences. OPM or a central office would have the authority to act on behalf of all human services state-wide and would coordinate with existing entities to do so with regard to areas such as healthcare policy and reform.

Key activities for coordinating health and human services operations across the State include:

- Integrating the Governor's vision and objectives at the human services agency level while streamlining reporting to the COO and Governor.
- Ensuring consistent agency compliance with state and federal guidelines.
- Monitoring use of state and federal funds and evaluating usage outcomes
- Spearheading crisis communications to ensure consistent messaging.
- Coordinating with other states to increase overall federal funding and improve outcomes for federal programs such as SNAP benefits, TANF grants, and more.

There are multiple approaches to improving coordination across Connecticut's health and human services policy and operations, each of which would have to be carefully executed and monitored. Doing so, however, could enable agencies to focus more explicitly on delivering resident-facing services and help ensure that Connecticut can be an active participant in the critical collaboration taking place in human services between other states nationwide.

Opportunity 3: Digitize Resident Services and Internal Processes

The State of Connecticut should accelerate its technology investments to improve the quality of, and access to, its services to residents. With an estimated 25% of employees retiring by 2022 and an ongoing pandemic, digitization will enable the State to replace manual internal and resident-facing processes. This means that the State can continue to operate as seasoned employees retire and provides an opportunity to improve service quality to residents – many of whom expect digital services when interacting with government – while lowering the ongoing cost to provide those services.

Connecticut has been recognized for having strong digital capabilities and providing a good level of digital services to residents. It earned a B+ rating in the Center for Digital Government's 2020 Digital States Survey, ranking the State just outside of the top 15 in the nation. Recent successes in Business One Stop, revenue service digitization, contact tracing, and improvements to cybersecurity demonstrate that the State government can lead a modernization effort of this scope.

While the State of Connecticut has had success in digitizing government services—including those where the State is a national leader—some operations are still manual, outdated, and inefficient. Among the State's key digital opportunities are:

- Automating highly manual processes using a central digital team: **Page 49**
- Adopting a single payment platform and document management platform for the State: **Page 51**
- Further automating Affirmative Action reporting: **Page 51**
- Developing a common grant-making platform: **Page 60**
- Further digitizing DMV transactions and making better use of third parties (e.g., American Automobile Association [AAA], credit unions) to deliver services: **Page 52**
- Completing the Revenue Services

digitization program: **Page 56**

- Completing unemployment insurance (UI) modernization: **Page 57**
- Digitizing DMHAS patient records: **Page 58**
- Adopting new tools for transportation inspections and projects **Page 59**

The single greatest improvement for the general public will come when most state transactions are available online, easily accessible, and personalized to make government more manageable. To find online services today, a resident must first locate the agency that provides the services. This structure inhibits usage and creates a sense that government is complex. A common, personalized digital front door will greatly facilitate the move to more online interactions – improving experience and lowering costs for all.

Discussions with 16 of Connecticut's largest agencies also identified more than 100 processes that are highly manual and could be further automated and/or digitized. These processes range from determining resident eligibility for services to processing grant payments and staffing shifts. Among these opportunities, a consistent theme emerged: challenges in communicating key data, such as that used to identify eligibility for services, across agencies.

Another key opportunity lies in automating Connecticut's payments to its utility providers. Currently, the State manually processes bills from major providers such as Eversource and reconciles them in CoreCT (the State's accounting system) to issue payment. Implementing an Electronic Data Interface (EDI) between CoreCT and providers like Eversource would enable direct payments, reducing processing time and cost for the State and providers. In addition, digitization of billing information would improve visibility and help reduce payments made for non-State meters (e.g., for municipalities or former CTDOT construction sites). Connecticut could

³<https://www.govtech.com/cdg/digital-states/Digital-States-Survey-2020-Results-Announced.html>



also reconcile the output of the Department of Energy and Environmental Protection’s (DEEP) EnergyCAP system – used to track consumption of all utilities – with the billing process to identify high-volume users and reduce the State’s overall carbon footprint more effectively. Overall, manual processes such as these consume hundreds of thousands of hours of staff time and cost tens of millions of dollars. Digitization could eliminate or significantly reduce these costs, allowing the savings to be redirected to serving constituents.

Part of the challenge the State faces in digitizing such processes is that agencies are responsible for developing and procuring their own digital initiatives and solutions. As a result, separate systems across agencies are often unable to interface effectively. In addition, it is critical to establish rigorous guidelines for data sharing to ensure that residents’ sensitive information is protected properly. Connecticut is working to streamline data-sharing processes via the P20 WIN initiative, which outlines a framework and standards for sharing data between agencies involved with children (e.g., OEC and DCF), education (SDE), labor (CTDOL), and the State’s higher education institutions. By providing increased visibility, P20 WIN will help participating agencies drive more successful

outcomes for residents as they navigate the educational system and seek employment.

Beyond P20 WIN, ongoing IT centralization efforts led by the CIO team in the Department of Administrative Services should better position Connecticut to identify additional agency-coordination opportunities in the short- and medium-term. This opportunity is particularly timely given the significant impact of the anticipated 2022 retirement surge on the State’s IT workforce. With 40% of IT employees retirement-eligible and an estimated retirement uptake of roughly 65% (implying a likely retirement rate of 25%), agencies are likely to require increased central support. Connecticut should take these retirements as an opportunity to accelerate its digital reform efforts via increased central oversight and a focus on shared solutions.

The DAS Digital Services Team will be a key component of reform efforts. While the team currently identifies trends and solutions across agencies and advances Connecticut’s collective digital strategy, it often supports implementation at individual agencies that lack the digital skills needed. This typically results from lack of clarity regarding the team’s role, which is intended to be more strategy- than implementation-focused.

With more centralized and flexible IT services and clearer external communication, the Digital Services Team will have increased capacity to reach out proactively to agencies, identify pain points and solutions, and involve agencies in state-wide projects such as Business One Stop.

As the State implements digital solutions and works to further automate manual processes, day-to-day work at individual agencies will evolve. State employees will spend less time on repetitive and manual tasks but will need to have specific knowledge of the new digital systems put in place for those tasks. In addition, employees will need to collaborate more closely with DAS and the Digital Services Team to identify and address new areas for

improvement. As a result, while fewer total employees may be needed, the positions that remain may require a new and expanded set of skills and be more highly compensated.

Overall, Connecticut is well-positioned to build on its recent digital successes. Strengthened central capabilities and a holistic approach to state-wide solutions may shift the skills required of the State's workforce, but are key to reducing manual effort, simplifying internal processes, and streamlining resident interactions. Taking these steps will enable the State to better meet residents' expectations of digital convenience similar to that seen in the private sector. The sections below outline some of the most significant opportunities.

Common Payment Platform

In FY20, the state of Connecticut, excluding UConn and other non-SDE educational systems, processed payments for just under \$1.5b in non-tax, non-grant revenue. This includes services such as license fees and charges for other services to residents and businesses. Roughly 17% (~\$252m) was processed via the State's centralized payment service, GlobalPay, which provides agencies access to credit/debit card processing and ACH payments. The remaining ~83% was processed through a combination of cash/check payments and credit/debit card payments not part of the central platform. By expanding use of the common platform and optimizing electronic processing on it, Connecticut could realize three key benefits:

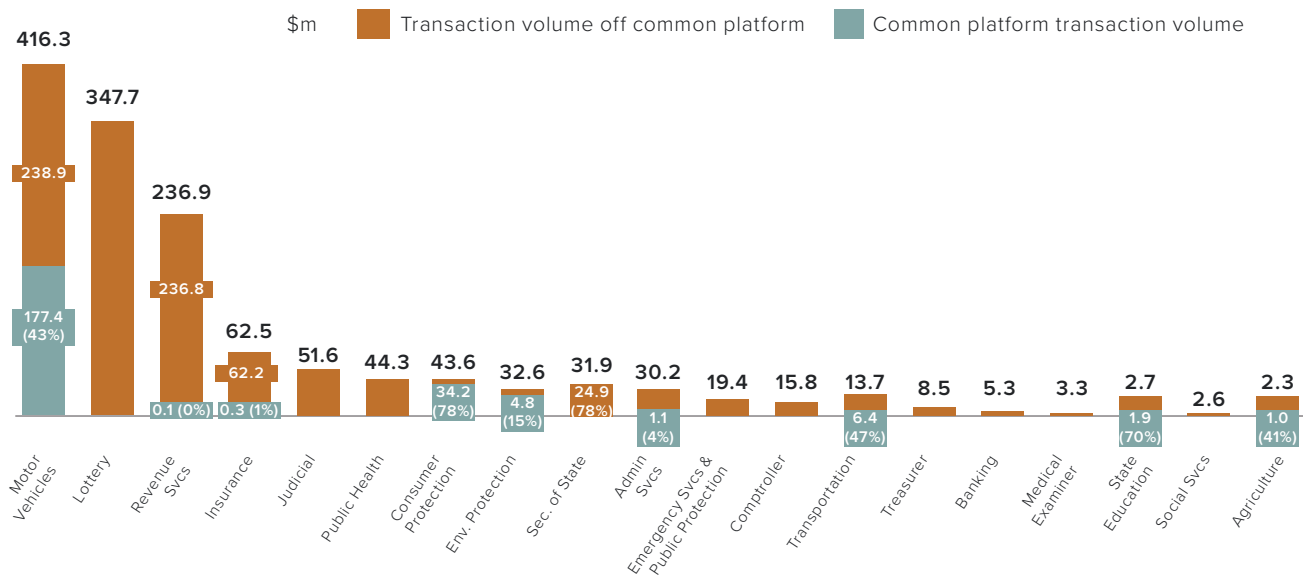
- **Lower fees and charges:** A higher volume of transactions processed via a central platform would improve scale and allow the State to negotiate better rates, including through potentially to re-bidding the contract. The State could also maximize use of lower-cost vendors.

- **Lower operational costs:** Processing fewer cash and check transactions would reduce the processing costs; fewer staff would be needed for complex/manual processing.
- **Revenue uplift:** Payment processes that simpler and more customer-friendly result in earlier payments and improve overall resident uptake.

Based on available data, only eight executive branch agencies processed more than 15% of the total value of their transactions via the central system:

- Department of Consumer Protection (78%)
- Secretary of State (78%)
- State Department of Education (70%)
- Department of Transportation (47%)
- Department of Motor Vehicles (43%)
- Department of Agriculture (41%)
- Office of Early Childhood (34%)
- Department of Energy and Environmental Protection (15%)

Utilization of common payment platform across agencies



The data suggest that there is room to substantially expand the use of the central platform to other agencies, which could improve state-wide payment tracking, simplify residents' payment experiences, and negotiate more cost-effective rates based on a higher scale of transactions.

Benchmarking of service provider rates, as well as experience in other jurisdictions, indicates that the fees Connecticut incurs on transactions processed via its central platform could be lower as volume increases, thereby driving additional savings via increased volume and negotiation. The State can also encourage residents to utilize lower-cost options. For example, debit card payments typically cost less than credit card transactions and the State can encourage or incentivize customers to pay using lower-cost means.

In addition, Connecticut should seek to improve its statewide, end-to-end visibility of agency payment processes and usage trends. There is limited central visibility of the >80% of transactions not conducted on the central platform, limiting the State's ability to identify patterns of inefficiency, incurred costs, and areas for improvement. For example, paper transactions such as cash and check payments are much more expensive to process compared to electronic transactions – sometimes by a factor of 10 or greater when considering labor and physical materials. Agencies such as DESPP conduct most of their transactions via cash and check, suggesting potential savings opportunities worth millions of dollars for the State. However, estimating and achieving the full extent of those savings statewide will require central agencies' in-depth analysis, communication, and guidance.



Common Document Management Platform

The State relies heavily on paper documents in its operations. Several processes identified for digitization relate to eliminating paper and making more efficient use of electronic processing, signature, and storage services. A coordinated statewide effort to adopt common document management platforms across agencies could result in substantial cost savings, allow better cross-agency coordination, and mitigate the risk to high-volume processes posed by widespread administrative staff retirements.

State-wide, 506 secretaries, clerks, and administrators are retirement-eligible by mid-2022; this represents 43% of the State's total administrative personnel. Retirement survey results indicate that 75% of those eligible are likely to retire, implying that nearly a third of the State's secretaries, clerks, and administrators will retire by 2022.

These employees often administer highly manual processes, such as processing checks, receiving and filtering incoming mail, facilitating document reviews, and collecting signatures from different departments or agencies. Without secretaries, clerks, and administrators, these processes cannot be executed. In addition, these employees often take on responsibilities beyond their job description in a less formal capacity, which further increases the risk of disruption to the State posed by their retirement.

By automating and/or digitizing these and other processes, Connecticut could avoid backfilling

administrative vacancies or further burdening remaining administrative employees and realize cost savings. Just digitizing forms which are currently paper could save \$3m or more per year (not including initial investment). Additional cost savings – though likely more marginal – could result from:

- A reduced office footprint with less space dedicated to physical documents.
- Reduced expenditures on physical materials such as paper and stamps.
- Lower call center volumes from external parties due to easier online access to relevant information.

Document digitization could lead to additional benefits for Connecticut, beyond self-evident time and cost savings. Statewide digitization would improve access to data and facilitate cooperation across agencies. This would lead to better services to residents and businesses and increased ease of access for external parties.

To realize the long-term savings and benefits cited above, Connecticut must approach document digitization at the state-wide level. Thus, it is critical for the State to establish a set of common platforms that are useful across agencies and that can scale to accommodate additional processes. In doing so, Connecticut has an opportunity to position itself to offer solutions, rather than relying on agencies themselves to surface pain points, and thus become proactive in its approach to document digitization.

Streamline Affirmative Action Reporting

State governments have long been leaders in bringing equity into the workplace. Reporting on compliance with Affirmative Action regulations is a critical component of every executive agency's operations. This ensures that the agencies and the State are providing equal employment opportunities to minorities, women, and other protected classes in the workforce. To

do this, agencies conduct rigorous ongoing data collection and reporting to comply with highly specific state statutes.

However, the process through which state agencies complete these reports is heavily manual, generates a significant amount of work for individual agencies, and is at risk of

disruption due to the 2022 retirement surge. Further automating and centralizing Affirmative Action reporting could mitigate that risk and create significant time and cost savings for agencies.

Agencies consistently identified Affirmative Action reporting as a time-intensive and manual process and suggested that it could be more efficient with further automation and centralization. One agency noted that its annual plan produced thousands of physical sheets of paper and required year-round staffing. Another agency noted that the data for its reporting required significant additional manipulation to fulfill Connecticut statutes' requirements.

As of January 2021, 38 employees were wholly dedicated to EEO work, which includes Affirmative Action reporting, across agencies. Administrative staff in agencies without dedicated full-time Equal Employment staff reported spending a significant amount of additional time to prepare Affirmative Action reports. Initial responses from agencies indicate that the total amount of time dedicated to Affirmative Action processes in the State could approach 100 Full Time Equivalents (FTE) of

time, including non-Equal Employment activity, and cost millions of dollars.

Experience with other jurisdictions indicates that automation and centralization could result in a 30% or greater reduction in reporting work. Digitization and automation of the reports would mean less time required to produce physical materials, populate reporting forms, and share data across agencies, among other activities. This would allow Connecticut to direct that staff time to other efforts to improve diversity and representation within State agencies, such as targeted recruiting of underrepresented minorities, providing career support to minorities already employed by the State, and increasing investment in other diversity, equity, and inclusion efforts.

The State should also consider whether additional Affirmative Action processes can be centralized. Increased visibility provided by a central office could improve awareness of Connecticut's progress and help prioritize areas for improvement across agencies. This, in turn, would equip individual agencies to better address any gaps or deficits via a cohesive strategy.

Department of Motor Vehicles (DMV) Digitization

The DMV is one of the places where many Connecticut residents can directly observe the State's journey in digitizing services and achieving Governor Lamont's goal: "We will be online, not in line." A multi-year DMV modernization program is underway and has demonstrated success, moving multiple transactions online during the last several months. Wait times inside branches were reduced significantly before the pandemic, though COVID-19 considerations forced branches to close or to restrict customers for 2.5 months in 2020, the addition of an appointment system allowed the DMV to reopen with a safer and more streamlined approach to customer service. Overall, the agency has a strong vision on how to continue this modernization journey but requires support to sustain these efforts into the future through new

administrations.

When the pandemic arrived, DMV had relatively few online services and no self-service kiosks, leaving residents with little or no way to conduct their transactions (the State appropriately extended deadlines so as not to disrupt residents' activities). As a result, the limitations on traffic resulted in a backlog of transactions, delaying much-needed revenues (Motor Vehicle Receipts ended FY20 \$38.5m (10%) below pre-pandemic projections). While this revenue will be realized in the future (i.e., residents must renew licenses eventually), a decline in cash flows can negatively impact funding for road and bridge maintenance programs, delaying important projects. With declining gas tax receipts and lost fares from reduced public transit ridership, DMV revenues have

become even more important to the health of the Special Transportation Fund (STF). Though COVID-19 may be perceived as an isolated event, DMV must prepare for future scenarios that impact residents' ability to transact in person and provide the STF with a more stable source of revenues. Moreover, while the DMV is addressing the backlog through overtime and extensions, transactions remaining will need to be address concurrently with the October 2021 federal REAL ID deadline, which has the potential to impact service delivery and unrealized revenues for the State.

Today, Connecticut residents have fewer types of DMV transactions online than their neighbors in Massachusetts or New York, as well as compared to digital leaders like California. While the agency is actively adding to their online services, there are several structural factors that have the potential to impede continued progress if not addressed:

- DMV has historically been viewed as a “brick-and-mortar” or “paper-transaction processing” agency. As a result, the agency has a number of dated institutionalized processes and regulations centered around in-person interactions. A modernized DMV will require new and enhanced service delivery channels, a skilled workforce and potential changes to statutes and collective bargaining agreements.
- A lack of internal technology capability due to a limited number of existing employees with digital skills and challenges hiring employees with required capabilities. Moreover, the DMV

business systems (CVLS and mainframe) sit across two technology platforms, one of which is coded in Cobol – an outdated programming language.

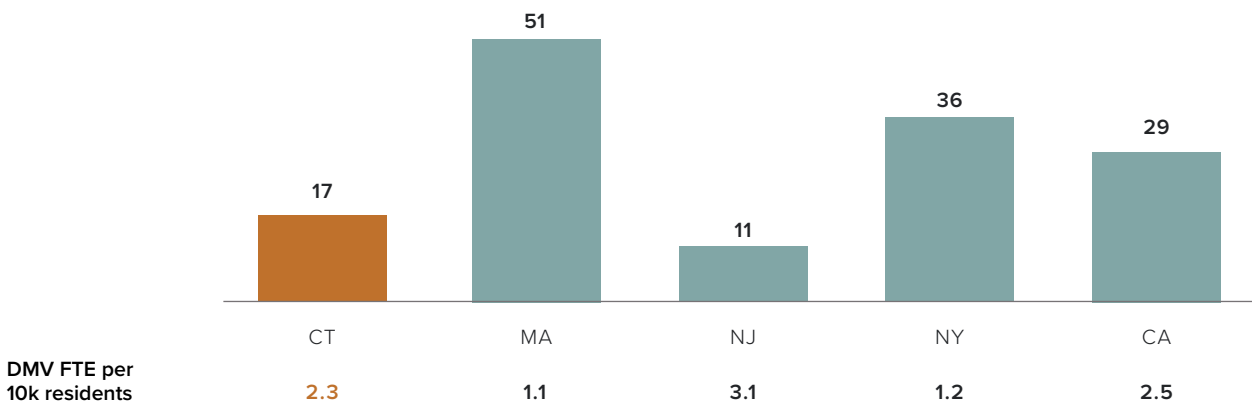
- Lack of internal project management resources to coordinate end-to-end design and business specifications.
- Lack of training and development program for DMV employees to build new skills.
- Accommodation for the breadth of responsibility placed on the DMV by legislation, including oversight of local tax payments, carrier suspension of Federal Out-of-Service truckers, dealer limitations and CVSD impact.

Combining the above factors with the lack of advanced back-end digitization of manual processes, DMV transactions remain heavily paper-based on both the front- and back-end. This can make it challenging to properly quantify backlogs (the number of transactions which need processing), identify process bottlenecks, and evaluate employee performance.

While there could be additional factors driving the difference (e.g., use of outsourced labor, scope of responsibility), the CT DMV requires more FTE per capita than its more digitally advanced neighbors, with approximately twice as many DMV workers per state resident as Massachusetts and New York. New Jersey, a neighboring state that offers even fewer transactions online than Connecticut’s DMV, also appears to require additional staffing to meet their residents’ needs.

Observed DMV online transactions and staffing ratios by state

Observed transactions online by state¹



Digitizing and prioritizing transactions and back-office processes will address the expected surge in retirements and modernize processes that are still conducted manually. Based on potential FTE savings seen in benchmark states as well as analysis of time spent across manual transactions, digitizing the DMV has the potential to generate tens of millions of dollars in combined cost savings and accelerated revenue. Achieving these efficiencies will require statute changes, system updates and reconciliation of workflows with municipalities and other agencies.

Importantly, these efforts would also improve the customer experience for Connecticut residents by allowing them to conduct more transactions without the need to enter (or at least reduce their time inside of) a branch. Surveys indicate support, especially among residents under 65 years old, for more digital DMV services. While jurisdictions must address security risks, there already exists technology used to verify individuals' identity remotely, meaning most future transactions could be conducted virtually. Several countries have adopted or are pursuing digital licenses using facial verification and biometrics: Alabama uses selfies to verify individuals' identities for tax

returns, and California, Arizona and Michigan are expanding into digital license plates.

To provide residents with a more enjoyable DMV experience while leveraging the retirement surge as an opportunity to bring staffing in-line with best-in-class states, it is recommended that the DMV:

Shift transactions and process channel mix to online. The most impactful initiative DMV can take, and the one to prioritize, is to move as many transactions and processes online as possible. Backlogs result in long waits for residents to receive services and delay revenue for the State. In some cases, backlogs can create public safety hazards (e.g., if the State has not processed an out-of-state citation or notice, it may not suspend the license of a dangerous driver). With additional support, DMV can aggressively shift transactions online. This would free DMV branches and personnel for transactions that still require an in-person visit (e.g., (e.g., skills tests).

Moving forward, the agency can prioritize moving transactions or processes online that fit the following criteria:

- | | | |
|--|---|--|
| <p>1</p> <p>Have high volumes</p> | <p>2</p> <p>Require long processing times but have consistent workflow steps</p> | <p>3</p> <p>Do not have statues requiring in-person transactions (the DMV should work with the legislature to remove these requirements where possible)</p> |
|--|---|--|

Following these criteria ensures that the DMV is moving those transactions online that residents would benefit from by doing themselves. Using this criterion, the transactions for the DMV to move partially or fully online (or increase the share of online transactions where the service is already offered) include:

- Driver License pre-visit application
- Driver knowledge testing (non-CDL)
- New registrations and cancelling registrations
- Driver's License and non-driver ID renewal (launched in early February)
- Driver's License and non-driver ID replacement

- Commercial Driver's License (CDL) new issuance and renewal
- Change of address (in progress)
- Out-of-state license transfers (in progress)
- CDL downgrades to passenger licenses
- License plate cancellations
- Boat registration renewals

The DMV launched an online driver's license renewal transaction. In the first 4 weeks of operation, without any media or publicity, more than 22,000 residents renewed their licenses online. The important next step is to ensure that more residents use these services. To encourage residents to transact online, the DMV should optimize the website's user interface (e.g., place

self-service links more prominently; minimize the number of clicks needed to complete a process), increase awareness of self-service tools (e.g., marketing campaigns), and continue using differentiated pricing.

Digitize document in-take and automate repetitive processes. In addition to moving transactions to online self-service, the DMV must prioritize digitizing back-office processes. Natural language processing (NLP), optical character recognition (OCR) and robotic process automation (RPA) are three tools that should be used to scan and upload documents without workers manually handling paperwork. This reduces the need for human interaction with data or repeating monotonous tasks. For transactions that do require physical documentation, such

as vehicle titles and transfers, the DMV should implement intelligent processing tools to manage inflows and processing. In addition, transactions that require identity/document verification are often presumed to require full in-person processing. However, many states now use a combination of advanced software (e.g., AI) and virtual meetings to validate documentation, confirm individuals' identities, extract personal information, and upload it to the agencies' database – all without an in-person visit. While current federal law does require in-person visits for REAL ID completion, many states are using these tools for pre-REAL ID branch visits. Most states have found advanced software and virtual meetings significantly reduce processing times when supplemented by automated reminders and document checks upon entry and in-line.

DMV front- and back-office digitization opportunities



Enhance online customer portal

Self-service tools to be optimized (appointment scheduling) and expanded (e.g., chatbots / voicebots)

Self-uploading of documents with AI for validation



Digital document reading and storage

Utilize software that can upload, read and action documents

Use e-Signature software to mitigate need for "wet signatures", print & mail operations



Back-office automation

Expanded use of automation to manage repetitive processes

Integration with other state agencies for single resident view (e.g., integrating DRS, DMV, DOL, etc.)



Performance management

Implement real-time performance management dashboards

Include merit-based rewards based on objective criteria to drive productivity

Modernize labor activity and hiring restrictions.

A modernized DMV requires the flexibility to adapt its workforce to carry out new ways-of-working, yet the agency's initiatives can be slowed by antiquated statutes and bargaining agreements. For example, DMV branch workers are not allowed to use tablets to check documents or run case management tasks for customers waiting in line. As with other agencies, DMV will struggle to implement much of the recommendations unless they are provided additional flexibility with regards to hiring job classes not previously approved for within the agency.

Self-service kiosks. Many residents are not comfortable using or do not have access to smartphones. These residents would benefit from increased presence of self-service DMV kiosks in various state and municipal government buildings, as well as at third-party vendors. This would effectively turn any government office—or local library—into a DMV branch. The legislature can facilitate this by amending statutes to allow self-service kiosks across Connecticut. Kiosks enable residents to handle simple processes themselves, in more convenient locations, and with 24/7 availability. For example, supermarkets host DMV self-service kiosks in stores across California, Colorado, Florida, Georgia, Indiana, and Michigan,

among others.

Expand breadth of services provided by third-party partners. The legislature can expand the spectrum of transactions that third-party vendors can process on behalf of the DMV. Currently, residents can complete a select handful of transactions at their local automobile club or credit union. The State should allow these

partners to handle more transactions.

Similarly, the legislature should allow for municipal government offices to handle some DMV transactions and for the DMV to accept property tax payments online, which will be particularly helpful in resolving occurrences where individuals owe property taxes and thus are blocked from completing transactions at the DMV.

Complete Revenue Services Digitization Program

The Department of Revenue Services is in the middle of a four-year IT system modernization. The goal of this initiative is to generate significant efficiencies by digitizing more of parts of the tax filing process and improving the back-end system. The initiative includes an improved do-it-yourself tax services portal for residents (myconneCT) that provides taxpayers the ability to file, view, and amend returns, correspond with DRS officials, and view upcoming deadlines and past due activities. It also improves access for CPAs and accountants to file on behalf of their clients.

Once the initiative is complete, the program may generate hundreds of millions of dollars in revenue uplift over the first 5 years. The agency is already seeing a significant increase in past due payments being brought current through more efficient electronic correspondence with taxpayers. The State can expect this initiative to bring efficiencies in returns, payments, and billing.

The digital system will facilitate work for DRS examiners and auditors through these efficiencies and improvements:

- All relevant documentation will be accessible via cloud storage.
- Supervisors can more efficiently allocate work.
- Enhanced reporting tools provide more robust analytical capabilities.

As a result of these improvements, DRS estimates that it can now reduce or realign the tax correction examiner class by 25% for FY 2021-2022, with possibly greater savings for FY 2022-2023. With proper cross-training, DRS can utilize the reduction in other areas to fill current and anticipated gaps through staff realignment. DRS can increase or maintain the overall FTE count of revenue examiners, which are revenue-generating positions.

DRS is making progress with this initiative and must ensure they maintain sufficient project management resources to sustain momentum. The retirement-eligibility of approximately 50% of IT personnel within the agency creates a significant risk to the success of this initiative. DRS is seen as a more advanced digital agency, so a significant loss of IT personnel during an IT modernization program could disrupt the initiative.

As in other agencies, DRS struggles with the State's rigid job classifications. They find it difficult to hire for new skills not previously approved for hire by OPM, while the rigid pay grades result in not being able to compete with private sector employers for high skill workers and paying excessive rates for work that can be done by entry-level workers with little experience. DRS would benefit from more flexibility to hire workers that meet today's needs and to have the flexibility to better match salaries with job skills.



Unemployment Insurance (UI) Modernization

Like many states, Connecticut relies on outdated systems to process unemployment insurance (UI) claims. Despite numerous improvements implemented by CTDOL, the systems have limited self-service capabilities for claimants and employers, resulting in time delays and processing errors of UI benefits and taxes. The systems were unable to handle the surge of unemployment claims coinciding with the COVID-19 pandemic, and the agency has gone to great lengths to ensure that Connecticut residents receive their benefits.

The agency is part-way through a modernization initiative of its UI systems to increase flexibility, adaptability, and operational efficiency; and improve service. This modernization will result in a consolidated system that replaces multiple, disparate legacy systems. UI modernization will significantly improve customer experience by streamlining processes and enhancing self-service options through online and mobile technology. Additionally, it will expand CTDOL's ability to identify and reduce unemployment fraud, resulting in significant reductions in agency processing and staffing costs.

Implementation of the UI modernization effort is a four-phased project. To date, the agency

opted to join an existing multi-state consortium, identified state-specific requirements and system interfaces, and prepared for data migration. The agency is implementing the new system through two rollouts:

- The first, implemented in April 2020, included mobile applications to allow claimants to file their weekly certifications.
- The second, with a projected date of April 2021, will include the tax system. Once complete, the State will retire nearly all CTDOL legacy UI systems.

UI modernization will significantly change the way CTDOL conducts day-to-day business. It is critical that the UI modernization project be completed to maximize accessibility and convenience for claimants, employers, and staff; provide a flexible infrastructure that can readily respond to future changes; and ensure data integrity and security. The project faces ongoing risk due to the limited number of employees with the skills necessary to modernize the current system, which is coded in COBOL, an outdated programming language. Further retirements in CTDOL, or external events, such as the release of further CARES Act funding, could delay the current timeline for completion.

Digitize DMHAS Patient Records

The Department of Mental Health and Addiction Services (DMHAS) provides inpatient behavioral health services at four state-operated facilities with a total capacity of 714 beds (Connecticut Valley Hospital, Whiting Forensic Hospital, Connecticut Mental Health Center, and Greater Bridgeport Community Mental Health Center [GBCMHC]). An estimated 3,500 individuals receive inpatient services annually, including specialty services such as Geriatrics, Young Adult Services, and Cognitive Rehabilitation. The EHR would also support the thousands of clients receiving outpatient services at the state-operated LMHAS.

Unlike most care providers of this size, DMHAS does not have an Electronic Health Record (EHR). As a result, processes including managing patients' charts, administering medications, and inventory control are manual, time-consuming, and not standardized. Implementing an EHR would standardize these critical processes, increase the quantity and accuracy of data available to DMHAS, and generate significant cost and time efficiencies. This will contribute to improved quality of care for the recipients of DMHAS services.

The potential time and cost savings associated with implementing an EHR are significant. DMHAS's internal audits estimate that tens of thousands of employee hours and millions of dollars could be saved annually. For example, an EHR would eliminate the need to use paper records for managing patients' care charts, saving more than 12,000 employee hours a year (an economic value of more than \$300,000) at just one facility.

Potential time savings are particularly noteworthy in light of the anticipated retirement surge in 2022. Among job functions state-wide, nurses and mental health assistants have some of the highest number of retirement-eligible employees – 169 nurses and 196 mental health assistants, representing roughly 30% and 45% respectively, of total DMHAS employees in each function. When surveyed, 77% of eligible nurses and 84% of mental health assistants indicated

they intended retire by July 2022, among the highest numbers for any job classification. This means that more than 20% of DMHAS' nurses and 35% of its mental health assistants may retire.

Historically, the stressful nature of these positions, competition from the private sector, and time-consuming training requirements have all led to challenges filling vacancies. Given the likelihood that there will be a high number of vacancies over the coming 18 months, DMHAS is at risk of significant service disruption. To maintain service levels for its highly vulnerable clients, it will be critical for DMHAS to effectively utilize all staff, making the efficiencies generated by an EHR even more impactful.

Implementing an EHR has some challenges. It is a technologically complex undertaking that requires substantial initial investment and legislative support, as well as close collaboration with the State's central IT function and DAS. Discussions are ongoing with DAS, and DMHAS is in the process of further developing the business case. During the implementation process, existing procedures and processes would be redefined, and employees would need to be trained accordingly. As a result, there may be some resistance to change from employees who are accustomed to current processes.

Overall, the benefits of an EHR exceed the challenges. The annual cost savings are likely to offset the initial investment in less than 5 years. The likelihood of significant near-term improvements to resident outcomes is crucial to mitigate the adverse impact on service continuity of impending retirements, especially as Connecticut and the rest of the country grapple with the COVID-19 pandemic and the opioid crisis.

Though the use case for an EHR is most clear for DMHAS given the size of its inpatient and outpatient populations, other human services agencies could also benefit from investment in digital records, including DDS and DCF.



New Maintenance and Inspection Tools

CTDOT has made significant advances in the use of technology in recent years and continues to look for ways to further modernize the agency. Like other state DOTs, it is examining the benefits of more durable construction materials (e.g., Ultra High-Performance Concrete), sensors to proactively identify road surface failures, more efficient salt trucks, autonomous transit vehicle technology, and unmanned aerial systems (e.g., drones) to assist the State with many of its activities.

The State must continue to invest to make best use of the State's Special Transportation Fund and address the risk of attrition from the retirement surge. Further investments in technology will not only help the State operate in a leaner manner but will also help keep Connecticut travelers safe and on time. The agency is already piloting or analyzing some of these opportunities but should continue to expand the initiatives and receive the resource support needed to further their efforts. These tools include:

Utilizing drones for bridge safety inspections, as well as road and site surveyance. While not a full substitute for manual inspections required under national standards, drones can conduct initial surveys of bridges faster and safer at lower costs, especially for larger bridges. They reduce the need for expensive snooper trucks, lane closures, and traffic delays while prioritizing which bridges require follow-up manual inspections.

Studies conducted by American Association of State Highway and Transportation Officials (AASHTO) indicate that the cost of a drone bridge deck inspection can potentially save up to a quarter of the cost of doing the same bridge inspection manually. With a majority of the agency's bridge safety inspectors eligible for retirement, there is a clear need to use technology to urgently assist this work.

Operating drones will require employees with new skills as well as the data storage and analytics to realize the drones' potential. The investment will generate significant returns while attracting new talent into the agency (e.g., UAS pilots, data scientists). The agency is currently piloting a program to train personnel in bridge inspection and construction site surveys and should receive the necessary approvals and investments to expand their capabilities.

Implementing automatic drawbridge operations. Drawbridges are continuously staffed, although technology exists to automate these operations. Automation would save the State millions of dollars per year.

Use innovative durable materials. Similar to the current pilot with the University of Connecticut of Ultra High-Performance Concrete, CTDOT should continue to explore innovative materials being tested and used throughout the country and internationally to identify which are feasible for Connecticut (e.g., permeable pavement, electrical

currents, iron oxide nanoparticles, magnetite, and recycled asphalt/shingles).

Expanded use of smart sensors and predictive technology with real-time information can determine where the high cost of new materials is worth the benefit for reduced frequency of maintenance. The cost of repairing roads increases significantly the more they deteriorate. Thus, knowing which roads to prioritize and repairing them earlier can reduce total maintenance cost.

Upgrade the state's traffic signal system.

Many of the State's traffic signals use antiquated hardware with no connectivity. Modern signal

systems leverage technology to better coordinate signals allowing improved traffic flow and reducing congestion caused by fixed wait times. The improved technology also enables remote sensing for trouble, reducing response times and therefore traffic / safety impacts. Remote sensing could also be combined with a routine maintenance program to extend the life of signals, which would reduce the number of more costly repairs. Federal funding exists to support this initiative, including DOT grants (e.g., 2016 Smart Cities Challenge), Congestion Mitigation and Air Quality (CMAQ) Program, and, potentially, Transportation Infrastructure Finance and Innovation Act (TIFIA).

Common Contracting and Grant Platform

Connecticut administers approximately 4,400 grants and contracts worth nearly \$14b. These totals include both direct State funding and federal funding that is allocated and administered by State agencies. Grants and contracts can serve various purposes, including:

- Enabling agencies to contract with private providers that offer statutorily-required services, such as behavioral health services.
- Awarding one-time grants of pre-determined amounts that receive multiple applications, such as soliciting ideas to improve energy efficiency and grants to municipalities and subdivisions of the state primarily for capital projects, and some planning projects.
- Making outcomes-based grants issued to achieve a specific outcome, such as reducing teenage pregnancy and truancy.
- Providing federal grants overseen by state agencies, such as wildlife restoration grants.

Based on engagement with agencies, many aspects of grant-making and contracting are heavily manual and not standardized across agencies. This results in duplicated efforts and complex processes for both state employees and grant recipients. Centralizing staff within a central "hub" and automating components of grant-making and contracting on a common platform could lead to significant benefits for the State, recipients of state funding, and the

communities and residents who are the ultimate beneficiaries of funding.

These potential benefits include:

- **Improved user interfaces and simpler processes** for agencies, funding recipients, and residents.
- **Better use of program funds and improved value for the State's money** through diligent central monitoring and evaluation of performance and compliance.
- **Fewer administrative tasks for agency staff**, allowing them to engage more closely with service providers, residents, and other key stakeholders.
- **Improved focus on equity in grant-making and contracting**, e.g., women- and minority-owned business representation among State service providers.
- **Lower State administrative costs** due to less time spent on heavily manual and repetitive tasks.

Agencies identified several specific functions that could be performed more efficiently if centralized. Among these functions are improving visibility into the scope of available funding for potential recipients; automating the application process for recipients; negotiating (where applicable) and executing agreements with recipients; standardizing contract formats

for various classes of grants and contracts; implementing forms that are preapproved by the Office of the Attorney General; and monitoring and evaluating recipient performance once the grant or contract is issued.

By conducting functions such as these centrally, the State could simplify and improve the grant-making and contracting process for its providers. Providers often work with multiple State agencies, and the lack of state-wide standardization can result in different requirements from each agency. For example, both DCF and OEC contract with day-care providers. OEC's payment system is very streamlined and based on paying for use of the building or facility in question, while DCF's payment system is based on individual children and their specific circumstances, such as whether there is an adult in the home or not. The two systems do not interact effectively, and as a result, day-care providers must spend time and resources gathering different information for each agency. Centralization would help establish state-wide reporting standards and keep providers from spending undue time on data collection, thus allowing them to focus more on providing quality services to residents.

It is critical for such a central hub and its platform to be compatible with and leverage

existing systems. For example, CoreCT, Connecticut's state-wide accounting system for government, is utilized by all agencies. Therefore, key functions of a central hub, such as financial tracking, would need to be compatible with CoreCT. The State has also recently rolled out a new procurement platform called CTSOURCE, which could be used to generate and store standardized forms and contract language. The State should examine whether this platform is suited to support certain contracts and grants such as those issued to provide direct services to an agency, or whether there is any CTSOURCE functionality that could be integrated into a hub platform.

Grants and contracts vary greatly and there is no one-size-fits-all solution to generate efficiencies across the entire scope of the State. For a central hub to be effective, a rigorous process for categorizing different types of grants and contracts is required. Forms, contracts, reporting requirements, and other documentation can then be crafted based on the specific processes involved with each group. Such a process would help the State to streamline without over-simplifying. Potential dimensions that could be used for categorization include funding source (e.g., state money or federal funds), the entity receiving payment (e.g., a municipality, nonprofit provider,



or an individual), and total funds expended. An underlying structure would ensure that the State operates efficiently and optimizes outcomes as they relate to different grants and contracts, whether it is receiving funds from elsewhere, allocating outside funding within the State, or disbursing State funds directly. These classification and standardization efforts would likely need to be conducted at the individual agency level first to ensure that streamlining efforts across agencies properly identify similar grants, contracts, and processes.

Experience from other government entities indicates that establishing a central hub can generate significant efficiencies. For example, the Australian government undertook a centralization effort with the goal of standardizing its operational approach to grant-making and contracting and strengthening its partnerships with providers and residents. The Australian government did not focus on cost savings, but their streamlining and automation efforts resulted in an estimated administrative savings of 30% - 50%. While Connecticut's approach to a hub would likely be very different, it could lead to millions of dollars in annual savings.

Implementation of a central hub and platform is a complex initiative and represents a longer-term opportunity for the State. Certain grant-making and contracting functions require specialized knowledge that is currently siloed within individual agencies. For example, nonprofit providers who operate group homes for people with intellectual disability are subject to specific requirements. Such functions would likely remain under the purview of agency staff,

as would the day-to-day working relationships with funding recipients. Thus, the roles and responsibilities of a central hub would have to be agreed upon and clearly articulated across agencies to ensure effective operations and minimize provider confusion. As noted above, the technical aspects of the hub would also have to be reconciled with the requirements of existing systems to ensure full compatibility.

It is unlikely that a hub would be implemented in time to mitigate the service continuity risks posed by the anticipated wave of retirements in 2022. In the short term, the State could expand on existing collaboration among agencies. For example, DMHAS currently manages a centralized contracting unit for smaller agencies such as DOH. CTDOT is also in the process of implementing an eGrant Application to automate grant applications and reimbursement, which could be adapted for use by other agencies with similar grant-making processes. Finally, DAS and DECD are in the early stages of identifying commonalities across grants and contracts to determine how a state-wide system could be effectively utilized to automate processes while retaining flexibility to address specific nuances and add new programs. The State could also perform an inventory across agencies to identify other such tools and platforms already in use and surface opportunities for other agencies to utilize them, as well identify gaps in automation that could be addressed in the short term with additional investment. Ultimately, a fully centralized hub and common platform would enable the State to operate more efficiently and ensure that grant and contract expenditures result in best-value service delivery and outcomes for residents.

Opportunity 4: Optimize Sourcing

Connecticut has well-established, robust engagement with non-profits and private service providers to deliver State services to residents. These relationships enable the State to provide high-quality services, often at lower cost, to more Connecticut residents than the State alone could accomplish, improving

overall service equity. Health and human services agencies are particularly notable in this regard – DMHAS and DDS partner with non-profit providers for a significant portion of their service delivery.

In many cases, specialized services, such as

caring for people with intellectual disability or transit and infrastructure maintenance, are well-suited to partnerships with external providers. These services require unique skills and benefit from the innovation that a State partnership with a private provider can bring. They can also provide the State access to talent or capability which it has difficulty hiring directly. Moreover, demand for some services is variable, making it inefficient for the State to hire full-time workers when a partnership brings more flexibility. With Connecticut likely to experience a significant number of retirements leading up to 2022, one way that the State can reduce the risk associated with service disruption is through creating additional partnerships.

The State has the following opportunities to increase its engagement with non-profit and private sector partners:

- Expand non-profit engagement for providing Local Mental Health Authority (LMHA) services: **Page 64**
- Expand non-profit engagement for providing group homes and intermediate care facilities for people with intellectual disability: **Page 65**
- Introduce competitive bidding for rail and bus contracts: **Page 66**
- Contract operations of veterans' convalescent care: **Page 68**
- Review transportation structure and maintenance contracting: **Page 69**

There are several key considerations when evaluating opportunities to update sourcing of services. Quality of service, whether resident-facing or otherwise, is first and foremost. During the initial bidding process, it is crucial that there be a pool of competitive providers to offer the best value to the State and its residents. In addition, the State should establish an objective set of performance metrics and quality standards to monitor ongoing service provision, and structure contract incentives around meeting these criteria. These standards and metrics are most effective when published publicly.

The State should also evaluate submitted bids for potential cost savings and best value. While

non-profit and private providers can often deliver services at lower cost, in some areas the State has been unable to solicit bids that are competitive on both quality and cost savings. As a result, any sourcing decision must be made as part of a competitive bidding process in which a provider is selected and held accountable for established quality and cost criteria.

Beyond these procurement considerations, sourcing-related efforts can often encounter significant challenges from the State's unionized workforce. Collective bargaining agreements can restrict the State's ability to reduce the number of positions at a given agency, especially if there are not immediate openings where impacted employees can be deployed. Multiple agencies observe pushback over seemingly arbitrary details, such as the length of guardrail along the highway, while statutes also prohibit successful partnerships from being expanded (e.g., DMV's third-party transaction partners).

Additionally, any contracting decisions for services not already provided by a non-state entity must be approved by the Connecticut State Contracting Standards Board (CSB). This approval process is complex and requires substantial effort. The agency must conduct a rigorous cost-benefit analysis, develop a detailed business case that articulates the feasibility and benefits of contracting, and, if the proposal would affect more than 100 state workers (including transfers or reassignments), re-engage with state labor unions and offer them the chance to provide the services in question at a lower cost. Particularly expensive contracts (those costing \$150m or more annually, or \$600m or more in total) require additional review by the Governor, the president of the Senate, the speaker of the House of Representatives, and any collective bargaining unit affected by the proposal. Even when these procedures are followed, agencies face the threat of the union filing lawsuit to halt contract awards and implementation.

Such complexity often makes the review process excessively complicated for individual agencies, disincentivizes bidders, and delays

vendor selection and project execution. Many agencies have found it difficult to even contract out work for which state employees lacked the skills or expertise to perform safely. For example, it took 4 years for CTDOT to contract out maintenance of movable bridges despite the fact that the existing workers had no experience in this area. Therefore, it is currently much more feasible for the State to look for opportunities to use private providers where there is a mix of

state and private service provision (e.g., local mental health authorities, road maintenance) than for services that are currently delivered exclusively by the State. Supportive legislation would help address several of these issues.

Overall, sourcing opportunities can be complex to evaluate and execute, but have significant potential to mitigate retirement risks, increase service equity, and realize substantial cost savings.



Non-Profit Engagement for Providing LMHAs

DMHAS operates six LMHAs, with two providing inpatient treatment. An additional seven facilities are operated by private, non-profit providers. With the 2022 retirement surge likely to impact the DMHAS workforce significantly, expanding service provision in non-profit LMHAs is an opportunity for Connecticut to mitigate service continuity risks and realize substantial cost savings.

Both state- and privately-operated LMHAs offer a variety of behavioral health services for residents, ranging from psychiatric evaluation and medication management to providing support in obtaining and maintaining employment. LMHAs also manage and fund a network of non-profit providers in their associated geographic regions and facilitate resident access to those providers.

At DMHAS, 169 nurses and 196 mental health assistants (30% and 45%, respectively, of total DMHAS employees in each function) are eligible

for 2022 retirement. The results of a survey indicate that that 20% and 35% of nurses and mental health assistants, respectively, may retire by July 2022. Given the challenges DMHAS has historically experienced filling vacancies, including the stressful nature of the position and competition from the private sector, state-operated LMHAs may be at risk of significant service disruption.

Further conversion of LMHAs to non-profit operation could both mitigate the risk of excess vacancies and realize substantial cost savings for the State. State-operated LMHAs service roughly 12,000 residents annually at higher cost than non-profit providers. Analysis based on 2016 costs suggests savings of just over 55%, or roughly \$7,000 per client, when non-profit providers perform services compared to state-provided services. The actual ceiling for savings depends on the extent of conversion and the State's ability to attract bids from non-profit providers at cost-efficient rates but could

be \$50m to \$75m with potential for additional upside. These figures do not account for potential reductions in state revenues.

When evaluating the feasibility of conversion, it is vitally important to maintain service quality to residents. DMHAS' Evaluation, Quality Management & Improvement (EQMI) Division conducts annual provider quality reports for both state- and privately-operated LMHAs, and consistently finds that non-profit providers meet quality and overall performance targets. Current indicators suggest non-profit providers offer service quality comparable to that of the State, and continued monitoring will ensure ongoing quality of service.

There are additional challenges associated with expanding non-profit operation of LMHAs. In particular, the State may need to remain the provider of last resort for residents with particularly acute needs. This dynamic could affect the bidding process. In the past, it has been challenging to source competitive bidders due to the intensive services required to

adequately meet the needs of these residents.

There are additional approaches beyond converting entire LMHAs that can be considered to offset these challenges. Select facilities within a broader network, such as the Danbury Area within the Western CT Mental Health Network, could be converted to realize efficiencies while maintaining a state presence. Alternatively, certain specific services could be converted, such as Residential Services within Young Adult Services or detoxification beds. Detoxification beds, in particular, have a robust market of non-profit providers, which would likely result in a competitive bidding process and ensure high-quality and cost-effective services. While these approaches would result in lower savings, they could minimize disruption to residents and allow the State to target its efforts to solicit competitive bids, while providing a foundation for potential conversions longer-term. Overall, the potential to mitigate retirement risks and realize cost savings suggests it would be worthwhile for the State to expand non-profit operation of LMHAs.

Expand Non-Profits for Group Homes

DDS currently operates 36 group homes and other facilities state-wide that provide services for Connecticut residents with intellectual disability – the Southbury Training School (STS), 3 Intermediate Care Facilities (ICFs), and 32 Community Living Arrangements (CLAs). These programs provide health care, rehabilitation, vocational services, and more. The State estimates that in 2020, 533 Connecticut residents received residential support through these programs.

DDS employees that provide these crucial services remain in their positions longer than compared to employees at other state agencies. DDS is unique among executive branch agencies in that it provides support to residents throughout their lives. As a result, employees often develop close, long-term relationships with the residents they serve. A substantial

number of Developmental Services Workers (559) and Case Managers (111) are eligible for retirement in 2022. The results of a recent retirement survey indicate that between 73% and 85% of retirement-eligible resident-facing employees are likely to retire, putting DDS at significant risk for service disruption in 2022 and beyond.

To mitigate service continuity risks and realize cost efficiencies, DDS should expand private provider operation of facilities. The 36 DDS-operated group homes and facilities comprise a small share of the total number of Connecticut settings providing services to people with intellectual disability. The vast majority – more than 800 – are operated by private providers that are typically not-for profit that offer similar services, often at a substantially lower cost. Savings from conversion vary depending

on the CLA and are subject to factors such as changing minimum wage laws. Based on past conversions, savings can be more than \$250k annually per CLA, driven primarily by dramatic differences (e.g., varying as much as 50% or more) in compensation between state and private provider employees. Potential savings from conversion of CLAs could total \$8m or more annually, with additional savings potential from ICF conversions. This figure does not account for potential reductions in state revenue.

Privately-operated facilities provide similar or greater service quality compared to state-operated facilities. A 2011 study conducted by the Connecticut Program Review and Investigations Committee found that privately-operated facilities had fewer deficiencies per facility based on inspections conducted by DDS and the Department of Public Health (DPH).

Converting CLAs from public to private operation presents several challenges. There are often strong bonds between residents and their current care providers. Changing care providers may disrupt residents' experiences and would need to be executed with great care. Connecticut also may need to remain the provider of last resort for especially high-needs residents. Finally, a large-scale conversion

effort might result in limited bids from private providers for each individual CLA, limiting competition and reducing the number of high-quality offers. Allowing bidders to bid for any or all subgroups of facilities or services could increase the number of bids received.

An alternative approach that addresses these challenges is to consolidate individual homes as resident participation declines to provide services more efficiently. This would maintain care provider-resident relationships for many residents and allow Connecticut to maintain a higher degree of selectivity when evaluating potential conversion opportunities. This could still result in some disruption to individuals who receive these services, although disruption would be minimized by the fact that consolidation only occurs once the population of the facilities in question is low and so relatively few residents would be impacted. However, this approach would still be subject to service continuity risks from State employee retirements and would likely result in lower cost savings.

Converting facilities to private operation, with internal consolidation serving as an alternative if conversion is not viable, will allow the State to mitigate risk of service disruption and realize cost savings while maintaining or improving the quality of services.

Competitive Bid for Rail and Bus Contracts

CTDOT spends approximately \$200m on bus service and \$220m+ on rail operations (net of revenue collected), heavily subsidizing both transit modes. Meanwhile, both bus and train ridership have declined dramatically as a result of the COVID-19 pandemic. This ridership decline has reduced fare revenues and worsened the State's ability to offset the expense of providing service. With the State's STF facing potential insolvency within the next 2-3 years, Connecticut should evaluate opportunities to reduce bus and rail spending. It can do this by introducing further competition for the State's bus and rail contracts. Contracts are currently managed by a few long-time

operators. Opening these contracts up to a fair and competitive process would ensure that Connecticut is receiving the best value for its money in terms of cost and quality of service to residents.

The State's experience with bus contracts shows that this will be challenging. CTDOT has been in litigation with its private bus operators for more than a decade to introduce competition. The central issue is that a handful of private bus operators holding government-issued certificates to operate bus service over fixed routes. The certificate holders believe that these certificates – issued starting in the

1970s by now-defunct agencies – represent lifetime rights and the State has been unable to take measures to save taxpayer money and improve bus service operations. To resolve this, legislature should amend law to clarify that no certificate is required when a bus company operates services under a contract with the Department. Modification of this statute will permit the Department to quickly adapt and respond to changes in its transit service needs while allowing CTDOT to continue to contract bus route operations without having to issue a certificate for each contract route.

This effort to amend the certificate requirement has faced resistance from incumbent operators. Going forward, only a fair, transparent, and competitive process can ensure that the bus

operators provide the most economically efficient and highest quality service.

Rail operations are substantially more expensive for the State than bus operations, though the rail service raises more in fares than the bus service. These fares are not enough to operate the service: even prior to the pandemic, fare recovery rates for Connecticut were generally lower than in other States, including Connecticut’s neighbors. While the New Haven Line is among the country’s best performers in farebox recovery rates (~67%, meaning that proportion of operating costs is covered by ticket sales); lines such as Shore Line East, Waterbury and Danbury are among the nation’s lowest performers by this same metric (5%-25%, exhibit below).

CT rail line operational and financial metrics compared to regional peers

	New Haven	New Canaan	Danbury	Hartford	Shore Line East	Waterbury	NJ Transit	NJ Transit
Operator	Metro-North	Metro-North	Metro-North	Amtrak, TASI/ACI	Amtrak	Metro-North		
Ridership (K)	40,375	1,525	740	658	595	343	89,562	31,177
Fare Recovery	69%	23%	9%	5%	5%	7%	55% ²	62%
Subsidy/Ride	\$3.85	\$4.90	\$24.13	\$43.30	\$55.28	\$24.46	\$5.12	\$4.68
Net Subsidy	(\$156)	(\$7)	(\$18)	(\$29)	(\$33)	(\$14)	(\$458)	(\$146)

\$257mm+ in annual subsidies for rail operations¹

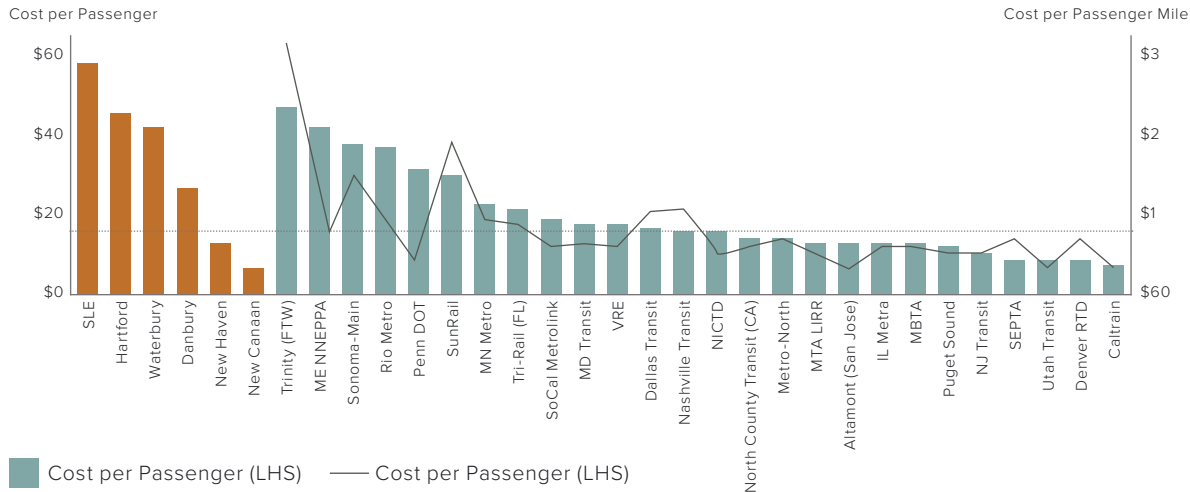
The COVID-19 pandemic has exacerbated these financial issues. Ridership remains 80%-90% below pre-COVID-19 levels for the New Haven Line, its branches (New Canaan, Danbury, Waterbury), and the Shore Line East.

Rail operations are primarily split between Amtrak (Shore Line East) and Metro-North (New Haven, New Canaan, Danbury, and Waterbury lines), while Amtrak and private operator TASI split

operations on the Hartford Line. In examining commuter rail costs nationally, the Shore Line East ranks among the highest-cost commuter rail lines across the country (the Hartford Line and Waterbury Line are also particularly costly). Amtrak and Metro-North are stalwarts in American rail service, but they have seen little competition for Connecticut operations and have continued to pass on rising costs while remaining unchallenged as incumbents.

¹ Excludes Hartford Line subsidy given assistance from federal funding through FY21. 2014 Fare recovery rates ranged from 19.6% for Atlantic City line to 88.4% Trenton/Princeton Northeast Corridor (2nd lowest line rate = 39.9%); Bottom two NJ commuter lines are 20% and 40%
 Note: Data used—2019 for New Haven, Hartford, SLE; 2018 for Waterbury; 2017 for New Canaan, Danbury
 Source: Federal Transit Administration (U.S. DOT), CT DOT; MBTA FY19 Final Itemized Budget

CT line operating costs and US-based peer systems



Transportation agencies across the country are trending toward using competitive Requests for Proposal (RFPs) to introduce competition and realize expense savings. Based on benchmark analysis, the State could potentially realize annual savings of at least \$10m-\$20m by introducing competitive bidding on operations of a subset of lines. CTDOT does not currently possess data that would allow for an in-depth cost comparison but should begin a detailed analysis of operating costs by provider to further validate potential savings.

Contracting operations will require upfront resources, including a team dedicated to crafting a robust and clear RFP, writing contracts with stringent performance hurdles to counter any lobbying efforts

against bidding based on service quality concerns, and preparing for complex negotiations since Connecticut does not have independent authority to operate in New York with access into Penn Station and Grand Central Station.

CTDOT views its relationship with Amtrak and Metro-North favorably, and both organizations are pivotal to ongoing rail operations regardless of the outcomes of any competitive procurements. Therefore, Connecticut should work closely with both services throughout any potential bid process to ensure continued positive engagement on issues such as rail rights-of-way, entry into Grand Central Terminal, fare pricing, and future transit policies.

Contract Operations of Veterans' Convalescent Care

The State provides a variety of high-quality services to veterans who reside in Connecticut and has done so since the end of the Civil War. Many of these, including convalescent (skilled nursing) care are provided at the Department of Veterans Affairs campus in Rocky Hill.

Services are currently directly provided by state employees in State-owned facilities. The State should consider opportunities to contract

out some of the services provided, such as management of the skilled nursing facility. In the past two decades several other states have contracted out veterans' services to foster innovation, take advantage of private operators' scale and manage the cost of services provided.

Benchmarking of other states which use private providers for veterans nursing care show that transitioning management of nursing homes to

private operators does not appear to have a negative impact on quality of care. Based on the Center for Medicare Services' Star quality rating system (a national standard quality measure), states such as Michigan, Montana, Texas and Utah demonstrate that privately operated homes provide quality of care in line with state-operated facilities. These private operators typically do so at 30-40% less cost than state-run facilities. In Connecticut, there would be a thriving potential market for operation of nursing care given the number of nursing home operators.

Any transition of services to a community provider would need to ensure that it does not disrupt services to veterans, including the other wrap-around services provided on the Rocky Hill campus. Additionally, most other

states benchmarked have pursued a mixed state- and private-run model for their veteran's convalescent care. Given Connecticut's small size, it only operates a single convalescent care facility, so it is not possible to contract services for a sub-set of facilities. Instead, an incremental approach would need to look at services within the one facility.

Regardless of the future model for nursing care, the State should also look for ways to increase the census (the number of people receiving services) of the nursing facility, ensuring that veterans and their families are aware of the services provided. This helps ensure that this population receives the services to which it is entitled, increases revenue from the Federal Government and helps spread fixed costs over a larger population.



Transportation Structure and Maintenance Contracting

By July 1, 2022, 26% of CTDOT Transportation Maintainers – whose responsibilities include maintenance of the State's highways, roads, and bridges – and 35% of Engineers – who assist in design, review, and oversight of projects – will be eligible for retirement. As a result, the agency will see a shortage in the number of maintainers and engineers in the years ahead, which could impede CTDOT's work to improve the condition of State-controlled roads and build new infrastructure to alleviate congestion.

These shortages will be exacerbated by restrictions on the duties that can be performed by workers of given job levels and the burdensome requirements for hiring new

workers into those jobs. The State should provide CTDOT the flexibility to re-classify and update job titles to better match the positions and the skills required to complete its work. For example, Transportation Supervising Engineers (TSE) – of whom almost 50% are eligible to retire – are all required to possess a Professional Engineer (PE) license. Creating a new TSE (Administration) job class would more cost-effectively backfill positions whose responsibilities would not require a PE and could therefore be hired at lower rates.

In addition to backfilling critical positions, CTDOT should increase outsourcing of its maintenance contracts where there are

available vendors. The agency already contracts with third parties for a portion of maintenance work and should explore using performance-based regional contracts, where vendors would provide cost-effective services for specialized work or specific geographic areas. For less skill-based work, CTDOT should continue and expand its relationship with the Department of Corrections to safely broaden the work carried out by the State's prison population. Similar to California's inmate firefighter program, Connecticut's Correctional Enterprises and other partnerships can continue to provide the State with more cost-effective road maintenance and services while providing inmates with skills

that facilitate employment upon release – a driving factor in reducing recidivism.

To enable more flexible procurement, the legislature should make it easier to contract with third parties where CTDOT sees a benefit to doing so. Existing statutes often result in significant hurdles to reaching agreement with vendors and executing contracts. For example, the process to approve the use of a private firm to make repairs to movable bridges (critical to ensuring those bridges were safe) took over four years, even though CTDOT did not have employees with the skills or expertise to perform the work.

Opportunity 5: Design Services to Meet Resident Needs

The State provides a wide variety of high-quality services to residents. As the needs of Connecticut residents evolve, the State will need to reform the services provided and the manner in which they are provided in order to best ensure that it is making the best use of resources. The following section details a set of significant opportunities to increase the efficiency of the State services by redesigning how those services are provided to residents.

These opportunities range from major reinventions of state policy to changes to processes within an individual department. Key opportunities include:

- Align rail/bus service to resident needs: **Page 70**
- Adopt value-based health payments: **Page 72**
- Control health spending and maximize federal funding: **Page 74**
- Improve tax compliance: **Page 76**
- Cut low-ROI film and tax programs: **Page 77**
- Find new transportation revenues: **Page 78**

Align Rail and Bus Service to Resident Needs

Connecticut's rail and bus service ridership remain significantly below pre-COVID-19 levels. Rail ridership, which remains down 80%-90% across lines as of early February, is highly reliant on commuters traveling into New York City, while bus ridership, down a less onerous 25%, is more reliant on local economic activity. As more New York City-based companies remain committed partial or fully remote-work models, there will likely be a long-term impact on ridership.

As a result of the declining ridership, the

cost per passenger has become even more unsustainable for a system that already had some of the highest commuter rail subsidies in the nation before the pandemic. Making matters worse, the STF – which is meant to finance Connecticut's transportation infrastructure program and operating costs for CTDOT and DMV – faces a deficit of \$60m this year. To manage expenses while continuing to meet the needs of the State's residents, CTDOT should continue adjusting transit service levels to match demand. Service level reductions already implemented should continue and be adjusted

as demand changes, followed by a thorough solicitation of rider and resident feedback via surveys to make longer-term service decisions.

The largest cost savings can be achieved by reducing service on commuter rail lines; some reductions have already been included in the FY22-23 budget proposed by the Governor.

CTDOT will realize annual savings of \$35m from its adjustment on the New Haven Line alone – the system’s largest line by ridership and budget—reducing service by ~38%, compared to ridership which remains more than 80% below last year’s levels. This line is the most dependent on NYC commuters; the proposed service change is less than half of the decline in ridership.

New Haven Line transit reduction plan

80%+

Decline in ridership

~38%

Change in service levels

\$2.9M

System wide monthly savings

\$2.9M

CT's share of monthly savings

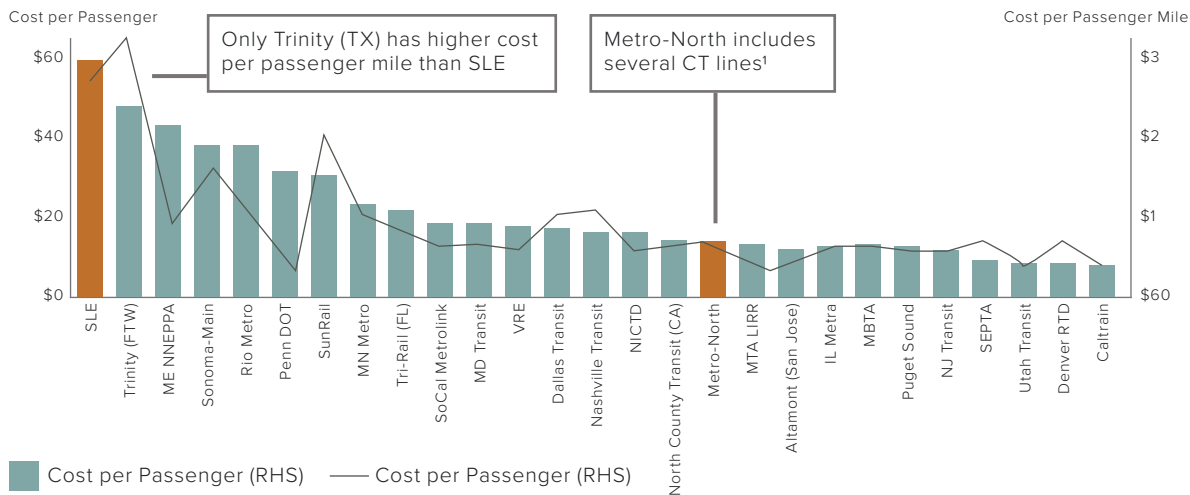
\$35M

Projected annual saving for CT

Service level changes are also necessary for smaller lines that have experienced similar declines in ridership. Shore Line East (SLE) ridership, for example, is down approximately

90% from pre-pandemic levels. SLE has among the highest cost per passenger in the country, and the line’s low farebox recovery ratios provide little offset to expenses.

Shore Line East costs compared to U.S. rail systems



¹The New Haven Line, New Canaan Branch, Danbury Branch, & Waterbury Branch are incorporated into the listed Metro-North costs. New Haven's proportional size Note: Hartford Line excluded from NTD (not categorized as commuter rail); Metro-North data contains several CT lines as well as NY Source: Federal Transit Administration - National Transit Database 2019; SLE reflect costs only associated with the Shore Line East Line. Hartford Line costs not included in this FTA profile.

With significantly depressed ridership, high fixed costs, and a relatively higher-income passenger base compared to bus transit, CTDOT should maintain its reduced service on the Shore Line East and New Haven Line while also reducing service on other lines experiencing significant declines in ridership. For SLE, with subsidy per passenger ranging from \$44 to \$60 in recent years – enough to pay for each rider’s individual rideshare – a 50% reduction from FY22 budgeted service levels will generate savings of several million dollars per year. While subsidy rates on other lines are less than that for SLE, service adjustments should also be considered for remaining lines, particularly those with the highest cost or subsidy per passenger. Moreover, the decline in ridership means that diesel-powered lines are using the same environmental resources over fewer commuters.

Service reduction can be politically difficult, particularly when there are concerns about providing adequate transit options. To address such concerns, the State should offset some rail service reductions with increased shuttle bus services. Since the subsidy per passenger is lower for bus transit than for Connecticut’s most subsidized rail lines, the State will realize substantial savings while maintaining sufficient service coverage.

For bus services, CTDOT can save millions of dollars in annual expenses by merging nearby routes to reduce redundancies (which will also decrease travel time for riders), reducing service levels along routes with depressed ridership, and temporarily or permanently discontinuing low-ridership routes. These actions must take into consideration the community impact, particularly focusing on mitigating adverse effect on low-income communities that rely on these services to commute to work, care for their families, and go about their daily routines. The changes should ensure that essential workers, who often use public transit in off-peak hours, continue to have options for their daily commutes.

These changes have the potential to produce more than \$40m in annual savings. The data show that ridership has declined significantly, costing taxpayers significantly. With the State’s transportation fund facing a potential crisis and considering the difficulty of enacting fare increases that could provide relief through increased revenue, it is critical that CTDOT and the legislature evaluate and make the difficult decisions about service reductions to better meet demand and reduce expenditures.

Adopt Value-Based Health Payments

In addition to preventing wasteful spend and maximizing funding, increasing use of value-based health payments could help Connecticut improve resident health outcomes and reduce HUSKY expenditure over the course of the next several years. There are several different forms of value-based payment. The common theme is that a service provider, such as a physician, does not receive fixed reimbursement for a procedure from Medicaid – instead, the reimbursement depends on care outcomes or covers multiple procedures. Some examples of value-based payment include:

- **Pay for Performance (P4P):** The provider’s reimbursement is contingent on meeting a certain set of pre-determined, metric-driven outcomes (e.g., more births requiring routine care as opposed to intensive care, or NICU).
- **Bundles:** Payment is pre-determined for an entire “episode of care”, with the provider covering any additional costs (e.g., one payment for a surgery that covers the preparation, actual surgery, and post-surgery rehabilitation).
- **Global payment or capitation:** Payment is pre-determined for a set length of time and covers all medical care for the patient(s) during that time.

Value-based payments can be complex to implement and execute. They require close coordination with providers to determine reimbursement structure and requirements,

a rigorous set of measurable and objective metrics to evaluate care quality and outcomes, and an infrastructure that can track and enforce those outcomes, among others. As a result, it can be challenging to achieve immediate results. However, the long-term upside has been proven to be substantial.

When provider reimbursement is based on care outcomes, rather than simply performing a procedure, residents are more likely to receive attentive and high-quality care. Value-based initiatives have been found to reduce length of hospital stays by 15% or more for specific procedures. Correspondingly, substantial cost savings can result due to shorter hospital stays, fewer post-procedure medical complications, and fewer unnecessary additional procedures. Analysis of another state's managed-care Medicaid program (roughly three times the size of Connecticut's by total spend) identified \$80m-\$230m in potential annual savings, and specific value-based initiatives have been found to reduce cost of care by 10% or more for relevant procedures.

DSS already implemented value-based initiatives that have improved outcomes, enhanced care experience, influenced obstetrics and primary care practice transformation, and produced cost savings. Among these are:

- **Pay-for-performance initiatives** for areas such as obstetrics (care related to childbirth), Psychiatric Residential Treatment Facilities, and behavioral health extended care clinics.
- **A next generation primary care-focused care coordination initiative** known as PCMH+ that uses upside-only shared savings arrangements (in which providers can be reimbursed if total spend on care

is below pre-approved benchmarks) with Federally Qualified Health Centers and advanced primary care practices

DSS is also in the process of implementing additional value-based initiatives, such as:

- **An expanded maternity bundle** that includes components such as nurse midwife services, doula services, social determinant support through use of community health workers, and a nationally recognized breast-feeding initiative.
- **Value-based payment** embedded in the State's proposed Substance Use Disorder 1115 research and demonstration waiver.

As a result of a 2019 settlement with state hospitals, Connecticut has limited in ability to implement additional value-based initiatives. However, there are still opportunities to accelerate value-based reform for other major areas of HUSKY spend, including physicians, clinics, and long-term care. As Connecticut continues its recovery from COVID-19, it should continue to seek out those opportunities and lay the groundwork for a longer-term, wide-scale transition to value-based payments to improve health outcomes for its residents and achieve long-term savings. It will need to do this in conjunction with the State's providers, including its hospital systems and OHS, which is charged with oversight of multi-payer payment and delivery reform initiatives, the state employee plan, its health insurance companies, employers, and residents. Lessons learned from Connecticut's implementation of its current value-based initiatives, such as PCMH+, as well as other states' deployment of Accountable Care Organizations and bundled payment initiatives over the past decade can provide a blueprint for effective approaches moving forward.



Control Health Spending and Maximize Federal Funding

HUSKY, Connecticut's Medicaid program, is administered by the DSS. In FY20, total HUSKY spend was over \$6.5b on behalf of over 850,000 Connecticut residents – \$2.6b spent directly by the State and \$3.9b in federal spending. Because of the scale of HUSKY spend as a share of overall state spend, the HUSKY program is often an area of focus when seeking to realize savings. At the same time, the HUSKY program, as the largest single health care provider in the state, has a clear mission to continuously improve health care outcomes and care experience for approximately 25% of Connecticut's residents.

One opportunity to pursue savings without negatively affecting client outcomes is to continue to identify potential sources of wasteful spending and aggressively implement initiatives to address them. Wasteful spending can occur in several forms – a commonly used acronym is FWA, standing for fraud, waste, and abuse:

- **Fraud:** Payment claims made for services that were not or could not have been provided, such as an operation conducted after a patient's death.
- **Waste:** Unnecessary spend, such as payments made on behalf of patients who already have healthcare coverage outside of HUSKY (e.g., from a private insurer or another state) or payment for high-cost services when lower-cost, equally effective services could have been provided.
- **Abuse:** Improper billing or services conducted, such as billing a service at the level of a more expensive service, or providing additional, unnecessary treatment to a patient to increase reimbursement.

To address the above, DSS has a dedicated Quality Assurance Team in place that currently uses several rigorous FWA tools, most notably the Pulselight data analytics platform. Through this system, data analytics are utilized to identify potential leads for further audit review and fraud detection. Efforts to build upon that framework have been identified that are projected to generate millions of dollars of savings.

Advanced data analytics such as those conducted by Pulselight are critical to identifying and curtailing wasteful spending. A data-driven understanding of care areas and providers with higher spend, as well as identifying unusual trends in spend over time, is crucial to establishing where to dedicate further investigative efforts and can yield substantial savings. To cite an outside example, Molina Healthcare, a facilitator of Medicaid and Medicare insurance for individuals, identified more than \$150m in payments that were made to providers with abnormally high costs – a likely indicator of wasteful or abusive spending.

Expanded analytical capabilities could complement Connecticut's ongoing efforts to reduce wasteful spend, which include significant investment in fraud investigation personnel and close collaboration with a third-party vendor to hone quality assurance efforts and identify and investigate outliers. These capabilities could also address the desire at OPM and DSS to create greater visibility into key drivers of Medicaid spend and the status of reform initiatives to ensure that resources are being allocated to yield the best possible outcomes for residents.

DSS has proposed specific new initiatives to reduce wasteful spend, such as review of "crossover" claims for members who are covered by both Medicare and Medicaid. This will focus on maximizing Medicare coverage and avoidance of cost shifting or duplicate billing to Medicaid. In addition to these initiatives, DSS has recently identified several savings opportunities related to more efficient operation of the HUSKY program, including the following which are included in the most recent Governor's Recommended Budget:

- Reducing capitated NEMT rate to reflect lower use of non-emergency transportation due to use of telehealth by HUSKY members
- Reducing quantity limits for medical surgical supplies where Connecticut utilization exceeds typical supplies in neighboring states (e.g., NY and MA)

- Reducing the fee schedule rate for strips and lancets to be more closely aligned to Medicare and neighboring states
- Limiting drug testing to twelve screens per provider/per patient annually and make all further tests subject to prior authorization (effective July 1, 2021)
- Improving oversight and management of Medicare crossover payments
- Expanding the existing contract with the Center for Medicare Advocacy to increase the level of nursing home Medicare appeals performed

Beyond identifying explicitly wasteful spend, additional savings can be realized by aligning thresholds for eligibility and the scope of benefits offered more closely to peer states. Connecticut is currently evaluating options to do so while maintaining its status as one of the most generous states in the country.

In addition to generating cost savings by reducing wasteful spend and aligning offerings with peer states, there are often high-value opportunities for states to capture additional federal funding and thus enhance the services offered to residents. This often occurs as a result of audits to ensure that federally

reimbursable spend is properly identified, and the savings can be substantial. Neighboring New York conducted an audit in January 2020 that identified roughly \$425m in uncollected drug rebates from the Federal Government.

Connecticut has dedicated resources to maximizing federal funding. A designated revenue maximization team consistently works to identify opportunities to increase revenue. Several related initiatives are planned over the next couple of years. One such initiative – implementing a waiver to receive reimbursement for substance-abuse-related treatment services – will involve close collaboration with DMHAS, DCF, and OPM. Another effort in conjunction with Dempsey Hospital, put forward by DSS for the Governor’s Recommended Budget, has the potential to bring in nearly \$34 million in additional federal disproportionate share hospital (DSH) reimbursement over the upcoming budget biennium. As DSS continues to investigate opportunities to increase revenue, further examination of services provided by agencies other than DSS to determine whether some are reimbursable could identify significant sources of revenue for the State.



Improve Tax Compliance

Based on independent research and external benchmarks from other jurisdictions, DRS may be facing a potential tax gap at least hundreds of millions of dollars annually as a result of some tax filers paying less than their full obligation. Rather than increasing tax rates, the State has an opportunity to increase tax revenues while keeping rates fixed. To do this, DRS should prioritize closing this tax gap and collecting as much of the outstanding and underreported revenue that filers already owe (or should owe). Collecting these taxes will require a mix of technology and cultural changes within the agency.

While the current front- and back-end IT modernization program will have some impact on tax compliance – for instance, the self-service portal where residents see their own delinquency status has already led to an increase in collections – a more robust, data-driven compliance program can help identify patterns in intentional and unintentional fraud, non-compliance and other sources of underreporting. Combining strategic insights with advanced data analytics can help DRS optimize audits, increase deterrence for tax fraud and collect a greater share of what is owed to the State. With audit coverage ratios for some taxes less than one-third of what is achieved in many other states, DRS must backfill retiring auditors while improving its case selection to maximize the return on those audits that the staff are able to conduct. DRS will need to invest in more advanced analytic capabilities, including a mix of internal capabilities and third-party software, to better segment taxpayers and audit the highest value filings.

In conjunction with the capability expansion, the agency must continue to build on recent organizational changes, including greater focus on agile teams and mindsets, cross-training personnel across taxpayer types and issues, and pushing for more creativity in its analyses of how to extract more value from its end-to-end tax and compliance processes. One solution is to develop a team of individuals capable of thinking strategically through potential actions and running detailed analytical analyses to

pressure-test these ideas. For example, this team could forecast a cost-benefit analysis on initiatives such as experimenting with soft-notice and piloting efforts to increase compliance. A more data-driven tax compliance program could yield incremental revenue of at least \$40m-50m per year.

In addition, there are several immediate steps that DRS can take to improve compliance and produce incremental revenue uplift:

Blocking payments to state vendors who owe taxes. The state currently pays vendors who are not current in their tax payments to the State. Withholding payments, analogous to the ability to garnish wages, could have a potential incremental revenue impact of tens of millions of dollars.

Prohibiting DMV transactions for residents who owe taxes. The legislature should empower DRS to coordinate with DMV and restrict residents who owe State taxes from completing transactions at the DMV. Many peer states have enacted similar restrictions, and results indicate that the potential incremental revenue of this initiative could be tens of millions of dollars annually, if not more (e.g., California and New York realized more than \$600m and \$400m in revenue, respectively, within just the first few years). This initiative is more difficult to implement in the near term because of its complexity integrating with the DMV, which already faces inefficiencies from failed transactions and a lack of technology capabilities.

Securitize and sell “uncollectable debt.” The State has \$700m in outstanding revenue currently deemed “uncollectable” by DRS. As fixed income markets continue to see record low interest rates and investors search for yield, DRS could likely securitize and sell this debt for a significant one-time cash flow. A model already exists for the State to emulate as municipalities run similar programs. Legislative action will be required to enable DRS to act on this initiative.

Executing a one-time amnesty program. An amnesty program may generate incremental revenue by allowing residents who are knowingly out of compliance, are under audit or expect to be audited to come forward and pay their full obligations. However, this could create a moral hazard, perpetuating future non-compliance as individuals come to

expect future amnesty programs (Connecticut offered a similar program as recently as 2018). Academic research on the topic also indicates mixed results. If implemented, which requires legislative action, a successful amnesty program must be targeted, used to inform future enforcement, and accompanied by strengthened enforcement in subsequent years.

Cut Low-ROI Film and Tax Programs

DECD is tasked with attracting businesses to the State of Connecticut and creating more jobs for local residents. This includes the use of tax credit programs, a common practice across states and vital to remaining economically competitive. While these credits often receive negative backlash from some community members, they often are necessary to keep

jobs in the State and generate revenue across a variety of revenue sources (e.g., taxes on sales and use, income, property, and schools). These jobs help create other jobs through spending in all sectors of the State's economy. Nevertheless, not all tax credit programs are equally effective, and some should be further evaluated and possibly cut depending on their true value.

Overview of DECD programs and returns on investment

Program	Budget (M)	Cost/job created	State net revenue and ROI
CT Aerospace Reinvestment Act	\$400M authorized \$335M earned 2015-19	N/A (not measured) ⁴	N/A (not measured) ⁴
Special Act	\$220M awarded \$5.7M in 2019	1,126 new jobs \$27,000/job	\$6.4M in 2019 112% ROI
Stranded Tax Credit/Sales and Use Tax Offset	\$50M authorized \$6MM awarded ²	N/A	\$27.4 over 10 years ³ 55% ROI
Urban & Industrial Site Reinvestment Tax Credit	\$950M authorized \$450M awarded since 2010	~34,000 new jobs \$13,000/job	\$284M since 2010 63% ROI
Film, TV and Digital Media Tax Credits	\$730M since 2010 \$157M awarded in 2019	3,500 jobs per year \$45,000/job	(\$680M) since 2010 (193%) ROI
Insurance Reinvestment Fund Tax Credit	\$170M credits issued since 2011	N/A (not focus)	\$20M since 2011 12% ROI
Property Tax Abatements (Enterprise Zones)	\$3M in 2019	N/A (not focus)	~\$10M per year 333% ROI
Direct financial assistance	\$146M provided in 2019 \$1.4B portfolio	6,000 jobs/year \$24,000/job	\$132M since 2010 9% ROI

¹. Includes income and sales taxes ². Program authorized to award \$50m, but only 1 application approved ³. Projected—does not have sufficient data ⁴. 17k total CT jobs with \$1.9b total payroll
Source: 2019 DECD Annual Report

Connecticut has provided \$730m in film, TV, and digital media tax credits since 2010, including \$157m in 2019. Over this time, initial analysis indicates the cost per job created to be approximately \$45,000, far higher than other tax credit programs, while the return on investment using net state revenue is also significantly negative. Independent analysis indicates that the State loses ~\$0.68 in revenue per dollar of tax credit provided. Even if the analysis is incomplete, it certainly indicates a low performing credit program. While the program attracts movie and television

production activity, many of those jobs are temporary and thus do not have the full ancillary benefits of other programs. Analysis across other states including New York, Massachusetts, and Maryland have similarly found the cost per job created from film production tax credits to be exorbitant and the multiplier effects far from sufficient to objectively justify these incentives. The DECD should therefore further evaluate this program more closely and consider eliminating the program to avoid the revenue loss. Doing so may require the legislature to amend Chapter 208 Sec. 12-217jj.

Find New Transportation Revenues

Capital and operating expenses for transportation-related programs are sourced from federal, state, and bonded funds. For more than a decade, general revenues have been transferred to the Highway Trust Fund and the Special Transportation Fund to keep them solvent. These are funds that were intended for municipalities, education, nonprofits, and social services. Much of the funds used to maintain roads comes from motor fuel taxes. However, Connecticut's gas tax has remained flat since 2001, vehicles have become more fuel efficient, and construction costs have more than doubled. These factors lead to a substantial decline in the purchasing power of the gas tax. The largest potential solutions have been defeated in recent years (e.g., tolls) or are politically difficult (e.g., gas tax increase). While these difficult but meaningful reforms should remain on the table, less burdensome paths exist to examine new sources of both recurring and non-recurring revenues, albeit materially smaller opportunities.

Monetize ROWs with solar panels and telecommunication leases. For recurring fees, a both potentially lucrative and environmentally friendly initiative would involve the installation of solar panels along CTDOT rights-of-way (ROW) and on top of State-owned facilities. Massachusetts, Oregon, Ohio, and Texas are just some of the States already pursuing similar initiatives, which could help the State make progress on Governor Lamont's Executive Order

No. 1 ("Lead by Example") while also converting unused land into a revenue generating asset. Similar to Massachusetts, CTDOT should pursue a public-private partnership (P3) deal, leasing the land to a private operator who will build and maintain the solar panels. Similarly, the State should utilize ROW for fiber and broadband infrastructure leases. These initiatives could provide millions of dollars in annual revenue in the near-term, with additional upside in the years ahead. Examining CGS 13a-126c and initiating more detailed analysis in partnership with relevant sister agencies should be pursued in the near-term to study these opportunities further.

Optimize advertising opportunities. CTDOT should also explore more modern and aggressive advertising, including public transit vehicle wrappings, onboard digital and geo-based ads, naming rights and digital billboards. In addition, Connecticut should modernize its CTDOT Attraction and "Blue Signs" programs, making it easier to manage, enhance compliance with federal standards, become more responsive to business needs and convert the blue sign fees from a one-time fee to an annual subscription format, more fairly capturing fair market value on a recurring basis and bringing Connecticut in-line with 45 other states. To do so, the legislature must revise 13a-124a and 13a-124a-1-7 of the State Regulations.

Encourage retained revenue programs. For more ad hoc, non-recurring revenue, CTDOT should pursue retained revenue programs, where the agency is incentivized to find new revenue from activities such as salvaging scrap metal that can be retained by the agency. Other states have utilized such initiatives to generate seven-figure cash inflows while reducing unsightly, unsafe, and environmentally unfriendly scrap across state grounds.

Index CTDOT and DMV fees to inflation. CTDOT and DMV have several potential sources of increased revenues. While the State's DMV fees are broadly in-line with peer states, many other legislatures across the country have enacted legislation indexing fees to inflation. Doing so provides a one-time political hit but thereafter allows for transaction fees to increase in-line with purchasing power.

Share infrastructure cost burden more equitably by introducing EV registration fees. Another option for increased revenue includes the introduction of a fee on fuel-efficient (e.g., hybrid, electric) vehicles. While on the surface this may seem to be at odds with environmental goals, there are several reasons to introduce such a fee: (1) this would more evenly distribute the cost burden of maintaining roads across all users, as fuel-efficient drivers incur little or no gas tax; (2) EV users are typically of higher income and less sensitive to a fee that would be less than 1% of the typical cost of an EV, thus allowing the State to increase revenues without impacting low-income residents (who could also receive rebates/credits to offset the EV registration fees) or deterring the adoption of these vehicles; and (3) most states,

including some of the most environmentally progressive, have already introduced similar fees. Connecticut would be the first state in the Northeast region to introduce such a fee and the State should evaluate the potential impact on EV adoption, as well as consider rebates to offset the impact on low-income residents. In addition, if the State achieves its goal of having 125,000 to 150,000 EVs on the road by 2025 without other common-sense reforms, this will further erode fuel tax receipts and push the STF closer to insolvency. Overall, such fees are increasingly becoming commonplace, and would help offset the decline in gas tax receipts by bringing millions of dollars of revenue into the STF to contribute to keeping Connecticut roads safe and in good repair.

Implement road usage charges. Finally, a mileage-based fee (e.g., road usage charge) would also help bring more fairness in distributing transportation costs across all drivers and offset the decline in gas tax receipts. However, Sec. 13b-14b prohibits CTDOT from even conducting a cost-benefit analysis of mileage-based vehicle user fees. Transparency for residents and taxpayers should be encouraged, and the ability to conduct objective, data-driven studies should be encouraged rather than banned, especially given the importance of safe roads and a solvent STF. Moreover, the funding for these studies can be partially sourced from federal grants, such as the federal Surface Transportation System Funding Alternatives (STSFA) program. Many additional federal funding opportunities would likely become available with these fees, opening the door to more cost-effective P3 initiatives.



Additional revenue opportunities across CTDOT and DMV



Solar and wireless leases

Install solar and wireless equipment ROW

Potential to add \$1M+ in revenue p.a. plus help meet climate goals



New electric vehicle fees

More equitably distribute road infrastructure costs

Potential to add several million dollars p.a.



Vehicle safety inspections

Ensure vehicles are safe in addition to emission compliant

At least several million dollars p.a.



Increased advertising

Increase digital and print ads across public transit, ROW and customer apps

Potential to add several million dollars p.a.



Annual blue signs program

Convert ROW blue sign ads from one-time to annual fees

Requires legislative action to amend statutes



Retained revenue

Incentivize agencies to find untapped revenue potential that is aligned with taxpayer interests

Potential to add at least \$1m in revenue p.a.

Opportunity 6: Rationalize State Assets

The Connecticut State government owns a large, diverse, and valuable portfolio of real assets, ranging from office towers to colleges/universities and parks. In total, the State's real estate footprint includes over 66 million sq. ft. across 3,643 state-owned structures (this includes buildings as well as salt sheds, bus shelters, latrines, etc.) and 2 million sq. ft. across 138 leased buildings. Half of this real estate portfolio is under the custody and control of colleges and universities.

The State's current workforce, smaller and with a different distribution across agencies than a decade ago, presents an opportunity for the State to rationalize its real estate footprint. While

reducing unused or underutilized real assets does not directly address the risks associated with the retirement surge, it can raise funds that will allow the State to invest in services to improve resident experience, build new capabilities (e.g., digitizing internal processes), and address general fiscal pressures.

The key efficiency opportunities for the State are to:

- Increase office co-location: **Page 80**
- Match prison footprint to current population: **Page 82**
- Consolidate specialized assets such as maintenance garages and barracks on an agency-by-agency basis: **Page 83**

Increase Office Co-location

The Connecticut state workforce has decreased in size over the past decade and could continue to do so, with 25% of state employees eligible for retirement in 2022. Consolidating the State's office footprint could lead to significant savings and create a revenue stream to fund important projects.

OPM is currently implementing an initiative to increase co-location of agencies (the "Real Estate Plan to Reduce Excess Space and Maximize Efficiencies to Achieve Savings While Meeting EO 1 Goals"), in which approximately 1,000,000 sq. ft. of office space will be divested and approximately 1,000 employees will be relocated to existing state buildings that they would share



with other agencies. Through this effort, thirteen office buildings that require significant capital investments for facility improvements will be divested, allowing the State to avoid more than \$200m in required capital expenditure and generate income from the sale of the vacated buildings. The State will also avoid approximately \$6m in annual operating and maintenance costs for those buildings.

While current co-location efforts will generate significant savings through cost avoidance, the State could go further in decreasing its office footprint. Currently, the State allots more office space per employee (220 sq. ft./employee) than does private industry in the State (about 150 sq. ft./employee). Current work by OPM suggests that the State could reduce its office footprint to 175 sq. ft. per employee by eliminating wasted or un-used space in building configuration.

After the acute phase of the COVID-19 pandemic ends, the State may consider exploring alternative office models, such as extending current work-from-home arrangements or adopting other teleworking practices. Alternative office models, such as desk-sharing and hoteling, have led to cost savings in private firms such as Microsoft and helped those organizations be more flexible while including measures to ensure that employees are productive while working away from their desks. Alternative office models such as teleworking makes the State more competitive, attracting more workers as is seen in the private sector.

Based on an employee survey, numerous state employees requested teleworking to be a more consistent practice. As interest in teleworking grows, the State will need to find performance management tools to ensure productivity and

efficiency. Prior to COVID-19, labor unions did not favor teleworking, limiting the number of days non-managers could teleworking and not allowing managers to telework altogether. Any model adopted would need to fit the nature of employees' work (e.g., some employees handle highly confidential documents and need dedicated space to store them) and would need to be bargained with the State's labor unions. Additionally, any alternative office model will need to ensure privacy associated with each agency operations and data. Group sharing for office spaces may need to consider operations and privacy for respective agencies.

As the State explores the optimal office model to maximize employee productivity and utilization of its office buildings, it will need to consider multiple constraints and implications, such as:

- Reconfiguring office space and moving employees is expensive and requires initial investment for a long-term return.
- Relocating employees may impact a neighborhood's economy (e.g., restaurants and small businesses may be impacted when jobs move to a new location).
- State building costs and conditions vary greatly; some need significant and costly repairs prior to their sale.
- While alternative office models have been shown to generate significant cost savings, state employees may not favor desk-sharing or hoteling models. This will likely vary by agency and job classification.
- Each agency has unique functions and operations, and the State must identify an office model that improves productivity and service delivery for every worker.
- Union/administration collective bargaining approval will be required for any changes.



Match Prison Footprint to Current Population

Connecticut's prison population has been decreasing over the last 5 years and has further reduced in size due to the COVID-19 pandemic. In 2015, the prison population was well over 15,000. Currently, the prison population is fewer than 10,000 inmates (a 40% decrease). Because the State's imprisoned population has decreased significantly, DOC has an opportunity to optimize its real estate by closing facilities which are no longer needed.

Currently, the agency has 14 facilities housing inmates in security levels 2 to 5. Out of the 14 facilities, four provide specialized accommodation and services to groups such as women, youth, and those with special physical and mental health needs. Connecticut is one of four states that have a unified system in which the State's prison system also administers jails. In Connecticut, "correctional institutes" function as prisons, whereas "correctional centers" have unique infrastructure in place so that they may also function as jails.

Given the decrease in prison populations, the current occupancy rate is 56% across the 14 facilities. Prior to the COVID-19 pandemic, the

overall occupancy rate was 74%. This figure is higher than the current occupancy rate, but still lower than other states. If the current low inmate population is maintained, DOC has an opportunity to optimize its facility footprint by divesting high-cost and dilapidated facilities. Many of the facilities in the agency's portfolio are dated and require significant investment to maintain. Based on the current occupancy rate, the agency is well-positioned to divest three prisons across various security levels and geographies. In addition to capturing savings from operating expenses, the agency can generate income from selling off dilapidated facilities, though initial investment may be required for associated clean-up costs.

The agency is assessing the capacity needs of the imprisoned population and developing a plan for its future facility needs. In conducting this assessment, the agency will need to consider several challenges, including the impact on both communities that lose a source of employment and employees themselves, and the need to maintain a set of facilities that can house a variety of inmates.

Consolidate Specialized Assets

State agencies maintain a variety of specialized real estate holdings that enable them to deliver services to residents. In some cases, multiple agencies maintain the same type of asset. For example, the Department of Transportation, State Police, and Military Department all maintain extensive garages and parking facilities (for construction equipment, police cruisers, and military transport, respectively). The State should look for ways to utilize assets across agencies where possible and consolidate redundant assets.

Police barracks are used primarily to accommodate troopers and staff while functioning as temporary holding cells. Many police barracks used by CSP are in poor condition and require capital investment to maintain the facility. CSP has also recently consolidated some of its troop organizations. CSP can use both factors as an opportunity to further consolidate barracks to save on capital and operating expenses. Making investments in digitization, such as allowing troopers to complete some paperwork while on patrol and reduce the need for desk space in barracks, will accelerate the consolidation process and allow

troopers to spend more time on patrol protecting public safety and less time behind a desk.

Connecticut should look for opportunities to consolidate fleet garages. Fleet garages are managed by multiple agencies, including CSP and CTDOT. Many garages are old and outdated and require continual investment for upkeep and use. While State Police garages are primarily used to house and maintain fleet vehicles, they should coordinate with CTDOT to determine if garage-sharing is feasible. CTDOT has multiple types of garages (e.g., vehicle storage and salt storage) which are federally funded and often have unused capacity. Coordination between both agencies will allow the State to save on capital and operating expenses.

Connecticut should continue to look for ways to coordinate and consolidate assets which could be used by multiple state agencies. This approach could apply across other asset types (e.g., warehousing / storage, fleet, resident-facing services) and would reduce operating and capital expenses as well as FTE required for facility maintenance.





4 CONNECTICUT

Agency profiles

Agency profiles

The following section reviews each of the agencies in the executive branch, focusing on those most impacted by the retirement surge. This covers the mission of each agency, how the retirement surge will impact it and the major

efficiency opportunities identified. All budget figures cited are based on FY20 Recommended totals from the FY2020-2021 Biennial Budget Program Addendum. All FTE figures cited are based on CT STARS data as of January 5, 2021.

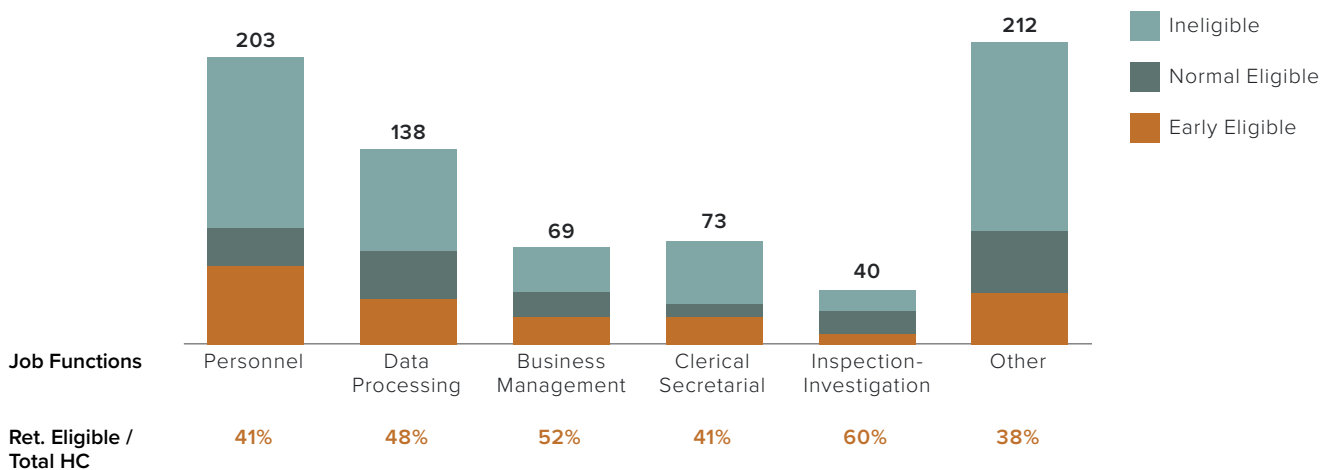
Department of Administrative Services (DAS)

DAS provides administrative and essential services to State agencies. Services include providing statewide policy on matters affecting purchasing and procurement, vehicle fleet, human resources (HR), IT, property and facilities management, and construction services. The agency serves a pivotal and centralized role in hiring processes; assisting agencies in identifying and vetting candidates while guiding them through the job-creation processes; and IT provisioning with its centralized Bureau of Enterprise Systems and Technology (BEST) unit, which provides technology systems and best practices statewide.

As of January 2021, DAS has 735 employees, of whom approximately 43% will be retirement-eligible by July 1, 2022. Given the agency's central role as an HR and IT provider, the high number of potential retirements poses a risk to service continuity across the State. Almost 50% of the agency's data and IT personnel are eligible for retirement, as are more than 40% of its HR personnel. DAS should pursue several initiatives besides those already in progress to mitigate risk and achieve savings for the State.



DAS | 43% of agency personnel eligible for retirement



Source: CT STARS database as of 1/5/2021

The pending retirement surge provides an opportunity for DAS to right-size the agency by managing attrition. DAS leadership has developed roadmaps for backfilling units based on current utilization and anticipated improvements in productivity as the State implements its automation and digitization efforts. Allowing some retirees' positions to be eliminated will produce significant ongoing savings or will enable the State to re-allocate those personnel expenses.

DAS should increase efforts to centralize some aspects of IT and accelerate digitization across State government. The BEST unit provides centralized IT and operational systems support across agencies; however, opportunities exist for DAS to accelerate and broaden digitization efforts. The level of digital maturity varies significantly across agencies. Many agencies would benefit from technology that other agencies have had for some time (e.g., document scanning and digital storage; e-Signature). Implementing these technologies will help all agencies, rather than a select few, to become "digital by default." The State must balance modernizing legacy agencies with enabling digital leaders to continue to progress. To do this, DAS can provide statewide outreach (e.g., e-mails, newsletters, webinars, and cross-agency conferences) to educate agency IT personnel on the efficiency-driving technology offerings that are approved and in-place, as well as clear guidance to adopt those same tools at other agencies.

Centralizing portions of IT will help streamline these offerings, reduce the need for redundant personnel hires, and provide a path for the State to move toward a single view of residents and businesses (e.g., Business One Stop). The user experience for residents and businesses could be improved through a single portal hosting activities from address updates and voter registrations to driver credentials, tax filings, and professional licenses. Such a move would also enable state employees to move beyond repetitive tasks to more complex or strategic initiatives.

In response to the COVID-19 pandemic, State government aggressively moved towards

remote working options for most workers. DAS leveraged lessons learned from this experience to implement long-term remote work policies to reduce its footprint of owned and leased real estate. Most state employees view teleworking throughout the pandemic as a favorable change in their work environment, while many managers we spoke with believed productivity had remained at least relatively constant. As more private companies offer their workforce flexible work arrangements, maintaining at least partial telework options (where they have been successful) will enable the State to operationalize expenses (e.g., ongoing maintenance and leases), avoid significant capital expenses for building upkeep and safety, and return real estate property to tax-producing assets.

DAS should consider several additional efficiency opportunities, including:

- **Implement common-sense workers' compensation reform.** While likely to incur backlash, bringing workers' compensation benefits in-line with peer states and making temporary disability benefits truly temporary can save taxpayers millions of dollars per year, while providing protection and security for State of Connecticut government workers (see Section 3.1.4).
- **Centralize business functions.** DAS should further centralize business functions (e.g., AR/AP, payroll, and benefits). As mentioned in Section 3.2.2, centralization of business functions can eliminate redundant positions within each agency, reduce overtime, and help offset service disruption from the retirement surge. While payroll should be centralized within the Office of the State Comptroller, other business functions should be centralized within DAS.
- **Rationalize statewide vehicle fleet.** In right-sizing business functions and establishing remote work policies, the agency has an opportunity to right-size its statewide vehicle fleet. As more state employees work from home and the State reduces its real estate footprint, there is an opportunity to reduce excess vehicle fleets and the corresponding parking/garage expenses.
- **Enhance the State's e-Procurement**

platform as an end-to-end digital solution. Agencies such as CTDOT will require customized solutions for their procurement needs, but most would benefit from a more comprehensive digital procurement platform that embeds data analytics to identify the greatest savings opportunities.

- **Embed advanced analytics in HR processes.** DAS has initiated an effort to bring AI into its candidate screening

processes. This will be especially helpful as the HR team faces the potential of a significant spike in hiring needs following the retirement surge. The State should accelerate the rollout of this program by reviewing historical applications of successful candidates while evaluating the opportunity to scale both costs and capabilities across other state agencies in need of AI-based solutions.

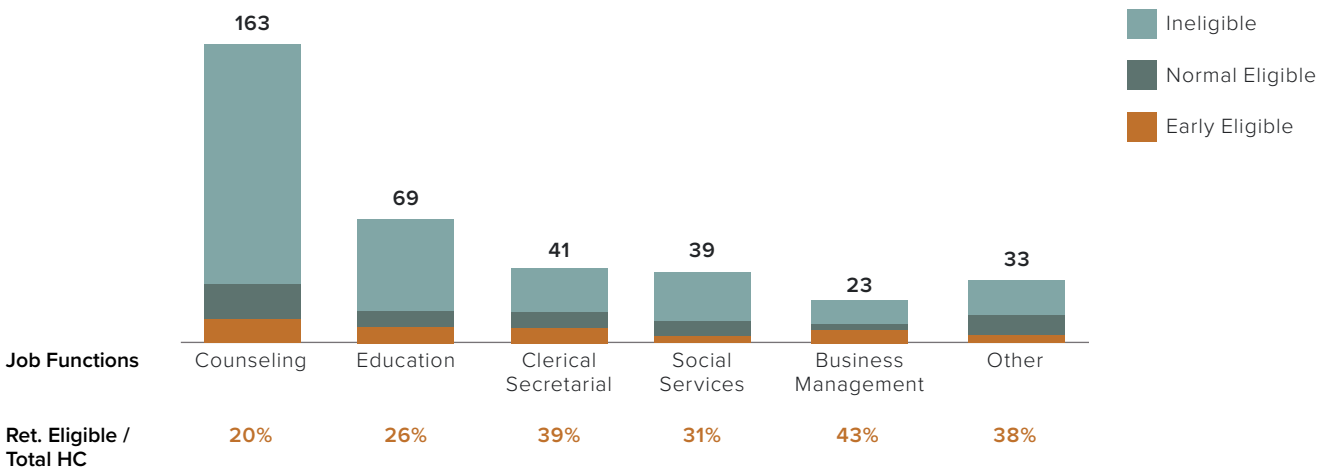
Department of Aging and Disability Services (ADS)

ADS, formerly known as the Department of Rehabilitation Services, provides employment, independent living, accessibility support, and general education to elders and people with physical disabilities. Specific services include programs to help residents develop the skills to gain and maintain employment, day-to-day education and consultation on chronic disease management, and assistive technology and user training. In 2020, roughly 366,000 residents were projected to receive independent living support and 9,900 were projected to receive employment support. ADS's FY20 budget was roughly \$103m, with \$27m

in state funding, \$72m in federal funding, and \$4m in funding from the workers' compensation fund, insurance fund, and private funds.

As of January 2021, 102 (28%) of ADS's 367 employees are retirement-eligible in 2022. Most eligible employees (62 total) are in resident-facing positions, such as Vocational Counselors, Disability Claims Specialists, and Educational Consultants. These employees work with residents daily to provide, among their other responsibilities, vocational training and education and file claims for various reimbursements.

 **ADS | 28% of agency personnel eligible for retirement**



Source: CT STARS database as of 1/5/2021

Since ADS operates at a smaller scale than its peer health and human services agencies and offers highly specialized services, individual retirements could pose significant risk of service disruption in certain resident-facing areas. For example, it is challenging to identify and recruit candidates who have the training necessary to work with vision-impaired or blind people. In addition, certain services now offered by ADS, such as the Driver Training Program, were provided by different agencies in the recent past, and ADS has limited experience in recruiting candidates with the relevant skills.

Similarly, ADS's lower number of middle- and back-office employees raises the risk of disruption of day-to-day business operations from retirements, particularly within the fiscal staff. State-wide, and particularly within health and human services agencies such as ADS, clerks, secretaries, and administrators generally take on tasks beyond their official job descriptions. As a result, when these employees retire, processes may be unexpectedly disrupted, increasing the challenge of filling the

relevant vacancies to ensure service continuity.

To mitigate the risks posed by the 2022 retirement surge and continue to provide quality services to Connecticut's elders and people with disabilities, ADS can consolidate and/or jointly administer certain resident-facing services, such as nutrition programs with DSS, and collaborate with other health and human services agencies to conduct certain business operations on shared platforms.

Operations that could be conducted on shared platforms include contracting with private service providers, monitoring and evaluating the outcomes of ADS's and private providers' programs, determining resident eligibility for various services, and conducting background checks as part of the State employee hiring process. By further automating these functions and implementing standardized processes across agencies where possible, health and human services agencies can better ensure positive outcomes for State residents, operate more quickly, and reduce the risk of service disruption.

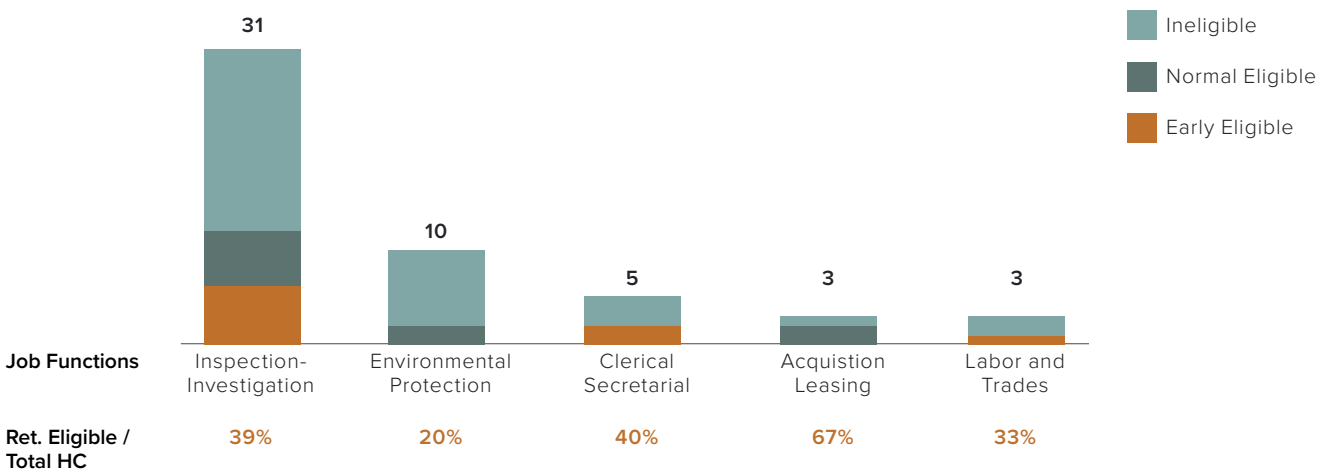


Department of Agriculture (DOAG)

The mission of the Department of Agriculture is to foster a healthy economic, environmental, and social climate for agriculture by developing, promoting, and regulating agricultural businesses; protecting agricultural and aquaculture resources; enforcing laws pertaining to domestic animals; and promoting an understanding among the state’s citizens of the diversity of Connecticut agriculture, its cultural heritage and its contribution to the state’s economy.

As of January 2021, the agency employs approximately 70 personnel; a majority perform regulation and inspection services, as well as agriculture development, and resource preservation. Looking ahead, 19 of DOAG’s employees will be eligible to retire in July 2022, of which a majority are seen in inspection and investigation services, causing potential service continuity risks for inspection services.

 **DOAG | 32% of agency personnel eligible for retirement**



The retirement surge poses several challenges for the agency. First, the Bureau of Regulatory Services requires highly skilled staff; rehiring for these roles will be challenging for the agency given the limited talent available, plus the training and certifications needed to execute regulatory duties. Second, the agency currently struggles to digitize its highly manual licensing and inspection processes due to a lack of digital capability and

trained staff built into the agency. In order to automate or digitize its services—which will be key to addressing future capacity challenges—the agency needs support from the central digital team to develop, construct and train its agency into the automated digital world for licensing and inspection reporting. This support would include opportunity identification, vendor engagement and contracting and implementation.

Source: CT STARS database as of 1/5/2021

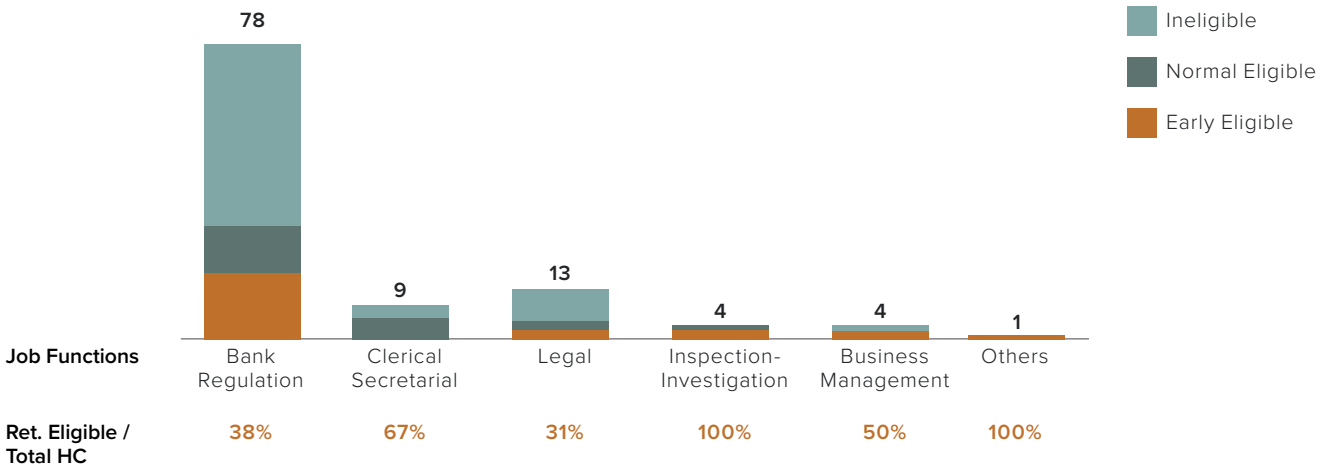
Department of Banking (DOB)

The Connecticut DOB is the primary state regulator for state-chartered banks and credit unions, securities, and consumer credit. It protects consumers from improper practices through licensing, examining, and enforcing against those

who are not in compliance. The agency is funded by the industry which it regulates and therefore does not draw upon the State's General Fund. It has just over 100 employees, 44% of whom are eligible for retirement by July 1, 2022.



DOB | 39% of agency personnel eligible for retirement



This very high proportion of employees eligible for retirement creates several risks for the agency, including the loss of institutional knowledge for conducting complex investigation, the need to continue investment in education for newly hired staff and the risk that if staffing levels drop too far that the

agency could lose its accreditation. The agency has taken a number of actions which help address these risks, including investing in new digital systems (e.g., Case Point), increasing coordination with other banking regulators (e.g., at federal level) and invested in training, including cross-training of staff across divisions.

Department of Children and Families (DCF)

DCF administers Connecticut's foster care, adoption, and subsidized guardianship programs; provides in- and out-of-home psychiatric support and substance abuse treatment for both children and families. DCF operates a children's behavioral health facility; manages a school district that services children that are involved with the department; and supports community-based prevention programs for children and families, among other services. DCF serves an estimated

35,000 children and 15,000 families directly at any given time, with 4,200 children in various placements (e.g., foster care or adoption). DCF's FY20 budget was roughly \$800m, with \$789m in state funding and \$11m in federal funding. The majority of the budget (\$536m) was allocated for Child Welfare Services.

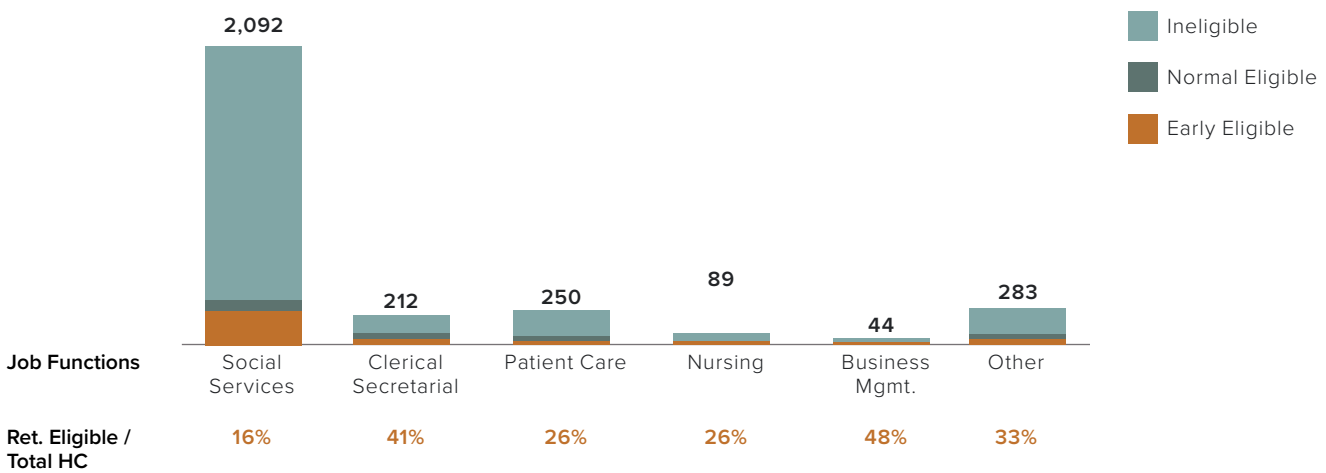
As of January 2021, 630 (21%) of DCF's 2,970 employees were retirement-eligible in 2022.

Source: CT STARS database as of 1/5/2021

Compared to other State agencies, 21% is a relatively low percentage of retirement-eligible employees. More than half (343) are in the Social Services job function, which consists of just over 2,000 employees such as social workers, who primarily work directly with residents. Thus, there is lower concern of service disruption due to retirements. However, key middle- and back-office jobs have higher retirement-eligible employees – in particular,

86 clerks and secretaries (41%) are eligible. Clerical and secretarial retirements can pose an especially high risk of business process disruption because those employees often assume responsibilities beyond the scope of their official job descriptions during their tenure. As a result, unexpected processes can be disrupted when those employees retire, making filling those vacancies both extremely important and more challenging.

DCF | 21% of agency personnel eligible for retirement



Despite the lower risk of resident-facing service disruption, DCF must closely monitor its staffing levels and plan to backfill vacancies in accordance with a 1991 lawsuit settlement. Since 1991, DCF has operated under a consent decree that requires DCF to achieve certain outcomes and maintain specific staffing levels, among other criteria. Failure to comply can result in a motion of contempt being filed against the State. Therefore, Connecticut must be prepared to backfill vacancies, particularly for social workers. This could prove challenging due to the high intensity of the job and the lack of candidates who have completed the requisite field hours due to COVID-19-related disruptions.

DCF has several opportunities to mitigate the retirement-related risk of disruption to its business processes, provide services more efficiently to children and families, and generate cost savings for the agency and the State. Key business

operations could be conducted via shared platforms with other health and human services agencies, including:

- Contracting with private service providers.
- Monitoring and evaluating the outcomes of programs administered by DCF and private providers.
- Determining resident eligibility for various services.
- Conducting background checks for the State employee hiring process.

Further automating and standardizing these functions across agencies (where possible) is likely to improve outcomes for State residents, increase operating efficiencies, and reduce the risk of service disruption. In addition, DCF has an opportunity to better control overtime costs by more efficiently staffing its direct-service workers.

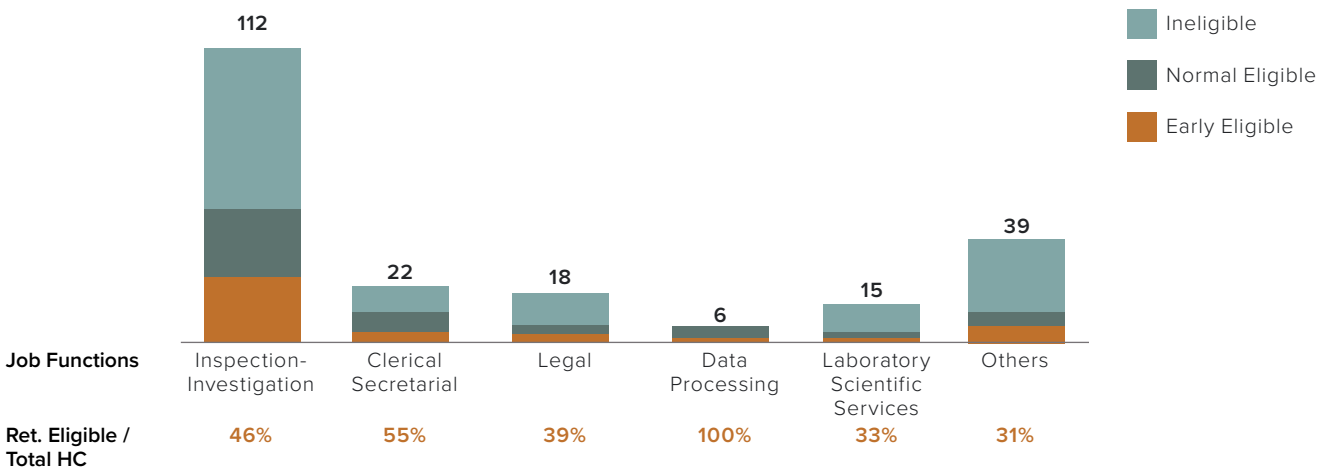
Source: CT STARS database as of 1/5/2021

Department of Consumer Protection (DCP)

DCP is a regulatory agency responsible for protecting citizens from physical injury and financial loss that may occur as a result of unsafe or fraudulent products and services. The agency ensures a fair and equitable marketplace through licensure, inspection, investigation, enforcement and public education activities.

DCP is comprised of approximately 230 employees of which 93 FTEs will be eligible for retirement in July 2022. A majority of the retirements are seen in inspection and investigation services (>50 FTEs) causing potential service continuity risks for the agency.

DCP | 44% of agency personnel eligible for retirement



The retirement surge places several challenges for DCP. First, the agency experiences challenges in hiring managerial staff and maintaining existing managers. High retention of managerial positions bring risk that others leave the department frustrated de-stabilizing organizational functioning. Second, the retirement of inspectors leads to niche institutional knowledge for particular industries. Inspector’s skilled nature of the work makes rehiring positions to be more

challenging, ultimately staggering work. And lastly, much like other agencies, DCP’s highly technical data processing capability at risk due to retirements. The agency could benefit from central digitation efforts outlined in Section 3 of this report. Additional opportunities the agency can leverage to improve services include, expanding common professional credential platforms, de-credential low risk professions, and strategically targeting inspection activities.

Department of Correction (DOC)

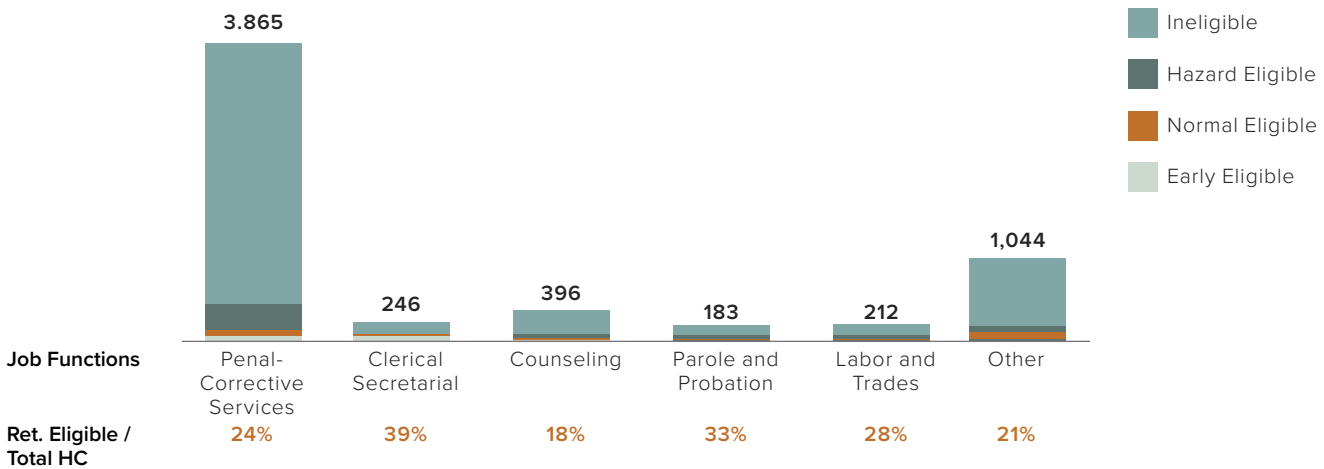
DOC manages and operates 14 State correctional facilities. Connecticut is one of four states that leverages a unified system in which correctional facilities function as both a jail and prison. In supporting correctional facility operations, the agency provides health and treatment services

through UConn Health collaboration. DOC has administrative oversight over pardons and parole through a structure parole board. The agency seeks to maintain and provide to offenders a humane environment that promotes successful reintegration and reduces recidivism.

DOC is made up of approximately 5,946 employees. Most of the agency's employees work in custody (>75%), health and addiction services (9%), and programs and treatment services (6%). 968 employees are retirement-eligible in 2022, causing service continuity risks

for corrective services (>400 Correctional Officers and >50 Captains and Wardens), clerical services (>50 FTEs), counselors (>50 FTEs) and parole officers (>50 FTEs). Given the significant number of upcoming retirements, the primary service continuity risk for DOC is in custody.

 **DOC | 16% of agency personnel eligible for retirement**



Connecticut has a higher imprisonment rate than neighboring states. In Massachusetts, 145 out of 100,000 residents are imprisoned, compared to Connecticut's 252 out of 100,000. Despite the higher imprisonment rate, the State has significantly decreased its prison population over the years, with COVID-19 further decreasing prison populations. Increased prison population is the leading source of cost within DOC due to the staffing, facility, and services required to serve the population. To mitigate retirement and service continuity risks, the State should consider, and DOC should support changing bail rules to maintain a low imprisonment population (such as similar programs in states such as NY and NJ). While making changes in bail reform requires political capital, the of savings and rate of return can be significant, depending on the level of reform.

While prison populations have decreased over the years and continue to drop due to COVID-19, DOC should match its facility footprint to its existing population size. The agency has 14 facilities with a total occupancy rate of 74% pre-COVID-19, and

56% during the pandemic. Maintaining existing population size post-COVID-19 will allow the agency to divest high-cost facilities in poor condition. DOC is evaluating the capacity needs of its existing prison population and is well-positioned to close as many as three correctional facilities to increase occupancy rates. Divesting facilities in poor condition will require union buy-in, since correctional facilities are often major employers in small communities. However, reducing facility footprint can optimize the use of the State's real estate and can lead to millions in savings. Consolidating on three facilities will also lead to significant personnel savings of tens of millions through post reduction and redeployment.

In matching the facility footprint to the existing population size through facility consolidation, DOC has an opportunity to improve its staffing ratio to be more in line with the national average. Pre-COVID-19, Connecticut's staffing ratio was 3.6 inmates per CO. Due to the decreased prison population, the current ratio is 2.8 inmates per CO, compared to the national average of 4.0 to 1. To address retirement and service continuity risks,

Source: CT STARS database as of 1/5/2021

DOC is well-positioned to accept CO retirements. In combining and consolidating facilities, the agency should identify an optimal staffing ratio based on security levels. High staffing ratios may be tied to employee safety and labor regulations; however, optimizing staffing ratios could yield tens of millions in savings.

Inmate population has decreased by 21% over the last 5 years, yet healthcare costs associated with population size have decreased by only 8%. The State has recently transitioned its healthcare delivery model from university- to State- and contract-provided and has witnessed success in its delivery. Primary care services are provided by the agency, such as caring for aging individuals entering the system and those with pre-existing medical issues. Specialty services are provided through non-profit and

profit providers. As seen from DOC's opioids programs, current efforts demonstrate strong and successful results.

Along with healthcare costs increases across the nation due to inflation, a potential contributor to shrinking healthcare costs in the State can be associated to the aging prison population. Understanding the recent transition in healthcare delivery model, the State should allow the newly implemented model to settle. Any expansion of contract-provided healthcare model can be used to address capacity issues. The agency currently experiences challenges in hiring licensed practical nurses (LPNs), despite paying more than any employer in the State. Additionally, the agency has a single employee managing hiring for healthcare services in the agency, contributing to service continuity challenges for health services in DOC.

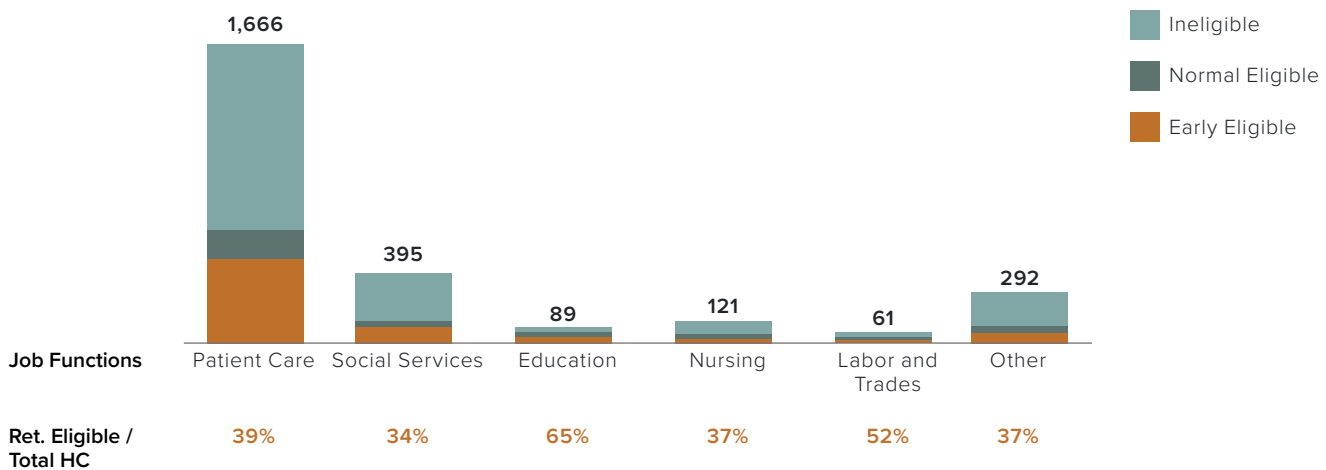
Department of Developmental Services (DDS)

DDS serves Connecticut residents with intellectual disability by providing employment support, administering day programs to facilitate community participation and social interaction, and operating residential facilities, among other services. Approximately 17,000 residents, the majority of whom (76%) are adults 22 and older, are eligible to receive services from DDS at any given time. In FY20, DDS's budget was just under \$1.2b, with roughly \$623m officially housed in DSS's budget for operation of congregate group homes and care settings.

As of January 2021, 1,027 (39%) of DDS's 2,624 employees were retirement-eligible in 2022. The vast majority of eligible employees (785 total) are in resident-facing positions, including 420 Developmental Service Workers and 107 Case Managers who work closely with residents

to manage their care and progress. The high eligibility among these positions is unsurprising, as DDS employees historically remain in their positions longer than other State workers due to the close bonds they form with residents over the course of many years. Many employees continue to work even after they become retirement eligible. However, based on the retirement-intent survey results, DDS may see higher retirement uptake in 2022 than in past years. Of the retirement-eligible employees who responded to the survey, 73% indicated that they were leaning towards retirement in 2022. Employees in certain resident-facing positions had even higher rates (85% among health non-professionals, which includes Developmental Service Workers). Concerns about the COVID-19 pandemic have accelerated this process, particularly among senior staff.

DDS | 39% of agency personnel eligible for retirement



Given the high retirement eligibility and ongoing senior staff departures, the 2022 retirement surge poses a significant risk to DDS's service continuity. DDS experiences several challenges when attempting to fill vacancies: interest in management roles has declined, particularly among people who have been trained for the roles; higher private-sector compensation complicates recruiting efforts for nurses and other clinical positions; and recruiting for direct-care positions (such as Developmental Service Workers) tends to focus on employees of private providers, which can in turn disrupt those providers' operations. Since 2002, DDS's management workforce has decreased nearly 40%, adding to the challenge of maintaining service continuity while recruiting to fill vacancies.

In addition to resident-facing roles, DDS's middle- and back-office operations could be disrupted by retirements of clerks, secretaries, and administrators – 28 out of 95 clerical-secretarial employees and 12 business management staff are retirement-eligible. As previously noted, clerks, secretaries, and administrators often take on tasks beyond their official job descriptions, resulting in additional unexpected disruption when they retire.

There are opportunities to mitigate these risks and ensure that Connecticut residents with intellectual disability continue to receive the highest quality care possible, while realizing cost and time savings for the State. Several of these opportunities are discussed in greater detail in other sections of the report, including:

- Converting additional Community Living Arrangements to operation by non-profit providers to ensure that residents continue to receive support and reduce costs.
- Expanding ongoing efforts to reduce overtime expenditure to better balance staffing.
- Centralizing and automating grant-making processes via a common platform shared with other agencies.

In addition, DDS could conduct business operations such as contracting with private service providers, monitoring and evaluating the programs it administers, determining resident eligibility for various services, and conducting background checks for the State employee hiring process via shared digital platforms with other human services agencies. Further automation and standardization could lead to better outcomes for State residents and help DDS – and other health and human services agencies – operate more quickly while reducing the risk of retirement-related disruption at any one agency.

Finally, several smaller-scale processes at DDS, such as payment tracking, service eligibility applications, and service plan monitoring, require significant manual effort from resident-facing and administrative staff. Automating and/or digitizing these tasks, potentially in collaboration with DAS's central IT team, could increase staff capacity and better equip them to handle the workload of retiring employees while simplifying resident interactions with DDS.

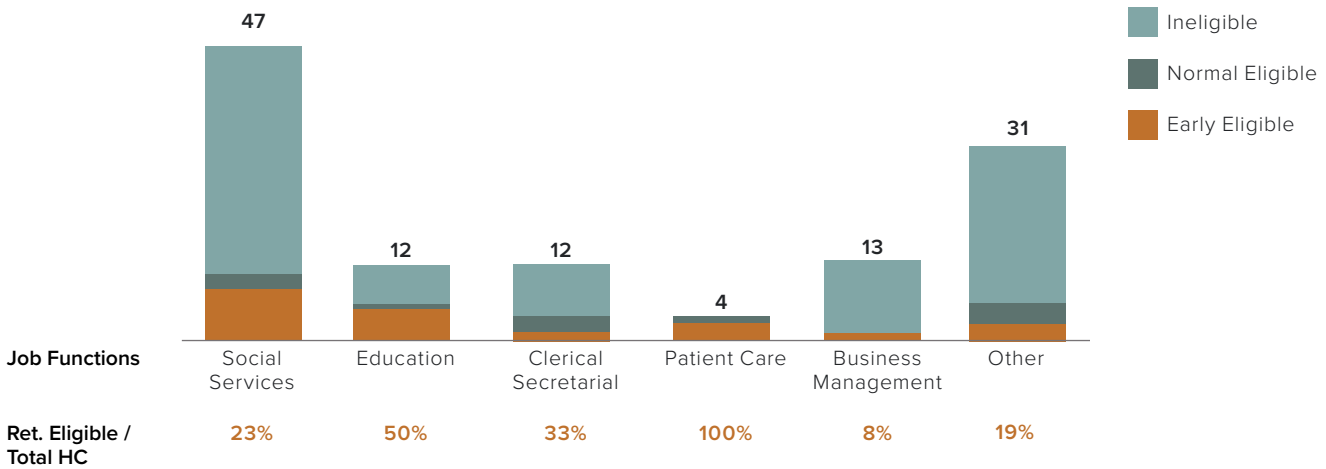
Office of Early Childhood (OEC)

OEC facilitates resident access to childcare and early education via community funding, administers joint educational programs for parents and young children in new or at-risk families, and licenses and monitors day care facilities and youth camps, among other services. OEC operates with a budget of approximately \$356m and has 105 employees as of January 2021.

32 of OEC’s employees (~30%) will be eligible for

retirement in 2022, including several senior staff members who lead key programs or departments. OEC is administratively lean, which amplifies the impact of individual retirements. In the next couple of years, OEC’s work will be especially critical – the total federal dollars Connecticut receives for early childhood funding could double, and Connecticut will need to work diligently to address the disruptions to children’s education caused by COVID-19.

OEC | 27% of agency personnel eligible for retirement



To minimize retirement-related impact to OEC’s operations, the agency should explore opportunities to conduct key functions, such as grant-making and program monitoring, via common platforms shared with other HHS agencies. In addition, OEC can continue to

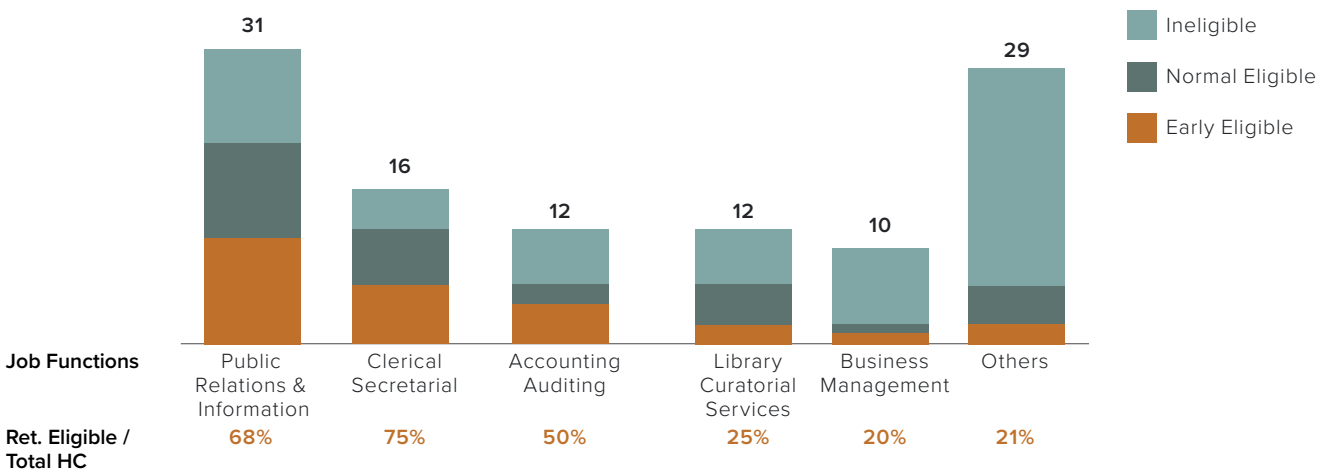
digitize manual day-to-day processes – for example, by using mobile inspections for day cares and youth camps. These opportunities can reduce administrative effort and allow OEC to focus staff capacity on day-to-day resident support, while generating cost savings.

Department of Economic and Community Development (DECD)

DECD is responsible for making Connecticut a competitive state for economic development by attracting and retaining businesses that create jobs for Connecticut residents. The agency takes a holistic approach by considering community development, transportation, education, and arts and culture, and other industries. DECD has historically supported Connecticut businesses through a combination of grants and loans, while partnering with non-profits to coordinate efforts.

DECD is among the agencies most at-risk of service disruption from the retirement surge, as nearly 46% of their 110 FTEs are eligible for retirement in 2022. To mitigate these risks, the agency has developed a plan to leverage its close relationship with non-profits, particularly AdvanceCT, to assume additional responsibilities. Though DECD does provide funding support to AdvanceCT, increasing staff capacity within AdvanceCT will cost a fraction of backfilling within DECD, resulting in more than \$1m dollars in potential annual savings.

DECD | 45% of agency personnel eligible for retirement



To provide a better use of state funds and mitigate revenue losses, DECD should evaluate the return-on-investment (ROI) of incentive programs and streamlines its processes, standardizing its approach and minimizing bespoke incentives. Integrating its data environment with that of agencies like CTDOL and DRS would allow the agency to have a better understanding of the jobs created by grant recipients, further strengthening DECD’s ability to monitor ROI of its programs.

Finally, DECD should take a strategic role in coordinating efforts across higher education programs. This would better synchronize planning between postsecondary education programs and local businesses, ensuring that Connecticut’s students are developing the skills they need to be considered for the jobs available in the State. This effort would have the added benefit of increasing collaboration on higher education financial aid programs, ensuring the prioritization of scholarship funding for programs that are better aligned to the needs of local industry.

Source: CT STARS database as of 1/5/2021

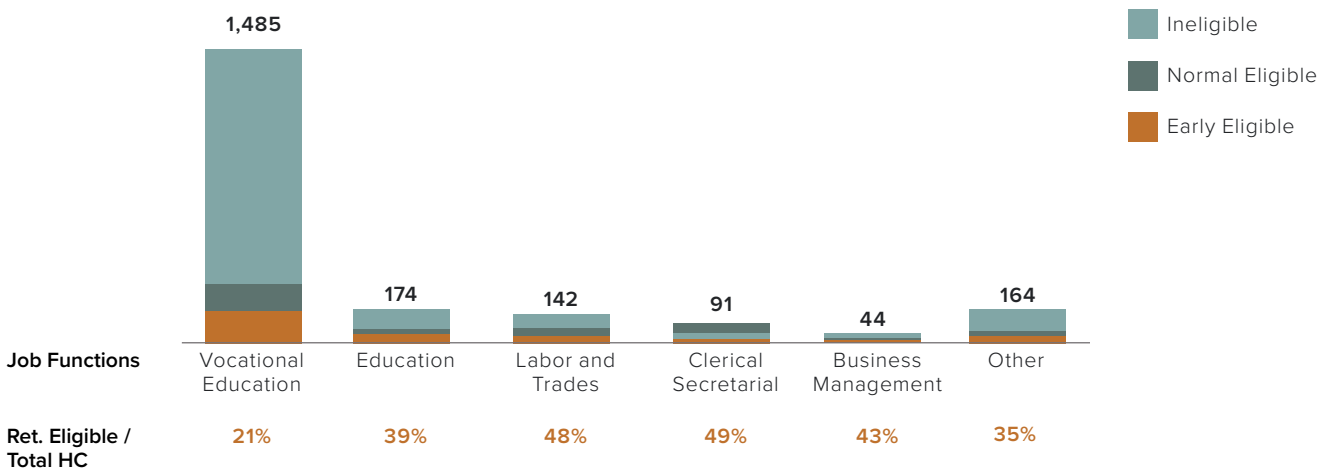
State Department of Education (SDE)

SDE primarily supports local education agencies through grants. Over 90% of the agency’s budget is allocated to grants and the distribution of grants for basic education and enhancement programs (e.g., nutritional programs and bilingual education). The agency provides research, planning, educator evaluation and support, educational technology, curriculum development materials, and assessment of educational outcomes. Unique to Connecticut, the department also manages and operates a state school system that provides thirty-three technical career educational programs across the State.

As stated in Section 3, SDE has approximately

2,100 employees. Most of the agency’s employees work in CTTHS (>75%) and administrative services (>10%). More than 550 employees are retirement-eligible in 2022, creating service continuity risks in the State’s technical high school services (>300 FTE) and administrative services (>50 FTE). Additionally, the agency will experience retirement risks for labor trade personnel (>50 FTE). Given that most of the agency’s retirements impact the State’s THS system, mitigating the agency’s retirement and service continuity risks focus on two main drivers: accepting instructor retirements and centralizing the State’s THS administrative services.

SDE | 27% of agency personnel eligible for retirement



SDE prepared to accept instructor retirements and manage capacity challenges by sharing instructors with other THS schools and municipalities as well as through program consolidation. Sharing instructors with municipalities will be complex and political given that THS instructors are state employees. While opportunities to rationalize THS programs are limited (<\$1m in savings), consolidating programs and sharing instructors can help the agency address potential instructor capacity challenges. In addition to accepting instructor retirements, the State has an opportunity to restructure THS’s central office.

Administrative services are performed independently on a school-by-school basis. SDE should centralize administrative services at the district level rather than at individual schools. Understanding that THS’s central office is already lean, this opportunity will require the agency to restructure while ensuring all functional roles are maintained and filled appropriately.

In addition to addressing retirement risks associated with the State’s THS system, SDE should consider opportunities to mitigate service continuity risks associated with

education consultants. By 2022, more than 50 education consultants will be retirement eligible. To address service continuity challenges, the agency should leverage digital technology to streamline awards scoring and program monitoring duties. The agency should also seek to automate supervision for Teacher Negotiation Act. Both opportunities will increase consultant capacity and reduce the need to backfill positions.

SDE should consider opportunities to streamline administrative services at the agency level. Understanding that the agency also provides back office support for other agencies (e.g., Office of Higher Education and Office of Early Childhood),

SDE should seek opportunities to digitize and automate existing administrative services.

A primary role of SDE is to manage grants. Grant management relies on highly manual administrative tasks (e.g., contract submission and reporting for grant approvals). The agency should leverage digital opportunities to standardize contracts and streamline grant approval processes. Another digital opportunity the agency can leverage is to automate the monitorization for Alliance District data. This will increase capacity for education consultants and administrative staff, leading to a more standardized approach for data gathering and reporting.

Department of Emergency Services and Public Protection (DESPP)

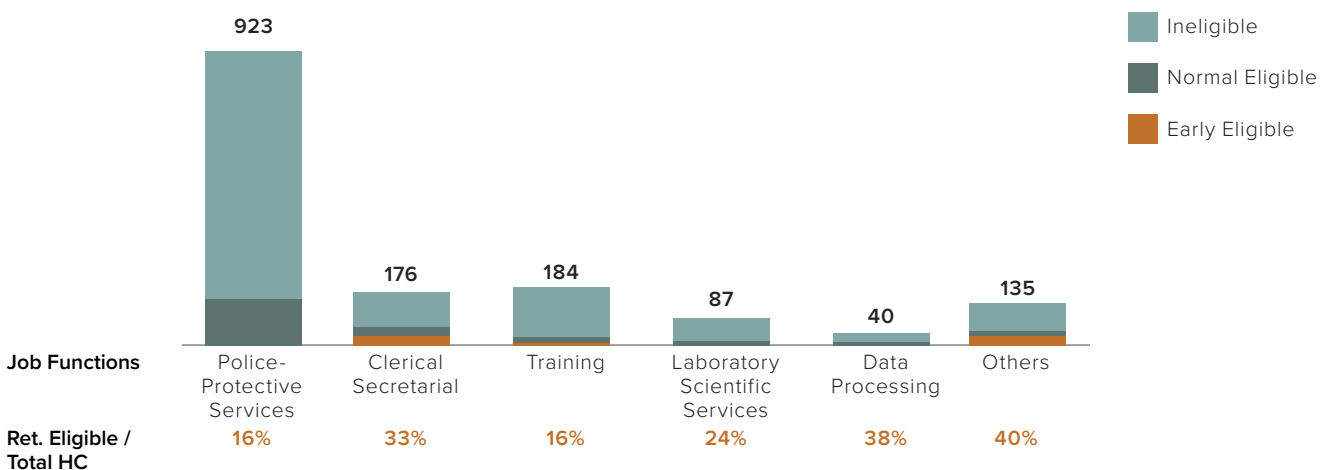
DESPP seeks to protect and improve civilians' quality of life through enforcement, training, education, prevention, public safety, and scientific services. The agency is one of the State's largest departments and comprises six divisions:

- Commission of Fire Prevention and Control
- Connecticut State Police
- Emergency Management and Homeland Security
- Police Officers Standards and Training Council
- Scientific Services

- Statewide Telecommunications

DESPP has approximately 1,545 employees, most of whom are seen in police services (>80%), administrative services (7%), and scientific services (6%). More than 300 employees are retirement-eligible in 2022, posing service continuity risks for police protective services (145 FTE) and clerical services (>90 FTE). Given the upcoming retirements for police-protective services, the primary service continuity risk for DESPP is in Connecticut State Police (CSP).

DESPP | 21% of agency personnel eligible for retirement



Source: CT STARS database as of 1/5/2021

Over the past 3 years, the total number of state troopers has decreased from 1,100 to 923 currently and is projected to drop by another 100 due to the upcoming retirement surge. Compared to peer states, the State's trooper levels are low, given their population and highway miles. As previously noted, to address the retirement and service continuity risks for CSP, the State should focus on increasing trooper levels and capacity by expanding cadet class sizes and civilianizing non-enforcement activities.

In addition to trooper capacity, DESPP faces several challenges that limit the agency's efficiency:

- Statutes that expand trooper responsibilities to non-protective service roles.
- Duplicative functions performed by other departments, thereby limiting agency capacity.
- Limited funding to digitizing reports and payments.

- Dilapidated barracks and agency facilities which require significant investment to renovate and maintain.
- Senior management turnover for both sworn-in and civilian roles

The primary role of state troopers is to enforce state laws and provide essential policing services to rural regions. However, statutes have expanded trooper roles beyond policing services (e.g., clerical duties and supervision for MMA events), limiting trooper capacity. Additionally, the agency shares responsibilities with other State departments in performing the same functions (e.g., overseeing weigh stations with DMV). To better utilize troopers in their limited capacity, the agency should reform police responsibilities to ensure that they can be fulfilled by only protective-service personnel. All non-protective services should be shifted to the appropriate department or civilianized.

Department of Energy and Environmental Protection (DEEP)

DEEP is responsible for a range of interrelated functions across environmental quality, environmental conservation, and energy. Environmental quality involves ensuring the protection of the natural environment and health of the State. This includes activities such as regulating emissions, managing waste materials, monitoring the State's environment, issuing permits, conducting inspections, and responding to emergencies.

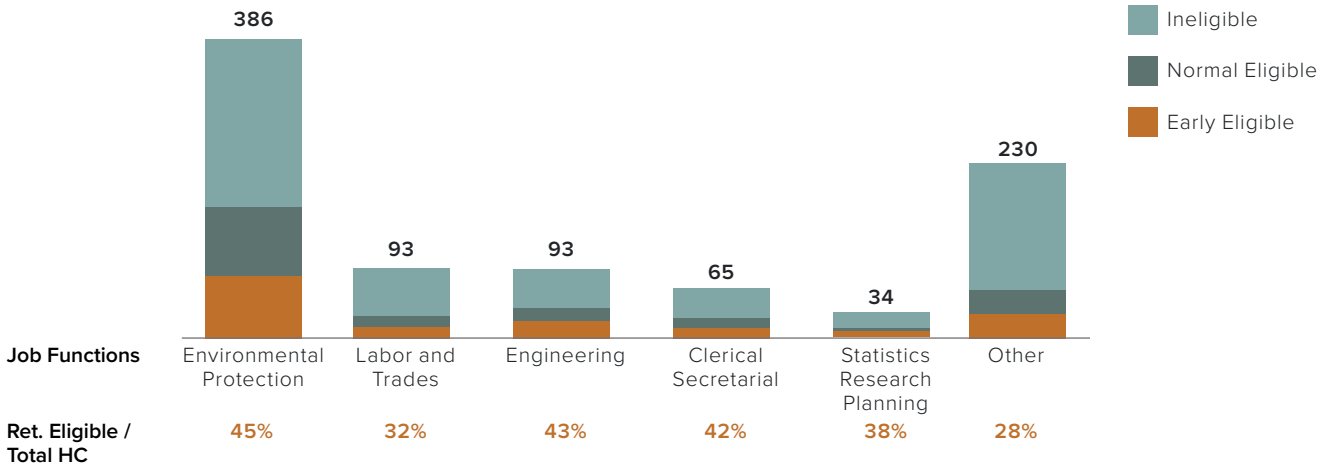
Environmental conservation involves providing outdoor recreational opportunities and managing the State's natural resources, including fish, wildlife, and forests, through regulation, management, research, and education. Energy activities include developing policy and management programs that promote energy efficiency, develop energy infrastructure and alternative power, and regulate utilities. The agency is expanding its efforts to address the

accelerating and emerging challenges with our changing climate and in response Governor Lamont's Executive Order 01 regarding climate.

DEEP's \$146 million budget for the agency comes from a mix of state, federal, and other sources. As of January 2021, the agency employs 898 people, in addition to many seasonal workers in the State's parks. More than 350 of DEEP's employees are retirement-eligible in 2022. This includes large numbers of employees in environmental analysts and engineering roles. Thus, DEEP will face a loss of specialized technical knowledge that will be difficult to backfill, and this creates risks to residents and the environment. For example, the loss of staff with specialized training could create a potential safety risk by limiting the agency's capability to respond to chemical spills or coordinate the management of infrastructure during floods.



DEEP | 39% of agency personnel eligible for retirement



DEEP has several opportunities to improve its operational efficiency. The agency can continue to streamline and consolidate existing services across programs where possible. For example, improving coordination of asset maintenance and land management across the agency will lead to better outcomes and potential operational savings. The agency can also increase its use of public-private partnerships to draw on private capital and capability to achieve public ends. Additionally, further simplification of regulatory requirements, such as on environmental permitting, will ensure that the agency can balance efforts across regulation, enforcement, and other activities, although legislative action will be required.

There are several challenges the agency will experience in achieving these opportunities. First, implementing operations efficiencies will require additional resources so as not to compromise ongoing business needs. Second, the loss of experienced and trained seasonal employees –

will impede our ability to respond to increasing demand for outdoor recreational opportunities. DEEP heavily relies on seasonal employees during the summer, many who take on robust responsibilities such as managing a campground or conducting wildlife research. If DEEP cannot adjust hourly pay in order to attract qualified staff, it may have to close parks or services at a time when attendance is increasing. The inability to adjust pay for experienced seasonal workers is an example of how inflexibility in the State’s workforce management can impact the services it provides to residents.

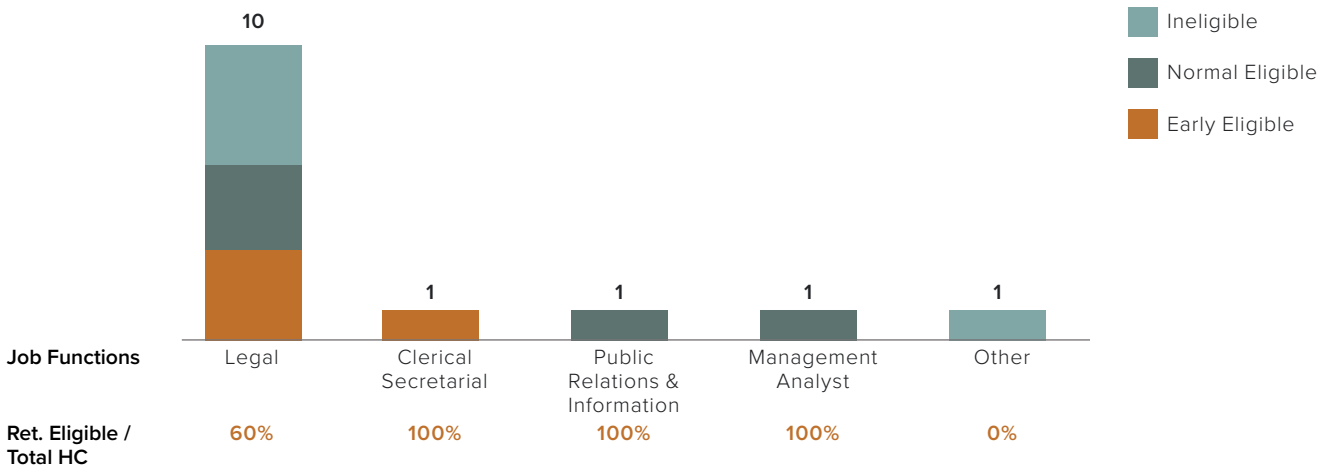
Third, DEEP also faces challenges in retaining younger employees: the agency has seen an increase in attrition among employees with fewer than five years of work experience, as they are attracted to higher-paying jobs in the private sector that offer less restrictive career paths. This situation further exacerbates the challenge of proper succession planning.

Freedom of Information Commission (FOI)

FOI is charged with ensuring that Connecticut’s residents and journalists have access to records and information, including conducting hearings and rendering decisions, in compliance with the Freedom of Information Act. FOI has an annual authorized budget of less than \$2m and 16 FTE positions – 14 of which are currently

filled. Notably, 9 of FOI’s employees are eligible for retirement, including most of the senior leadership. The commission should immediately seek to identify candidates – internally and externally – that can fill this managerial vacuum given the unique skillset and experience required.

FOI | 64% of agency personnel eligible for retirement



Given the importance of OSE, FOI, and CHRO in providing transparency and accountability, it is important that the State not consolidate these agencies – as was previously attempted. These agencies have existing MOUs to provide shared

services as needed, and additional IT support could be helpful in further automating manual processes as it has been done at many of the smaller agencies.

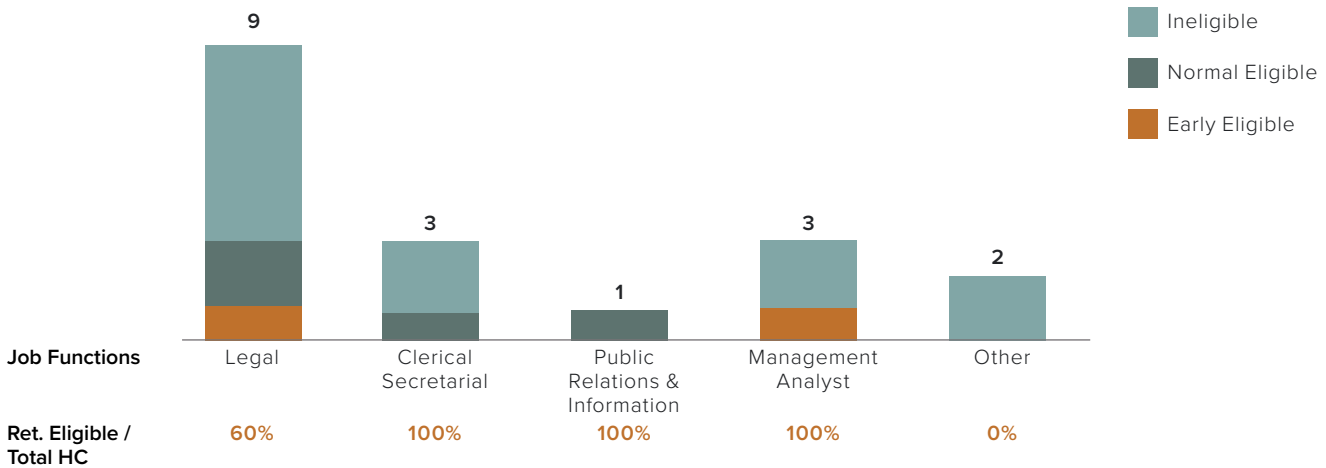
Office of Government Accountability (OGA)

OGA comprises a number of sub-agencies and programs whose mission is to foster honesty, integrity, and accountability within state government. These programs include Office of the Child Advocate, Office of the Victim Advocate, Judicial Review Council, Board of Firearms Permit Examiners, Judicial Selection,

and the Contracting Standards Board (CSB). In total, OGA has just 22 authorized FTE positions and a budget of less than \$2m. Beyond the recommendations to modify and simplify the CSB in Section 3 of this report, there are minimal opportunities for meaningful efficiencies within OGA.



OGA | 33% of agency personnel eligible for retirement



Office of the Healthcare Advocate (OHA)

OHA helps Connecticut residents select health insurance plans, access related services, and appeal service and reimbursement denials, among other responsibilities. OHA is extremely lean, with 17 FTE recommended to be budgeted for 2021 and a budget of roughly \$3.5m, funded via the Insurance Fund. Furthermore, the 2022

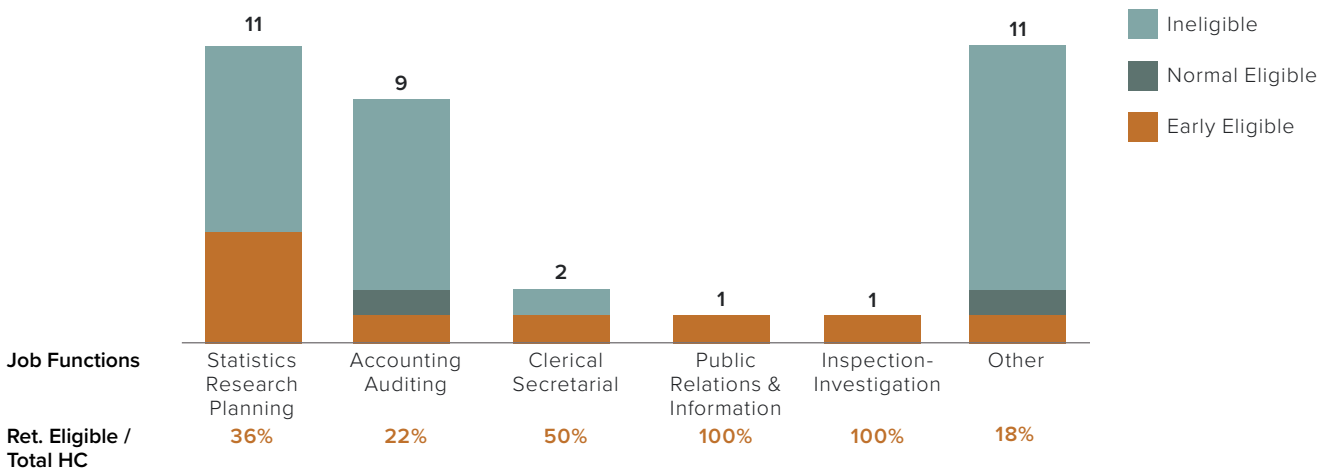
retirement surge is not expected to greatly impact OHA, with only a couple of employees eligible for 2022 retirement. As a result, there are minimal opportunities to improve efficiency at OHA, but it will continue to play a crucial role as Connecticut residents cope with the health impacts of the COVID-19 pandemic.

Office of Health Strategy (OHS)

OHS is tasked by statute with developing a comprehensive and cohesive vision for Connecticut’s healthcare strategy and engage key stakeholders to execute that strategy. It works with agencies and oversees the State’s major health care planning and reform initiatives to prevent duplication of effort and waste of resources and to improve access to quality health care services while reducing costs. Key activities include oversight of the All-Payer Claims Database, oversight of healthcare and payment reform initiatives, health systems planning, and coordination of the State’s health IT initiatives.

OHS collaborates closely with DSS, DPH, the State Comptroller, and the Insurance Department, as well as other HHS agencies, and has a budget of just under \$9m. Although 11 of OHS’s 27 employees are retirement-eligible in 2022, there is minimal concern regarding service disruption, as OHS does not anticipate significant retirement uptake and has been able to fill past vacancies easily. OHS is currently working to fill additional budgeted positions – there are 33 total positions budgeted across the State’s General Fund and Insurance Fund, with seven additional partially federally funded positions.

OHS | 31% of agency personnel eligible for retirement



OHS is already quite lean; there are minimal opportunities to increase efficiency at the agency itself. As DSS pursues substantial Medicaid reform efforts in the coming years, and as Connecticut continues to respond to

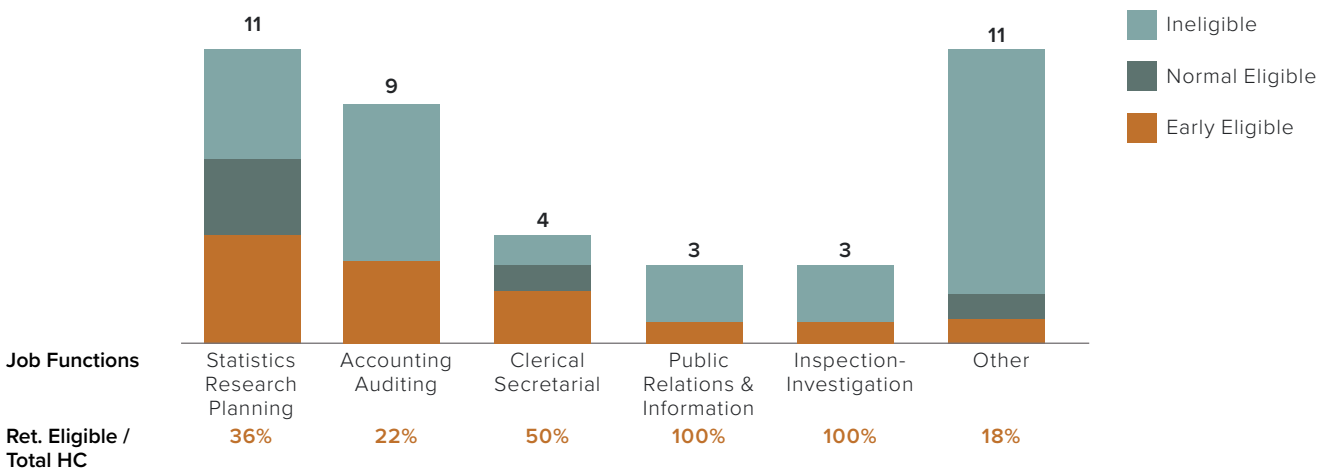
COVID-19, it will be crucial for OHS to be closely involved and coordinate reform efforts across agencies and with Medicare and commercial payers to ensure continued improved health outcomes for Connecticut residents.

Department of Housing (DOH)

DOH’s mission is to eliminate homelessness and meet the needs of low- and moderate-income communities in Connecticut. DOH administers a number of state and federally funded support programs to increase the supply of and access to affordable housing. DOH works closely with quasi-public organizations (mainly Connecticut Housing Finance Authority, or CHFA), the Federal Government (e.g., the Department of Housing and Urban Development), and other

State agencies – particularly those in health and social services, as well as DECD. DOH does not directly own, build, or operate housing stock. However, over the past decade, the agency’s staffing has decline from approximately 150 FTEs to a total of 41 active employees as of early January – this despite an increase in responsibilities and funding. Of those 41 FTEs, 14 are eligible for retirement by July 1, 2022, adding additional strain to the agency’s personnel.

 **DOH | 41% of agency personnel eligible for retirement**



DOH administers a significant amount of grants and is responsible for awarding and monitoring their results. A common grant platform will streamline many of the functions surrounding grant monitoring, though the benefits may be mitigated for DOH by HUD’s three distinct compliance systems. Therefore, DOH will require digital tools built on top of the recommended statewide grant platform that allows the agency to report into the Federal Government’s systems. Nonetheless, such a platform will assist in more systematic oversight and monitoring of grant recipients – within DOH as well as across agencies – and performance. While DOH’s mission cannot be strictly measured in financial terms, the agency could improve how it articulates the effectiveness of its programs. While the agency is hesitant to point to financial metrics as a measure of ROI, best-practices around the nation include KPIs that, as a whole, are indicative of performance (e.g., number of people/

households assisted, cost per unit completed, units of housing created per dollar of grant funding, project completion time, customer satisfaction, etc.). Integrating performance metrics into DOH’s organizational culture and grant platform can ensure that DOH is optimizing its allocation of resources to meet its mission of reducing homelessness and providing quality affordable housing.

DOH requires additional technology support and shared services to reduce their paperwork and manual processes. The current back-office support memorandum-of-understandings (MOUs) are perceived to be de-prioritized, requiring the agency to seek out their own internal hires to provide these support functions. These hires should ideally be avoided but require MOU-partners (e.g., DAS IT, DECD) to provide adequate responsiveness.

Source: CT STARS database as of 1/5/2021

Office of Higher Education (OHE)

OHE is divided into three programmatic divisions. The first, the Division of Academic deals with the regulatory oversight of independent institutions of higher education and their related programs within the State, authorizes private postsecondary occupational schools and their related programs to operate within the State, and serves as the Connecticut State Approving Agency (SAA) for the U.S. Department of Veterans Affairs. The agency's second division, Programs and Student Services, has three large programs within its portfolio, the Alternate Route to Certification (ARC), the Minority Advancement Program (MAP), and the National Service initiative (AmeriCorps). These programs provide students the skills, knowledge, and academic support they need to succeed. OHE's third division has oversight over all Finance and Human Resources, manages the Roberta B. Willis Scholarship, John J. Justice, and the Minority Teacher Incentive Programs and provides administrative, computer technology, and financial direction to the agency. This division is also responsible for grant administration (GEER UP, GEAR funding, and OER) and data collection and evaluation.

OHE is a smaller agency with approximately 30 employees who primarily support regulatory oversight of post-secondary education and scholarship administration. Unlike other agencies, OHE has minimal risk for service continuity, given that only two of its employees (7%) are retirement-eligible in the upcoming

years. While the agency is already lean, several opportunities can enable OHE to expand employee capacity and improve service delivery.

While the State needs an overall IT strategy to streamline business applications, OHE specifically faces challenges associated with the outdated software it uses to manage the Roberta B. Willis Scholarship Program. The current system does not provide adequate security for its sensitive data, does not provide the agency with the flexibility to conduct more granular functions, and has sign. Besides a data security solution, the agency would benefit from digitization and automation to support business applications and increase its employees' capacity.

Like other agencies, OHE has limited flexibility in managing its employees. Policies and statutes keep the agency from independently managing employees (e.g., offering promotions), which ultimately decreases employee retention. Allowing agencies to independently manage their employees will increase retention – not only at OHE, but throughout other State agencies.

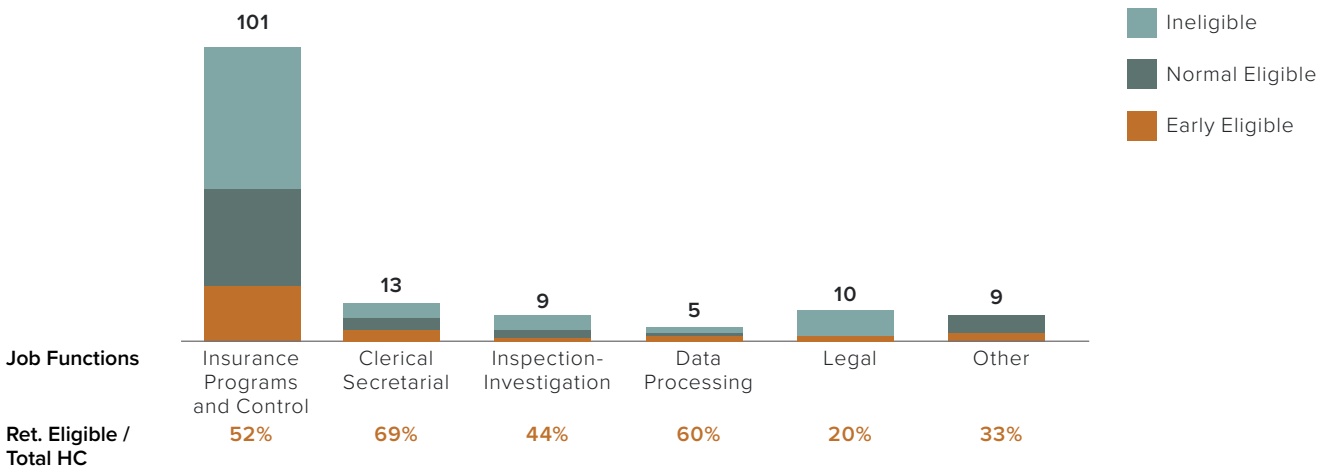
OHE is confronting challenges that are consistent across many state agencies. Previous sections of this report provide detail regarding centralizing and digitizing office support functions, and flexibility in hiring and employee management.

Insurance Department (ID)

The ID is responsible for regulating insurance enterprises that operate in the State, analyzing, licensing, and monitoring domiciled insurers. This includes on-site financial examinations and ensuring non-discriminatory rate setting. Hartford has long been regarded as a major center for the insurance industry, underscoring the importance of this department’s work. The 151-person agency operates with a budget of \$30m financed through the Insurance Fund.

Approximately 50% of the employees for the ID will be eligible for retirement in 2022, including a significant number who have specialized skills relating to insurance programs and control, as well as most of the clerical workers in the agency. This creates a risk for the loss of institutional knowledge and may increase the need to use external regulators in the future. This could have an adverse impact on quality control and increases cost.

ID | 46% of agency personnel eligible for retirement



The ID is already a lean agency, though potential future opportunities to increase efficiency include

centralizing bail bonds licensing and recognizing other state’s insurance licenses.

Department of Labor (CTDOL)

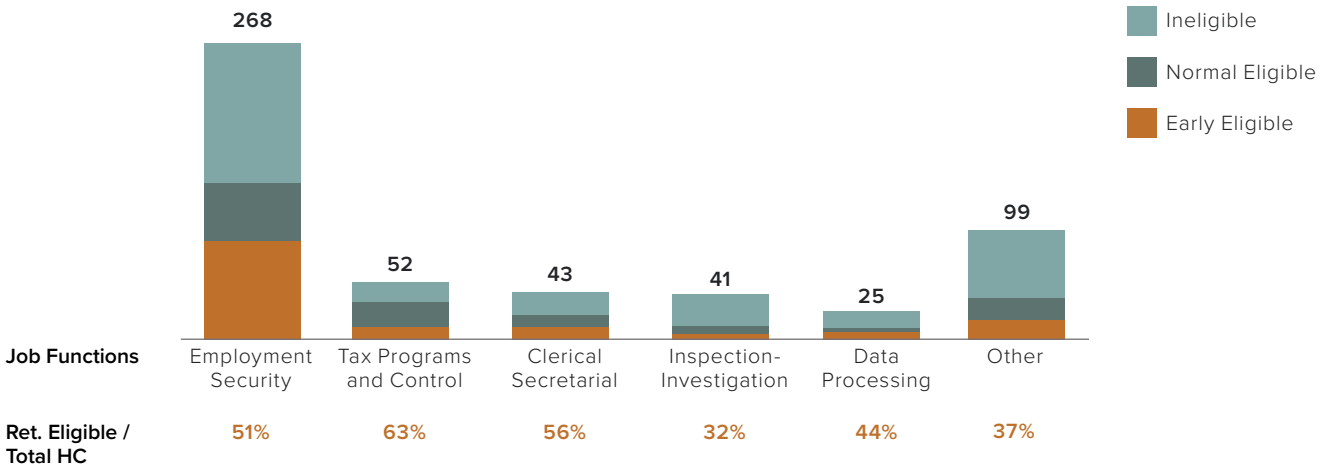
CTDOL provides both employment and unemployment services to workers and employers. The agency does this through a range of services which include, helping jobseekers prepare to enter the workplace and to find employment, providing unemployment insurance to workers who lose their jobs, regulating waste and workplace standards to ensure that workers and employers are protected, and providing information and analysis on the labor market and workforce.

CTDOL has been one of the agencies most impacted by the COVID-19 pandemic. Responding to the sharp increase in number of claims for unemployment insurance has been the responsibility of the agency, as have the

requirements of distributing CARES Act funding.

The agency has about 750 employees, including temporary workers. This is after the agency released about 40% of its permanent employees since 2015. Most of the agency’s employees support the job readiness and employment services and unemployment insurance programs. Of this group, more than 250 employees are retirement- eligible for retirement in 2022, making CTDOL one of the agencies most impacted by the retirement surge. Many of these retirements are in employment security services (>40 FTE), tax program and control services (>25 FTE), and clerical services (>25 FTE). The agency operates with a budget of almost \$150m, of which approximately \$69m is funded by the State.

DOL | 48% of agency personnel eligible for retirement



These retirements create several potential risks for the agency. The loss of experienced personnel could put further pressure on the unemployment insurance program, increasing backlogs and delaying the distribution of benefits. It could also put at risk the efforts to modernize the COBOL-based UI system (previously mentioned in Section 3.3.6), due to critical dependencies on a small number of

team members. Though UI modernization is the agency’s top priority, it has been forced delay this program in order to meet the surge in demand for UI. It has also been forced to deprioritize non-UI activities.

Beyond ensuring that UI modernization is delivered by June 2022, there are several opportunities for CTDOL to automate or

digitize its systems, which would allow it to become more efficient and improve the services provided to Connecticut workers and employers. These opportunities include automating licensing reviews, further integrating labor and social service client information across agencies, consolidating workforce

registry systems and investing in employment data system improvement. It can also take a lead role in refining the targeting of vocational and workforce training programs, a complex (and vitally important) set of services delivered to several populations by CTDOL and a number of other state agencies.

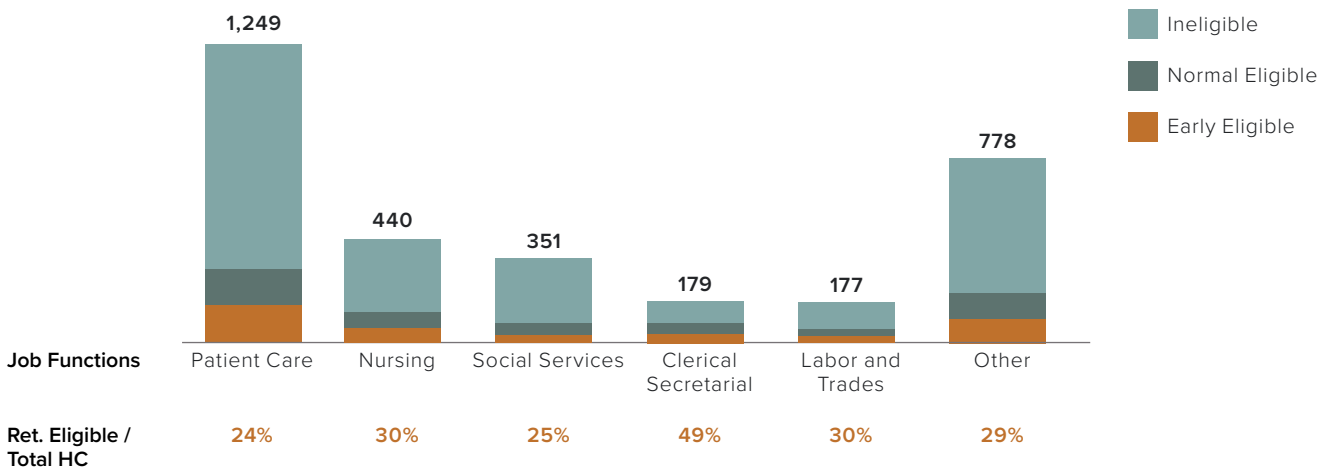
Department of Mental Health and Addiction Services (DMHAS)

DMHAS provides services to Connecticut residents who suffer from mental health issues or addiction, including operating treatment facilities, crisis response services to prevent hospitalizations, assisting in court evaluations, and administering employment and social support services. More than 100,000 Connecticut residents receive services from DMHAS every year. In FY20, DMHAS’s budget was roughly \$808m, with \$727m in state funding and \$68m in federal funding, as well as \$13m via the insurance fund and private funds. \$109m of DMHAS’s state

funding is housed in DSS’s budget.

As of January 2021, 883 (28%) of DMHAS’s 3,174 employees were retirement-eligible in 2022. As with other health and human services agencies, most of those employees (585) are resident facing, including Mental Health Assistants, nurses, and therapists. Retirement survey results indicate that 20% to 35% of resident-facing employees are likely to retire by 2022, putting DMHAS’s resident-facing operations at significant risk of disruption.

dmhas | DMHAS | 28% of agency personnel eligible for retirement



Historically, vacancies for resident-facing positions at DMHAS have been challenging to fill. Such positions often require a high level of skill and/or advanced training and can be stressful. In addition, compensation for nurses and other clinical positions is higher in the private sector. While there is an extensive network of private providers from which DMHAS could potentially recruit candidates, any large-scale hiring initiative would likely disrupt provider operations and present similar risks to service continuity.

DMHAS's business operations could also be at risk of disruption due to clerical and secretarial retirements, similar to other health and human services agencies. At DMHAS, nearly half of clerical and secretarial employees (88 out of 179, or 49%) are retirement eligible. As with other agencies, clerks, secretaries, and administrators often take on tasks beyond their official job descriptions, increasing the potential for disruption when they retire.

To mitigate retirement-related risks and ensure that residents continue to receive critical services in a timely and effective manner, and realize cost and time efficiencies, DMHAS should explore several efficiency opportunities. Several are discussed in greater detail in other sections of this report and include:

- Further converting operation of LMHAS to lower-cost, non-profit providers to maintain service continuity.
- Implementing an EHR at DMHAS-operated facilities to improve staff capacity, better track patient care, and reduce cost.
- Centralizing and automating grant-making

processes via a common platform shared with other agencies to improve value for money and reduce administrative effort.

- Centralizing and automating Affirmative Action reporting to reduce manual effort and duplicative work across agencies.
- Controlling overtime expenditure to reduce cost and better balance staffing.

In addition to these opportunities, DMHAS could reduce the risk of disruption to business operations by conducting certain processes via shared digital platforms with other HHS agencies, including monitoring and evaluating the outcomes of DMHAS- and private-provider-administered programs, determining resident eligibility for various services, and conducting background checks for the State employee hiring process. By further automating these functions and implementing standardized processes across agencies where possible, DMHAS and other health and human services agencies can better ensure positive outcomes for State residents, operate more quickly, and reduce the risk of disruption due to heavy retirements in particular agencies.

Finally, there are additional processes at DMHAS that require significant manual effort and could be conducted more efficiently if further automated and/or digitized. Among these processes are shift staffing at facilities, which is conducted manually by nurses; and various data-sharing procedures across agencies. DMHAS clients often utilize services from other agencies; streamlining and digitizing data exchange could help to ensure that services are provided more efficiently and simplify residents' experiences when interacting with multiple state agencies.

Military Department (MD)

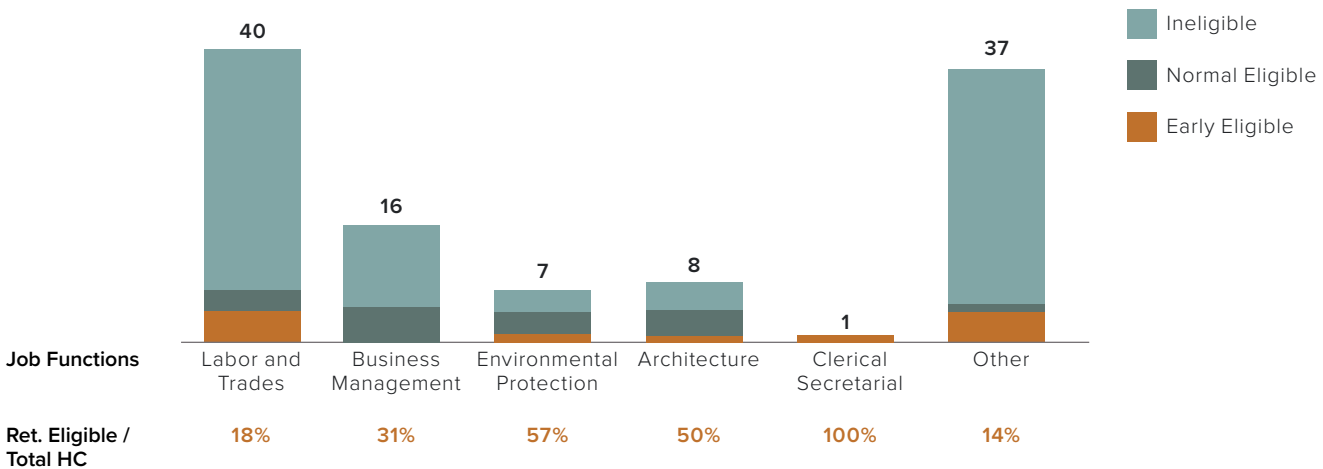
Connecticut's MD is primarily responsible for responding to emergencies, such as natural disasters or state civil emergencies, and maintaining thirty-four National Guard facilities across the State. The importance of the Military Department has been highlighted over the course of the past year by the role of the Connecticut National Guard in standing up the State's COVID-19

response, including testing and contact tracing. The agency's budget totals \$28m, of which \$22m is federally funded, and only \$5.5m is funded by the State. The agency has approximately 109 employees, 26 of whom will be retirement-eligible in 2022. Job functions most at risk due to the retirement include skilled trades, business management, and environmental protection.



Military | 24% of agency personnel eligible for retirement

Does not include National Guard members



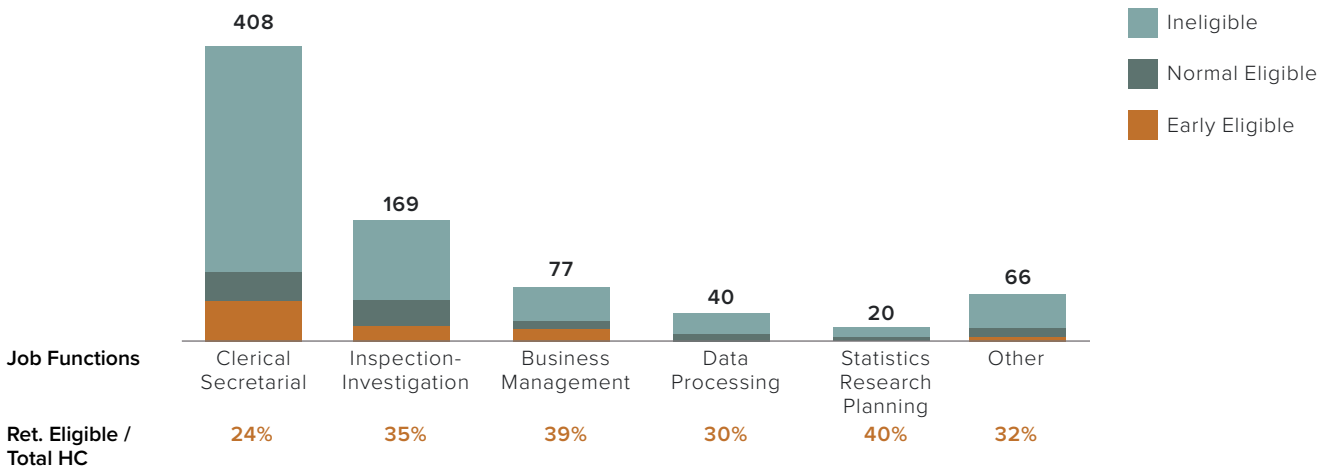
Department of Motor Vehicles (DMV)

The Connecticut DMV is arguably the most prominent customer-facing state agency. It handles all aspects of driver licensing and regulations that span passenger and commercial vehicles, rideshare services, and water vessels. Notably, DMV also serves as a significant source of revenue for the State, with close to \$500m in annual cash flows.

As of January 2021, the agency has 780 employees with a budget of \$77m. Looking ahead, DMV has 228 employees eligible for retirement by

the July 1st effective date, approximately 30% of the existing workforce. While this share of eligible employees is lower than in other agencies, many of these employees work in customer-facing roles at branches and play pivotal roles in processing transactions on both the front- and back-end of the DMV. These workers include Vehicle Examiners, Processing Technicians, License Agents, and Motor Vehicle Inspectors. As the workers retire from these positions, the agency risks longer wait times in DMV branches and extended backlogs on back-office processes.

DMV | 29% of agency personnel eligible for retirement



Prior to the COVID-19 pandemic, the DMV’s current administration made significant progress in improving residents’ experiences by reducing wait times, enabling residents to view wait times online, and using triage techniques (e.g., Know Before You Go, priority lines). However, like many states’ motor vehicle agencies experienced when the pandemic forced branches to close, the agency’s lack of digital and self-service tools relative to what customers have come to expect became more evident – just changing an address or voter registration required traditional mail activities. The agency is lagging both internally (vs other State agencies) and externally (versus other state DMVs) in terms of digital maturity and convenience for residents. The \$38.5m decline in revenue FY20 revenue from pre-pandemic projections provides evidence for the need to advance digital operations. COVID-19 may be perceived as an isolated event, but the DMV has an opportunity to enter the new digital world and no longer be seen as an example of inefficient government.

As noted, the current administration at DMV greatly enhanced operations by introducing online appointments, triaging customers, and placing check-in staff who ensure that customers have proper documentation before getting in line. However, there are significant opportunities to continue to improve. The DMV’s primary focus should be on shifting as many transactions as

possible to online and automated processes. These include partial transactions such as document uploads and identity verification (see Section 3.3.6) while modernizing the agency’s workforce to seamlessly transition from a transaction processing agency to a digital leader centered around the customer experience.

Statute and legislative review and updates.

The DMB and State need to review, evaluate and analyze all related statutes to remove barriers to digitization at the DMV. Legislative simplification will enable the agency to further digitize and streamline workflows within the DMV and with vendors, other state agencies and their partners.

Establish an implementation leader.

DMV priorities often change with each new administration, and many initiatives lose momentum and support. In order to continue progress towards DMV’s future vision, the agency needs an implementation manager – internal to the agency or within centralized IT (DAS).

Modernize and increase flexibility of organizational structure.

For the DMV to modernize its delivery of services, it must also modernize its workforce and skillsets. A significant hurdle in building internal digital capabilities lies in the obstacles surrounding job classes, discussed elsewhere in this report. The DMV has historically

been considered a transaction-processing agency, and the labor rules and job classes approved for hiring within the agency reflect this history. The State must enable the DMV and other state agencies to be nimbler and hire for the skills that would allow them to implement the services they need to provide more efficiently.

Moreover, the agency often struggles to retain the talent it develops as their skills move beyond outdated job classifications. As employees earn advanced degrees, for example, they often have difficulty continuing with the agency in a job that fits their skills and earning potential. DMV requires IT workers capable of handling a critical resident-facing modernization effort, whether internal to the DMV or through shared services (e.g., DAS IT centralized unit or shared services with other agencies). The agency also requires project management staff to ensure that progress continues through political administrations and that every phase of the design process is accounted for and includes input from all stakeholders. Previous efforts have lost momentum or failed to account for the end-to-end customer journey, indicating a need for an expert operating role that could be internal to DMV or led by DAS.

Upgrade job responsibilities to enable workers to handle relevant tasks. Changing the way that DMV delivers services, and thus changing the transaction shift of in-person interactions, has implications for the jobs DMV will need to fill. One recommendation is to modernize and expand job duties to enable workers to take on more relevant tasks. For example, employees are unable to utilize technology such as tablets to commence transactions with customers in line. This inefficiency forces customers to wait until they reach the counter to start their transaction. Moreover, 30% of in-branch interactions involve customers who failed to bring the necessary documentation, resulting in a failed transaction and no revenue – a lose-lose situation for everyone. Using more advanced in-line triage or charging upfront fees upon booking an appointment are two recommendations to mitigate the impact of failed transactions.

Introduce performance management systems. Another critical initiative is to implement

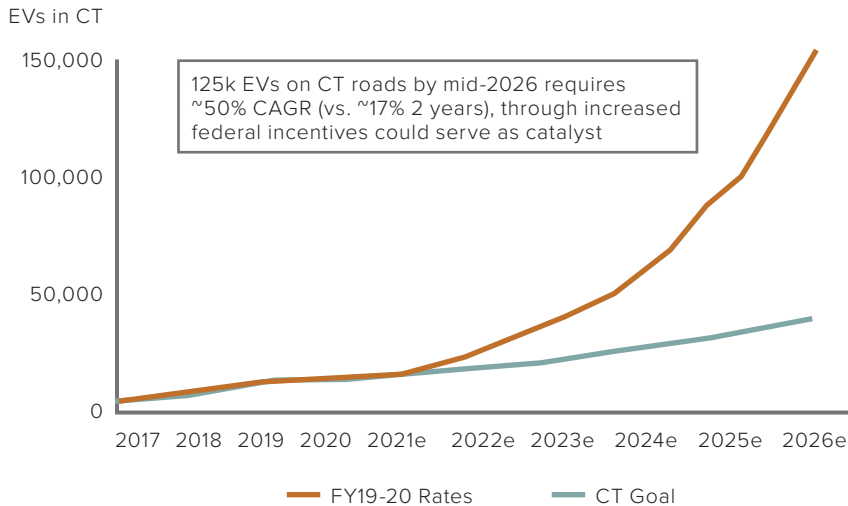
performance-management tools such as real-time dashboards or a system of incentivizing positive customer service scores and completed transactions. These tools have improved productivity in other states' DMV agencies and ensure that workers provide quality customer service. While such a move may require bargaining, it must be noted that performance-management tools in other states have helped to improve both customer service and employee morale.

Explore new and existing revenue opportunities. Beyond operational efficiencies, it is important for the DMV to ensure continued revenue. The agency is a significant source of revenue for the STF, yet the purchasing power of the motor fuels tax has declined over time due to fuel efficiency gains, increased construction costs, and the lack of increases in the tax rate. Thus, the agency's cashflow has become increasingly important to maintaining the State's transportation infrastructure. As a result, the State must look to offset declining revenues and rising costs with the following recommendations:

- Optimizing existing fees. As has been done in many other states, the Connecticut legislature can pass a statute indexing DMV fees to inflation (e.g., CA, MI, UT). This offsets the erosion from inflation and removes the politics from long-term revenue debates. By linking to inflation, DMV fees would rise in-line with the rest of the economy and the political capital required is for a single change, rather than incremental debates each time the State wants to modify fees.
- **Registration fees on EV and hybrid vehicles.** As cars have become more fuel efficient and consumers have adopted electric and hybrid vehicles, the State is receiving less income from the gas tax. Introducing new registration fees on these types of vehicles would ensure that drivers of fuel-efficient cars still contribute their share to transportation-related expenditures, as alternative fuel vehicles put just as much stress on the State's roads, highways, and bridges. Moreover, most states across the U.S. charge a fee for plug-in and/or hybrid vehicles (ranging from \$50 to \$200+), including environmental leaders (e.g., CA, OR, WA, HI, CO).

New revenue sources | Adding a fee for fuel-efficient vehicles produces little revenue at current EV adoption, but could grow to \$2m+/year

Total Electric Vehicles in CT and Forward Projections



- ~12.6k electric vehicles currently on CT roads today (17% growth YoY)
- Goal of reaching 125k fuel-efficient vehicles by 2025 would result in 20k+ new registrations annually
 - \$2m incremental revenue
 - <\$1m p.a. at current pace
- Demand-impact likely to be minimal and/or mitigated by new administration
- Consider means-testing new fees to prevent countering adoption goals

- **Mileage-based fees.** Another alternative to raising the State's gas tax – which has proven extremely unpopular politically – is to introduce mileage-based fees. This concept, like the EV/hybrid fee, would provide more equitable distribution of the cost to fix state roads across those who use the roads. However, Sec. 13b-14b blocks CTDOT from even studying mileage-based user fees. Whether or not CTDOT rescinds the statute, or the DMV circumvents it, the State should at least evaluate the cost-benefit analysis of such a fee.
- **Introduce annual safety inspections on all vehicles.** Today, Connecticut foregoes

vehicle safety inspections that nearly all peer states require (e.g., annually in MA, ME, NH, NY, PA, VT) yet requires bi-annual emissions inspections. Inspecting the safety of the more than one million vehicles on Connecticut roads is critical to maintaining residents' safety – arguably more so than the emissions examinations. Moreover, adding the inspection would require minimal effort from the State, as vehicle inspections could be outsourced to partners (e.g., dealerships, AAA, and maintenance garages), many of whom already handle the State's biannual emissions inspections.

Office of Policy and Management (OPM)

The Office of Policy and Management (OPM) reports directly to the Governor and provides information and analysis that the Governor uses to formulate public policy for the state. OPM also assists State and quasi-public agencies and municipalities in implementing the law and public policy on behalf of the people of Connecticut. OPM prepares the Governor's budget proposals, assists in drafting the Governor's legislative

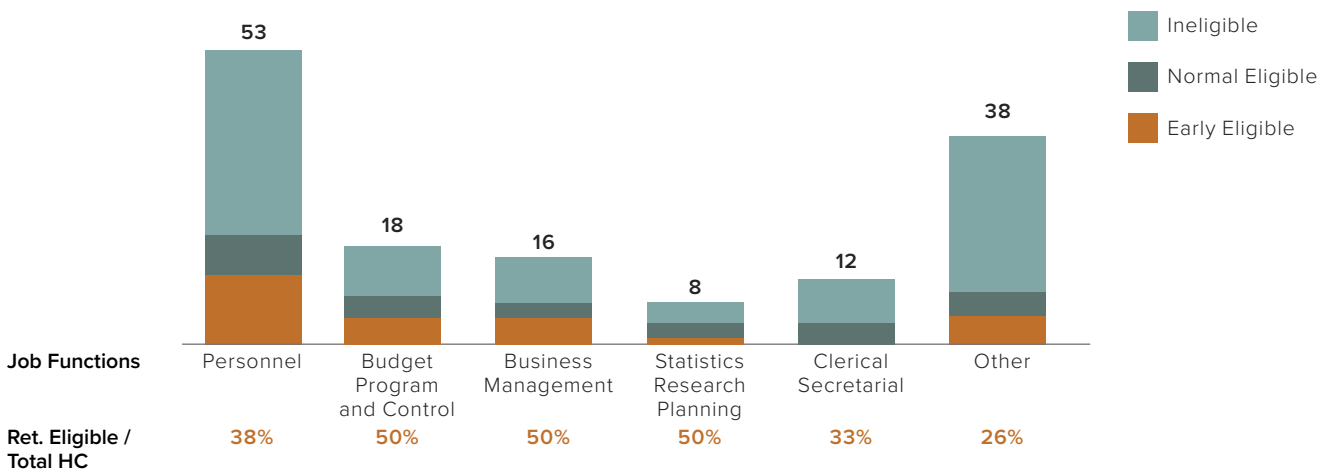
proposals, implements and monitors the execution of the enacted budget and oversees the executive agencies that report to the Governor.

OPM's FY20 budget was \$370m, which was largely funded out of the State's General Fund. As of January 2021, 55 of OPM's 145 positions are held by employees who are eligible for retirement by July 1, 2022. Particularly concerning for an agency

that manages much of the State's budgeting is that 50% of workers engaged in budget program and control, business management, general admin and management, and statistics research are eligible for retirement. Included in this group of eligible retirees are also several Undersecretaries, meaning the agency is losing a lot of personnel and a lot of senior personnel. It is critical for OPM

to establish a robust backfilling strategy over the next several months while also implementing succession planning and knowledge transfer initiatives. While OPM has made operational efficiencies a priority in recent years, there are several recommendations that the agency should pursue to minimize service disruption and further enhance its effectiveness.

 **OPM | 38% of agency personnel eligible for retirement**



OPM should clarify and codify complementary but distinct roles with DAS and OSC where any ambiguity exists in for agency leaders, including issuing regular procedural and policy updates. Some agencies express confusion as to the roles of OPM and DAS in areas such as procurement, facilities, budgets, and hiring. OPM undoubtedly serves a vital role in protecting taxpayers from unnecessary and excessive spending and that role must be maintained.

flexibility to tailor RFPs to their needs and regulatory requirements. More widespread use of the RFP template will allow OPM to implement and monitor basic standards, while providing efficiencies for legal reviews as well. OPM should strive to communicate regularly with guidance on how to use the RFP template and the procurement standards document in order to achieve more efficient procurement processes across the state.

While digitally ahead of many agencies, OPM could still benefit from increased automation and digitization efforts. Developing universal grants and contracts systems would better integrate data across the State while enabling staff to transition across agencies more easily. Additionally, the agency should provide regular training on service procurement RFPs. This would make it easier for agencies to use the newly updated and standardized RFP template provided by OPM while also giving them the

In supporting distinct roles, OPM should identify or hire project managers. OPM has focused on identifying efficiency opportunities and hosted many events focusing on lean operations. While interviewees noted that these events often produce valuable insights, the State lacks project managers capable of implementing many of the lessons learned. OPM has an opportunity to not only generate valuable insights but take action and support agencies in improving operations across the State.

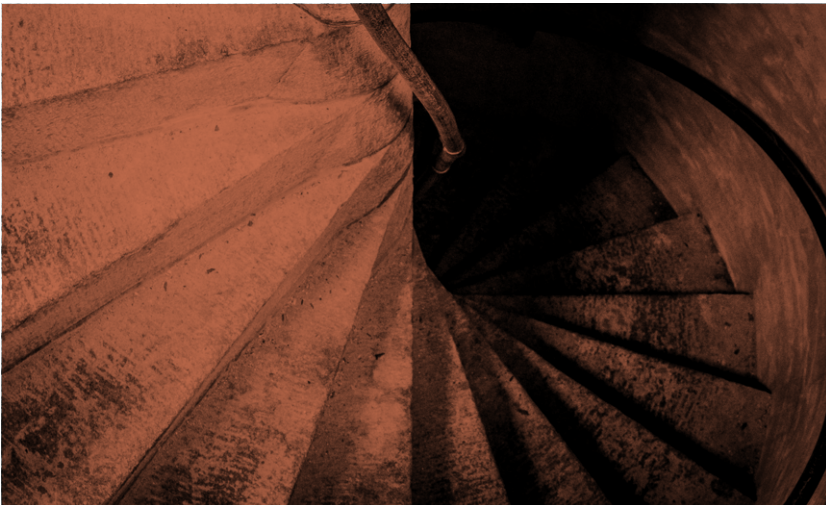
Source: CT STARS database as of 1/5/2021

Psychiatric Security Review Board (PSRB)

The Connecticut PSRB primarily serves to protect public safety through the oversight of citizens acquitted of a crime due to mental disease. The Board determines the level of supervision, treatment, and placement acquitted persons require to protect the State.

The agency is very lean—its total budget is

less than \$0.5m and comprises three board members. Therefore, few opportunities exist to increase the efficiency for PSRB. Because all employees will be eligible for retirement by 2022, the State should actively seek to backfill positions to mitigate service continuity risks for this essential work.

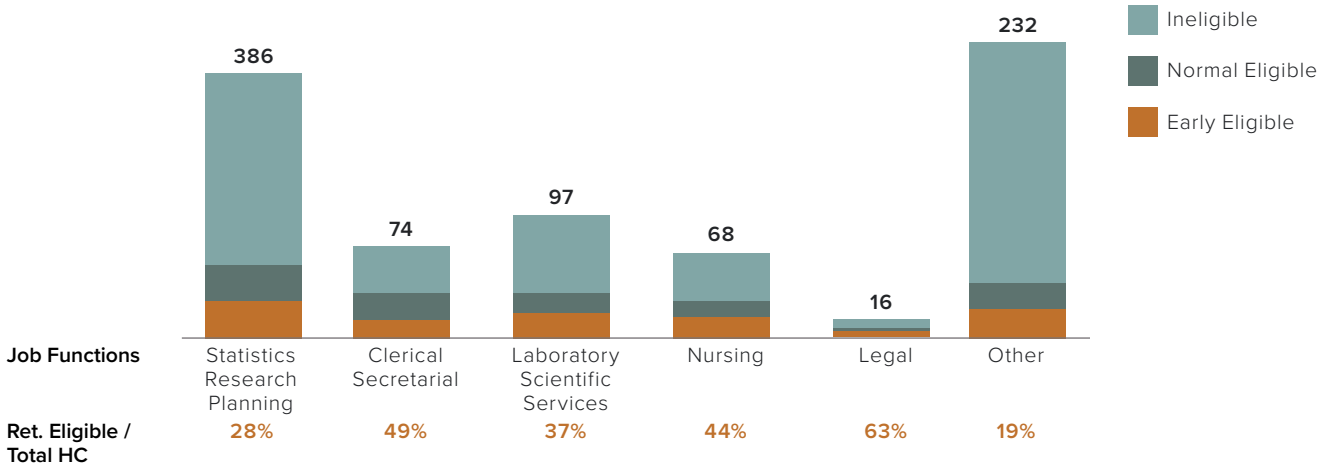


Psychiatric Security Review Board (PSRB)

The Connecticut DPH tests for and monitors diseases; collects, analyzes, and distributes public health data; licenses and regulates health care professionals and facilities; and more. Over the last 11 months, DPH has led Connecticut's response to COVID-19. DPH operates with a budget of roughly \$284m and had 718 employees as of January 2021.

237 of DPH's employees (~33%) are retirement-

eligible in 2022. Responding to COVID-19 has put significant strain on DPH staff, which may lead to especially high retirement rates in the coming years. Filling vacancies may be challenging. Job openings at DPH are likely to be less appealing to external candidates until the pandemic has eased. DPH's reliance on outdated systems such as Cobalt software and faxing for communication may also mean that staff are not prepared to fill new roles internally.



It is crucial to maintain DPH’s operations as the fight against COVID-19 continues. To increase staff capacity and reduce expenditure, DPH should consider conducting key functions such as grant-making and program monitoring

via common platforms shared with other HHS agencies. In addition, DPH could streamline programs that overlap with those of other agencies to reduce administrative effort.

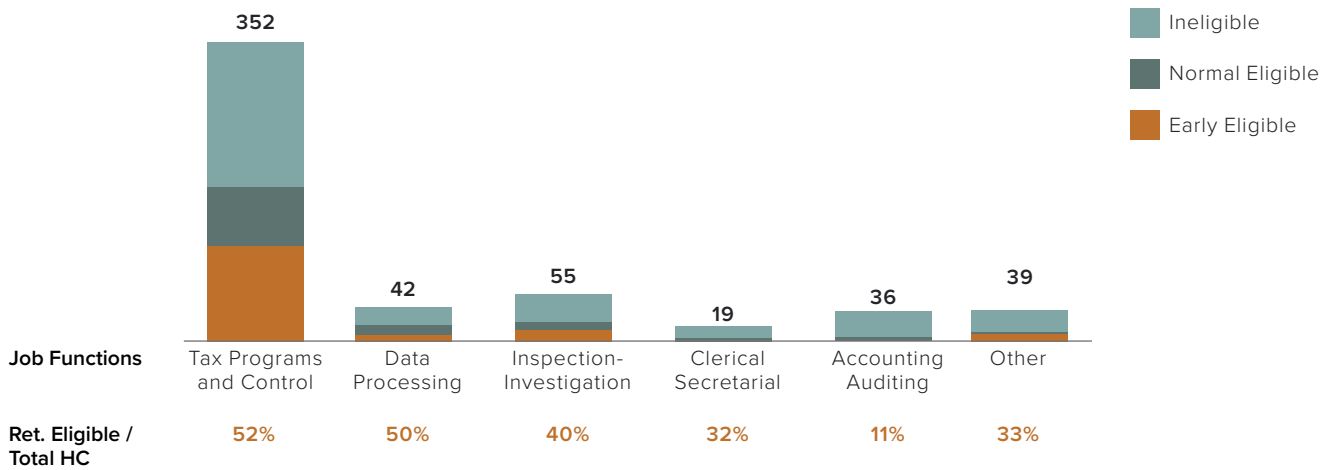
Department of Revenue Services (DRS)

Connecticut’s DRS plays a pivotal role in State government, executing decisions on tax policy which impact the overall financial health of the State.

The agency’s FY20 budget was roughly \$66m, with nearly all funding provided out of the General Fund. As of early January, DRS had nearly 550 staff members, 46% of whom are retirement-eligible by July 1, 2022. This represents one of the highest shares of eligible workforce of any state agency. Such attrition could significantly impede the agency’s ability

to ensure compliance, conduct audits, collect funds, and apply fair enforcement measures. DRS processes more than four million tax returns; thus, the retirement eligibility of 52% of Revenue Examiners and 50% of Tax Corrections Examiners could impede the agency’s ability to carry out essential functions. While revenue-producing auditors must be prioritized for backfilling, DRS leadership has developed a plan to avoid backfilling some positions without sacrificing productivity through technology and more agile personnel training.

 **DRS | 46% of agency personnel eligible for retirement**



First, the agency has successfully launched the initial phase of its multi-year modernization program, which brings a more user-friendly self-service portal to taxpayers. The portal will greatly reduce manual processes and tax filing errors, as tax filers and preparers are accelerating their shift towards filing electronically. Second, DRS has begun cross-training employees so that as retirements take place, the agency has more flexibility to re-deploy existing workers to critical roles that need to be backfilled. Likewise, the agency is training new hires to work across tax types. In total, DRS can use these initiatives to reduce the number of tax corrections personnel by 25%, resulting in an annual expense reduction of \$4m - \$6m. Revenue Examiners and Revenue Agents (i.e., auditors) should be prioritized for backfilling, given their revenue-generating function and the State’s already low audit coverage ratio.

In addition to personnel and tax compliance initiatives (discussed in Section 3.5.4), DRS must complete its current modernization program. This initiative is expected to generate nearly \$500m in incremental revenue in the first 5 years after completion – a significant amount that warrants necessary investment today (see Section 3.3.6 for additional details.)

Given the agency’s role in providing input on

policy decisions that impact the State’s revenues, it is important for DRS to develop creative ways to increase revenue inflows without placing unnecessary burden on taxpayers. Doing so requires strategic thinking, as well as expertise, in designing accurate forecasting models. Generally, DRS can audit filers for single-line issues and subsequently audit the same return within the appropriate statute of limitations if additional issues are identified. However, DRS has historically tended to audit sales tax filings in a single review. As a result, sales tax audits are often delayed and prolonged to ensure that the highest-value compliance issues are discovered before an audit is initiated. DRS should move forward with conducting single-issue audits for all tax types – and seek legislative changes to more restrictive chapters in Title 12 statutes, as necessary – while placing safeguards to ensure that the practice does not become overly burdensome for the business community (e.g., a cap on individual audits per cycle). This will help increase the agency’s audit coverage ratio while signaling to taxpayers that the agency is increasing its audit activity.

During the COVID-19 pandemic, two important and long-term DRS-specific developments have arisen: First, more than 90% of DRS staff has worked remotely, with no observable decline in productivity and an increased desire to contin-

ue teleworking. A move to more teleworking could reduce operating expenses for rent for the agency while making it a more attractive place of employment for young professionals seeking permanent telework options. Many residents of nearby states, particularly those working in New York, have migrated to Connecticut. DRS should engage payroll companies and other third-party data sources, and conduct marketing outreach, to identify and inform this influx of new, relatively high-earning taxpayers on how to accurately report income earned while living in Connecticut. Additional, less complex initiatives that DRS should consider include:

- Increasing shared services with other agencies where DRS or its peers benefit. This includes leveraging the agency's best-in-state technologies to bring the State's digital laggards forward (e.g., document scanning and chatbots). Doing so can scale costs across agencies, help

smaller agencies that lack the know-how or functional expertise, and reduce prices through heightened purchasing power.

- Closing DRS's four walk-in centers and replacing taxpayer assistance with a hybrid of online (e.g., AI-driven chatbots, virtual webinars, video tutorials) and in-person (e.g., tax fairs) assistance. During the 2020 filing season, the COVID-19 pandemic forced the State to close or restrict these centers, yet saw no meaningful uptick in filing errors. Making such a move would reduce operating expenses while returning real estate back to the private sector; that in turn would move property back into the revenue base.
- Evaluating outsourcing print and mail operations to private operators, given the focus on digitizing State government.
- Evaluating the benefit of transferring minor functions to more relevant agencies (e.g., licensing of tax preparation professionals to DCP).

Department of Social Services (DSS)

DSS delivers and funds a wide range of programs and services as Connecticut's multi-faceted health and human services agency. DSS serves about 1 million residents of all ages in all 169 Connecticut cities and towns and supports the basic needs of children, families, and other adults, including persons with disabilities. Services are delivered through 12 field offices, central administration, and online and phone access options. With service partners, DSS:

- Provides federal/state food and economic aid, health care coverage, independent living and home care, social work, child support, home heating aid, protective services for older adults and more vital service areas.
- Supports the health of nearly 850,000 residents through HUSKY Health, Connecticut's Medicaid and Children's Health Insurance Program, including medical, dental, behavioral health, prescription medications, long-term services and supports.

- Helps nearly 370,000 residents afford food and supports Connecticut's economy with federally funded Supplemental Nutritional Assistance Program (SNAP).

In FY20, Connecticut spent more than \$2.5b on Medicaid and received nearly \$4b in additional federal support on behalf of more than 850,000 residents. DSS's FY20 total budget was roughly \$7.8b, with \$3.4b in State funding and \$4.4b in federal funding.

As of January 2021, 433 (26%) of DSS's 1,645 employees are retirement-eligible in 2022. Most of the total retirement-eligible employees (328) are in public-facing positions such as Eligibility Services Workers, Child Support Workers, and Social Workers; more than half of clerical and secretarial employees (29 out of 55, 53%) are also eligible. It is important to consider both categories in tandem due to their interdependencies. DSS has historically had a lean clerical and secretarial staff, and over the years, other personnel, particularly

Eligibility Services Workers, have taken on many administrative tasks as a result.

Based on the retirement-intent survey results, DSS is likely to experience significant attrition – of the employees surveyed, 73% of resident-facing staff and 56% of administrative staff indicated that they are likely to retire. Thus, critical processes, such as ensuring the timely determination of eligibility for and distribution of medical, food and cash assistance benefits, run the risk of disruption.

Most of DSS's leadership is also retirement-eligible, and retirement uptake is expected to be high among managers, with 75% of surveyed managers indicating they are likely to retire on or before June 30, 2022. In many cases, logical successors to management positions are not present, and it is challenging to incentivize union employees to seek or accept promotions into a managerial position due to the underwhelming value proposition of becoming a manager. In general, managers endure longer hours and more stress, have less job security, are required to pay more into the health and retirement benefits, and unlike union staff do not have built in guarantees for annual salary increases, regardless of performance. In fact, salary compression has resulted in some managers making less than their employees, who are also asked to pay less for healthcare benefits than managers. Given the scope and impact of DSS on those in need throughout the state and the ambitious reform efforts to the HUSKY program, among others, that DSS is considering, experienced leadership will be critical, and individual initiatives must be planned with potential attrition in mind to ensure that they are effectively implemented.

These are several opportunities for DSS to mitigate risks to service continuity, improve resident healthcare outcomes, and realize substantial cost savings. Several of these opportunities are discussed in greater depth elsewhere in the report, including:

- Expanding the use of value-based payments.
- Controlling health spending and maximizing federal health funding.
- Consolidating and/or jointly administering teenage pregnancy prevention programs and federally funded nutritional assistance programs.
- Centralizing and automating grant-making processes via a common platform shared with other agencies to improve value for money and reduce administrative effort.
- Centralizing and automating Affirmative Action reporting to reduce manual effort and duplicative work across agencies.

Other opportunities for DSS including conducting certain processes via digital platforms shared with other health and human services agencies, such as monitoring and evaluating program outcomes, determining resident eligibility for various services via expanded use of DSS's existing ImpaCT platform, and conducting background checks for the State employee hiring process. Further automation and centralization of these functions could mitigate the risk of disruption caused by retiring Eligibility Service Workers, clerks, and secretaries; it could also enable health and human services agencies to operate more efficiently and better deliver services to residents.

Finally, certain individual processes at DSS require significant manual effort and could be conducted more efficiently if further automated and/or digitized, including digitizing the case visit documentation system, further automating call centers to provide help more effectively to residents, and instituting automatic approvals for certain eligibility-related documents. Similar to the platforms mentioned above, automating and/or digitizing these tasks would reduce the potential disruption caused by retirements while freeing capacity for remaining employees to take on a portion of the workload of those who retire.

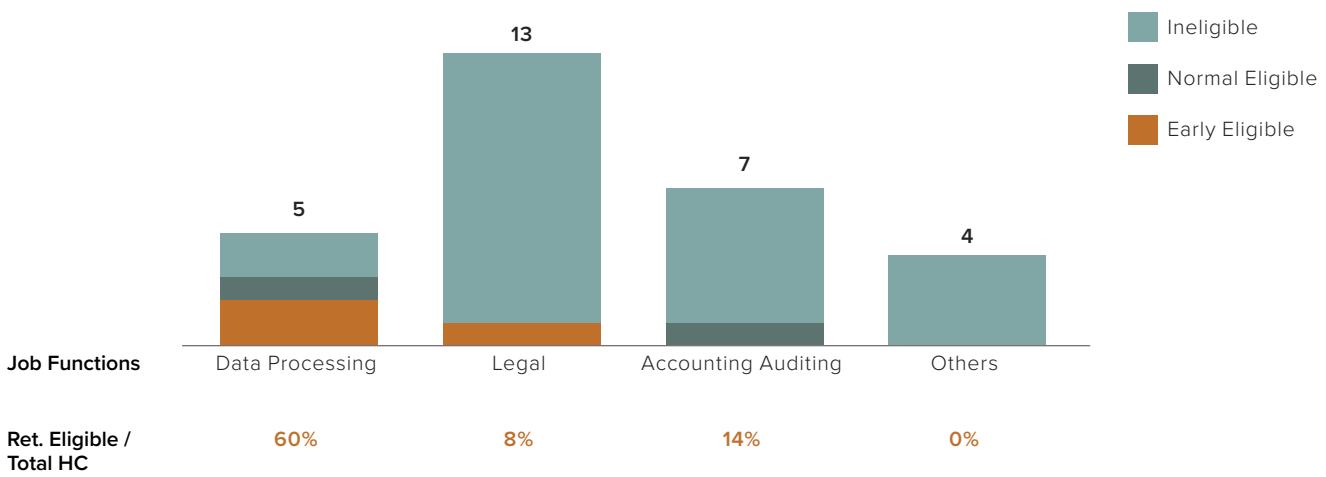
State Elections Enforcement Commission (SEEC)

The Connecticut SEEC is a non-partisan independent agency with exclusive civil authority to enforce election laws. The commission is tasked with monitoring compliance with campaign finance law. Over the last 8 years, the commission has seen attrition of 40% of staff and as a result has

become a relatively young staff with few employees eligible for retirement in 2022 (just 17%). Between the importance of remaining independent as a watchdog agency, the minimal retirement surge risk, and recent digitization efforts, there are no significant opportunities for additional efficiencies within the commission.



SEEC | 17% of agency personnel eligible for retirement

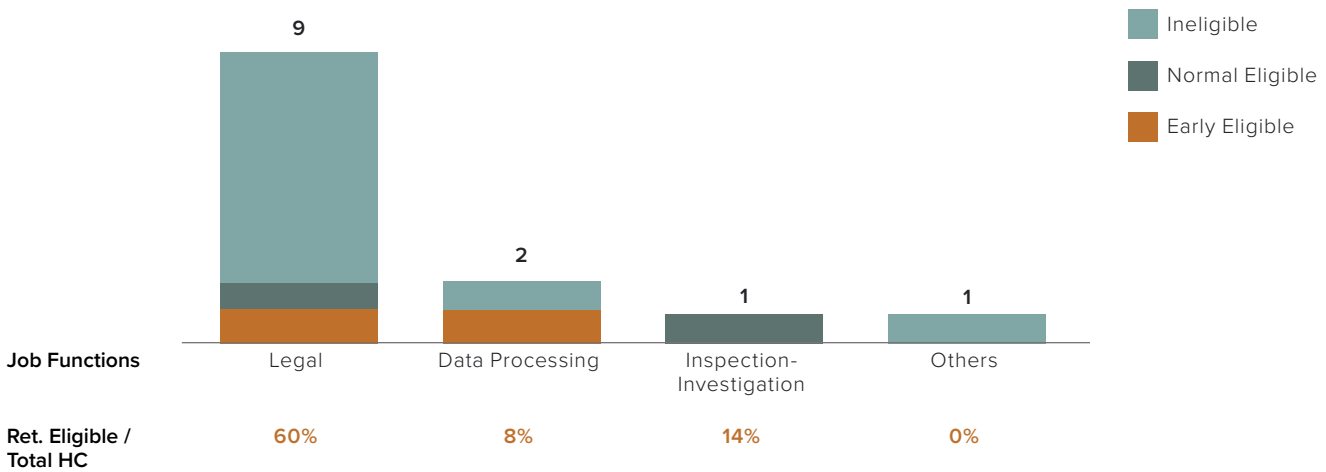


Office of State Ethics (OSE)

Connecticut’s OSE is an independent agency that administers the State’s Code of Ethics programs, including oversight of lobbyists. The agency has 16 authorized positions with four employees eligible for retirement by 2022. To minimize service disruption with an already lean staff, OSE is updating their website, software tools, and case management systems. No

further efficiency opportunities were identified. In addition, the commission is heavily reliant on manual processes given statutes mandating many notices be sent by mail. Amending these statutes would help accelerate the adoption of document digitization and storage in progress or needed across many other agencies.

OSE | 31% of agency personnel eligible for retirement



Notably, OSE, FOIC, and SEEC were consolidated in 2011 and split again in 2016 after poor results. Given their critical roles in providing transparency and accountability across State government, it is important that the State maintain their independence and not

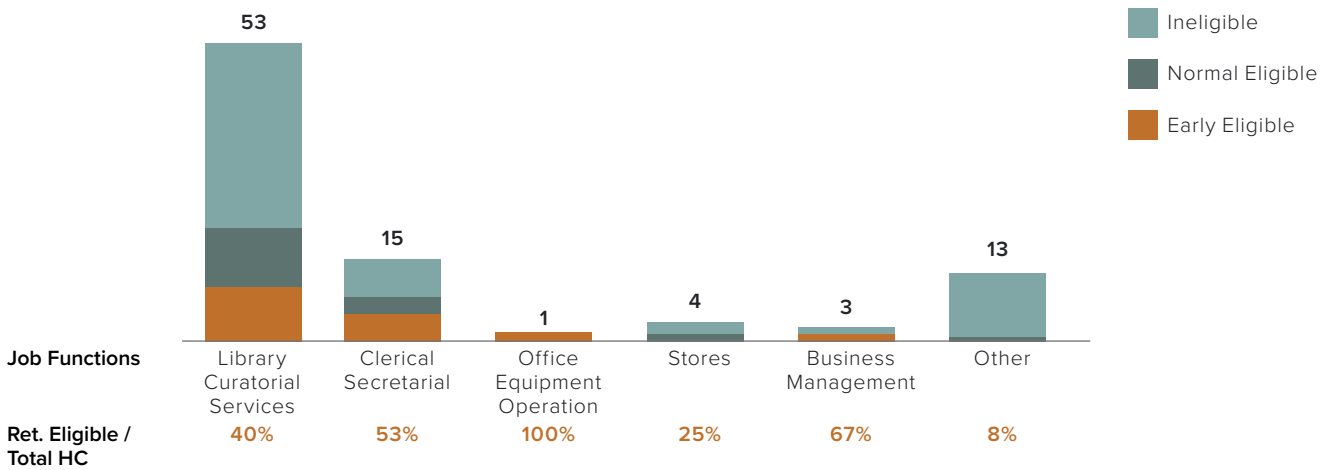
consolidate these agencies. These agencies have existing MOUs to provide shared services as needed, and additional centralized IT support could be helpful in further automating manual processes as was observed at many of the smaller agencies.

Connecticut State Library (CSL)

The CSL provides a variety of library, information, archival, and public records services for Connecticut state government, including assisting local libraries and overseeing the Museum of Connecticut History. The agency operates on an already lean budget of less than \$12m, providing few opportunities to identify meaningful efficiency

opportunities. As observed in other agencies, CSL would benefit from a statewide grant platform, document digitization and storage tools, and improved shift-coverage scheduling tools. Finally, CSL would benefit from combining State general and law libraries, streamlining operations and staffing needs.

 **CSL | 38% of agency personnel eligible for retirement**

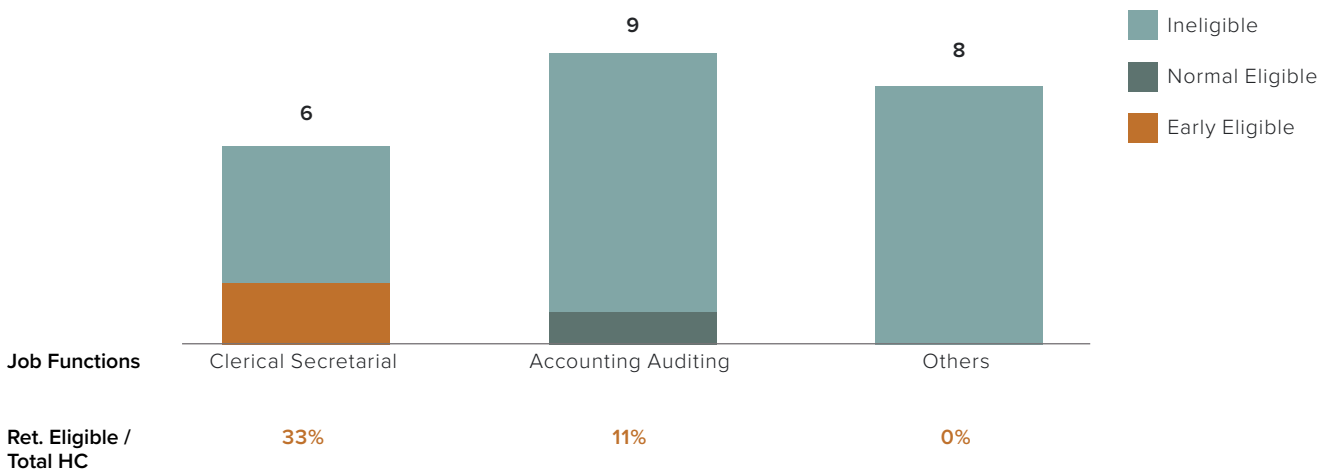


Teachers' Retirement Board (TRB)

The Connecticut TRB is responsible for administering retirement and health benefit plans for career public school teachers and eligible dependents. With fewer than 30 full-time staff, these workers answer questions from residents, determine and initiate eligibility, verify teachers' certification, manage the teachers' retirement system, and perform account reconciliation. Given the small number of staff, our primary

recommendations for efficiency focus on enabling the existing workforce to do their job more effectively and leveraging technology to reduce manual work. Much of this technology exists elsewhere in the State and simply needs to be shared more proactively with TRB, including self-service portals, chatbots and voicebots, OCR/NLU/RPA to digitize documents, and e-signature software to eliminate the need to submit physical paperwork.

 **TRB | 13% of agency personnel eligible for retirement**



Source: CT STARS database as of 1/5/2021

In addition, TRB would benefit from modernizing their pension administration platform, which is 20-30 years old and is not integrated with other statewide pension platforms. There is no integration between TRB's system and the municipalities (e.g., Boards of Education) with whom they interact. Having a single portal to view teachers and their information, while also enabling a resident-facing version, would reduce strain on the agency. Likewise, TRB and other agencies should be

able to sign a single, long-term MOU permitting data sharing between agencies rather than needing new legal approvals for each exchange. For example, this would have been helpful in identifying employees who were receiving workers' compensation but had already returned to work – something that is audited in a more ad hoc fashion today. Finally, ambiguous statutes lead to resource-consuming appeals that should be streamlined and clarified by the legislature.

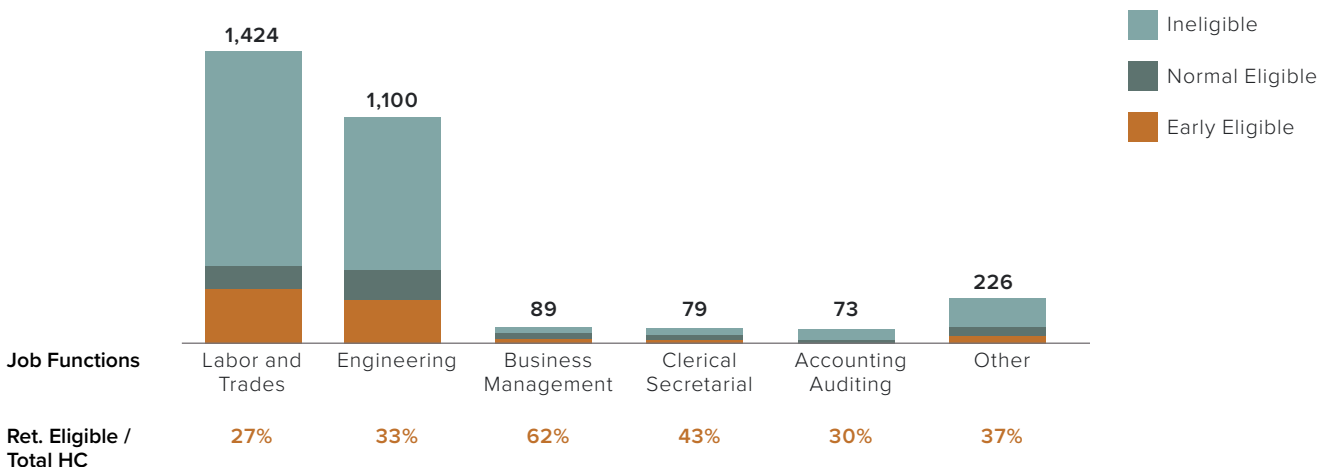
Department of Transportation (CTDOT)

CTDOT is responsible for planning, constructing, and maintaining Connecticut's state and federal highways and bridges. In addition, CTDOT oversees all public transit, rail, bicycle, and pedestrian programs. The agency's mission is to provide safe and efficient intermodal transportation networks that improve residents' quality of life and promote economic vitality.

CTDOT's FY20 budget was more than \$1.7b, with funding essentially split between the State's Special Transportation Fund and federal sources. As of January 2021, the agency had nearly 3,000 filled positions, of which 31% are retirement-eligible by July 1, 2022. Of particular

concern for CTDOT is that 35% of Transportation Engineers, 25% of Maintainers, and 30% of Maintainer Managers are retirement-eligible. These workers are responsible for keeping Connecticut's roads and bridges safe and in good condition. Even more concerning is that the State finds it particularly difficult to hire and retain certain engineering positions, including Engineer 3s, Principal Engineers, and Supervising Engineers, as there is significant private-sector competition for these highly skilled professionals. Unless the State implements the following initiatives, it risks disruption to the ongoing improvements to roads and bridges.

CTDOT | 31% of agency personnel eligible for retirement



Moving forward, the State should provide increased flexibility to CTDOT on its hiring processes and compensation, prioritizing the backfilling of these high-skilled engineer positions and creating new job classes that enable the agency to better match skills and pay rates. For example, enabling the pay rate for state maintenance positions to be competitive with their municipal peers would reduce employee attrition rates and improve the candidate pool for new hires. The creation of a new Transportation Supervising Engineer position would reduce the agency's costs. Finally, retirement attrition presents a good opportunity for CTDOT to conduct a full review of its organizational structure, optimizing spans and layers while re-deploying position-count savings from outdated job classes to fit a more modernized transportation agency. Specifically, the following jobs will assist the agency in their modern continued progress: Software Developers/Engineers, Policy Advisors/ Coordinators, and Data Analysts.

The agency should amend statutes to facilitate more flexibility in contracting work. Outsourcing is hindered by the State's Contracting Standards Board, which dictates that the State cannot use third-party vendors for services previously conducted by bargaining unit employees – standards that are often broadly interpreted. The State should amend Chapter 62 Sec. 4e-16 to make it easier for CTDOT to outsource work as needed – whether to increase flexibility, reduce expenses, or simply be able to accomplish the work that must be done with fewer workers following the retirement surge. In addition, CTDOT should explore the use of regional-based outsourcing contracts with strict performance-based metrics to ensure quality of service and timely completion of work.

CTDOT should also amend statutes to facilitate P3. Similarly, the State should encourage the use of P3 to upgrade its infrastructure without incurring the full expense on an already strained STF or waiting for an improved financial environment. Poor infrastructure, in addition to posing public safety risks to drivers, is often cited as a weakness for Connecticut in studies examining the top states for business (e.g.,

CNBC, U.S. News). Moreover, with growing debt service costs and limits on borrowing, the State cannot afford to take on all its infrastructure priorities. P3 partnerships can shift capital expenses and construction risks to the private sector. However, legislative action is required to allow for availability payments – a way of providing payments based on performance or timely completion of milestones. While tolls would provide the most straightforward revenue stream on which to base these payments (while opening more potential for federal funding, such as TIFIA, many states have found ways to tap into other sources of payments (e.g., fees and “shadow tolls”). Nonetheless, the legislature must provide CTDOT with more flexibility to use P3 to shift risk and expenses while improving the State's current infrastructure.

Additionally, CTDOT should modernize the agency with new digital tools and advanced technology. The agency has already made great strides, but it must continue to evolve into a tech-driven agency (see Section 3.1.7 for additional details). As the agency continues to modernize, it will be important to invest in new tools and techniques to help prioritize capital projects, continue to make road improvements, and assess bridge safety conditions in the face of high attrition. CTDOT is already using and/or piloting many new tools, but investments should be accelerated in areas such as innovations in durable materials (e.g., Ultra High-Performance Concrete), smart sensors, drones (UAS) and automated drawbridges. CTDOT is hampered in its ability to tap into many sources of federal funds due to lack of revenue-generating activities (e.g., tolls), requiring budgetary increases to pursue these tools. However, jurisdictions across the country and the globe are realizing the benefits of using drones to identify top-priority bridge repairs and sensors to predict where potholes are likely to form. In addition, CTDOT will require new skillsets, including individuals and technology capable of analyzing the vast data provided by these tools. This again requires increased flexibility in agency hiring procedures and approval processes.

Additional opportunities that may produce

smaller efficiency savings or take a longer time horizon to realize include:

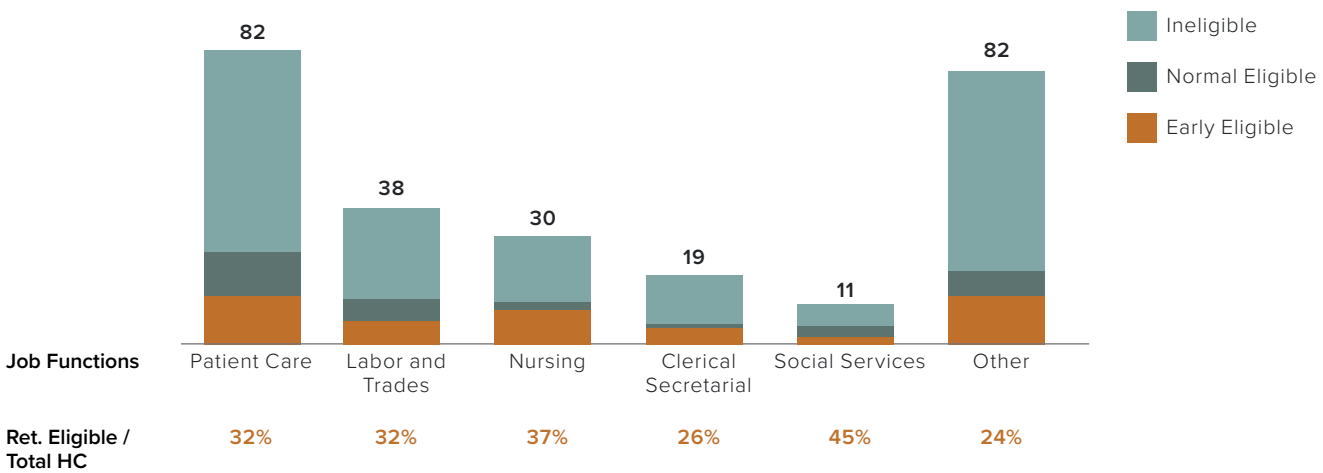
- **Continuing to pilot autonomous vehicles with the Federal Government.** While years away from a full-scale rollout, CTDOT has been selected as a federal grant recipient to test the first full-size automated transit bus project in North America.
 - **Leverage Transportation Network Companies (TNCs) to provide more efficient paratransit services.** ADA Paratransit service is vital for people with disabilities who cannot use fixed-route bus services, and it is the fastest growing expense within CTDOT. Mainstreaming ADA paratransit riders and increasing use of third-party TNCs could produce savings of \$1m or more annually while improving services. Today, CTDOT provides \$41 in subsidies per paratransit ride on more than 1 million rides per year. By contrast, California used TNCs to bring the average cost per trip from \$30-\$32 down to \$8; the MBTA in Boston cut the average cost from \$46 to \$13.
 - **Streamline bus systems and cap local subsidies.** Local bus systems lack synchronization, partially due to the fragmentation of 14 transit districts, each of which has the autonomy to determine which bus services to run and fares to charge. CTDOT subsidizes approximately 90% - 97% of local bus transit operations, despite the fact that municipalities managed the systems. CTDOT should explore transferring
- more of the cost to municipalities to ensure that local jurisdictions are accountable for inefficient operations.
 - **Consolidate Metropolitan Planning Organizations (MPOs).** The State should consolidate to either three MPOs or one, which could allow for possible integration of the Councils of Government (COG) Coordination and Statewide Transportation Improvement Program (STIP) units into a cohesive unit serving these functions. The Intermodal team would be potentially freed from their current support services to the MPO studies and could be redirected toward supporting true intermodal planning needs within the Department.
 - **Consolidate vehicle fleet.** Finally, CTDOT should reduce its vehicle fleet, particularly with a 15% reduction in motor pool shared light-duty vehicles. Once a post-pandemic “new normal” is identified, a deeper analysis should be conducted to identify further opportunities for fleet reductions and intra-agency shared fleets.
 - **Organizational structure review.** Finally, CTDOT has not conducted a detailed review of the agency’s organizational structure in recent years. While certainly a complex exercise, the retirement surge presents an opportunity for the agency to review optimal job classes and mixes of insourcing versus outsourcing and the associated impact on specific skill requirements, and spans and layers across the organization, before backfilling roles.

Department of Veterans Affairs

The Department of Veterans Affairs provides services to veterans who reside in Connecticut as well as outreach and advocacy on their behalf. Many of these services relate to veterans' healthcare, social and rehabilitative services. It administers a skilled nursing facility with long-term nursing and rehabilitative care with a capacity of 125 beds. Additionally, it operates a veterans' residential

facility which provides temporary housing, medical, recreational, educational, and vocational services and also operates a temporary family housing program for Veterans with dependants. It is also the only state agency to maintain a federally recognized Veterans cemetery in Connecticut. Of the more than 350 DVA employees, 30% are retirement-eligible by July 1, 2022.

DVA | 30% of agency personnel eligible for retirement



Like other State agencies which deliver healthcare services, DVA faces challenges recruiting skilled healthcare and social services workers. These challenges have been heightened by the pressure of providing services to a vulnerable population during the COVID-19 pandemic. This creates the risk of professional burnout and increased reliance on supplemental pool staff.

In addition to exploring the opportunity to contract elements of its convalescent and healthcare services (see earlier in this report),

the agency also has the opportunity to achieve greater efficiency through digitization. Decreasing the time spent on manual processes such as registrations and claims filings will allow the agency to improve the services it provides to veterans. Additionally, increasing the census of its nursing home will increase federal reimbursement, ensure that as many veterans as possible have access to the high-quality services provided by the DVA and allow the fixed costs of maintaining the service and facilities to be spread over a larger number of veterans.





Final report materials

Final materials

26 MARCH 2021



Connecticut

These materials accompany the public report for the CREATES project

This package contains the final versions of all materials created as part of the CREATES project

This document's structure parallels the public report, providing detail and analysis to support its narrative

- In some cases the public report contains less specific information than these slides
- Some topics covered in depth here (e.g., implementation approach) are not covered in depth in the report



1.1 CREATES Project Summary

CREATES project summary




Background

- 8k+ employees eligible for retirement by June 30, 2022
- Represents an imperative and an opportunity to modernize
- PA 18-81 asked the Governor to direct OPM to hire a national subject matter expert to find \$500m in operational efficiencies



Outcomes

- Engaged with 41 agencies, surveyed 2,500+ employees, analyzed operational and financial data, and benchmarked CT's performance against other states
- Identified ~200 opportunities totaling \$600-900m+ of potential value
 - Includes \$20m incorporated in FY22 and \$155m in FY23 budget
- Drafted detailed report that highlights opportunities while acknowledging potential challenges to implementation



Initiatives will benefit parties across the State of Connecticut.



Residents

- Makes services more convenient, straightforward and resilient in the face of retirement surge
- Builds toward vision of an "all-digital government"



Businesses

- Enhances support from the State and makes Connecticut a more attractive place to do business
- Empowers firms to train workers for the skills they need



Taxpayers

- Optimizes tax dollars for a more efficient government
- Finds new sources of revenue and cost savings without raising tax rates



State employees

- Increases capacity by automating manual, repetitive tasks
- Mitigates workload burden from retirement surge
- Provides more incentives to grow as a leader

Three-phase approach to improving Connecticut's efficiency

Objectives



Ensure continuity of operations



Manage expenses



Improve service quality

Approach

Baseline and calibration
Sep –Oct

Analyze **retirement surge** to understand risk and impact

Identify **improvement opportunities**

Develop **prioritization criteria** for opportunities

Develop **stakeholder map**

Develop recommendations
Oct - Dec

Conduct **employee survey**

Filter and **prioritize opportunities**

Conduct **detailed analysis** for prioritized opportunities

Ensure prioritized opportunities address **retirement surge risk**

Engage stakeholders to test and refine initiatives

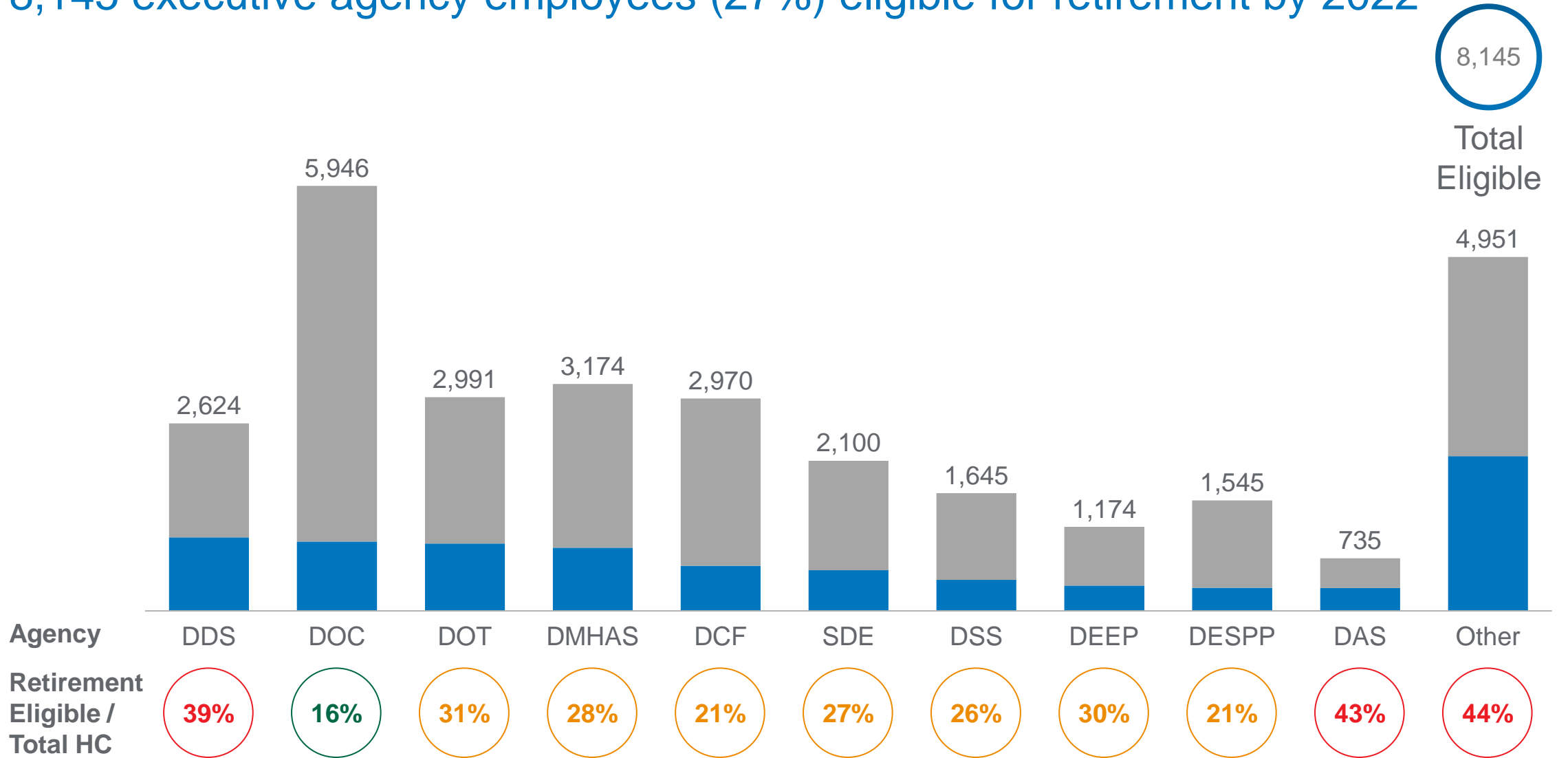
Report and roadmaps
Dec - Feb

Develop **high-level implementation plan** for prioritized initiatives

Develop **case for change** and supporting communications

Write **final report**

8,145 executive agency employees (27%) eligible for retirement by 2022



Note: Retirement eligible includes Early and Normal eligible employees for all agencies, plus Hazardous for DOC
 Source: CT STARS database as of 1/5/2021

Other employees Retirement Eligible

Opportunities were developed using a variety of inputs and engagement



Collaborating with 200+ senior employees, including agency leadership, staff and analysts, as well as 2.5k+ survey respondents



Benchmarking versus state, federal and private sector leaders to capture best-practices



Analyzing extensive internal financial and operational data



Engaging additional stakeholders, including non-profits, businesses and government experts across functions

Recommendations | Modernize management of the State workforce



Report Observations

- High number of vacancies due to difficulty in recruiting and retention for certain positions
- Long duration hiring process
- Non-competitive compensation for managers and high-skill jobs
- Lack of flexibility in changing org structures and job classes
- High levels of overtime experienced
- Tightly defined job duties



Recommendations

- Streamline the hiring process
- Improve manager value proposition and retention
- Manage overtime/absenteeism
- Improve management of workers' compensation expenses
- Return DOC staffing to previous levels
- Optimize CSP trooper target and civilianize administrative functions
- Optimize CTECs administration and teacher levels

Recommendations | Streamline services and pool resources



Report Observations

- Some pooled resources but many repetitive functions operating individually within each agency
- Confusing landscape for residents who interact with multiple health and human services agencies
- Sub-optimal coordination across agencies with overlapping customers or geographic focus areas
- Uneven capabilities across agencies and lack of shared best-practices



Recommendations

- Further centralize shared services
- Streamline similar human service programs and support functions
- Strengthen coordination of human service operations via a central office
- Integrate agencies with similar missions

Recommendations | Digitize resident services and internal processes



Report Observations

- Uneven digital capabilities across the State
- Many agencies operating on legacy IT systems and paper records
- Digital-laggard agencies unable to build capability individually
- Residents restricted in their ability to conduct motor vehicle transactions at home or from partner locations
- Below average audit coverage ratios within DRS



Recommendations

- Expand usage of common payment platform
- Digitize document management
- Streamline Affirmative Action reporting
- Digitize more DMV transactions
- Complete Revenue Services digitization program
- Modernize Unemployment Insurance
- Digitize DMHAS patient records
- Adopt new maintenance and inspection tools in DOT

Recommendations | Optimize sourcing



Report Observations

- State has well-established and robust engagements in place but faces obstacles related to certain specialized services
- High number of direct care staff eligible for retirement
- Longstanding transit operating contracts with generally high costs and little transparency
- Decade-long litigation over bus certificate requirements



Recommendations

- Expand non-profit engagement for providing LMHAs
- Expand non-profits for DDS group homes
- Bid out public transit service operations
- Contract operations of veterans' convalescent care
- Review transportation structure and maintenance contracting

Recommendations | Design services to meet resident needs



Report Observations

- Ongoing initiatives to control healthcare spend
- Potentially hundreds of millions of dollars in uncollected taxes
- Public transit services designed for old ways of working
- Depleting STF with no appetite to introduce new revenues



Recommendations

- Align rail and bus service to resident needs
- Adopt value-based health payments
- Control health spending and maximize federal funding
- Improve tax compliance
- Cut low-ROI film and tax programs
- Find new transportation revenues

Recommendations | Rationalize state assets



Report Observations

- Significant restrictions on teleworking pre-COVID
- Own and lease significant amount of real estate
- Large number of dilapidated buildings needing upgrades
- Allocate more physical space per worker than private sector
- Significant decline in prison population since 2015



Recommendations

- Increase office co-location
- Consolidate specialized assets
- Match prison footprint to current population

1 CREATES report context and approach

Connecticut demographics

	Attribute	2019
Population	Population	3,565,287
Age	0-18 years	25.5%
	19-64 years	-
	65+	17.7%
Race (Top 3 only)	White alone, percent	79.7%
	White alone, not Hispanic or Latino, percent	65.9%
	Hispanic or Latino, percent	16.9%
	Black or African-American alone, percent	12.2%
Education	High school graduate or higher, percent of persons age 25 years+, 2014-2018	90.5%
	Bachelor's degree or higher, percent of persons age 25 years+, 2014-2018	38.9%
Health	With a disability, under age 65 years, percent, 2014-2018	7.3%
	Persons without health insurance, under age 65 years, percent	6.2%
Income and Poverty	Median household income (in 2018 dollars), 2014-2018	\$76,106
	Per capita income in past 12 months (in 2018 dollars), 2014-2018	\$43,056
	Persons in poverty, percent	10.4%
Business	Total employment, 2018	1,528,867
	Total annual payroll, 2018 (\$1000)	97,728,524
	Total employment, percent change, 2017-2018	-0.5%

CT has suffered significant net migration losses in recent years – COVID presents opportunity to mitigate



Domestic net migration

US Rank: 44th
Est. loss of ~130M people from 2015-19



Birth rate

US Rank: 47th
15%+ below national average



International net migration

US Rank: 16th
Somewhat offset by inflow of ~75M internationals



Opportunity to attract domestic migration from neighboring states

16,000
New Yorkers moved to Connecticut from March-June

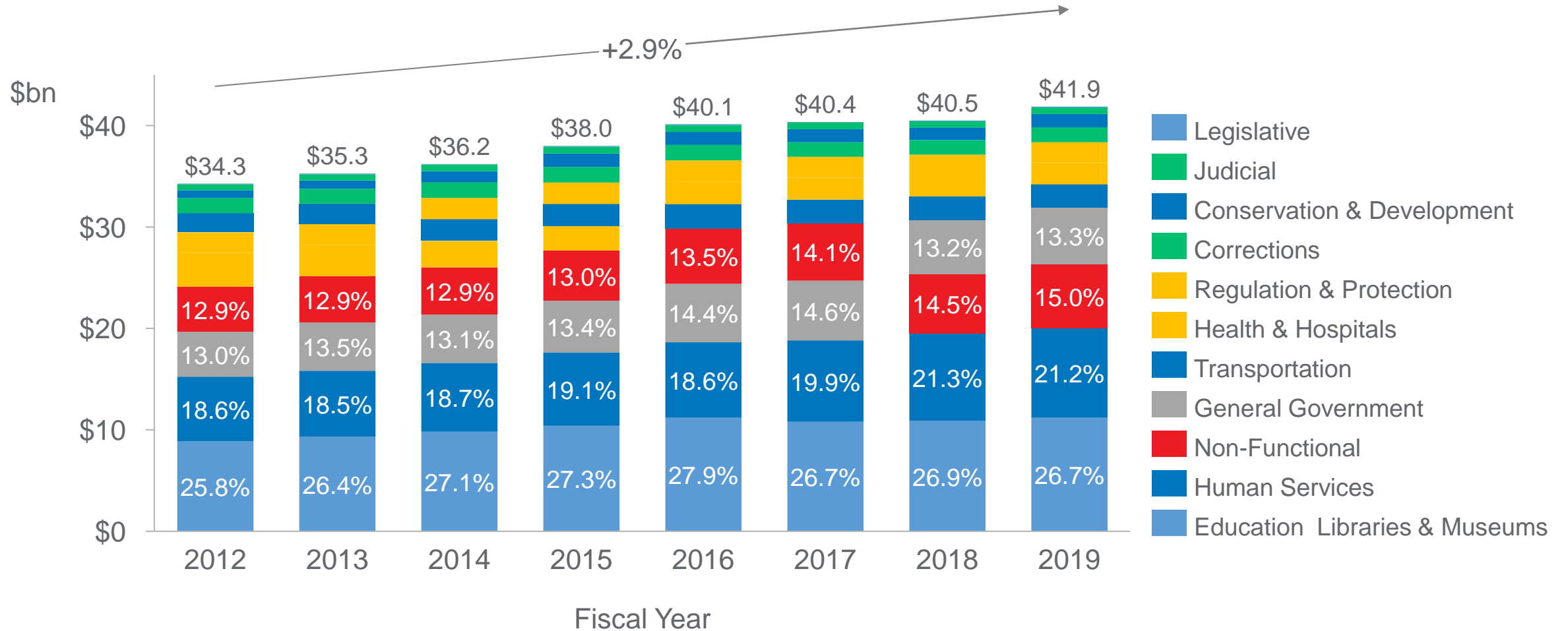
NY & NJ are historical sources of net domestic inflows

CT consistently scores poorly in CNBC's annual Top States for Business, driven by high costs and poor infrastructure

	Weighting	2015	2016	2017	2018	2019
Overall	100%	33	43 ↓	33 ↑	37 ↓	35 ↑
Workforce	18%	4	18	7	16	15
Economy	15%	26	43	41	45	43
Infrastructure	14%	46	47	47	47	43
Cost of Doing Business	14%	47	47	43	46	43
Quality Of Life	13%	11	25	23	22	20
Education	7%	11	18	3	9	8
Tech. & Innovation	7%	19	19	13	17	18
Business Friendliness	7%	32	29	32	26	21
Access To Capital	3%	30	25	20	18	20
Cost Of Living	2%	49	46	45	43	43

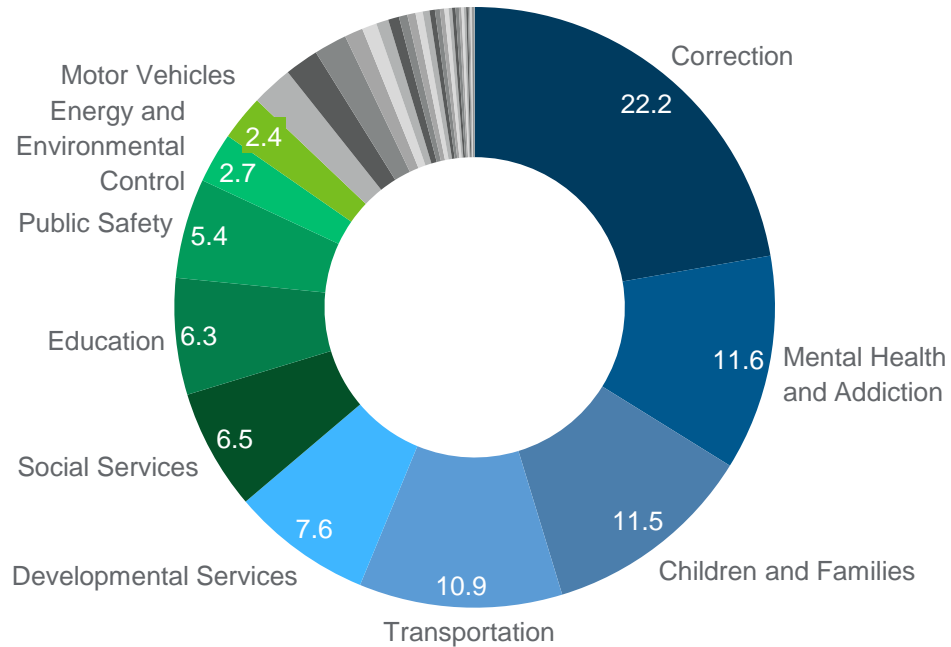
- High taxes and energy costs, poor fiscal health, lack of infrastructure and income inequality are often cited as drags on CT's attractiveness
- High ranking schools, quality of life, young workforce, & strong innovation provide areas of strength
- State also fares poorly in Forbes 2020 survey (43rd)

CT's state expenses have grown nearly 3% CAGR since FY12, led by \$2.5bn rise in Human Services (~40% rise)



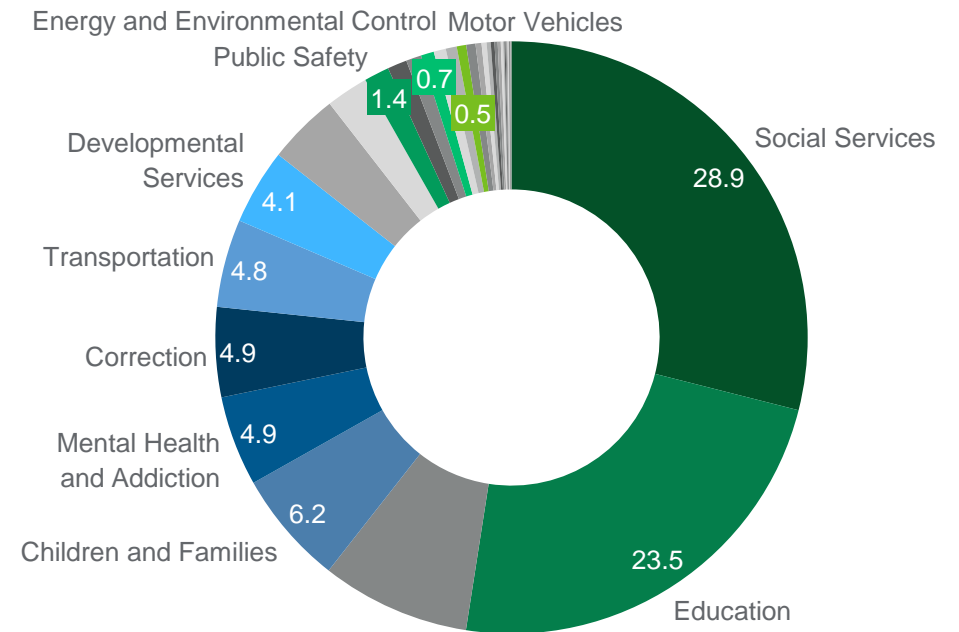
CREATES covered State executive agencies, with focus on areas with greatest opportunities for efficiency and savings

10 largest agencies are 87% of total headcount...



Thousand employees

... and 80% of the 2020 budget



\$M



Also need to consider retirement risk impact across department

Three-phase approach to improving Connecticut's efficiency

Objectives



Ensure continuity of operations

Prevent the retirement surge from impacting services provision



Manage expenses

Lower costs by identifying potential efficiency improvements



Improve service quality

Create value through improved citizen experience, better distribution and improved outcomes

Approach

Baseline and calibration Sep –Oct

Analyze **retirement surge** to understand risk and impact

Identify **improvement opportunities** by cluster

Develop **prioritization criteria** for improvement opportunities

Develop **stakeholder map**

Develop recommendations Oct - Dec

Filter and **prioritize improvement opportunities**

Develop **high-level business cases** for prioritized opportunities

Ensure prioritized opportunities address **retirement surge risk**

Engage broad set of stakeholders to test and refine improvement opportunities

Report and roadmaps Dec - Feb

Develop **high-level implementation plan** for prioritized initiatives

Develop **case for change** and supporting communications

Write **final report**

CREATES identified improvement opportunities and integrate with other work

Focus was on operational efficiency improvements within current policy framework

Focus of CREATES



Op model and org structure

Leverage more efficient delivery models, remove redundancies, optimizing spans/layers and sourcing



Digitization

Replace manual processes or services (internal and external) with digital and automation



Process improvement

New ways of improving current activities, including through simplification and deduplication



Service design

Enhance services for citizens and industry, eliminate non-value-add services and enable self-service



Workforce management

Across the employee lifecycle, including hiring, learning and development, deployment, retention



Revenue optimization

Identify new opportunities for revenue and improve revenue realization

Additional State projects in progress



IT efficiency analysis

Review of the IT footprint conducted through the Department for Administrative Services



Lean management

Review of use of Lean techniques to follow-up on progress since official adoption in 2016



Workspace realignment

Updates to teleworking policy and projected impact on estate footprint



Procurement

Processes through which the State purchases services and current value from those services



We feed relevant ideas into this work and ensured alignment in final report

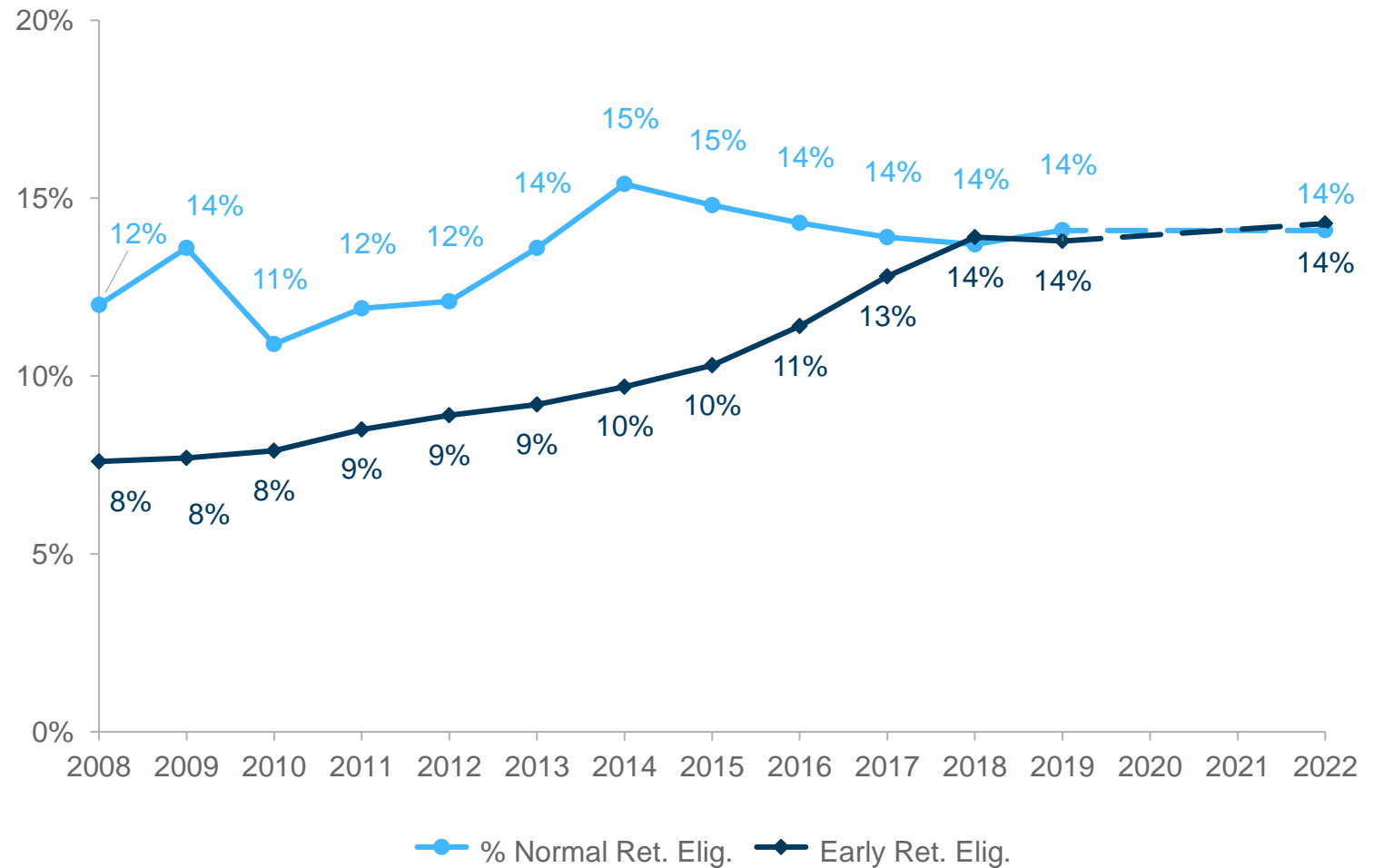
2 State Employee 2022 Retirement Surge

2.1

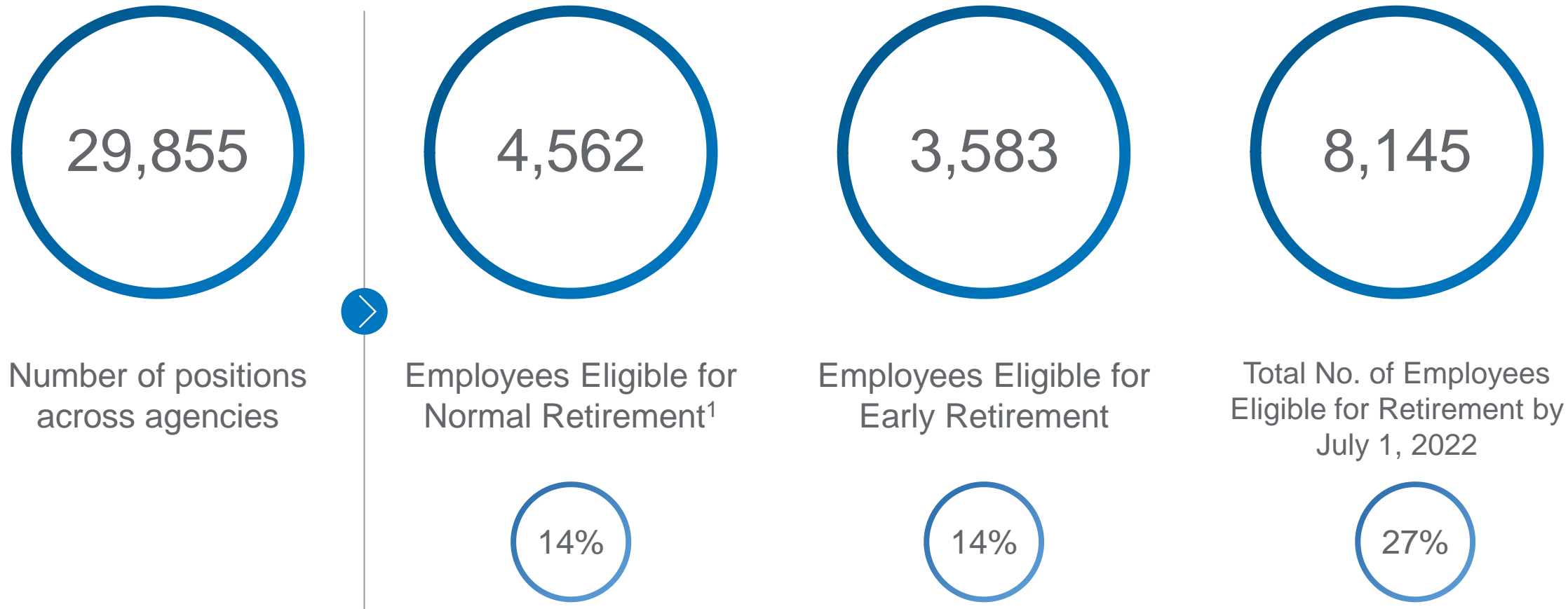
State employee retirements

Over the last decade, the share of State workforce eligible for retirement has continued to rise

Share Eligible for Retirement



27% of workforce will be eligible to retire by July 1, 2022, split between those eligible for reduced/full benefits

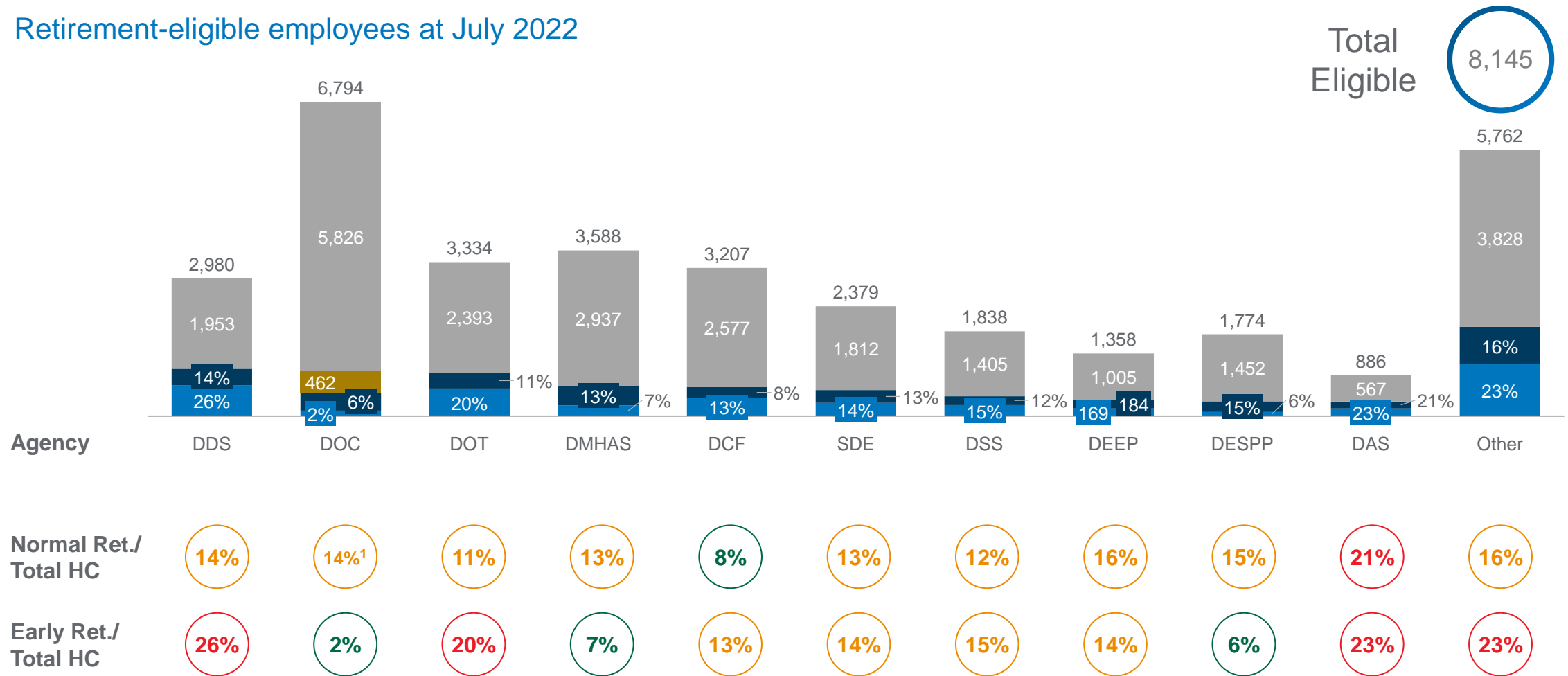


1. Includes DOC employees eligible for retirement under Hazardous Duty
Source: CT STARS database as of 1/5/2021

Agency lens | Retirement risk varies significantly by agency

DDS, DOT, DMHAS, DAS and the smallest agencies are at greatest risk

Retirement-eligible employees at July 2022



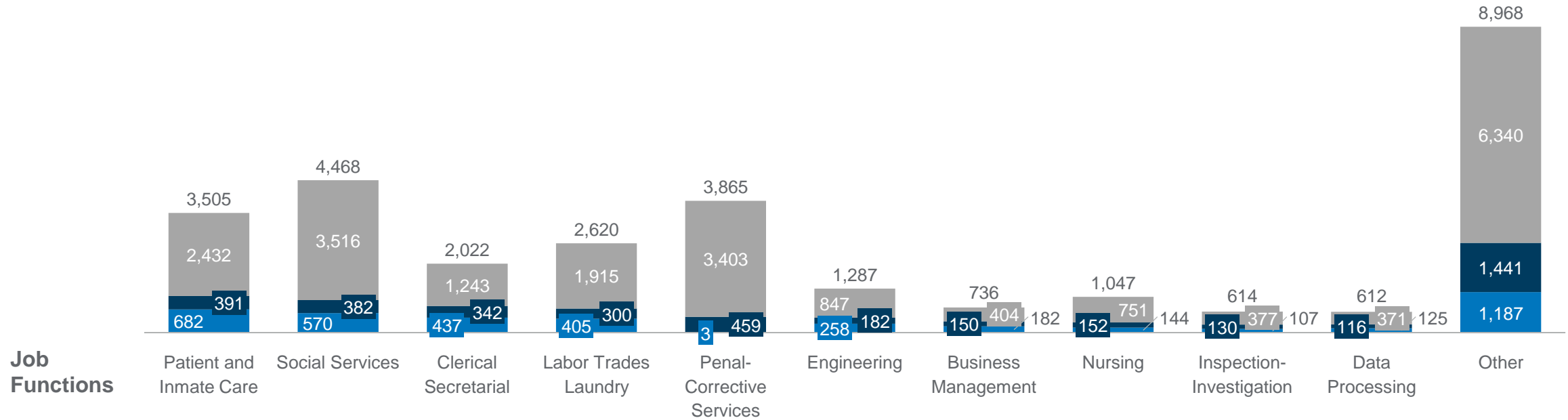
1. DOC Normal includes employees eligible for retirement under Hazardous Duty

Note: Color coding is based on % vs. statewide benchmark (Normal = 13.6%, Early = 13.8%); Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red

Source: CT STARS database as of 1/5/2021

Profession lens | Admin, health and managerial positions are at highest risk

Retirement-eligible employees at July 2022



Normal Ret./ Total HC



Early Ret./ Total HC

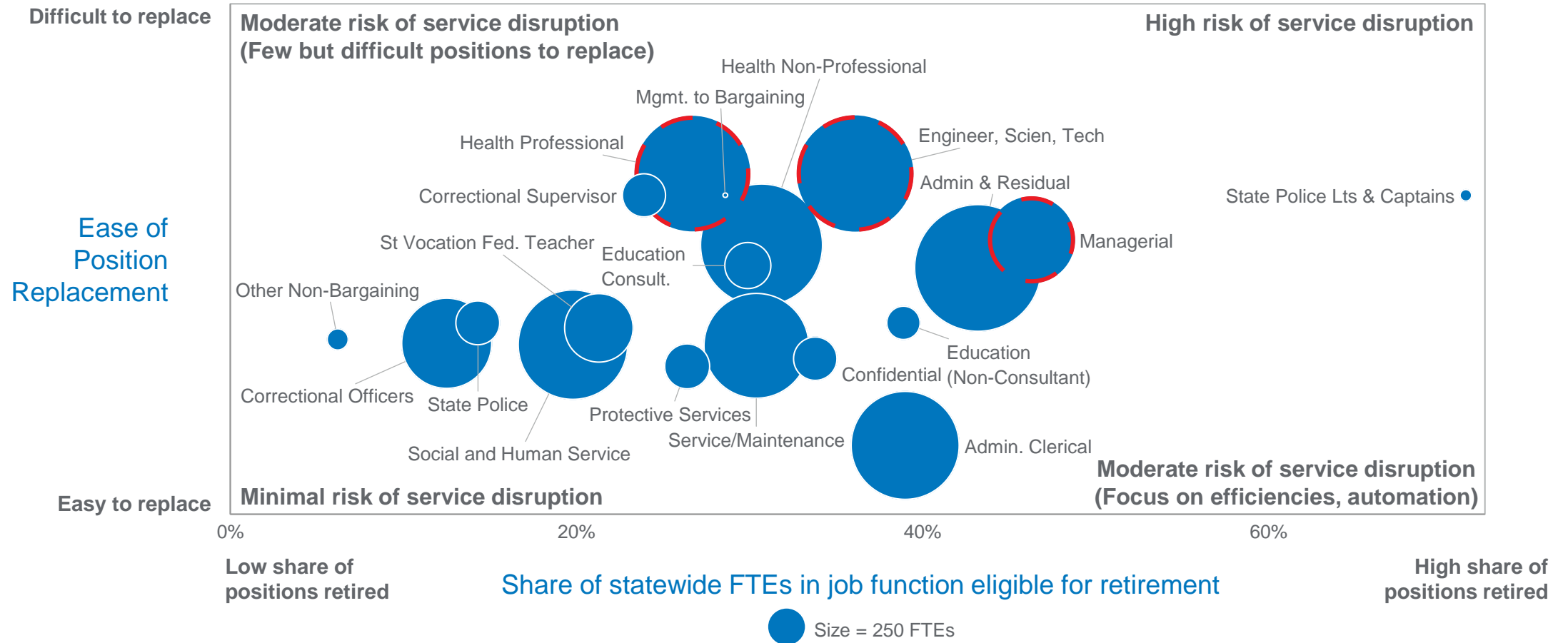


1. DOC Normal includes employees eligible for retirement under Hazardous Duty

Note: Color coding is based on % vs. statewide benchmark (Normal = 13.6%, Early = 13.8%); Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red






Source: CT STARS database as of 1/5/2021

Health professionals, engineers/scientists and managers represent greatest risk for service continuity due to difficulty to replace retired employees



Note: Ease of replacement based on job qualifications and prerequisites; Education B consists of education related consultants; "Mgmt. Trans. To Barg." consists of temporary unit managers transitioning to bargain units represented by A&R union
 Source: STARS database, DAS HR

Delayed retirement results in loss of 2% COLA floor, delays first COLA by ~18 months and increases healthcare costs for under 65

	Retirement before 7/1/22		Retirement on or after 7/1/22	
	Hazardous	Non-Hazardous	Hazardous	Non-Hazardous
Cost of Living Adjustment				
Annual cost of living adjustment (COLA)	2% or 60% of CPI-W ¹ up to 6% and 75% of CPI-W above 6%		CPI-W up to 2%, then 60% of CPI-W up to 6% and 75% of CPI-W above 6% 	
Minimum COLA	2%		0% 	
Maximum COLA	7.5%		7.5%	
First COLA Adjustment	~12 months (9-15 months)		30 months (Kick-in added if annualized COLA > 5.5% first 18 months) ²	
Healthcare				
65 years+/Medicare-Covered Retirees	No change		No change	
Premium share paid by employees < 25 yrs. service	0 to 1.5%	1.5% to 3.0%	3.0% 	5.0% 
Medicare Part B Premium Reimbursement	State pays 100% premium for Medicare-covered retirees		50% reimbursement of add'l cost beyond standard premium for high earners ³ (~\$1.2-2.4k cost p.a. to individual) ⁴ 	

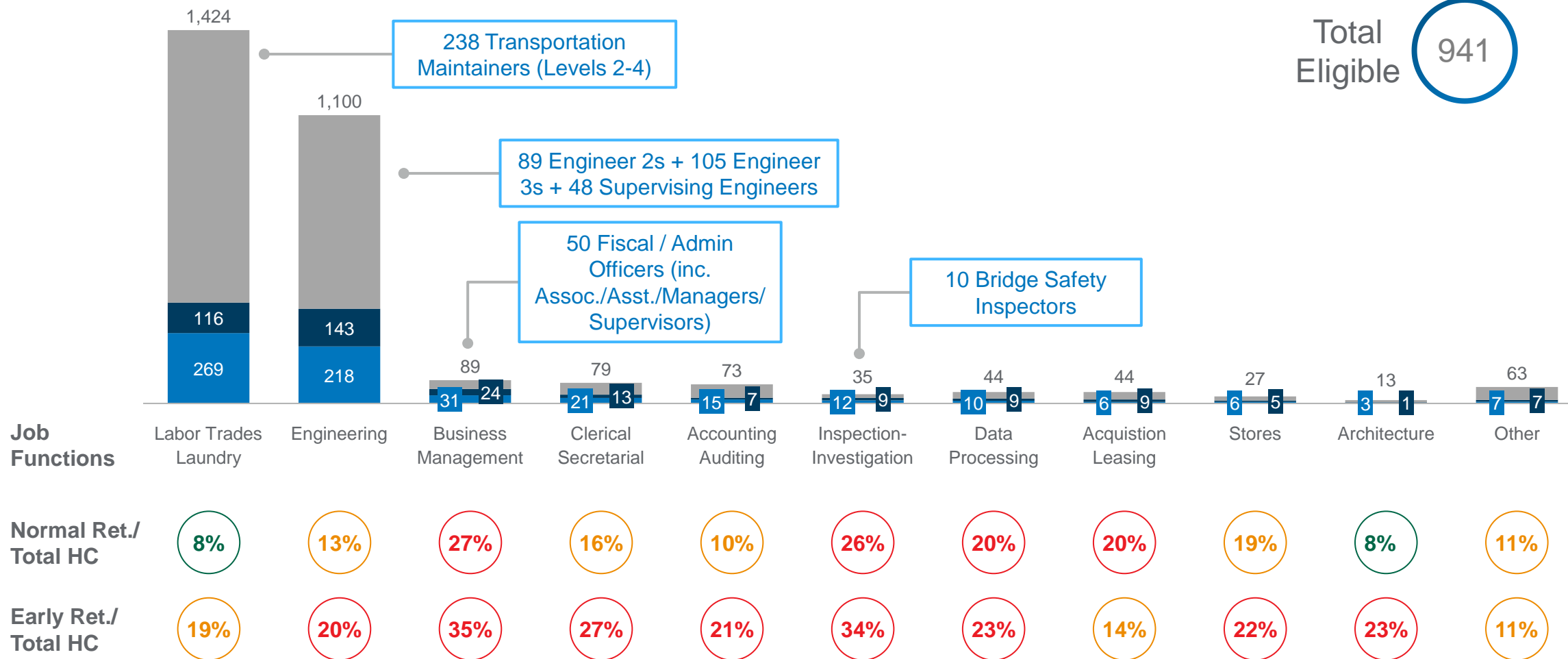
No relief provided to early retirees in terms of benefit reduction

1. COLA = annual Cost of Living Adjustment, based on CPI-W (Consumer Price Index for Urban Wage Earners & Clerical Workers) 2. Kick-in = [(60% * CPI-W) - 2.5%] * 1.5
 3. \$85K salary for single filers 4. Additional premiums start at \$2,429 per year for single filers with salaries \$87-109K, \$3,470 from \$109-\$136K, \$4,512 from \$136-\$162K
 Source: SEBAC 2017 agreement



Department of Transportation

Total Eligible **941**

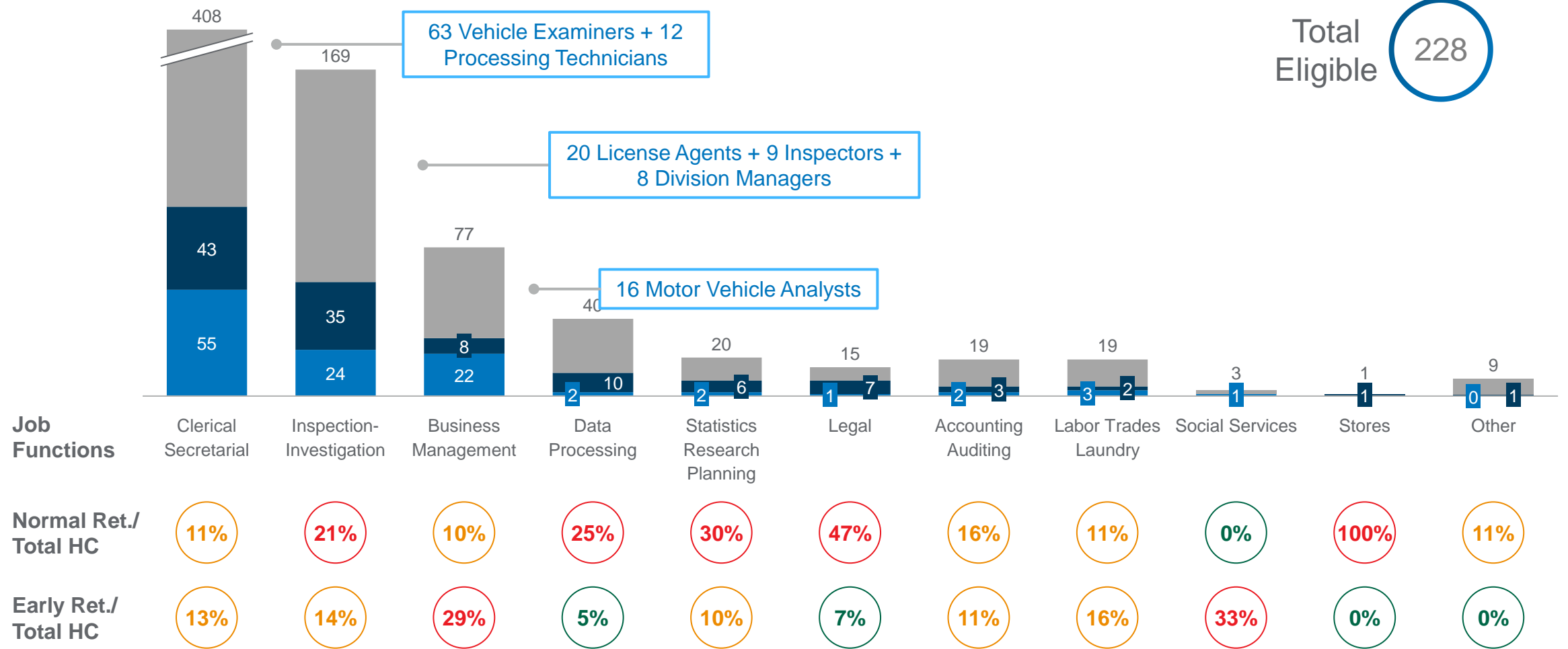


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Motor Vehicles



Total Eligible **228**

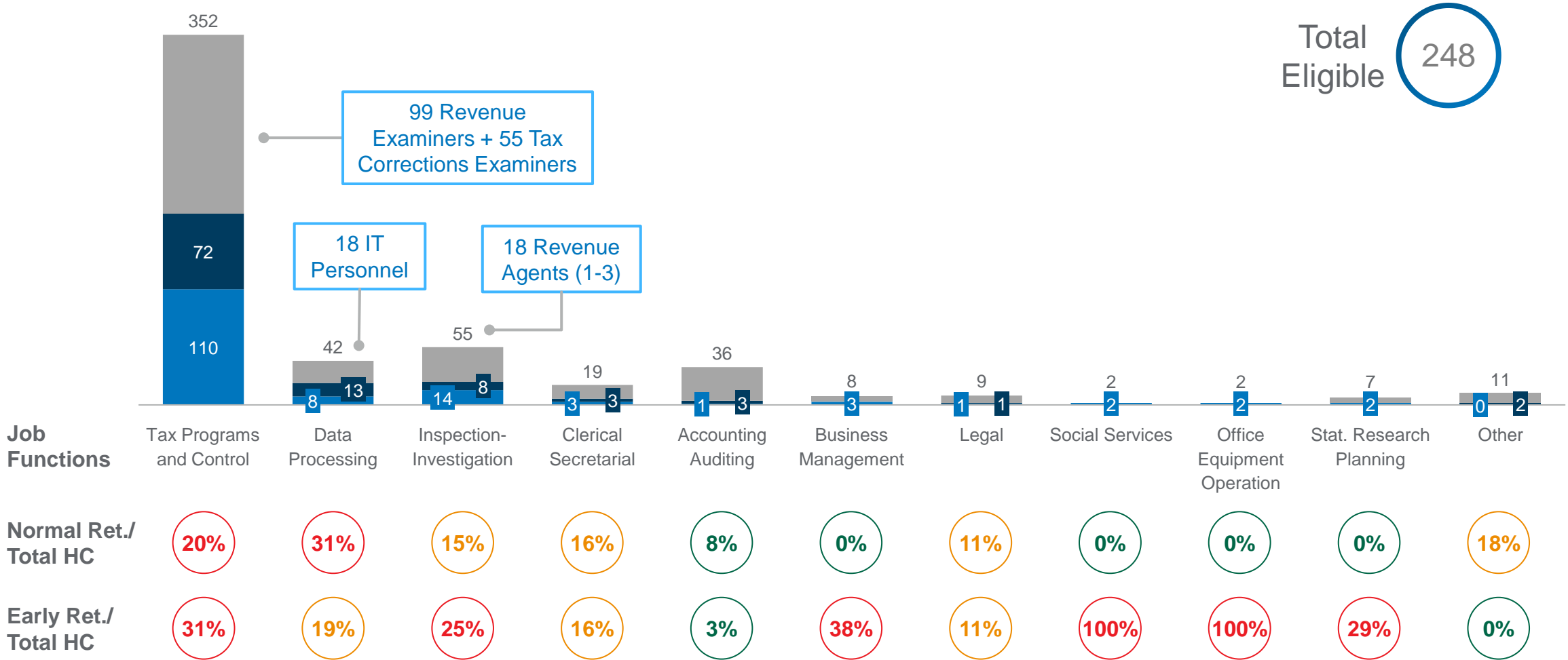


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Revenue Services



Total Eligible **248**

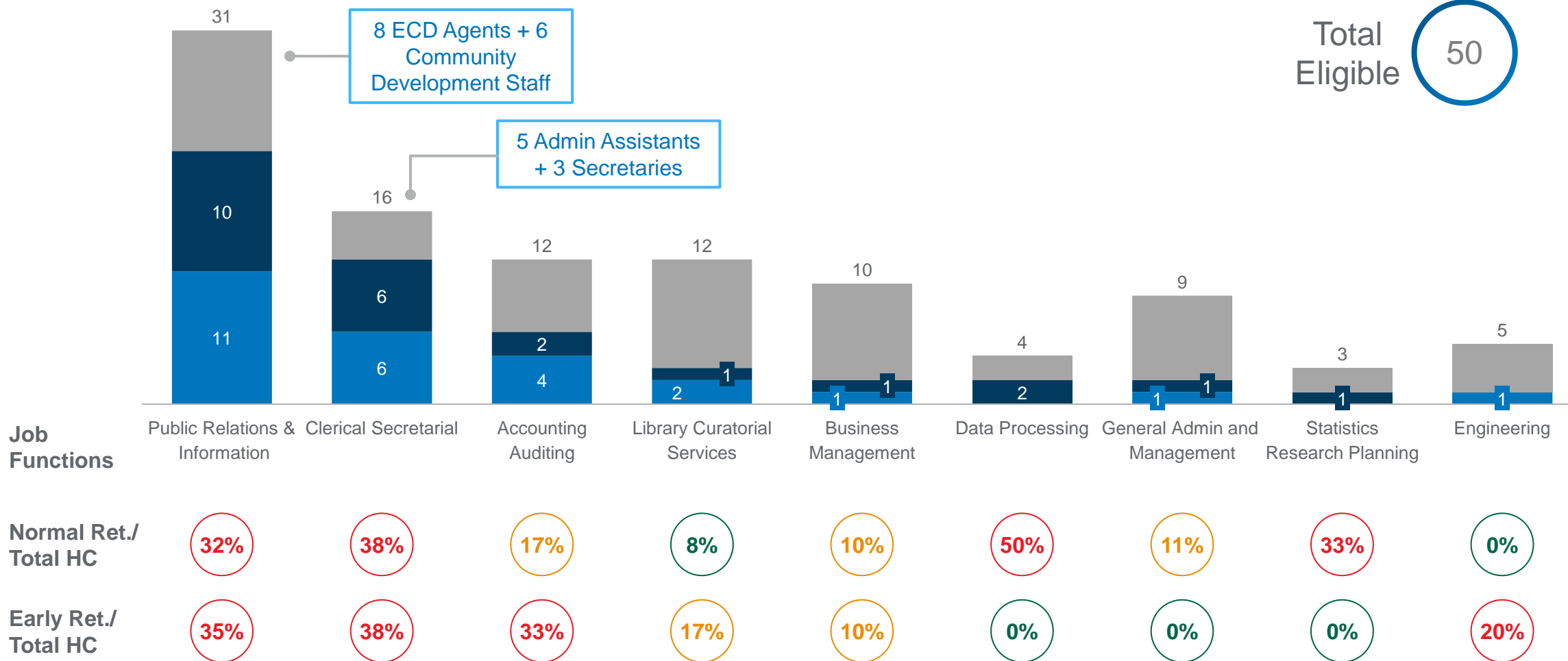


	Tax Programs and Control	Data Processing	Inspection-Investigation	Clerical Secretarial	Accounting Auditing	Business Management	Legal	Social Services	Office Equipment Operation	Stat. Research Planning	Other
Normal Ret./ Total HC	20%	31%	15%	16%	8%	0%	11%	0%	0%	0%	18%
Early Ret./ Total HC	31%	19%	25%	16%	3%	38%	11%	100%	100%	29%	0%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Economic and Community Development

Total Eligible **50**

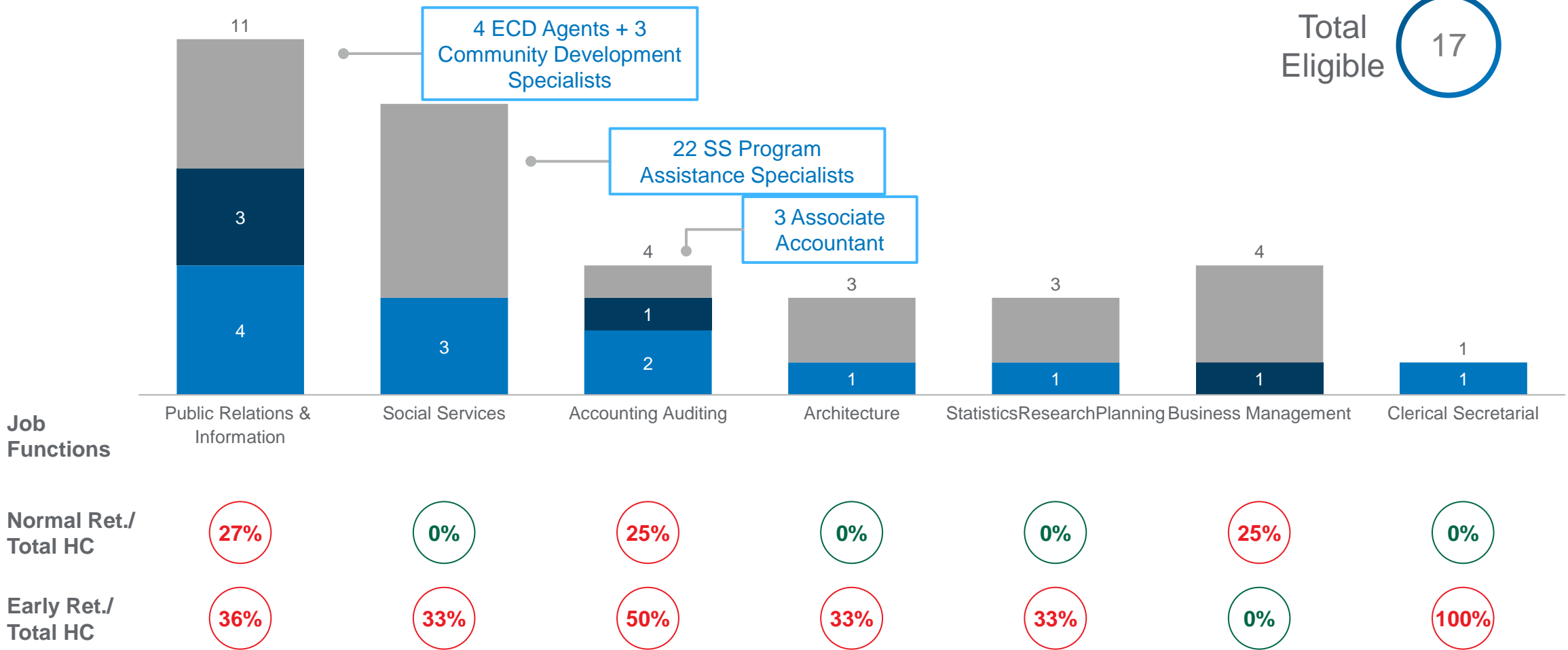


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Housing

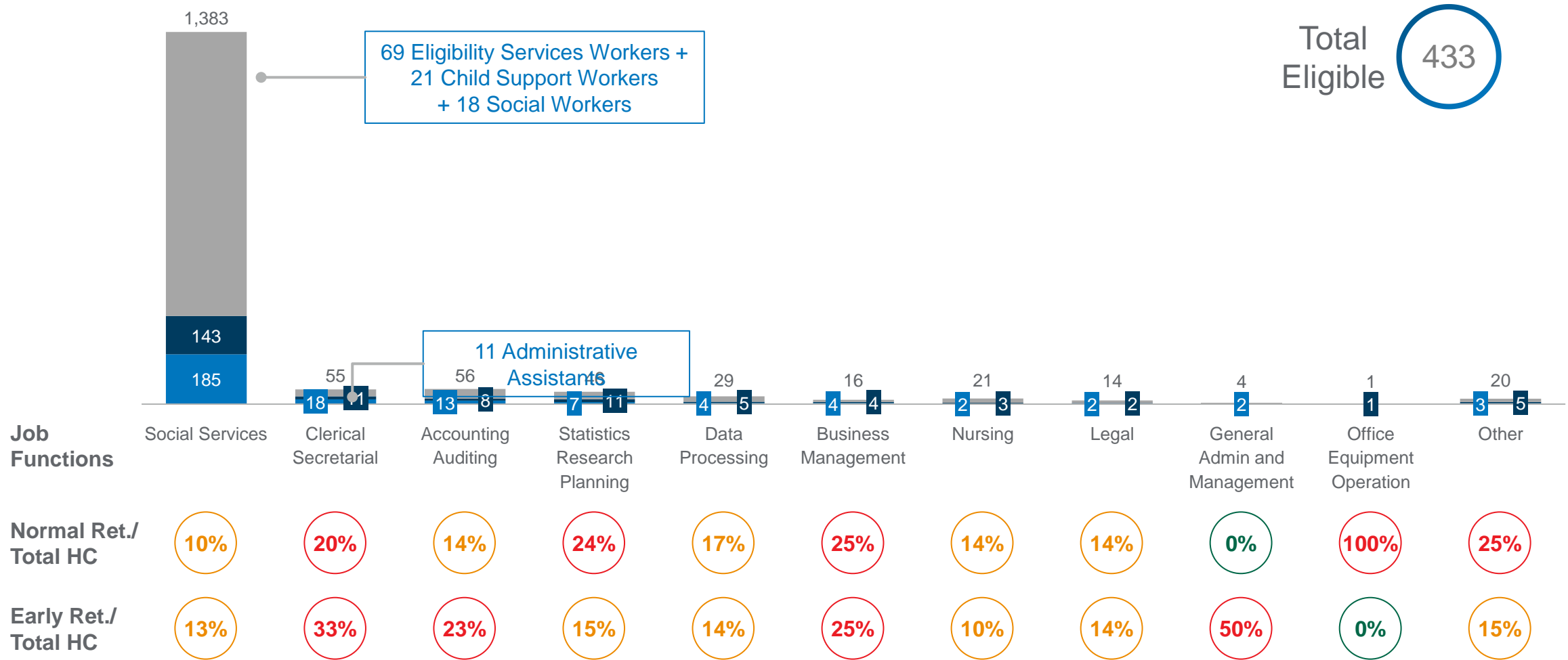


Total Eligible **17**



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

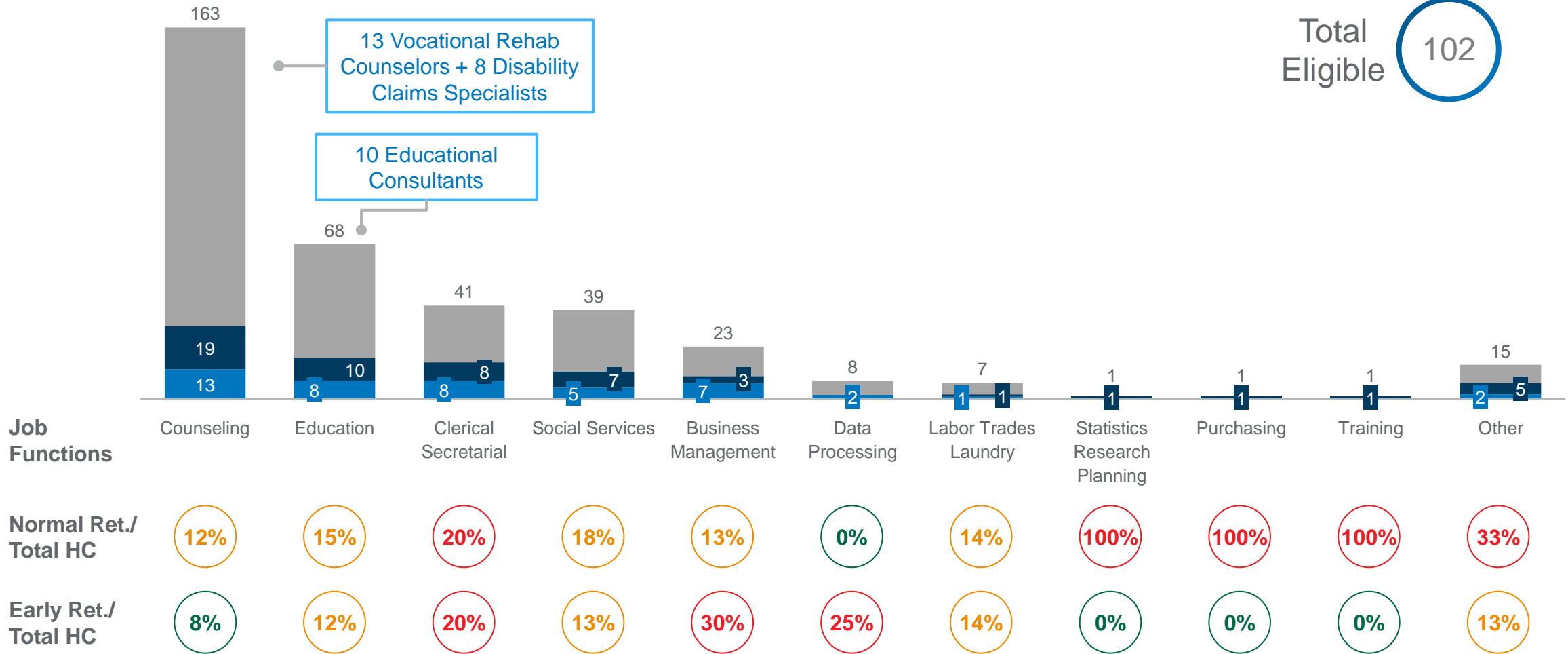
Department of Social Services



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
 Source: CT STARS database as of 1/5/2021

Aging and Disability Services

Total Eligible **102**

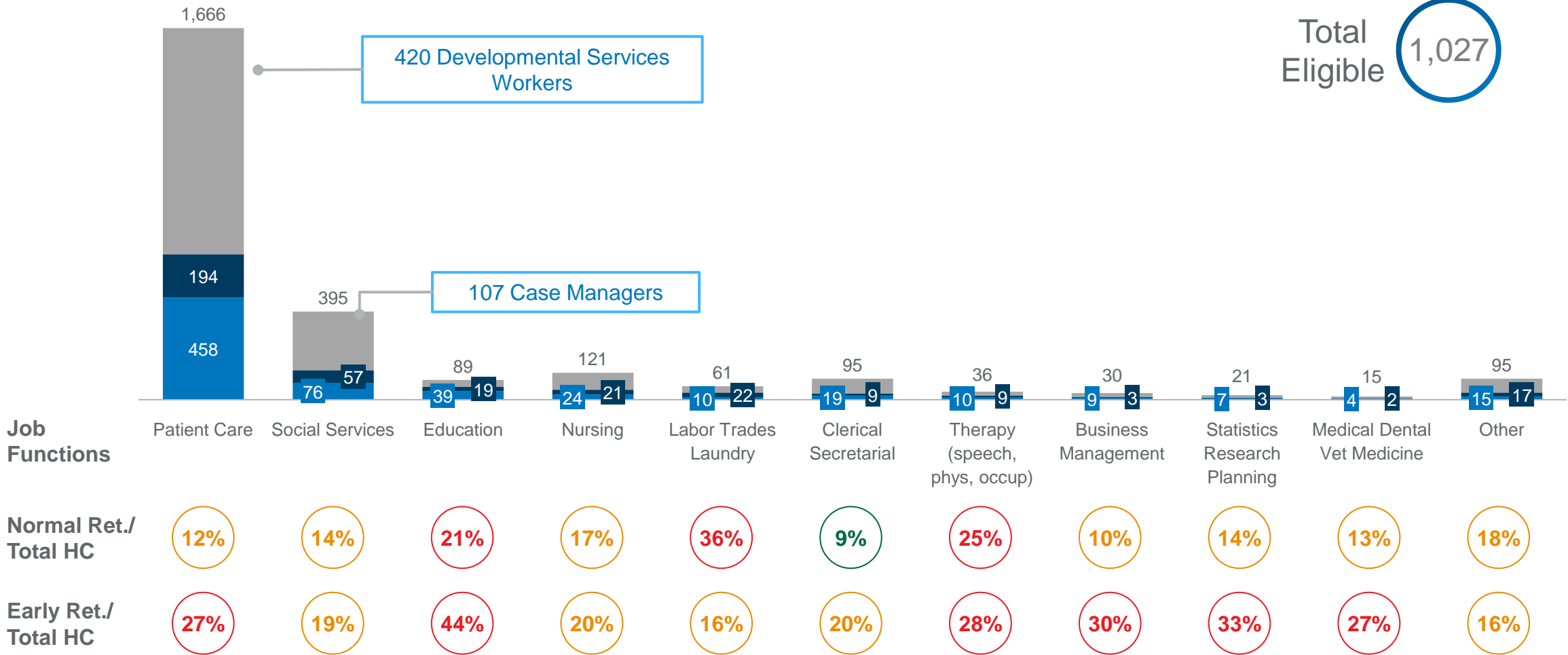


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Developmental Services



Total Eligible **1,027**

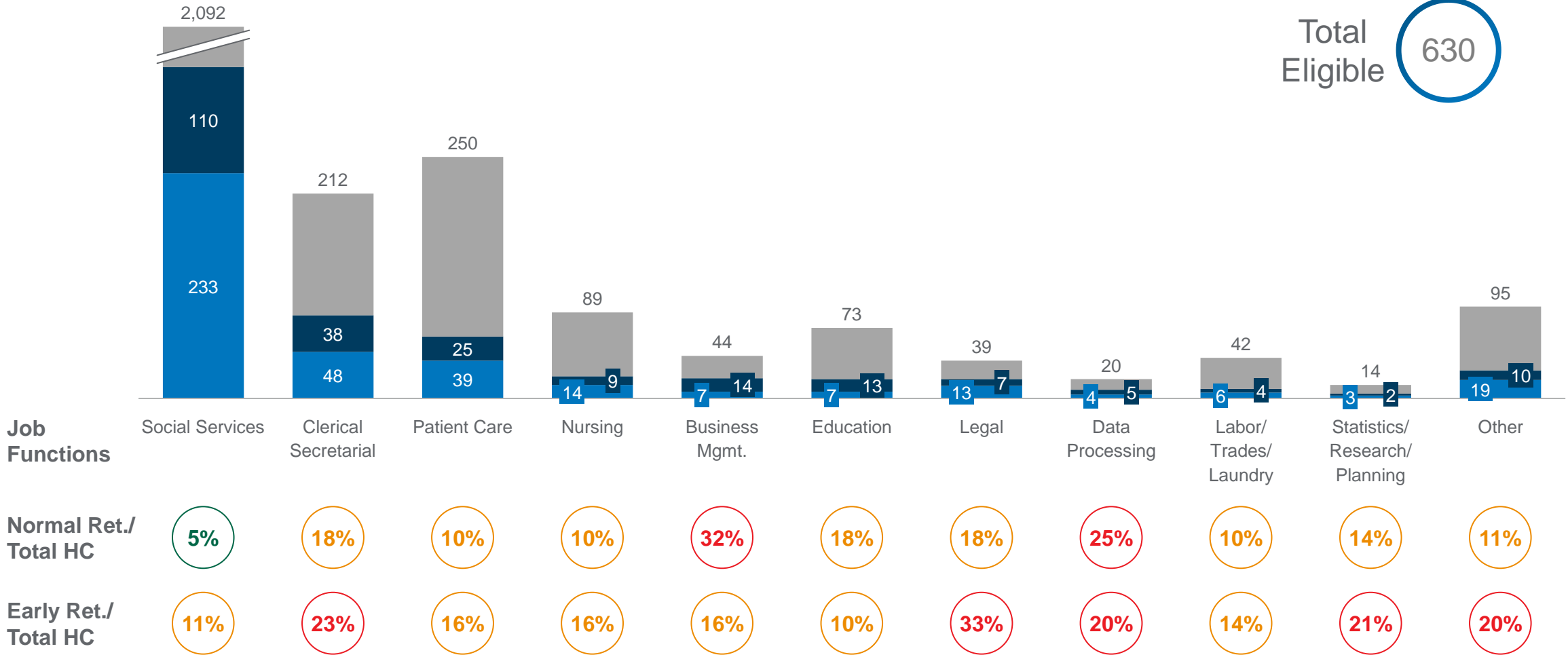


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
 Source: CT STARS database as of 1/5/2021

Department of Children and Families

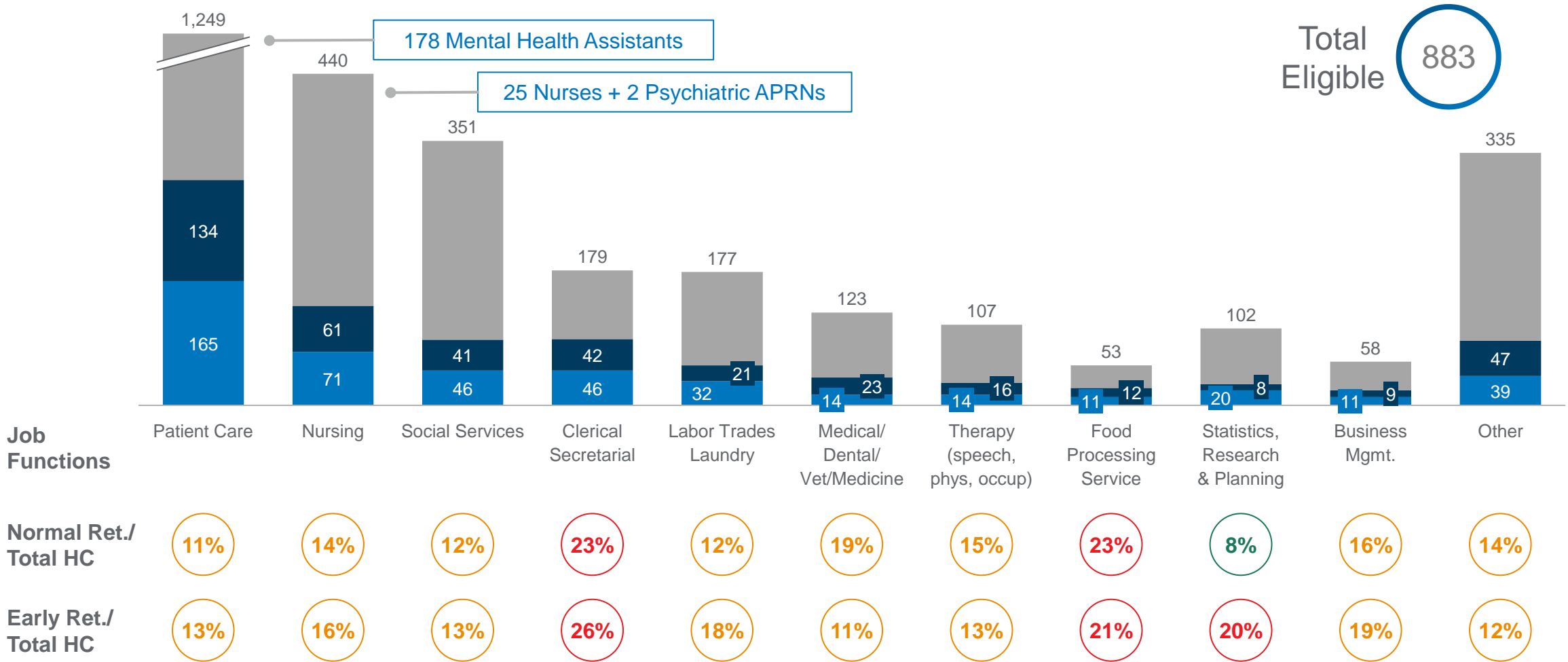


Total Eligible **630**



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Mental Health and Addiction Services

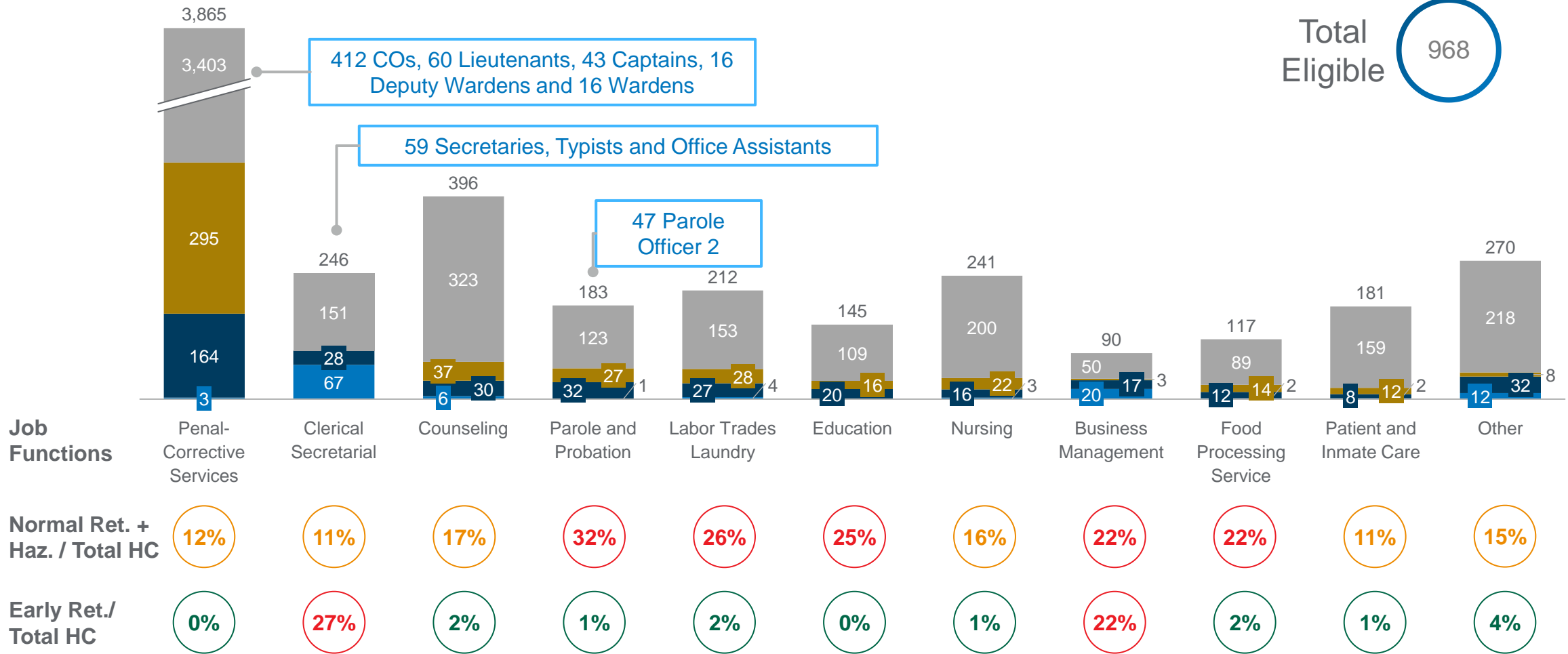


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
 Source: CT STARS database as of 1/5/2021



Department of Corrections

Total Eligible **968**

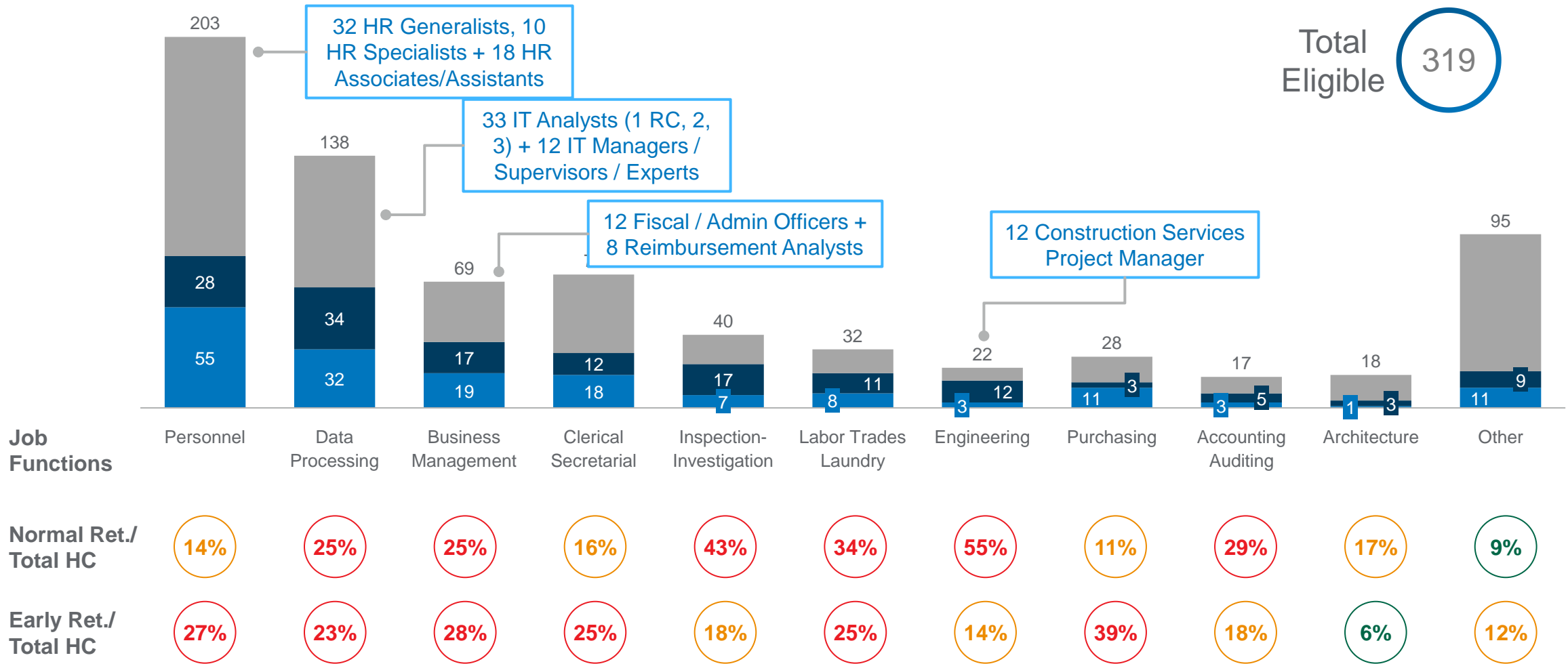


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Includes hazardous duty eligible employees.
 Source: CT STARS database as of 1/5/2021



Department of Administrative Services

Total Eligible **319**

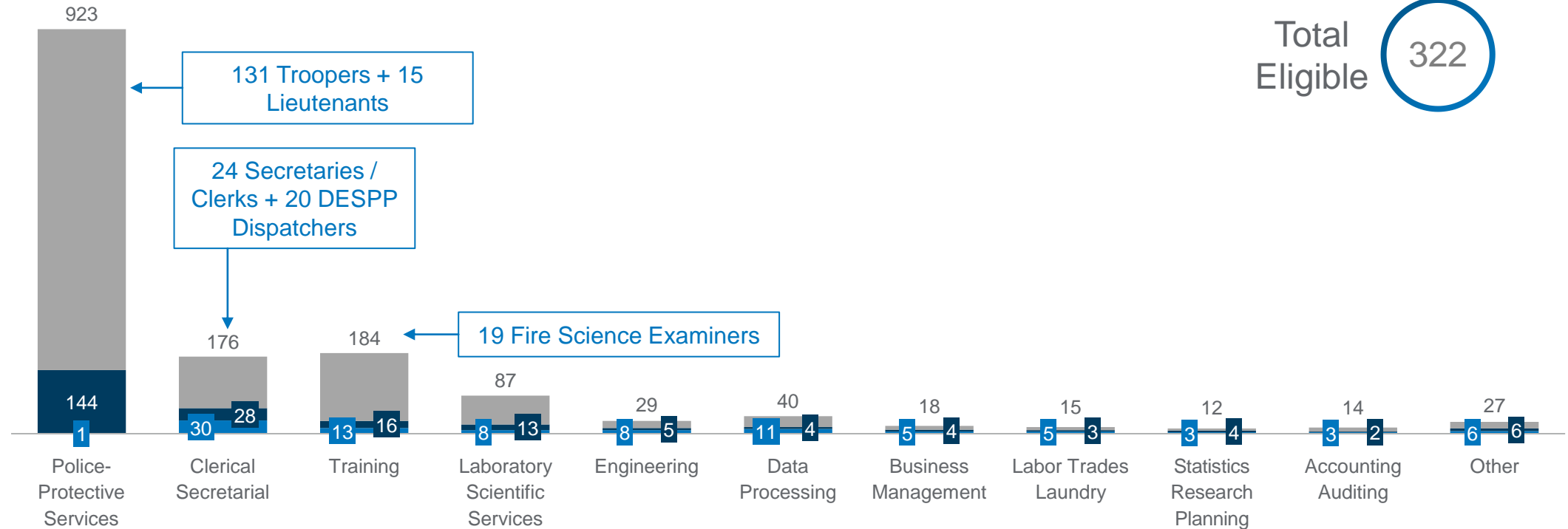


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



Department of Emergency Services and Public Protection

Total Eligible **322**

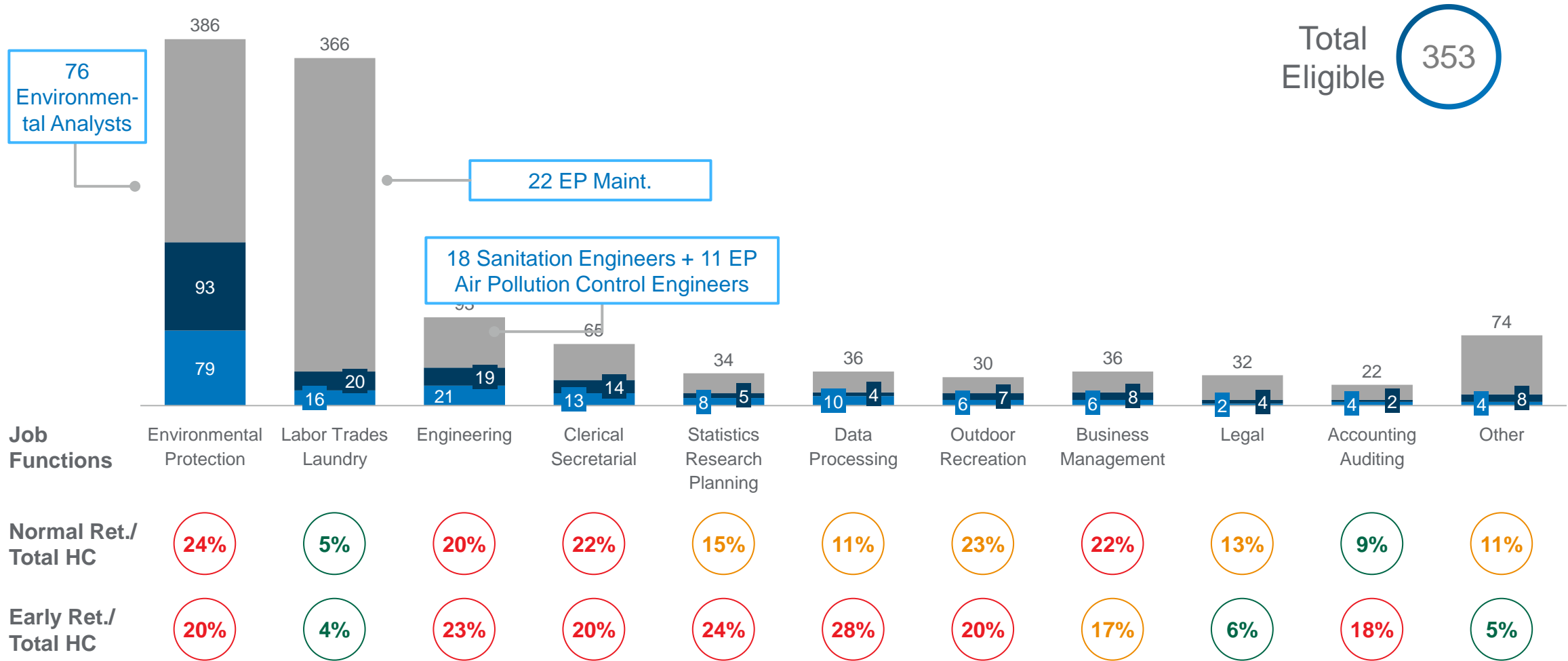


	Police-Protective Services	Clerical Secretarial	Training	Laboratory Scientific Services	Engineering	Data Processing	Business Management	Labor Trades Laundry	Statistics Research Planning	Accounting Auditing	Other
Normal Ret./ Total HC	16%	16%	9%	15%	17%	10%	22%	20%	33%	14%	22%
Early Ret./ Total HC	0%	17%	7%	9%	28%	28%	28%	33%	25%	21%	22%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
 Source: CT STARS database, BCG analysis



Department of Energy and Environmental Protection

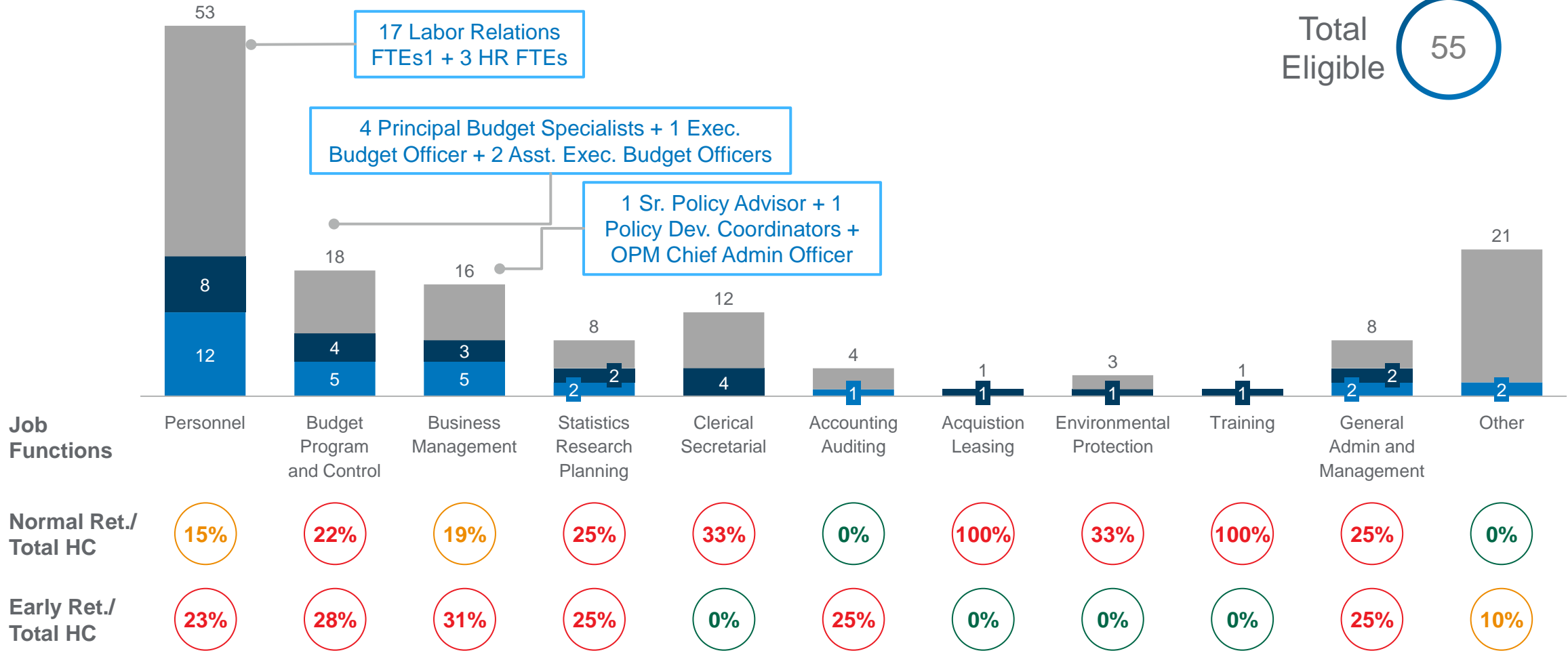


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
 Source: CT STARS database as of 1/5/2021



Office of Policy and Management

Total Eligible **55**



1. Includes 12 Agency Labor Relations Specialists

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.

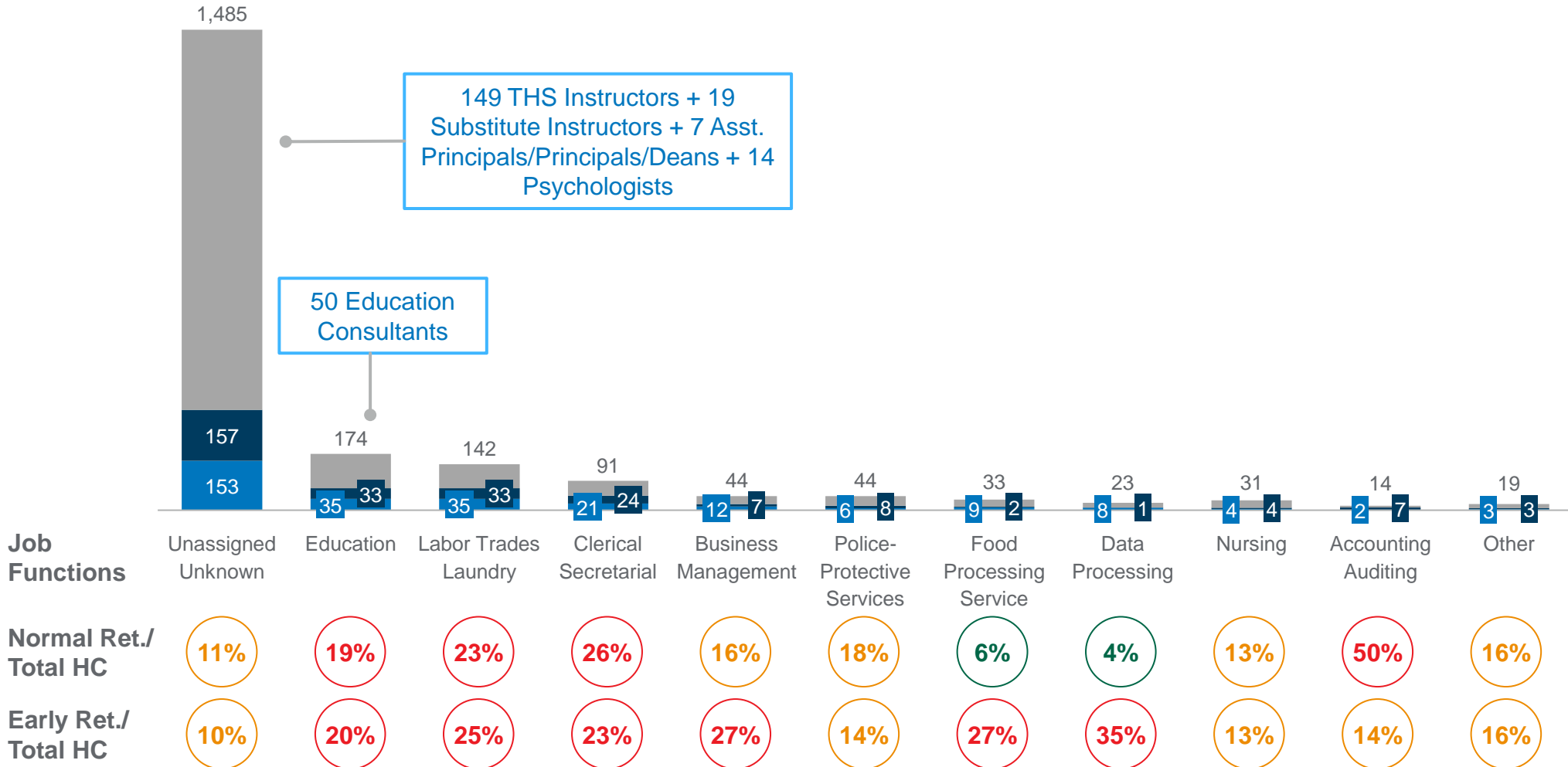
Source: CT STARS database as of 1/5/2021

State Department of Education



567

Total Eligible



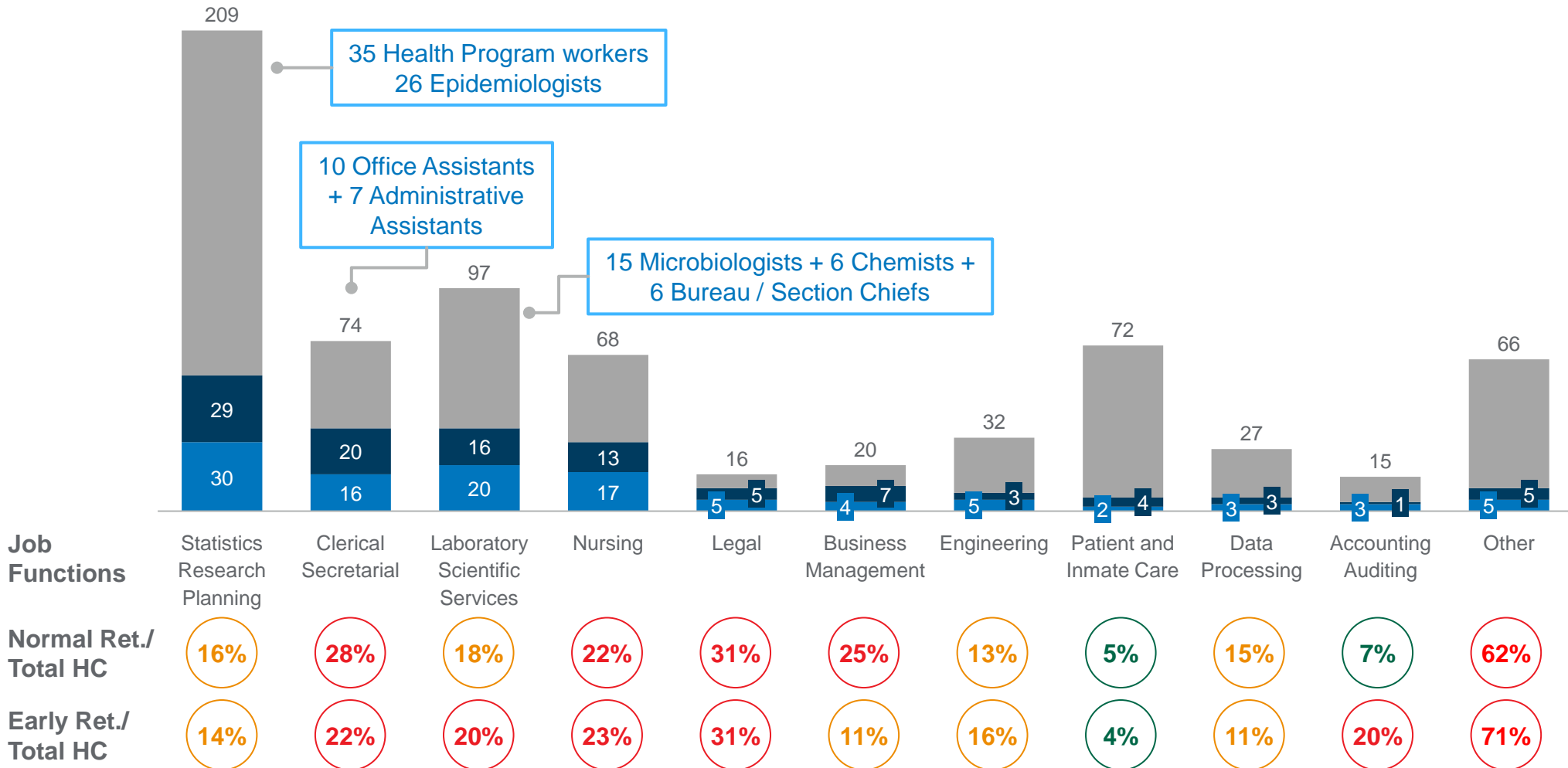
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Public Health



216

Total Eligible



Normal Ret./ Total HC



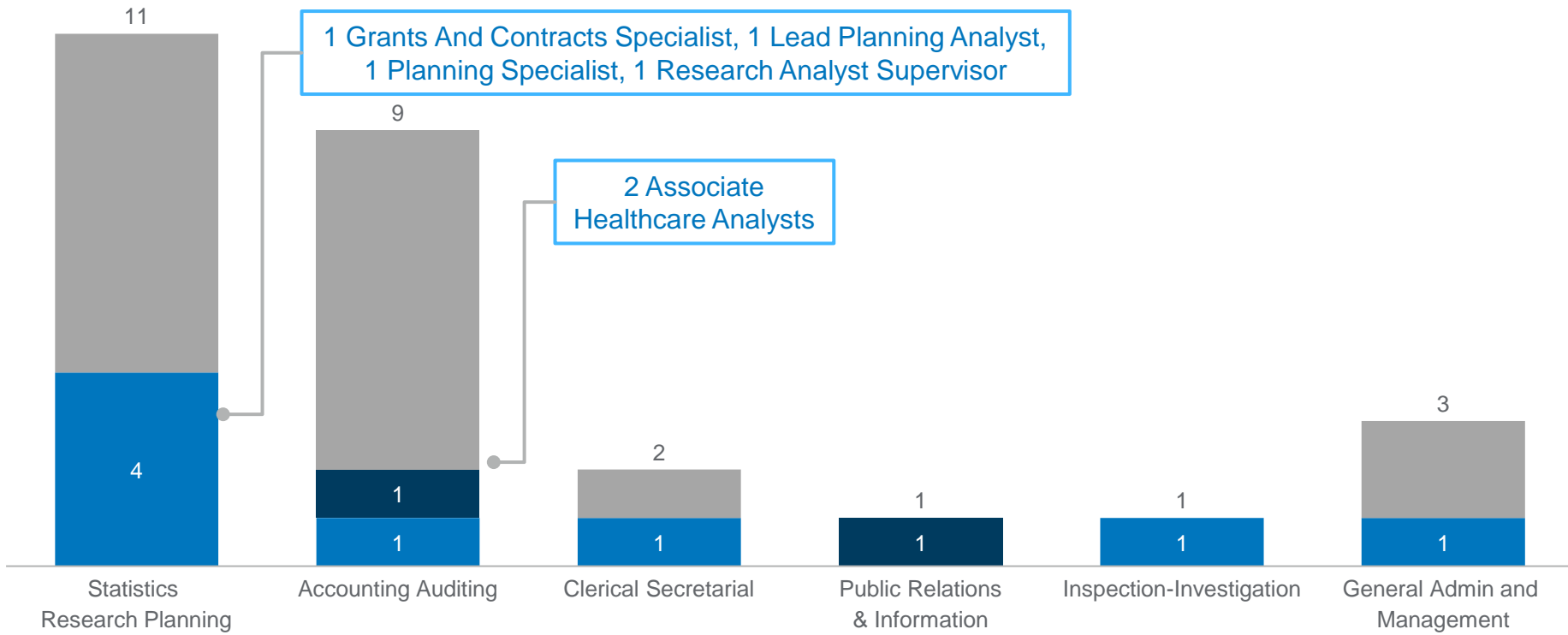
Early Ret./ Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Office of Health Strategy

11
Total Eligible



Job Functions

Normal Ret./ Total HC

0%

11%

0%

100%

0%

0%

Early Ret./ Total HC

36%

11%

50%

0%

100%

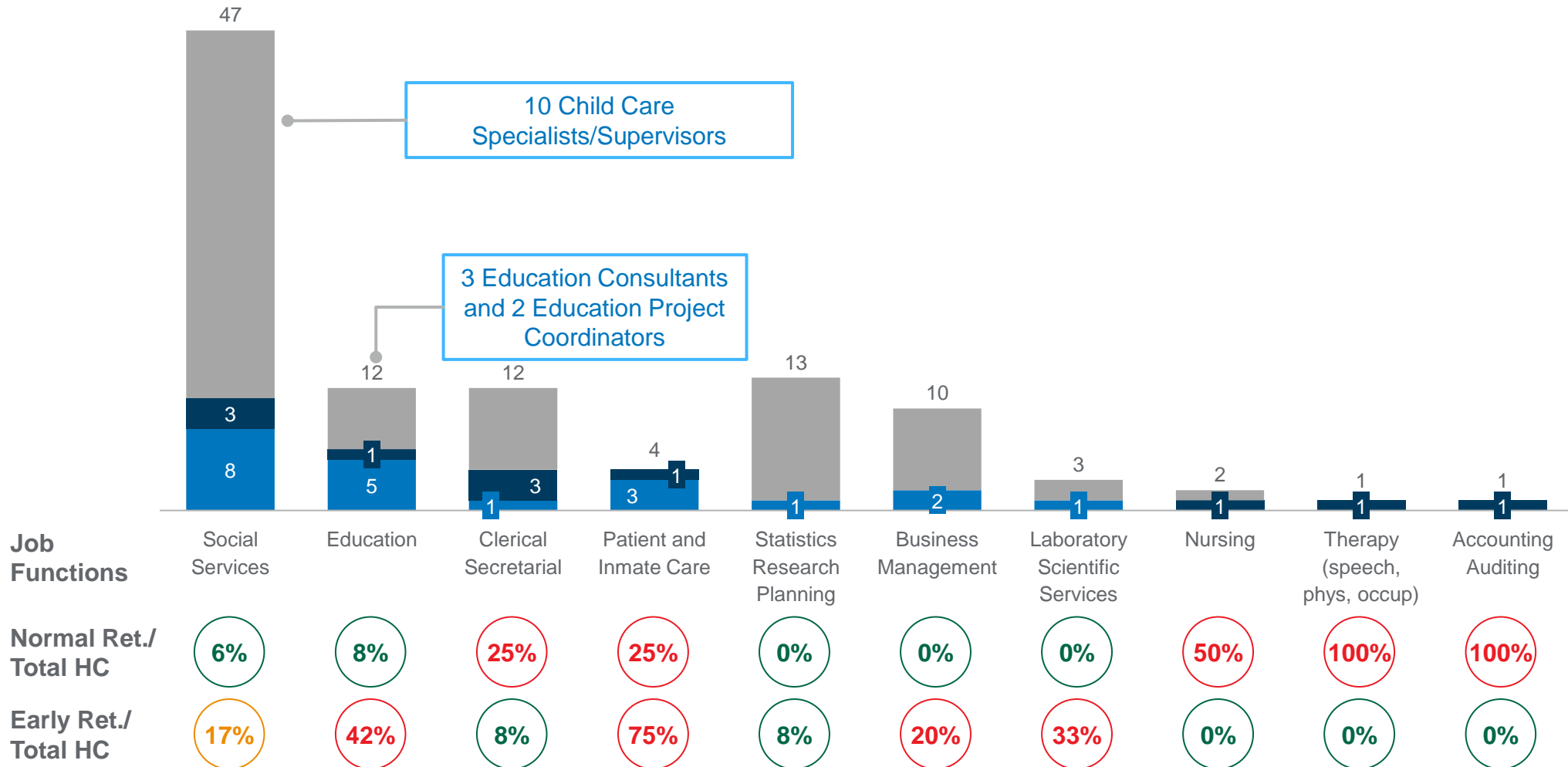
33%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



Office of Early Childhood

32
Total Eligible

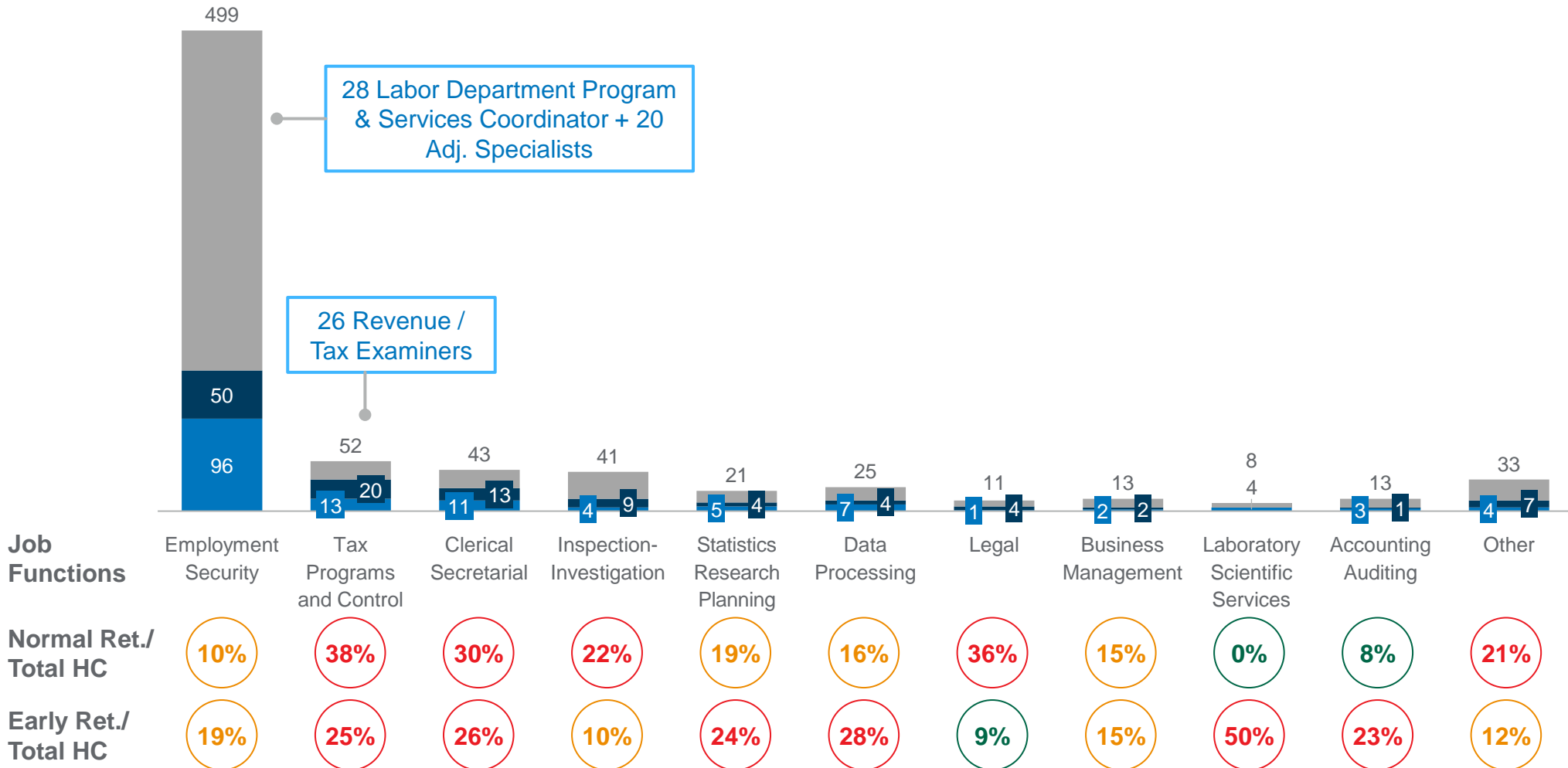


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021

Department of Labor



264
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

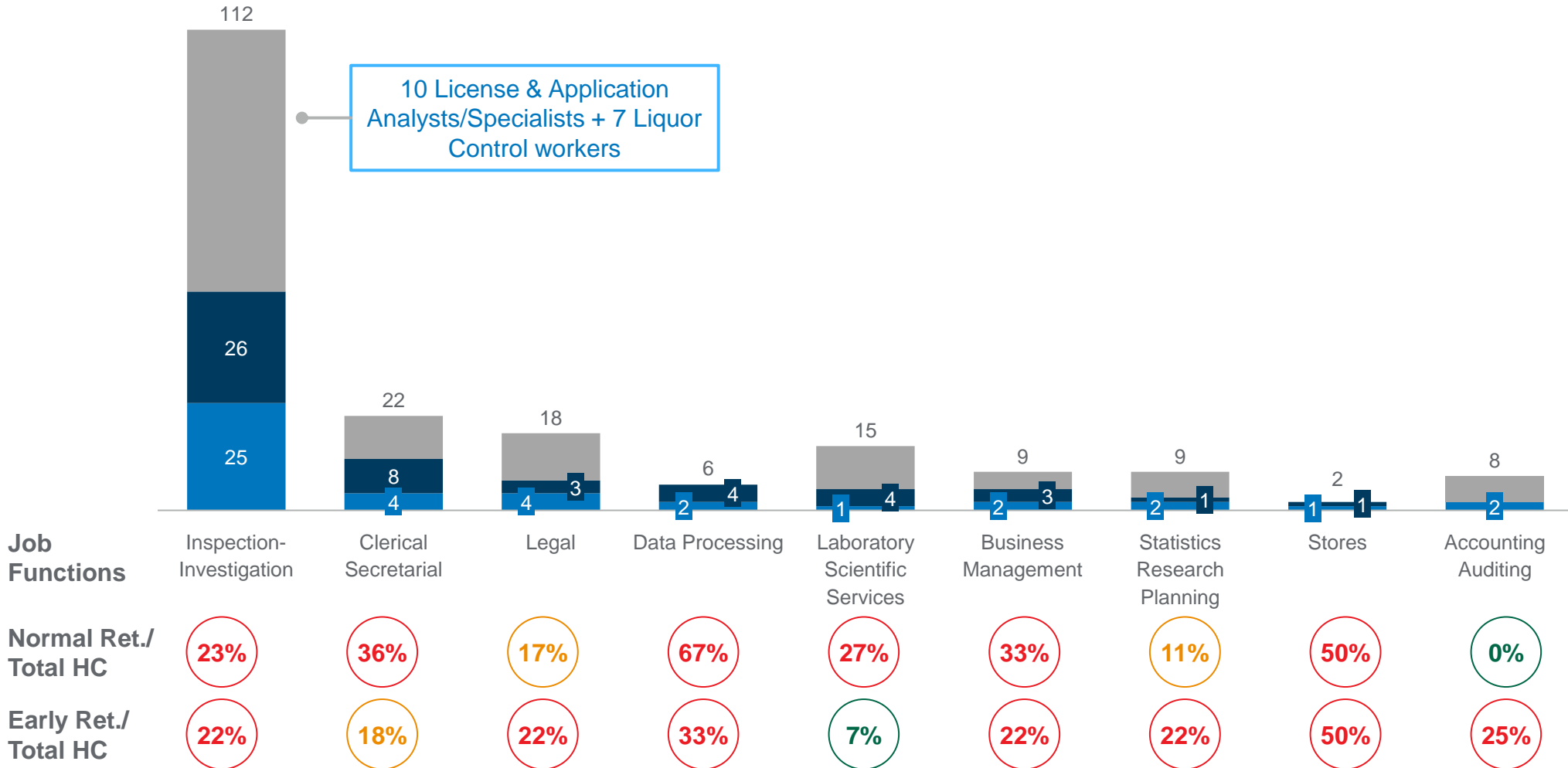
Department of Children and Families



93

Total Eligible

10 License & Application Analysts/Specialists + 7 Liquor Control workers



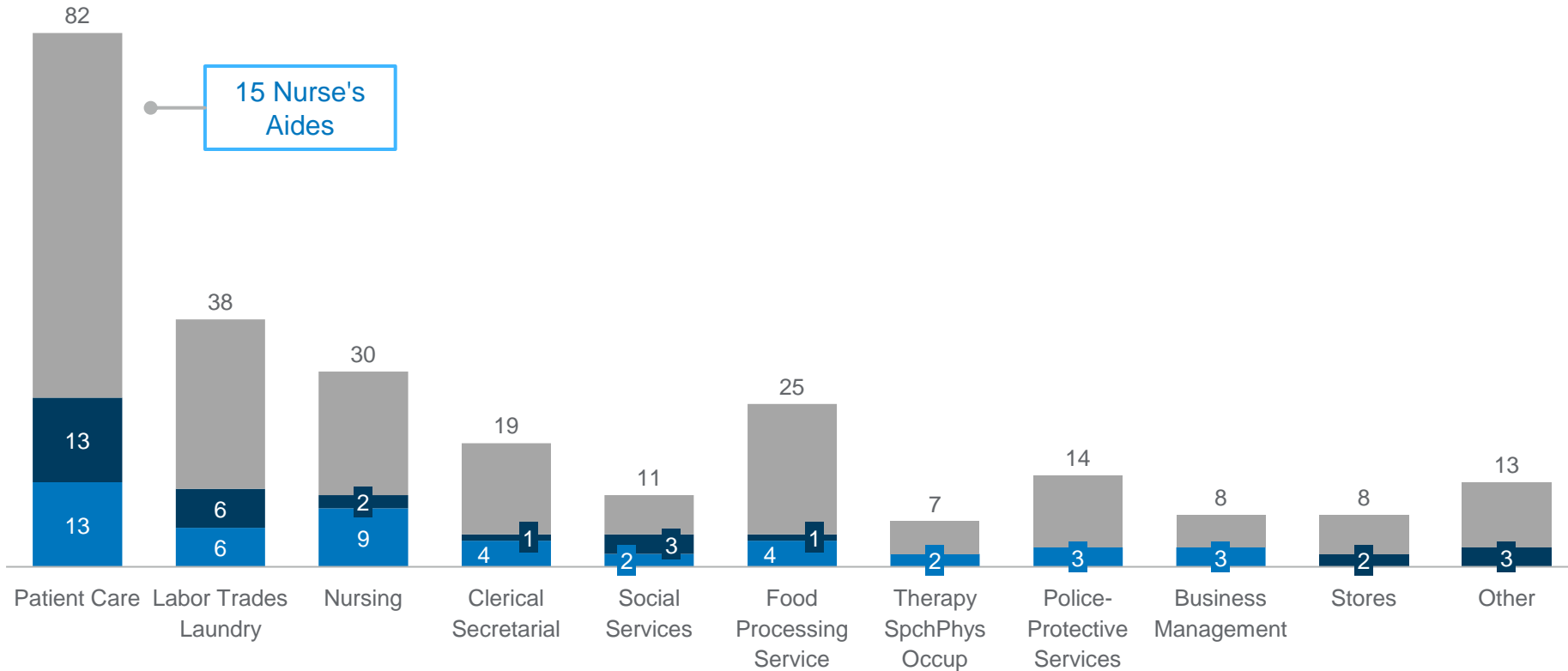
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Veterans Affairs



79

Total Eligible



15 Nurse's Aides

Normal Ret./ Total HC



Early Ret./ Total HC



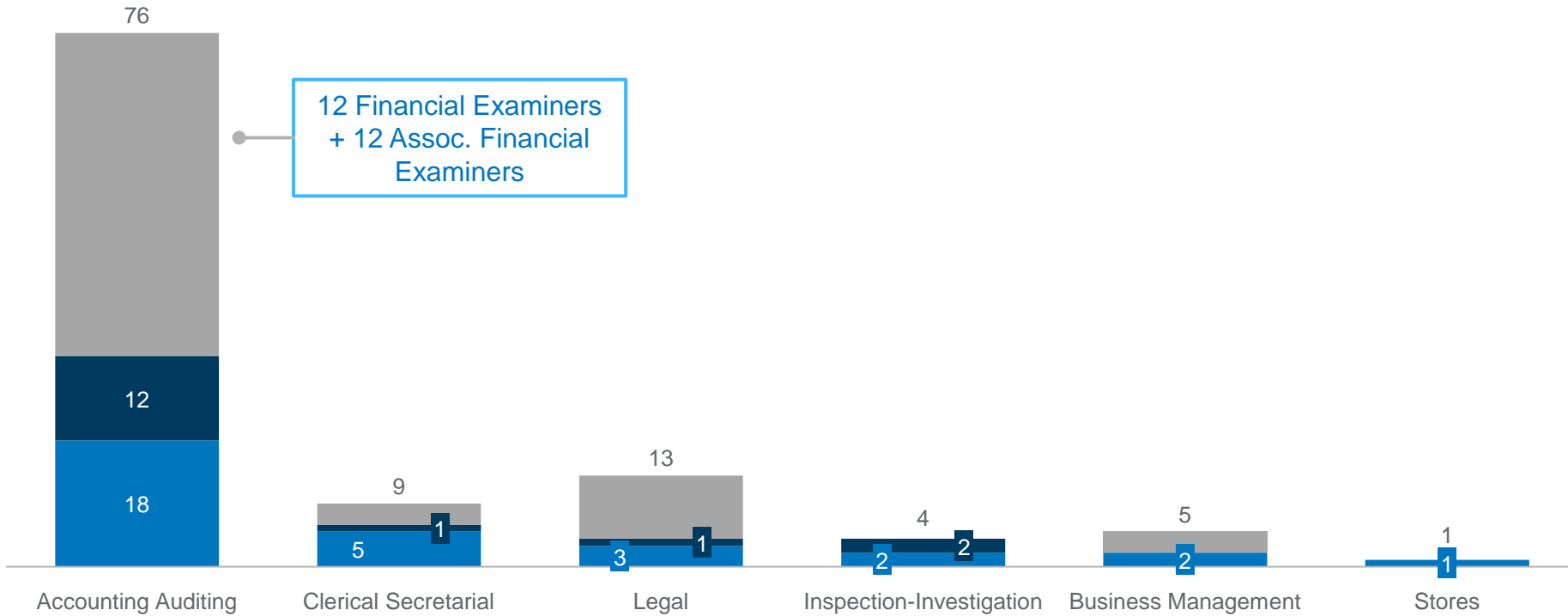
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis

Department of Banking



47

Total Eligible



12 Financial Examiners + 12 Assoc. Financial Examiners

Normal Ret./ Total HC

15%

11%

8%

50%

0%

0%

Early Ret./ Total HC

23%

56%

23%

50%

50%

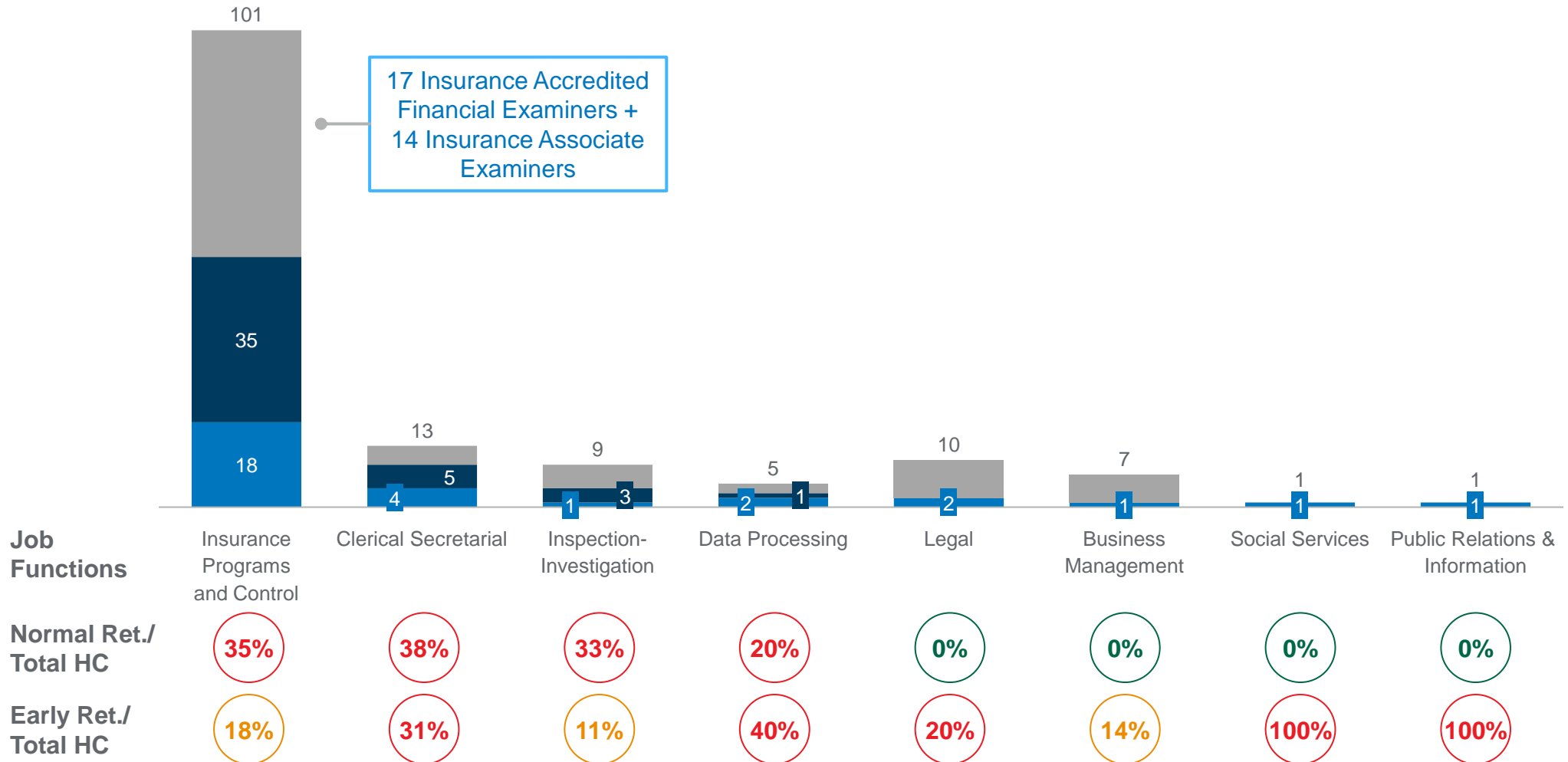
100%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis



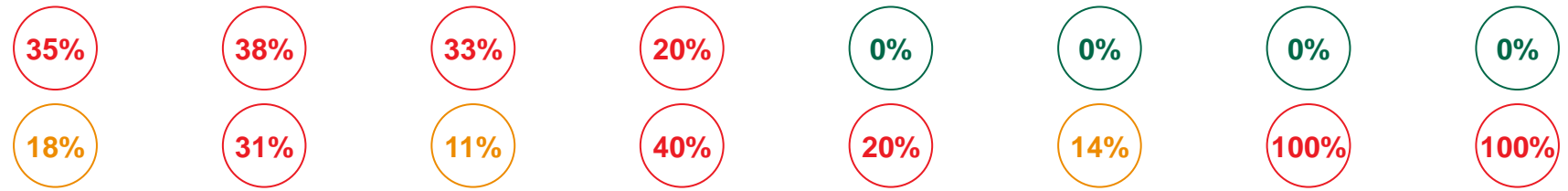
Insurance Department

74
Total Eligible



Normal Ret./ Total HC

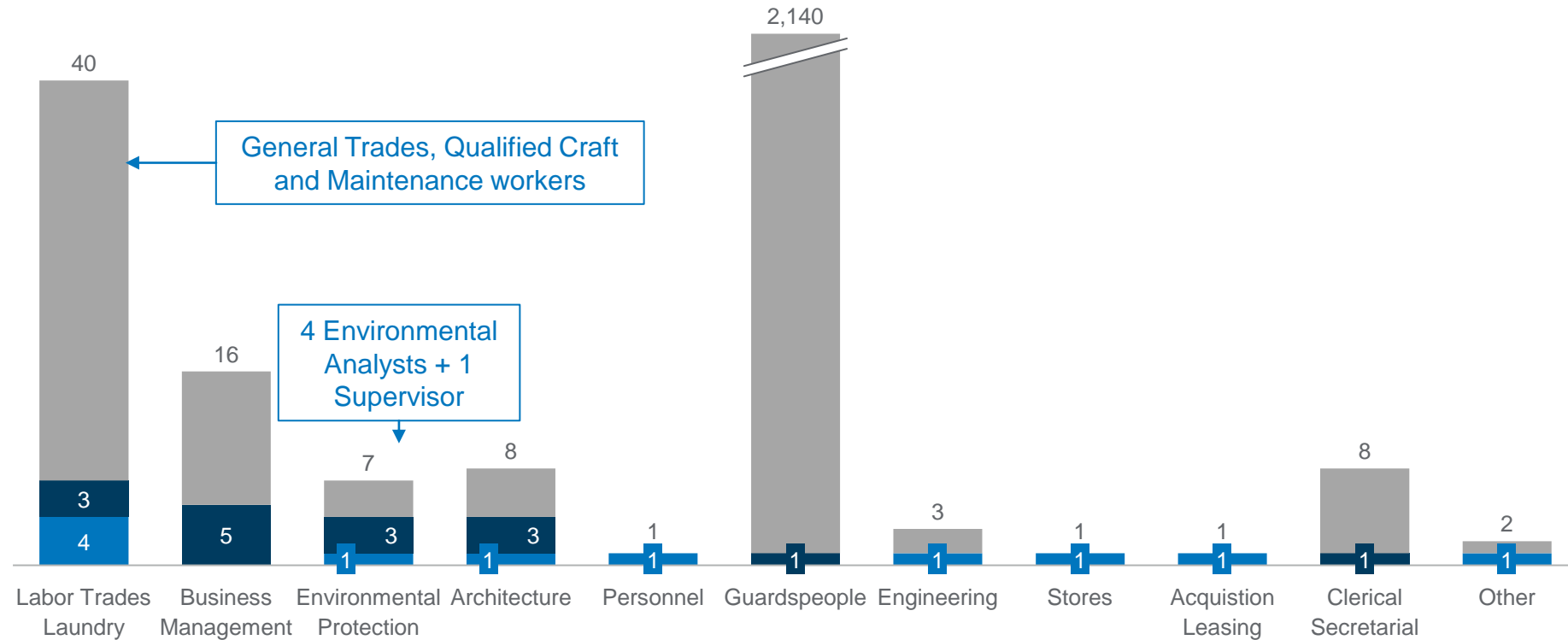
Early Ret./ Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021



Military Department



26
Total Eligible



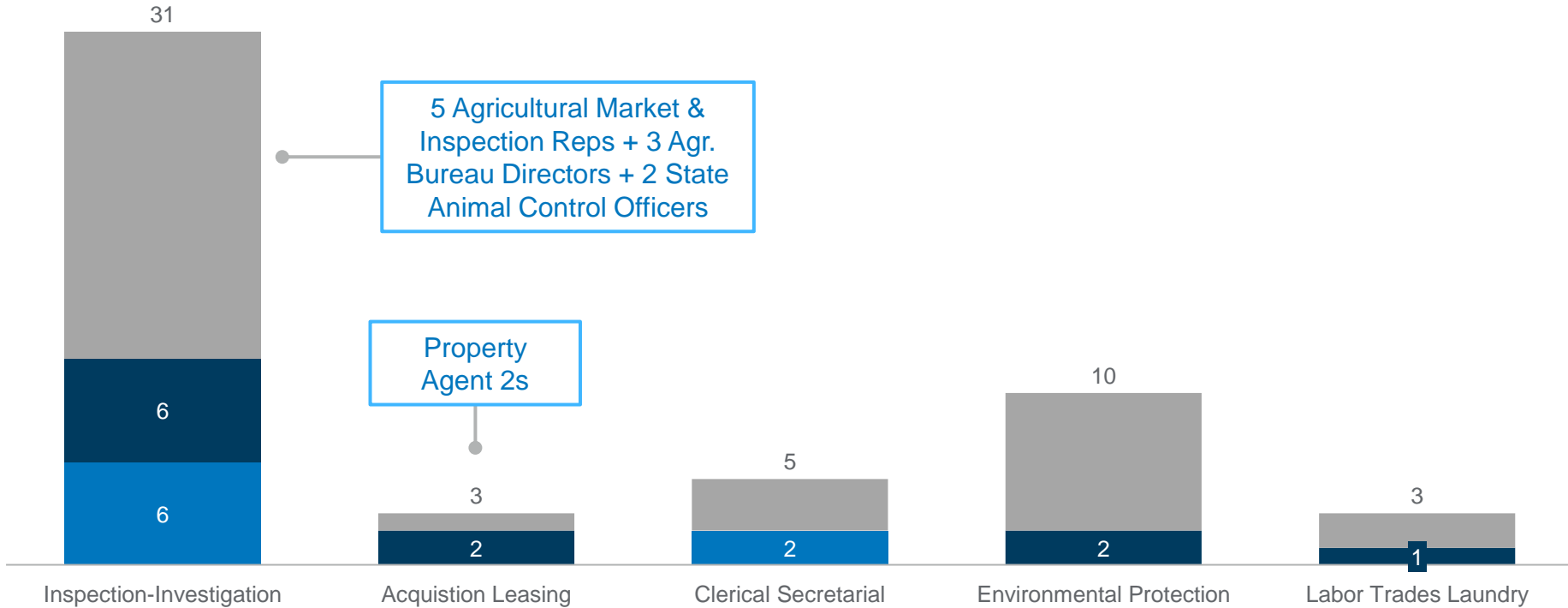
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database, BCG analysis

Department of Agriculture



19

Total Eligible



5 Agricultural Market & Inspection Reps + 3 Agr. Bureau Directors + 2 State Animal Control Officers

Property Agent 2s

Job Functions

Normal Ret./ Total HC

19%

67%

0%

22%

33%

Early Ret./ Total HC

19%

0%

40%

0%

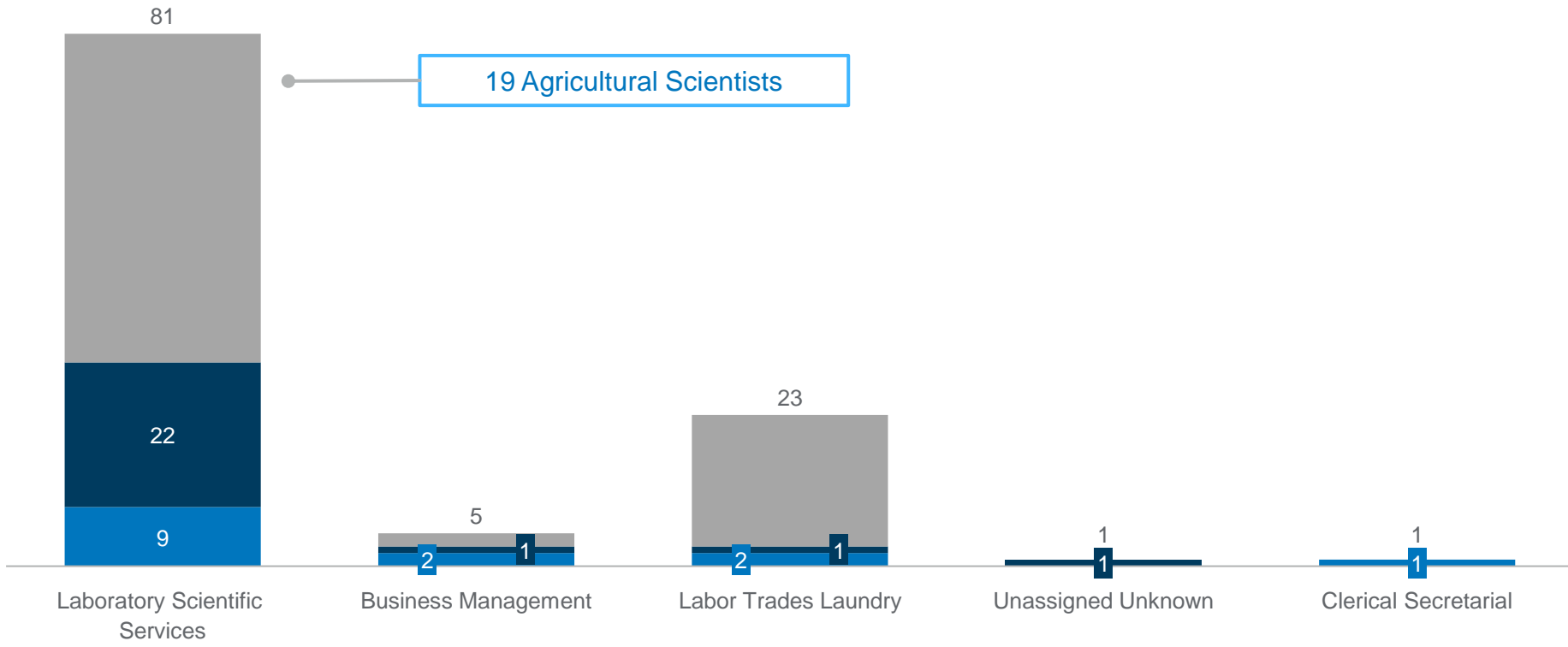
0%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Agricultural Experiment Station



39
Total Eligible



Job Functions

Normal Ret./ Total HC

27%

20%

4%

100%

0%

Early Ret./ Total HC

11%

40%

9%

0%

100%

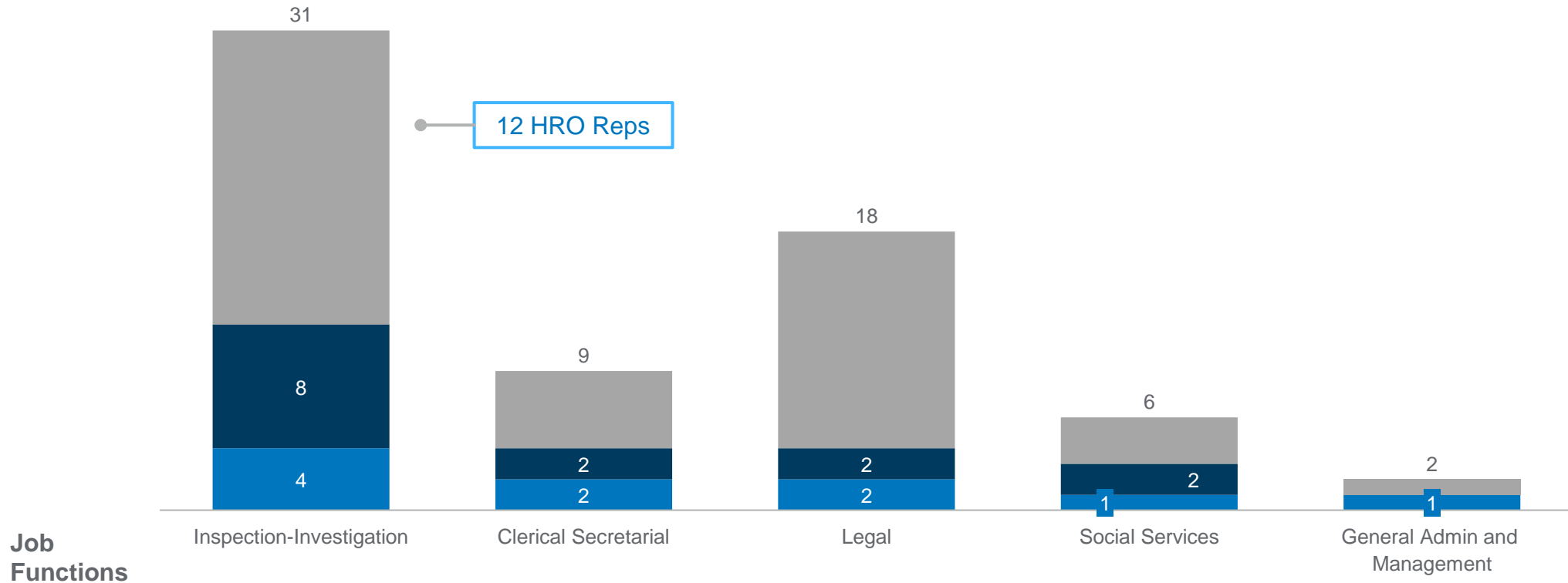
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021



Commission on Human Rights and Opportunities

24

Total Eligible



Normal Ret./ Total HC

26%

22%

11%

33%

0%

Early Ret./ Total HC

13%

22%

11%

17%

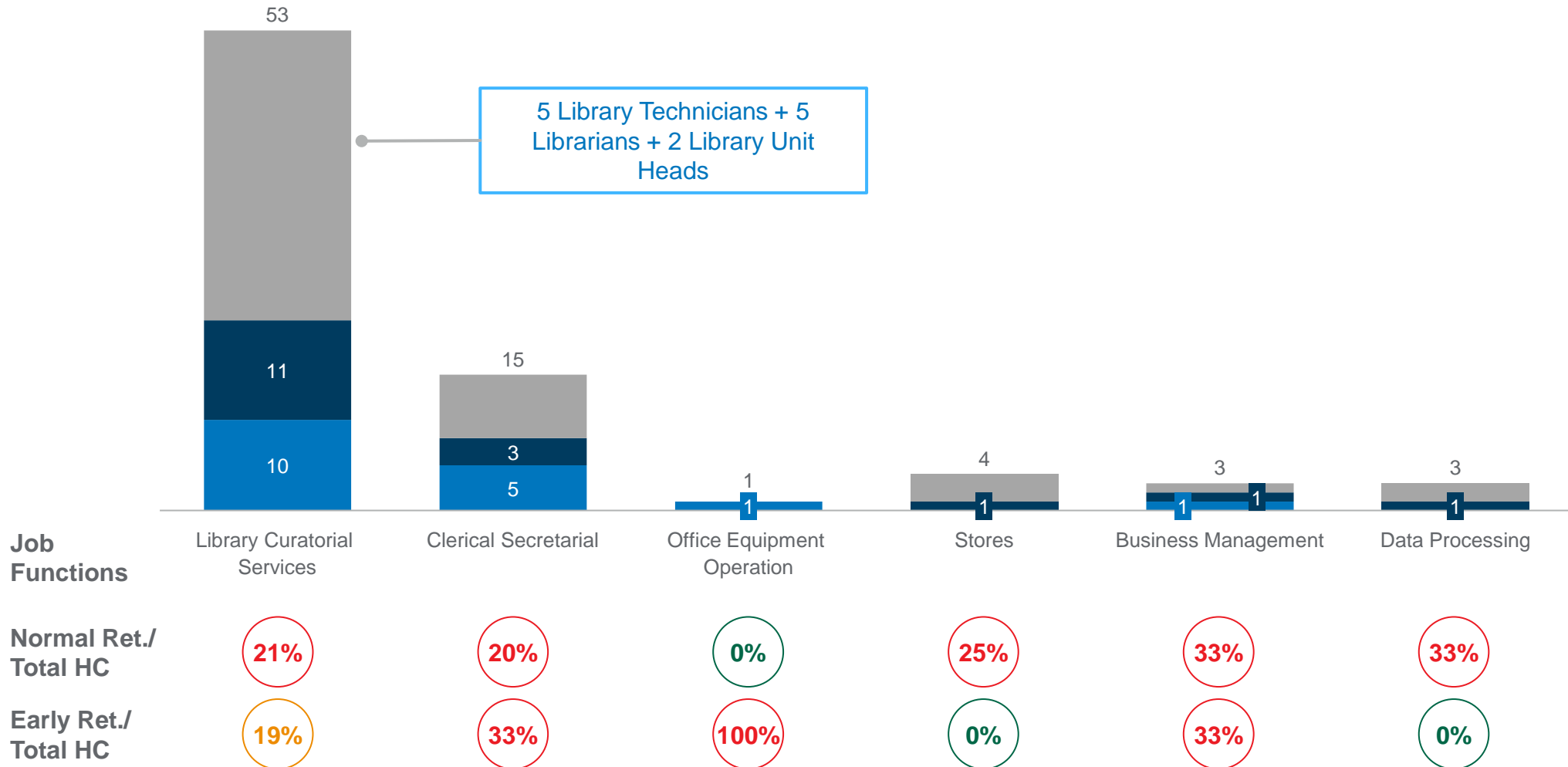
50%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Connecticut State Library



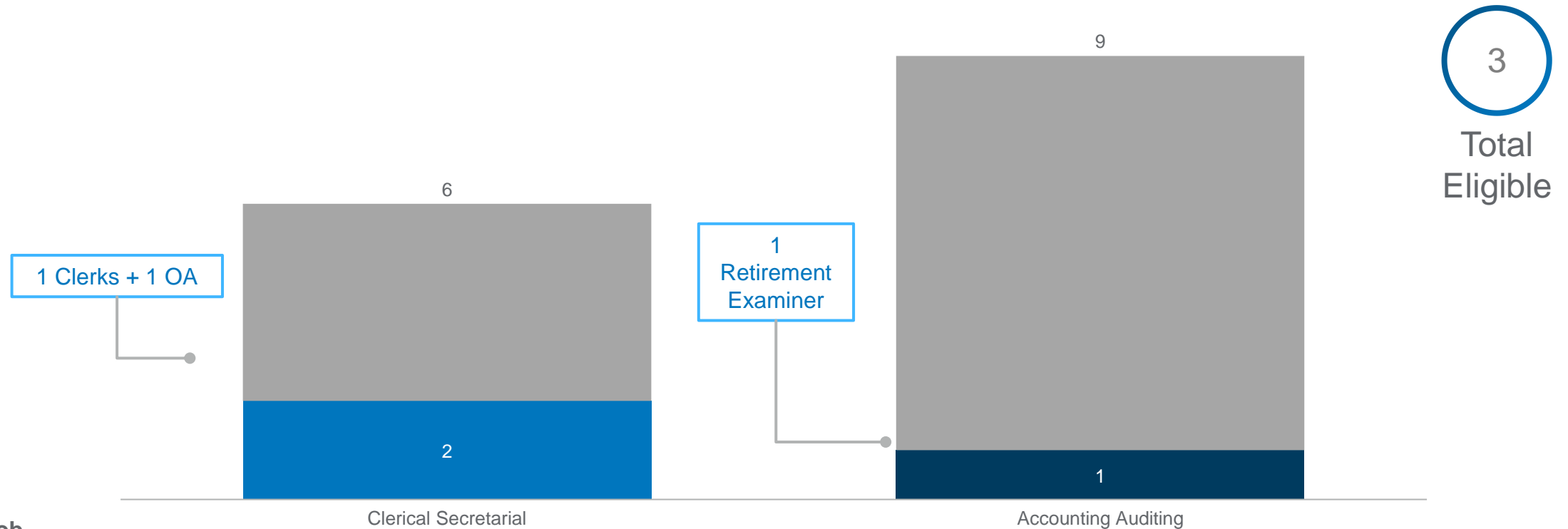
34
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021



Teachers Retirement Board



Job Functions

Normal Ret./ Total HC

0%

Early Ret./ Total HC

33%

11%

0%

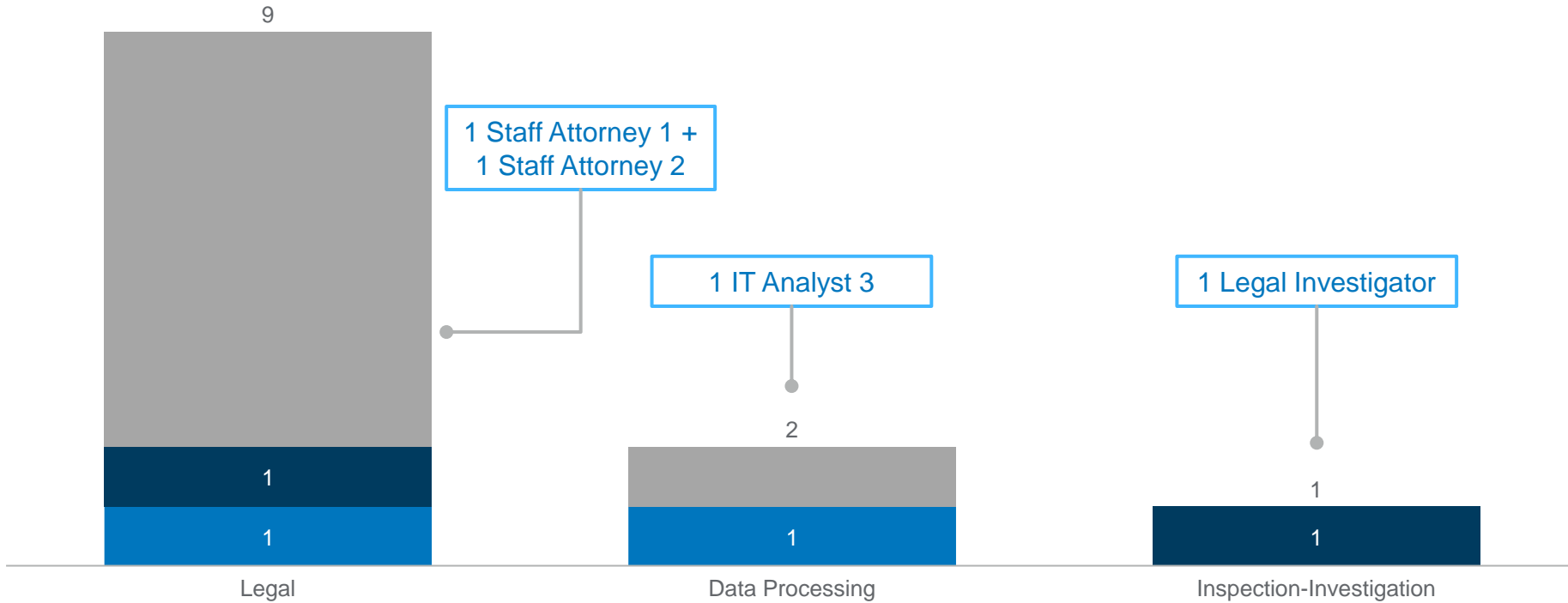
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Office of State Ethics



4

Total Eligible



Job Functions

Normal Ret./ Total HC

11%

0%

100%

Early Ret./ Total HC

11%

50%

0%

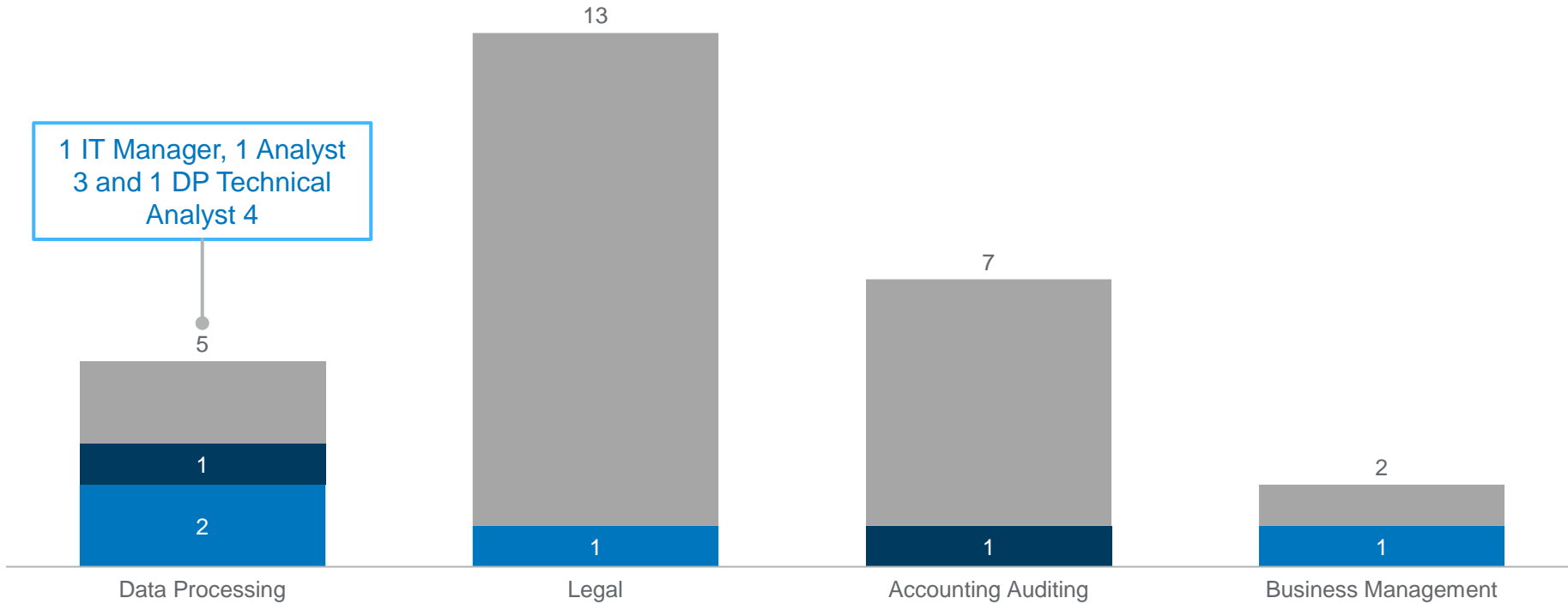
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

State Election Enforcement Commission



5

Total Eligible



1 IT Manager, 1 Analyst 3 and 1 DP Technical Analyst 4

Job Functions

Normal Ret./ Total HC

20%

0%

14%

0%

Early Ret./ Total HC

40%

8%

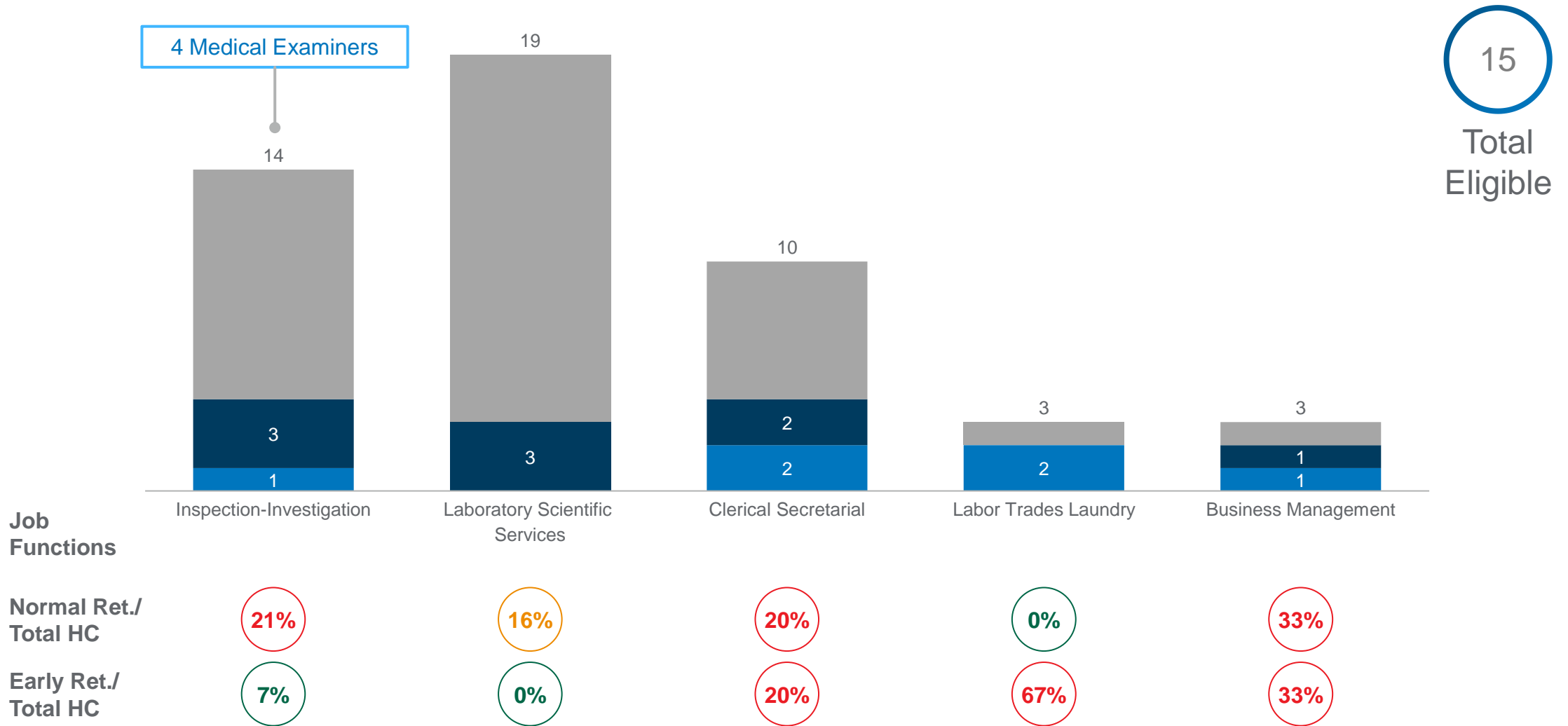
0%

50%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



Office of the Chief Medical Examiner



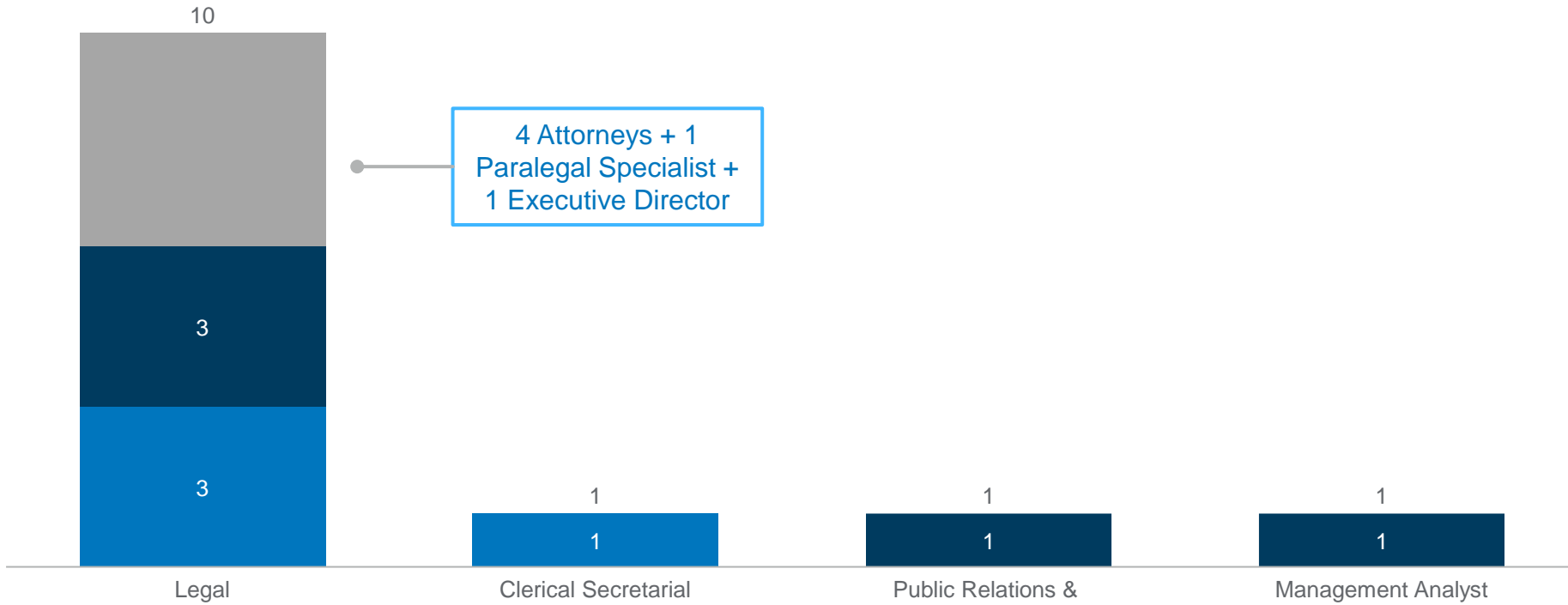
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
 Source: CT STARS database as of 1/5/2021

Freedom of Information Commission



9

Total Eligible



4 Attorneys + 1 Paralegal Specialist + 1 Executive Director

Job Functions

Normal Ret./ Total HC

30%

0%

100%

100%

Early Ret./ Total HC

30%

100%

0%

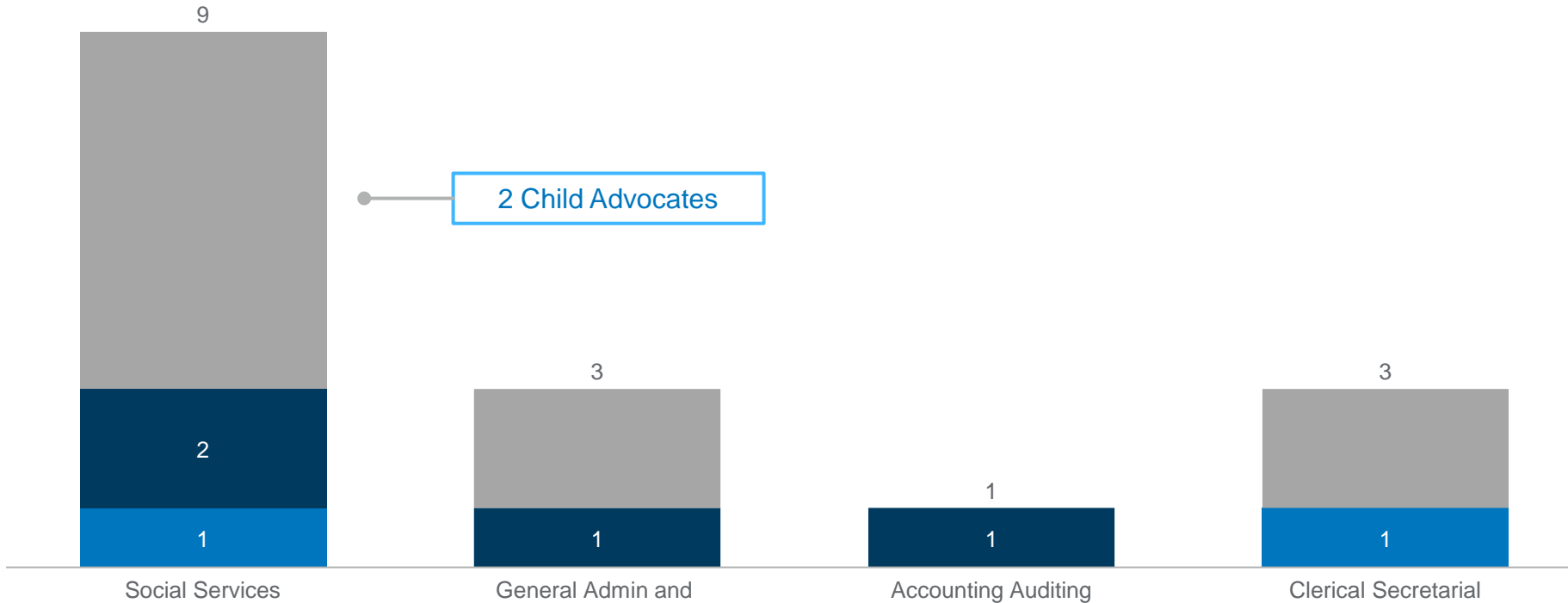
0%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Office of Governmental Accountability



6
Total Eligible



Job Functions

Normal Ret./ Total HC

22%

33%

100%

0%

Early Ret./ Total HC

11%

0%

0%

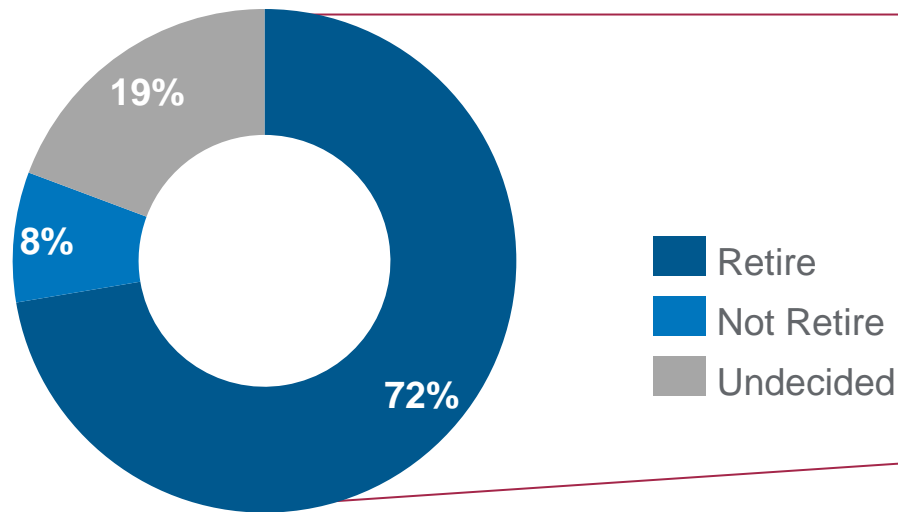
33%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

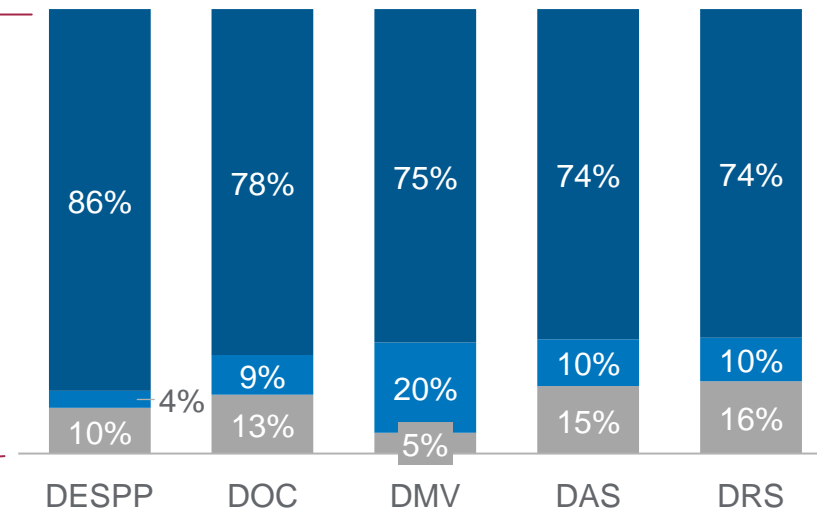
Overview of retirement risk (survey results)

Survey results indicate 72% of self-identified eligible employees leaning towards retirement, led by DESPP, DOC and DMV

Retirement Decision by Self-Identified Eligible¹



Five agencies have significantly higher uptake intentions²



50%

Uptake among Early Retirement eligible

75%+

Intent among State Police, Corrections, Health Non-Professionals, Service / Maintenance and Protective Services job functions

31%

Intend to move out of CT upon retirement

“ Most common reasons cited for retirement include

- Changes to COLA ranked as top reason by 46% and as a factor by 75%
- Health benefits ranked as top reason by 24% and a factor by 64%
- Concerns surrounding COVID-19 cited by just 19% - vaccine unlikely to be a catalyst for changing intentions

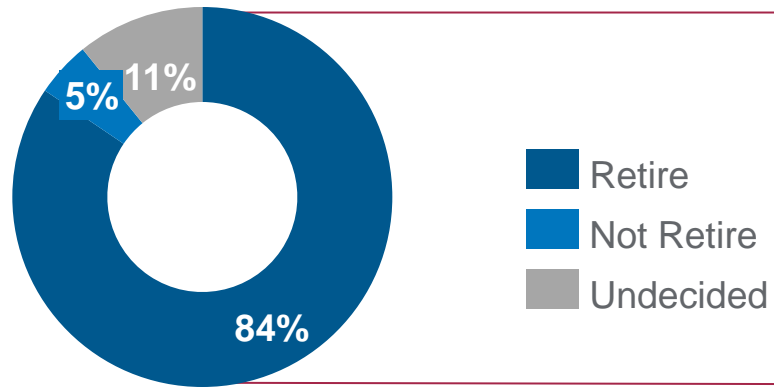
“ Most common factors cited for being undecided include

- Having a better understanding of the retirement benefit changes named the top factor by 77% and named as a factor by 91%
- Continued enjoyment of the job cited by 58%

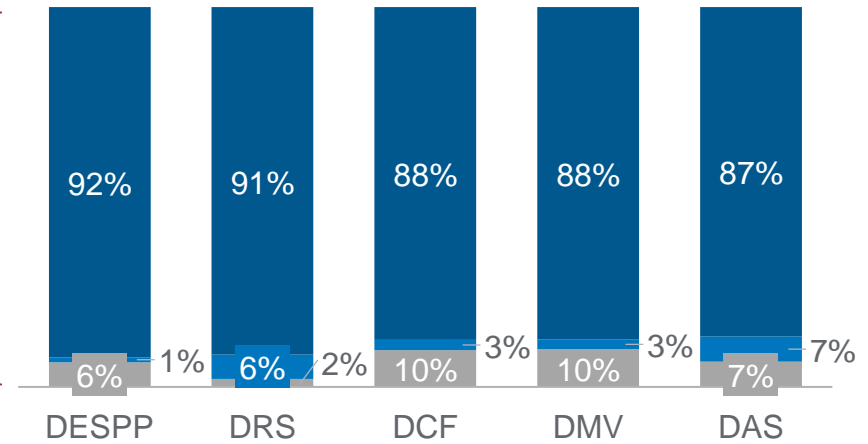
1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits) 2. Filters for agencies with at least 30 responses

Significantly higher retirement intent and certainty for workers eligible for full benefits (84% vs. 50%) – 35% of early-eligible employees remain undecided

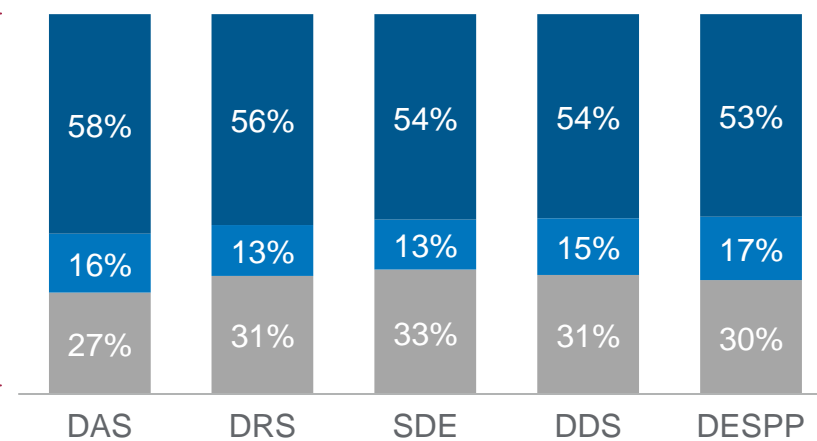
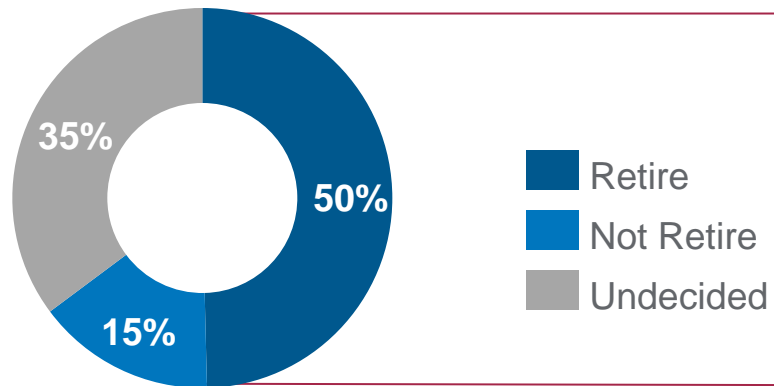
Retirement Decision by Self-Identified Full Eligible¹



Five agencies have significantly higher uptake intentions²



Retirement Decision by Self-Identified Early Eligible¹



1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits) 2. Filters for agencies with at least 30 responses

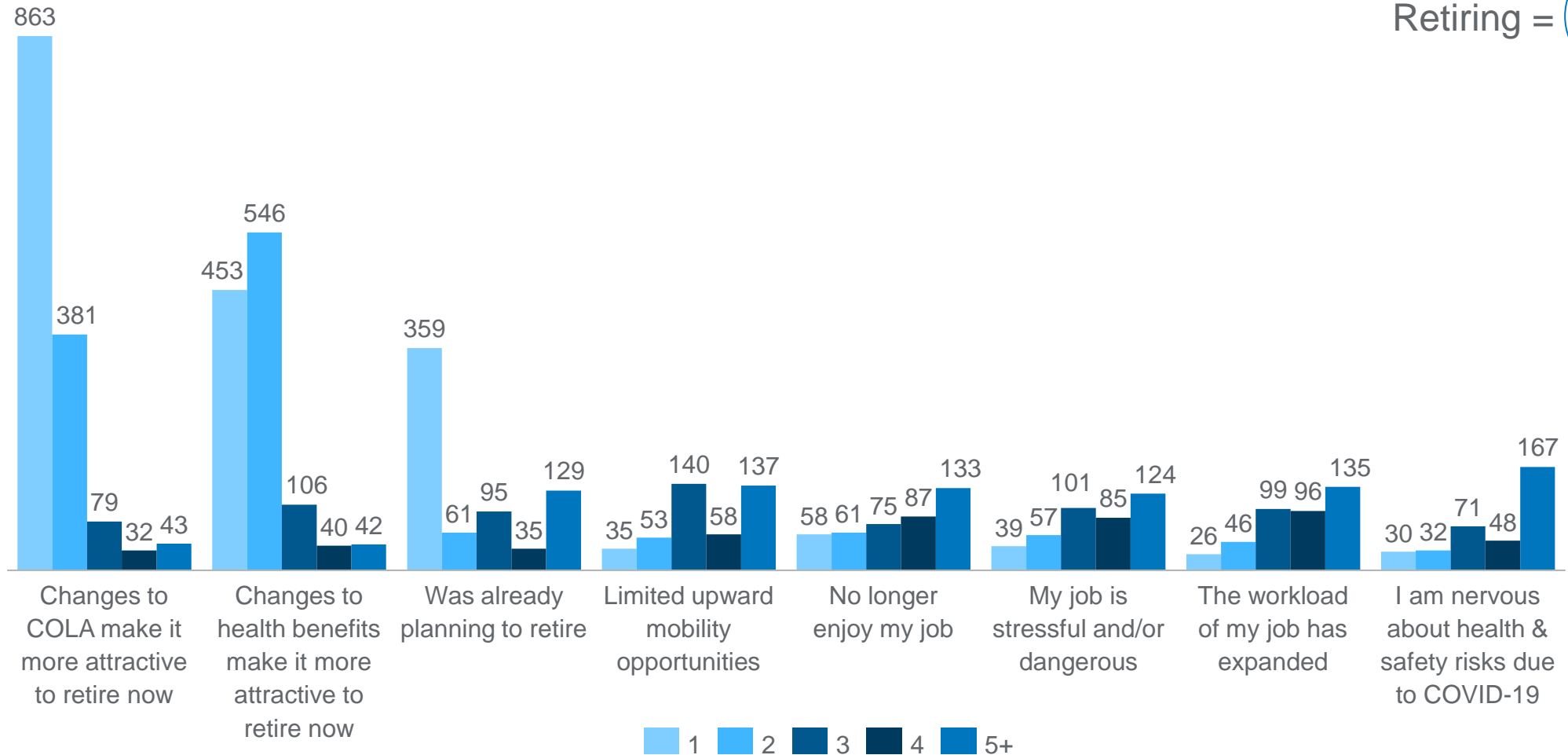
Retirement intent varies by job group

Job group	Agencies impacted	Number of employees	% eligible to retire	Est. % planning to retire	Potential retirement impact			
					Retiring	Eligible but not retiring	Not eligible to retire	
Social workers¹	DCF, DDS, DMHAS, DSS, DOC, DOE, ADS	3,784	23%	71%	618	252	2,914	3,784
Corrections officers	DOC	3,440	12%	89%	367	45	3,028	3,440
Nurses²	DMHAS, DOC, DDS, DCF, DVA, DPH, DOE, DSS, DOI, OEC	1,646	26%	79%	309	82	1,255	1,646
High school instructors³	DOE	1,277	21%	69%	194		1,006	1,277
Secretaries and clerks	All	1,207	44%	75%	396	131	681	1,208
Transportation maintainers⁴	DOT	979	25%	81%	198		735	980
State Police trooper⁵	DESPP	930	14%	86%			799	930
Eligibility services workers⁶	DSS, DCF, ADS	922	18%	73%			755	922
Mental health assistants⁷	DMHAS	800	25%	84%	165		604	801
Transportation engineers⁸	DOT	797	35%	63%	177	103	517	797

1. Includes children, clinical, case aides, developmental 2. Includes NPs, aides, coordinators, consultants and per diem RNs 3. Includes instructors and department heads 4. Includes grades 1-4 5. Includes first class through Master Sergeant 6. Includes specialists and supervisors 7. Includes grades 1-2 8. Includes engineer techs, district engineers and principal engineers
 Source: CT STARS, Survey of state employees December 2020

Changes to COLA was listed as a top 2 factor in deciding to retire by two-thirds of respondents intending to retire, followed by changes to health benefits

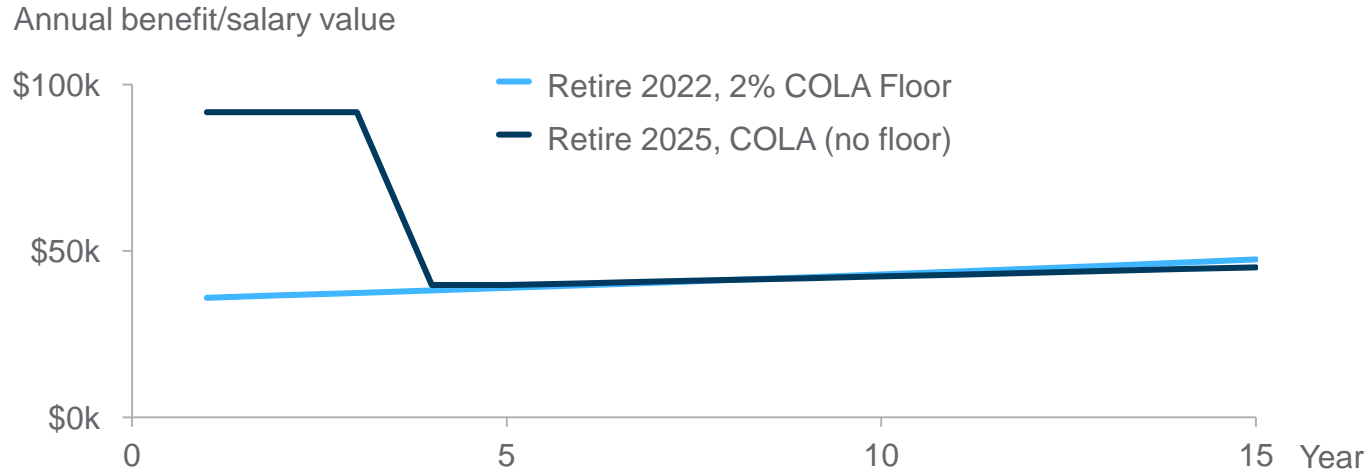
Retiring = 1,863



1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits)

COLA and health coverage changes minor impact for most employees; targeted marketing and education campaign may change views

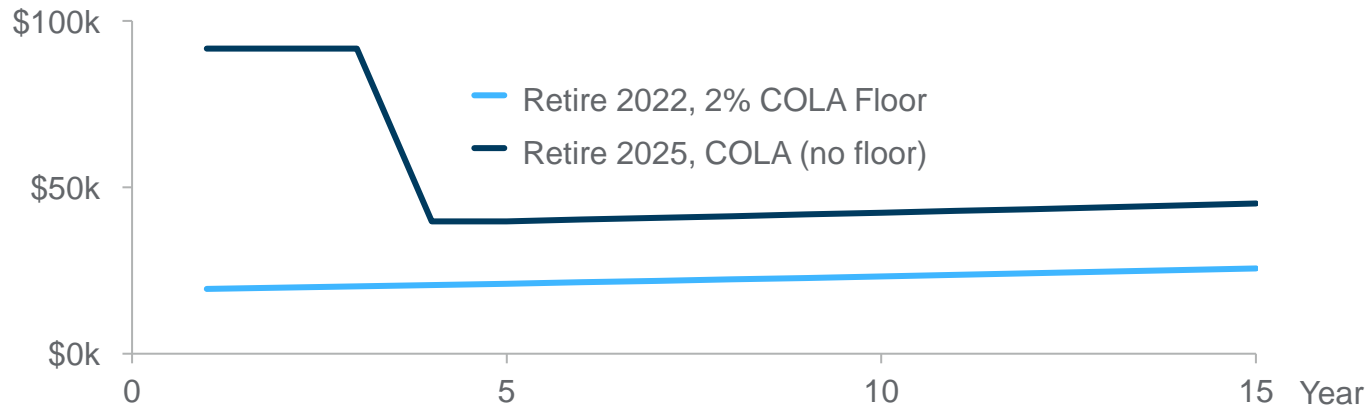

Worker A
 Eligible for Full Retirement



NPV of lifetime benefits
 15-year retirement

\$529k Retire 2022, 2% COLA floor	\$684k Retire 2025, COLA (no floor)
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Worker B
 3 Years Short of Full Retirement



\$286k Retire 2022, 2% COLA floor	\$684k Retire 2025, COLA (no floor)
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Note: Scenarios based on median annual rate of ~\$92k and 28 service years, 2.1% CPI-W est. (actual CT COLA based on 60% of CPI-W up to 2%)
 Breakeven Supplemental Salaries – salaries above this value would make retiring now more beneficial from NPV perspective

Comments in survey highlight importance of HR, career development and telework; common government issues which are top-of mind for eligible retirees

Management specific issues (5.3%)

Pay raises for managers, fair treatment of managers, etc.

Issues with management (6.3%)

"Top heavy", less managerial layers, better communication from management, less micromanagement, etc.

Taxation & compensation (4.1%)

Reduce state taxes, competitive compensation for employees

Automation & technology (7.3%)

Replace paperwork with electronic workflows, offer more services online, improved electronic health records, more data sharing, etc.

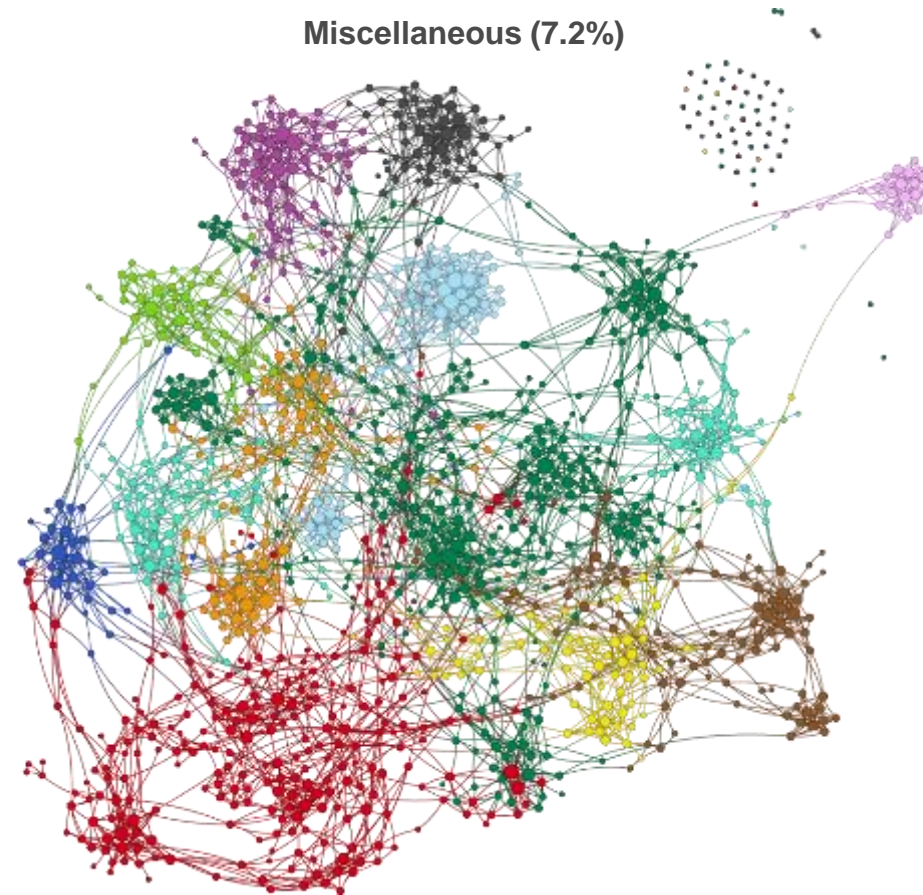
Spending (2.3%)

Reduce government spending, change contracting processes, etc.

Teleworking (19%)

Continue teleworking options beyond the COVID-19 pandemic

Miscellaneous (7.2%)



Accountability & the police accountability bill (1.6%)

Increased accountability of employees, revisit the police accountability bill

HR, hiring & career development (25%)

Quickly fill vacancies, increased staff, more recognition, more trainings, merit-based promotions, etc.

Process improvements (8.4%)

Reduce paperwork, eliminate redundancy and streamline processes such as hiring, contracting, etc.

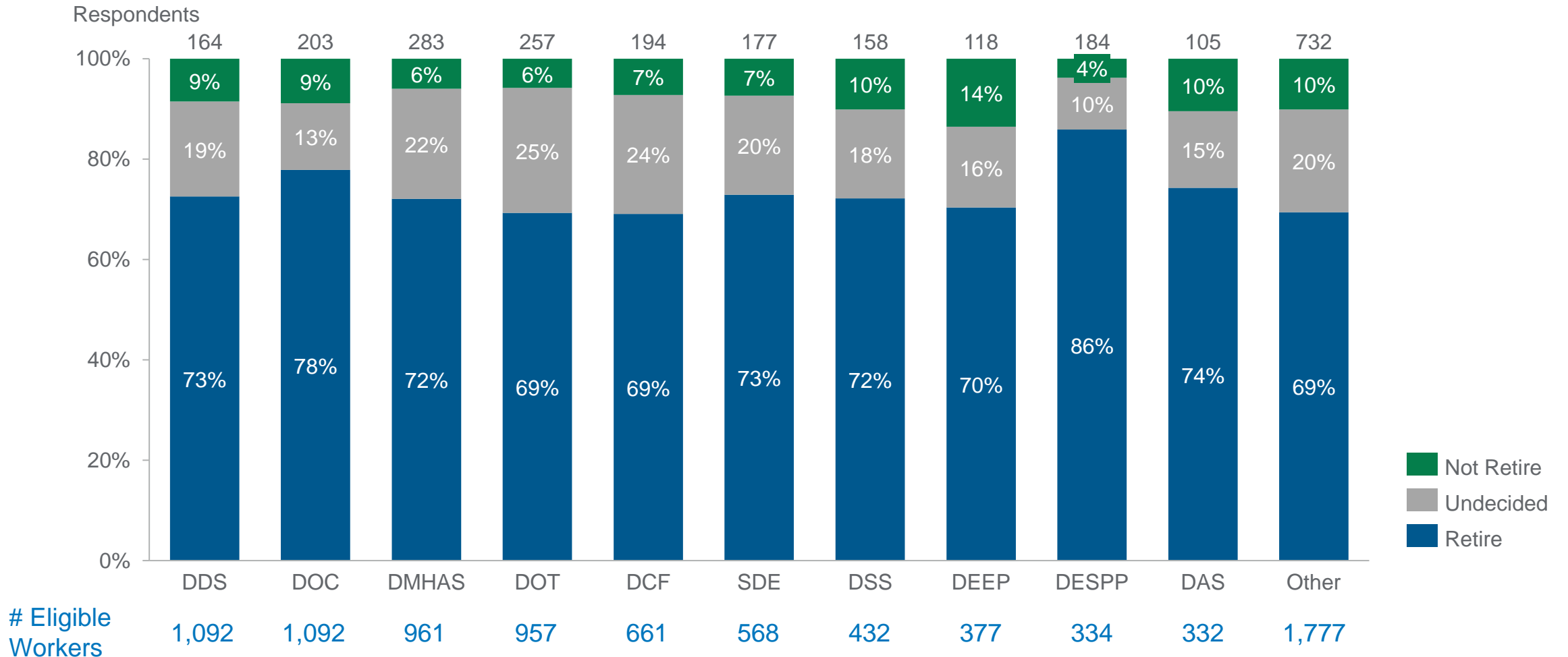
Retirement related issues (7.4%)

Remove early retirement penalty, make information around retirement easily accessible, avoid making changes to retirement benefits, etc.

COLA changes (5.1%)

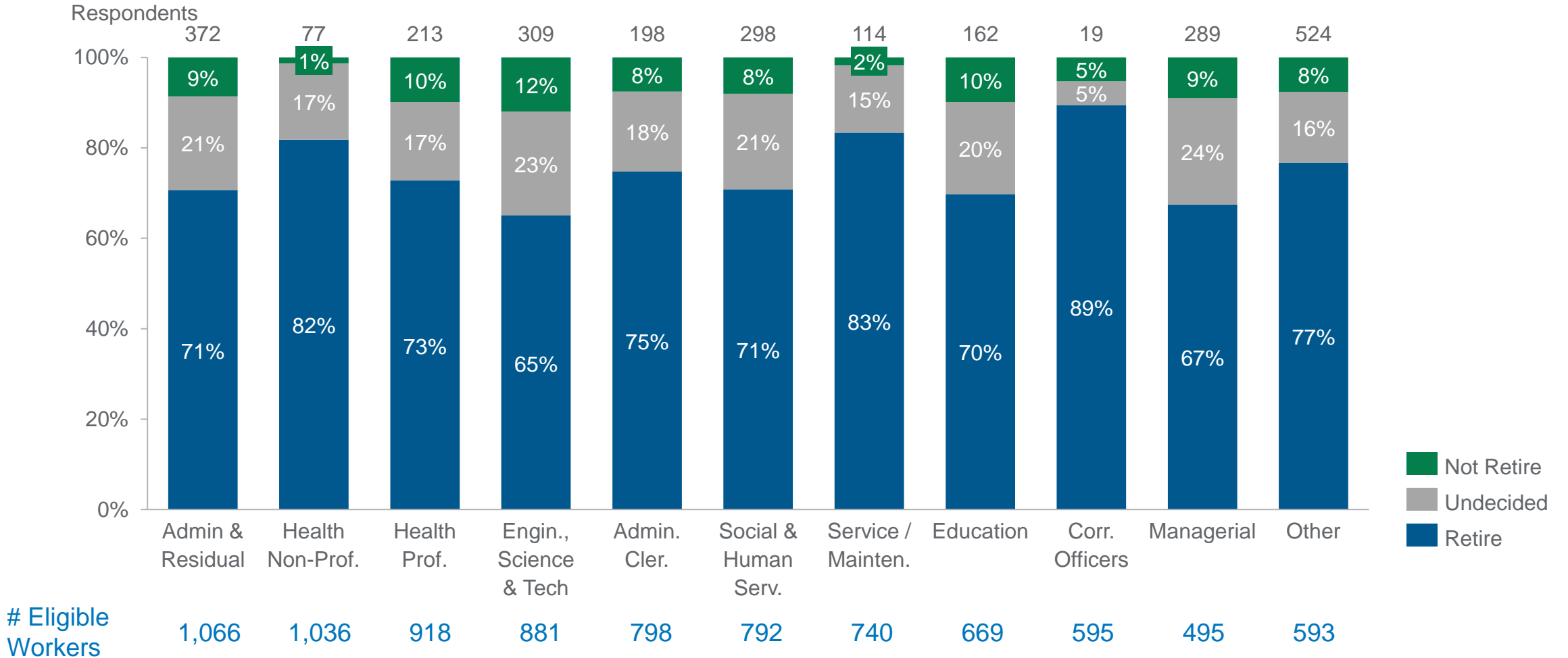
Extend COLA past 2022, better communication around changes to COLA

By Agency | Retirement intentions highest among hazardous duty agencies



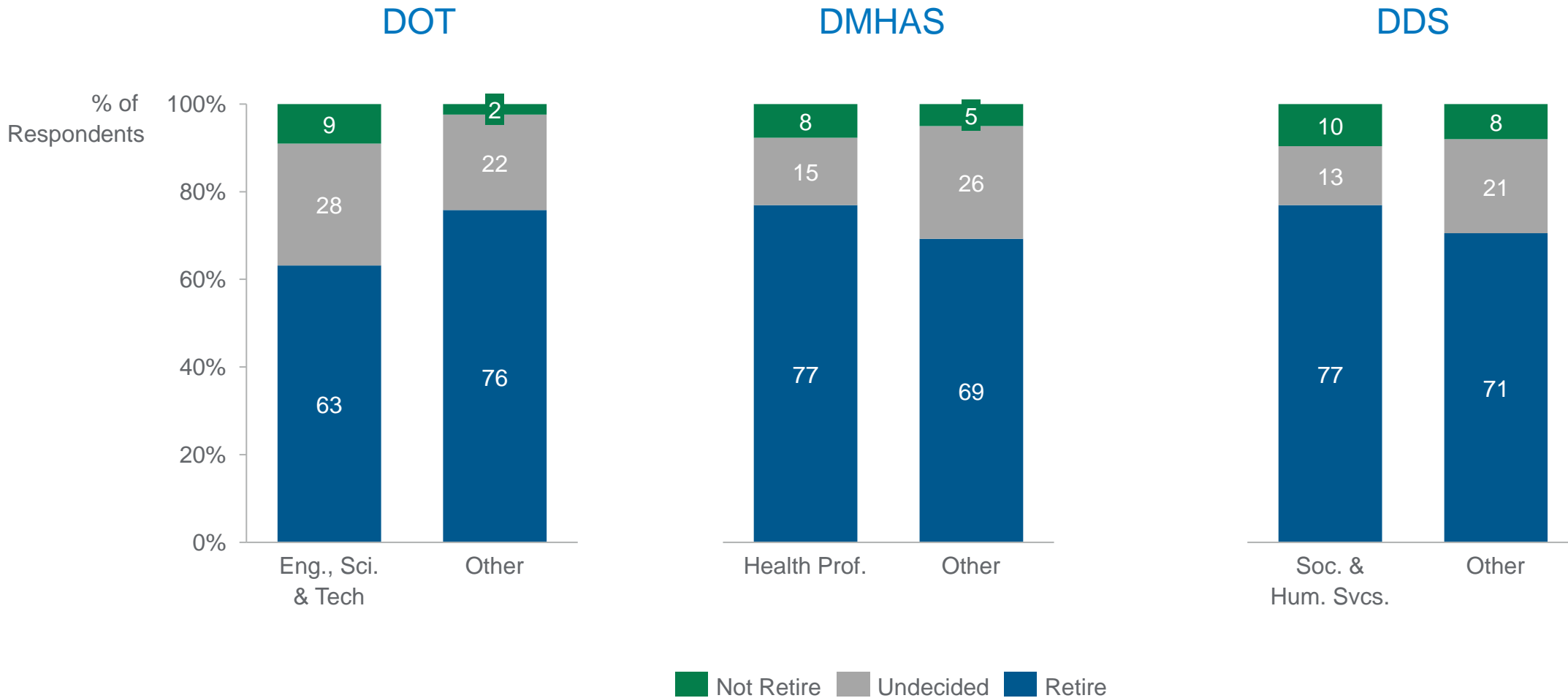
1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits)

By Job Function | Health workers among highest retirement uptake



1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits)

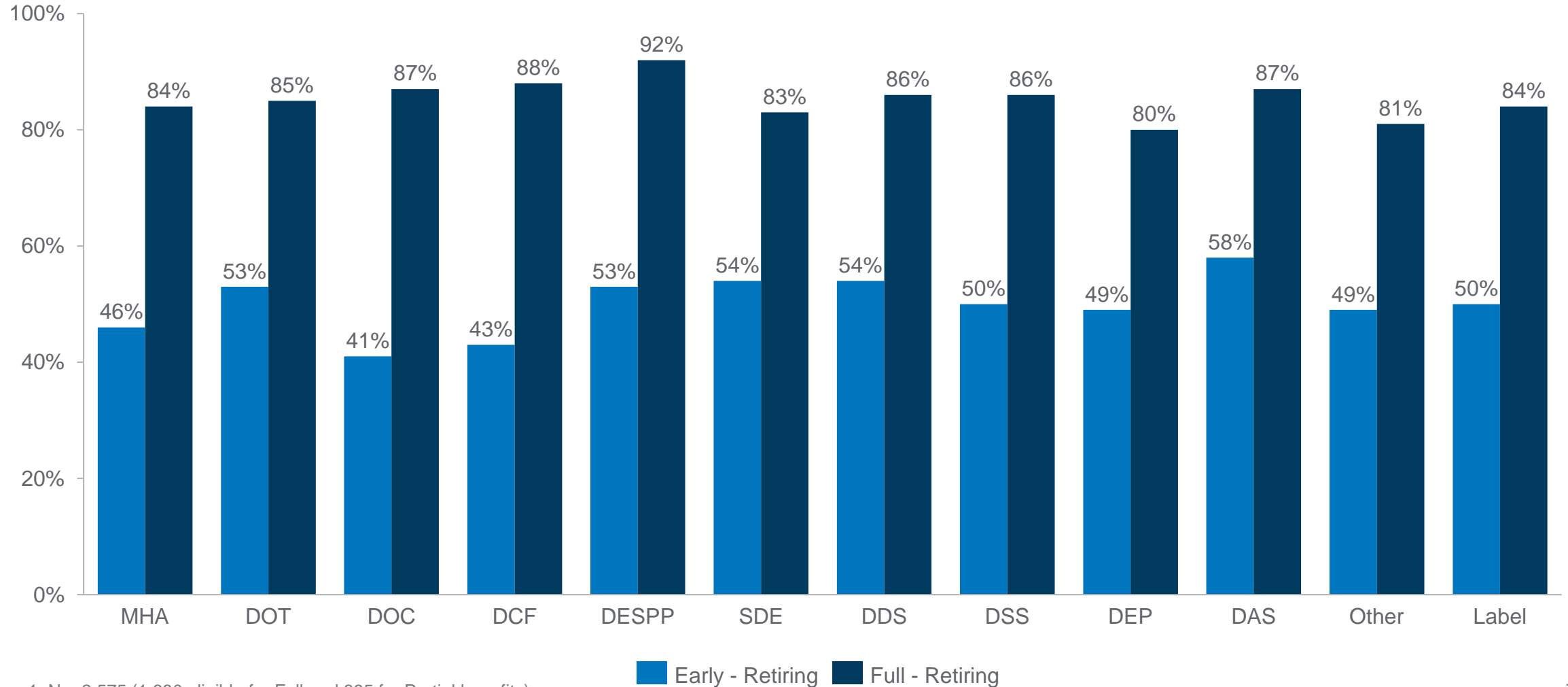
Largest jobs within agencies | Health and human services fields at greater risk of service continuity as providers intent outpaces non-direct care workers



1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits)

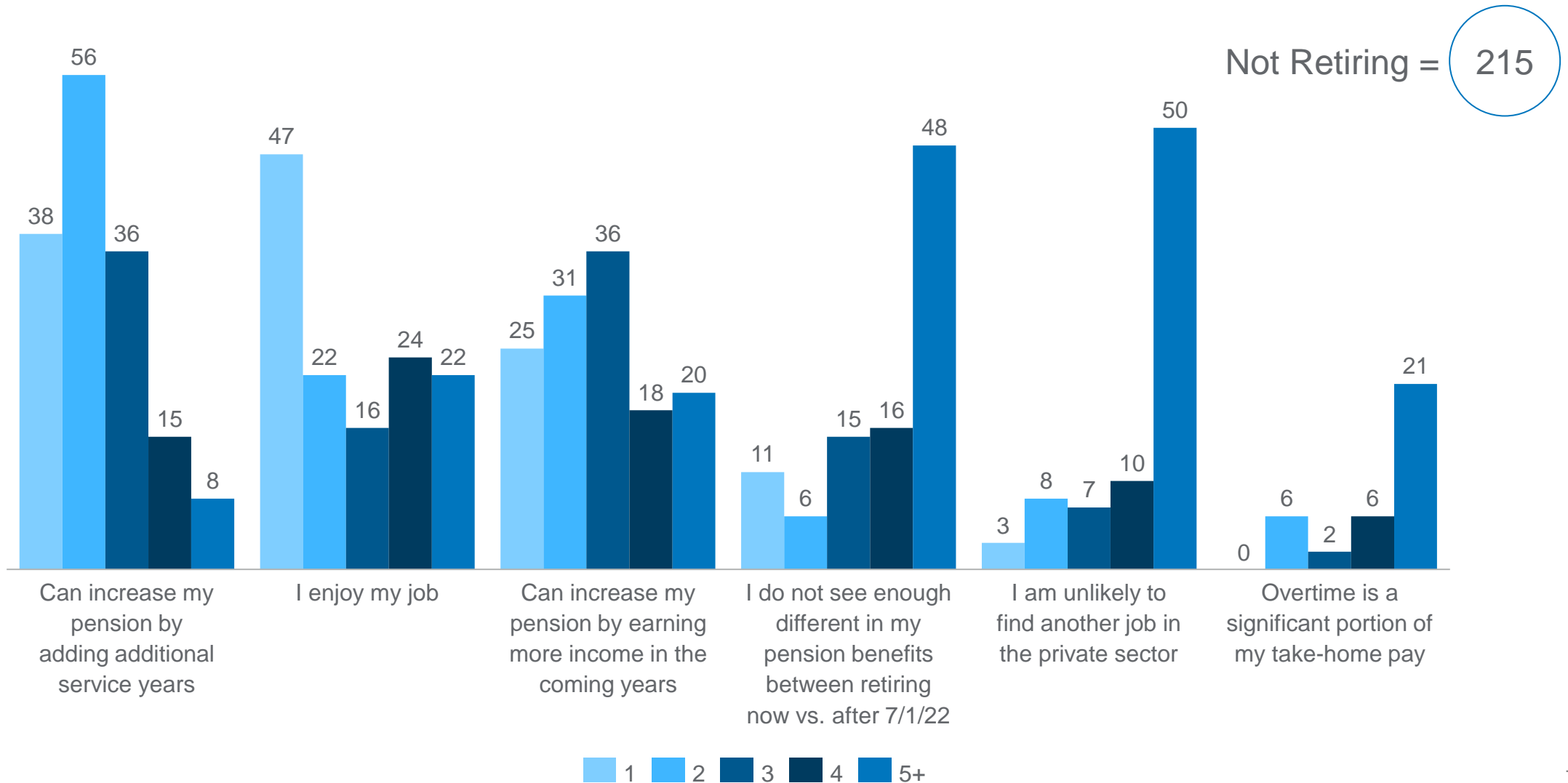
By Agency and Eligibility | Early retirement intent typically ~30%+ below that of those eligible for Full Retirement

% of Respondents



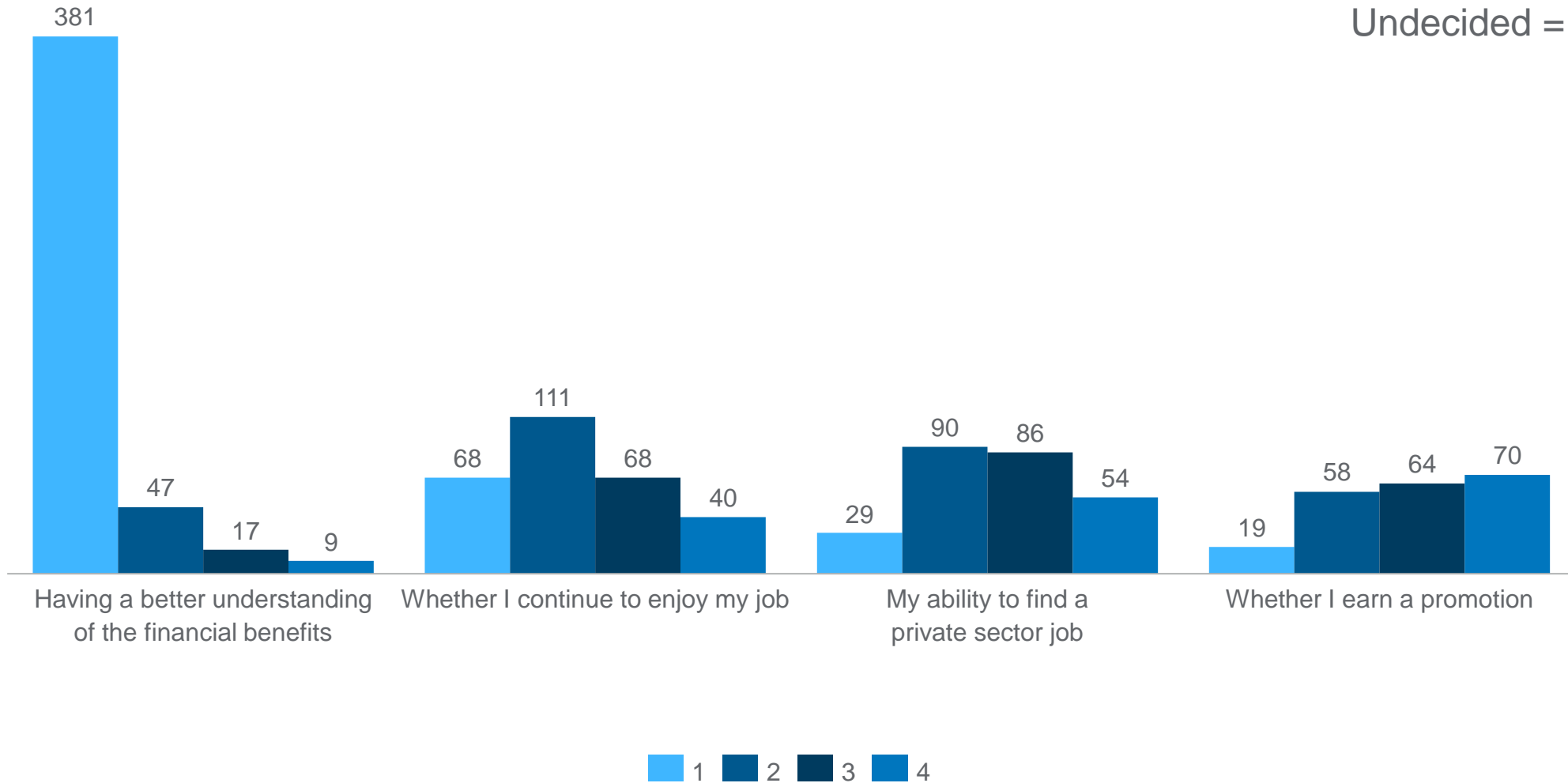
1. N = 2,575 (1,680 eligible for Full and 895 for Partial benefits)

Leading reasons for not retiring include ability to increase pension through added service time (71%) or increased earnings (60%), as well as enjoying work (61%)

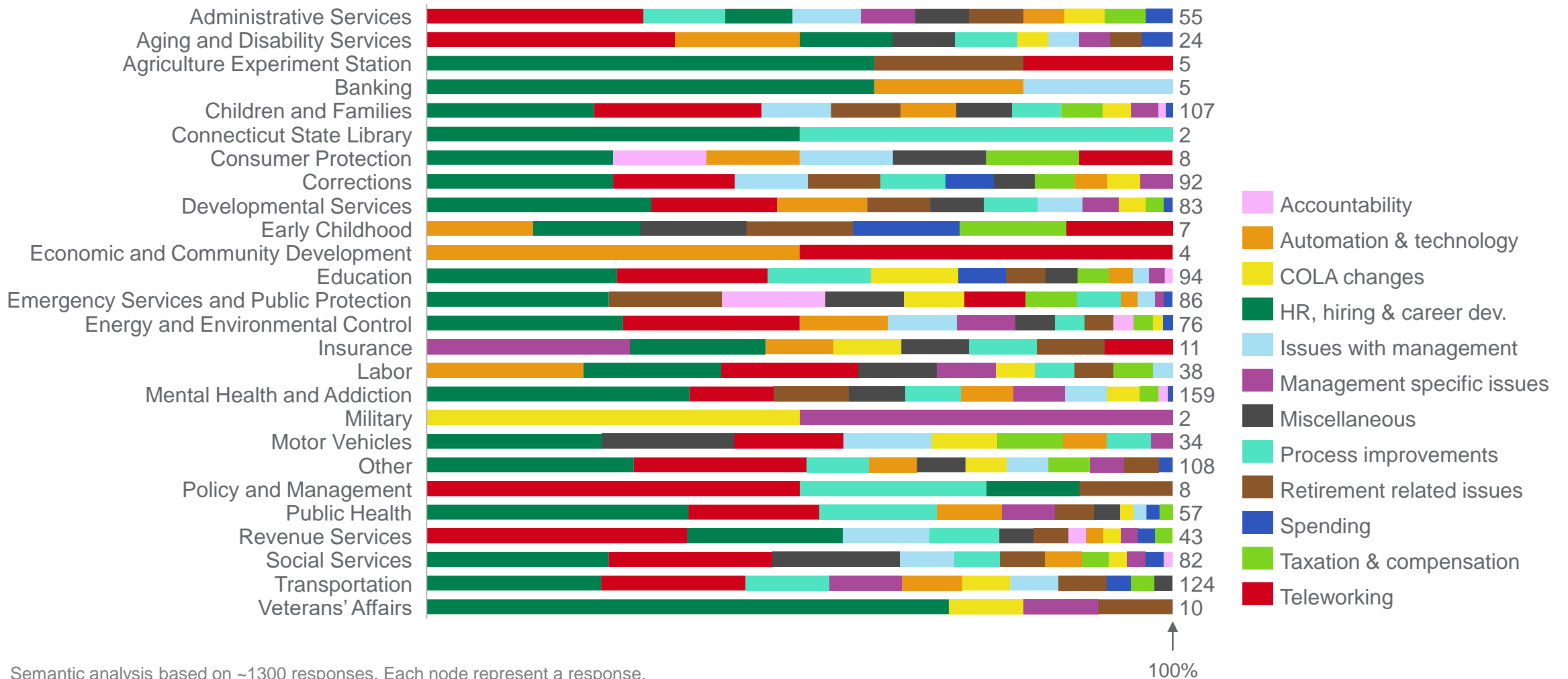


Vast majority of undecideds cite the need for a better understanding of the relative financial benefits – opportunity to use education to guide decisions

Undecided = 497

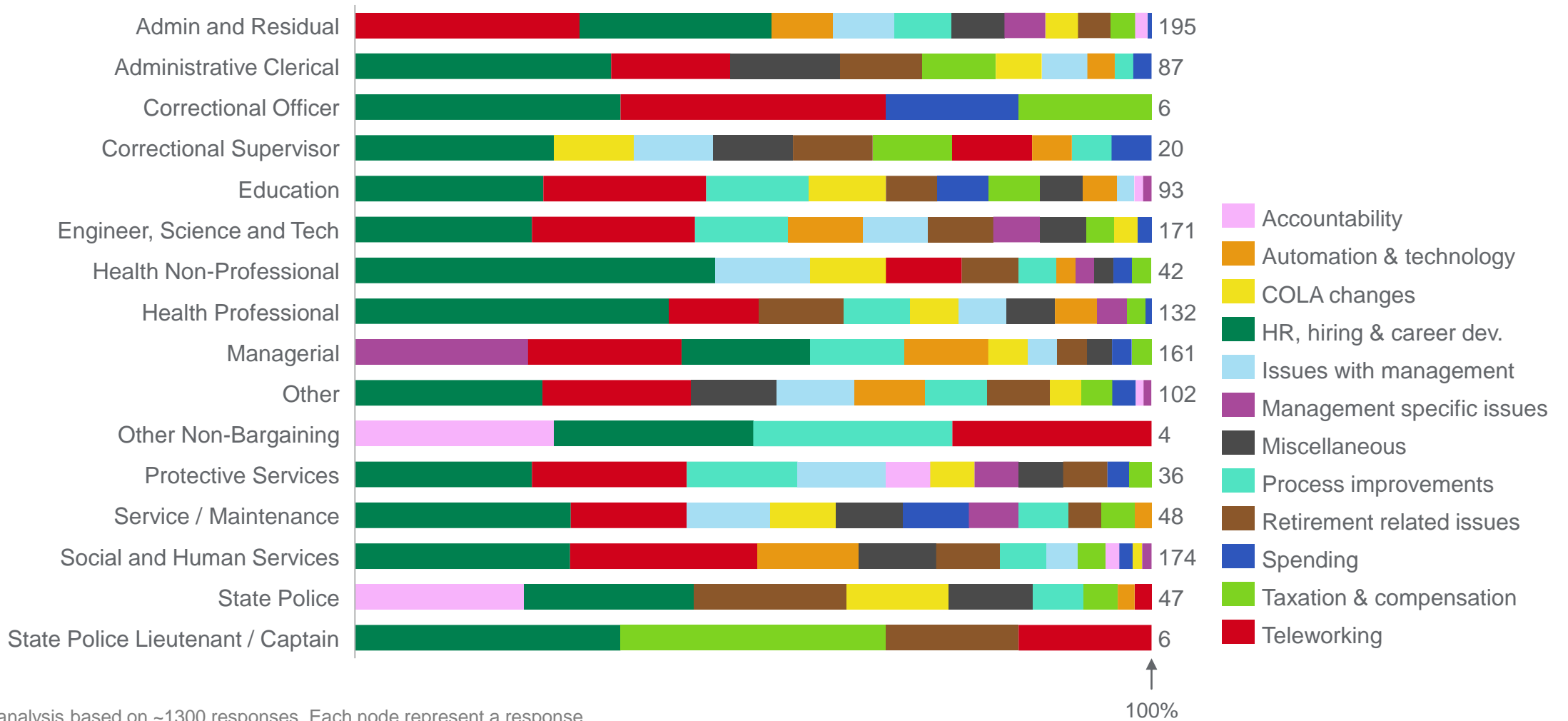


'HR, hiring & career dev.' and 'Teleworking' are the frequent top suggestions across agencies



Semantic analysis based on ~1300 responses. Each node represent a response.
 Source: Quid; BCG Center for Growth & Innovation Analytics

'HR, hiring & career dev.' and 'Teleworking' are the frequent top suggestions across job functions as well



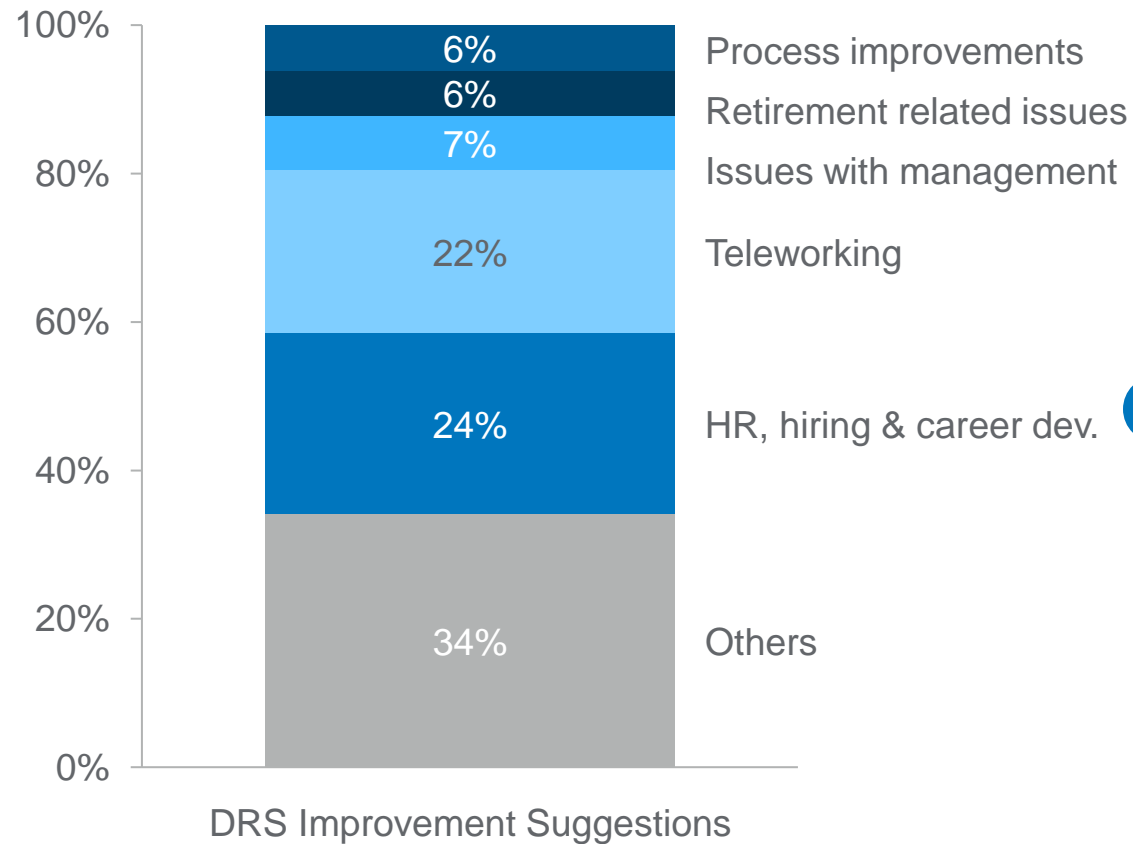
Semantic analysis based on ~1300 responses. Each node represent a response.
Source: Quid; BCG Center for Growth & Innovation Analytics

Insights from state workers largely support teleworking and need for more tools / automation, as well as consolidating agencies

- “ Employees that can work from home during COVID should continue to be able to work from home. This can reduce building sizes and help decrease traffic from commuting
- “ Allow us to continue working from home even after COVID...most of us are more productive..., the State can save on rentals, electricity, etc., and we can help the environment...
- “ I think rather than having so many experienced workers retire - the state could benefit from offering these experienced workers a part time schedule
- “ Look at 'non-essential' employees (myself included) - if these folks are 'non-essential' - well, why do we need them?
- “ Systemically, there are no incentives for state employees to be more competitive and accountable. We cannot recruit in a timely fashion. We do not reward employees for good work.
- “ [Fill] positions [ahead] of departure. An enormous amount of time and effort are wasted in the current process of waiting for positions to become vacant
- “ Filling vacancies needs to be revamped as it is unnecessarily lengthy, arduous and inefficient and has created an unfair burden on existing staff
- “ I work in a hospital and we have been so shortstaffed for the last few years that everyone is exhausted. Its really hard to work with people that are too tired to really care about their jobs.
- “ Extend the 7/1/22 cutoff date by at least another couple years...Many employees planning to retire in 2022 ...would plan to work longer if this date is extended.
- “ Use technology wisely to automate low-level tasks for employees to concentrate on resolving more complex issues... Enhance online service for increased accessibility self-help

Insights from DSS respondents support teleworking and improved hiring processes

Share of comments








- “ Rather than having so many experienced workers retire - the state could benefit from offering these experienced workers a part time schedule
- “ Remove constraints that prevent us from doing work we were able to do in the past which are covered under our job specifications. Also give us the opportunity to work out of our job specification class.
- “ Continue to show flexibility such as telework options [and] continue to consolidate services amongst agencies.
- “ I think we should plan to have the retired person's position posted prior to their retirement so agencies can have a smooth transition of new staff.

2.2

Changes to state employee pensions

Delayed retirement results in loss of 2% COLA floor, delays first COLA by ~18 months and increases healthcare costs for under 65

	Retirement before 7/1/22		Retirement on or after 7/1/22	
	Hazardous	Non-Hazardous	Hazardous	Non-Hazardous
Cost of Living Adjustment				
Annual cost of living adjustment (COLA)	2% or 60% of CPI-W ¹ up to 6% and 75% of CPI-W above 6%		CPI-W up to 2%, then 60% of CPI-W up to 6% and 75% of CPI-W above 6% 	
Minimum COLA	2%		0% 	
Maximum COLA	7.5%		7.5%	
First COLA Adjustment	~12 months (9-15 months)		30 months (Kick-in added if annualized COLA > 5.5% first 18 months) ²	
Healthcare				
65 years+/Medicare-Covered Retirees	No change		No change	
Premium share paid by employees < 25 yrs. service	0 to 1.5%	1.5% to 3.0%	3.0% 	5.0% 
Medicare Part B Premium Reimbursement	State pays 100% premium for Medicare-covered retirees		50% reimbursement of add'l cost beyond standard premium for high earners ³ (~\$1.2-2.4k cost p.a. to individual) ⁴ 	

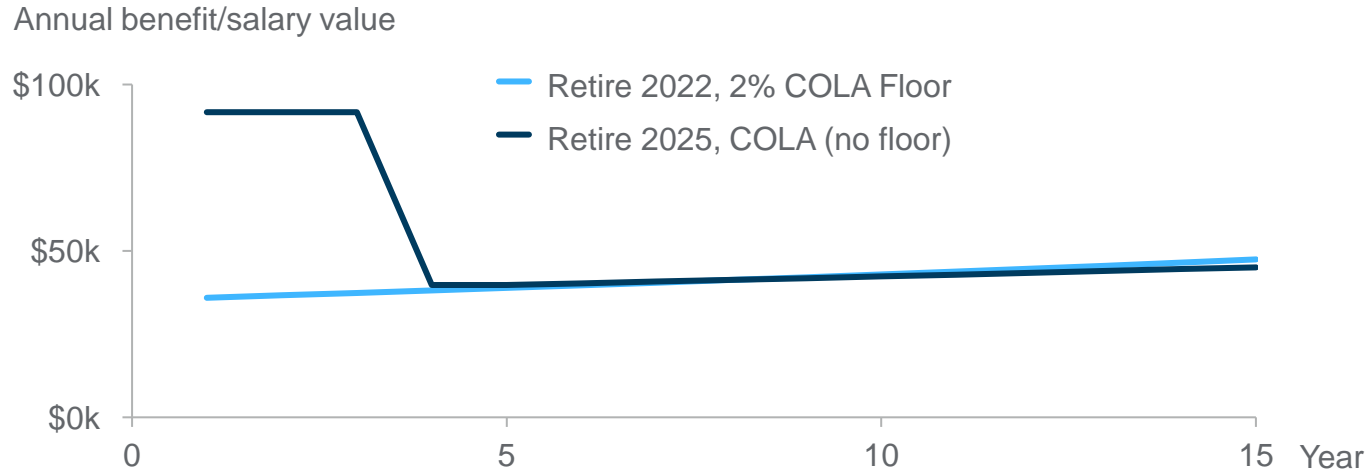
No relief provided to early retirees in terms of benefit reduction

1. COLA = annual Cost of Living Adjustment, based on CPI-W (Consumer Price Index for Urban Wage Earners & Clerical Workers) 2. Kick-in = [(60% * CPI-W) - 2.5%] * 1.5
 3. \$85K salary for single filers 4. Additional premiums start at \$2,429 per year for single filers with salaries \$87-109K, \$3,470 from \$109-\$136K, \$4,512 from \$136-\$162K
 Source: SEBAC 2017 agreement

Retirement changes do not provide clear economic incentive to retire – ability to find supplemental income could drive decisions



Worker A
Eligible for Full Retirement



NPV of lifetime benefits
15-year retirement

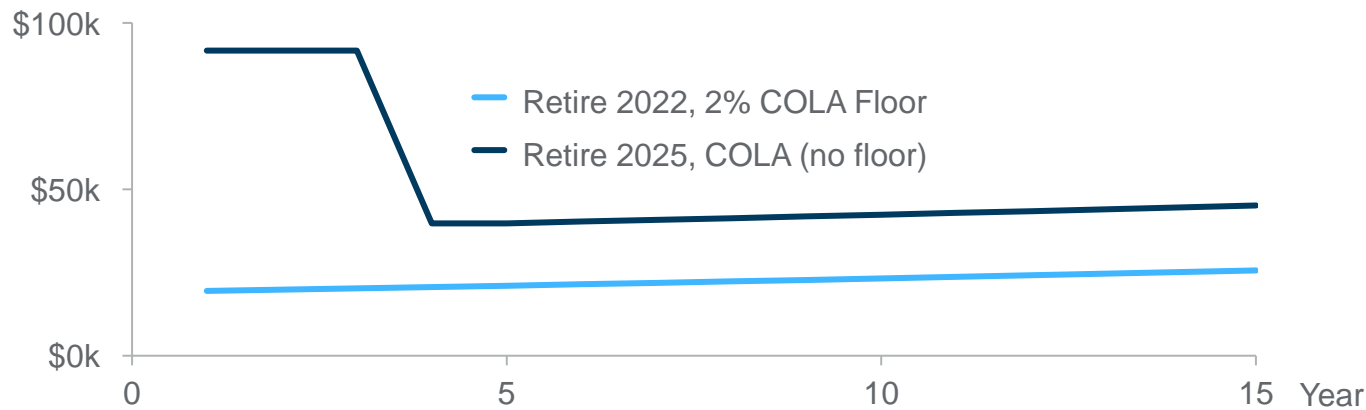
\$529k Retire 2022, 2% COLA floor	\$684k Retire 2025, COLA (no floor)
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Breakeven Supplemental Salary: ~\$54k

Scenarios do not account for potential earned income from new employment



Worker B
3 Years Short of Full Retirement

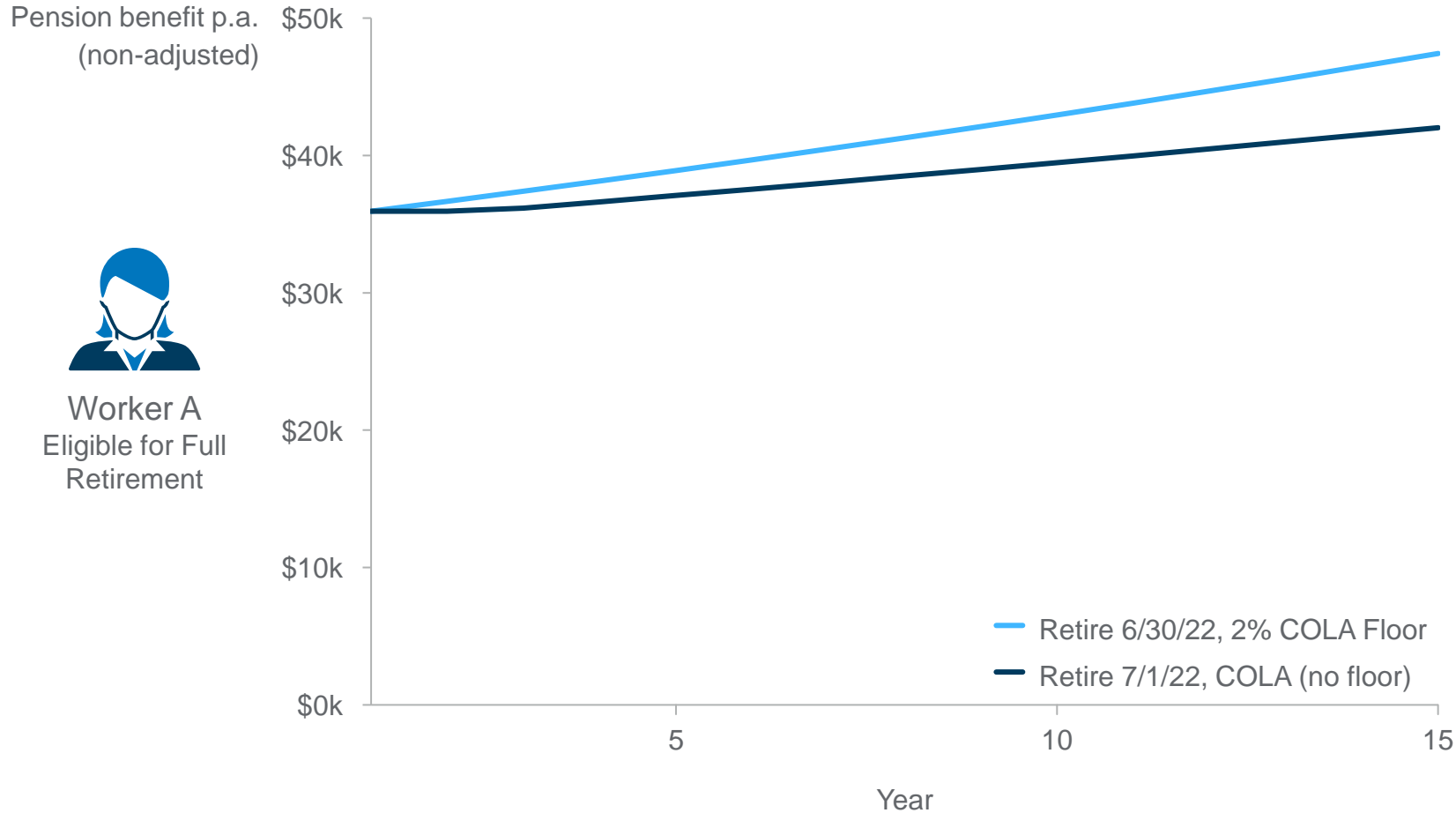


\$286k Retire 2022, 2% COLA floor	\$684k Retire 2025, COLA (no floor)
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Breakeven Supplemental Salary: ~\$138k

Note: Scenarios based on median annual rate of ~\$92k and 28 service years, as well as 2.1% CPI-W est. (actual CT COLA based on 60% of CPI-W up to 2%) Breakeven Supplemental Salaries – salaries above this value would make retiring now more beneficial from NPV perspective

For many workers, retirement changes do not provide clear economic incentive to retire before 2022 effective date



Based on median salary for retirement eligible employees, the difference in expected cumulative value between retiring on 6/30/22 and 7/1/22 over 15 years is ~\$35k¹

For many employees, this difference may be offset by an additional year of working at full salary²

1. Discounted at 2% for Net Present Value 2. Each additional year of service also adds to annual benefit percent (not included in this analysis)
Note: Scenario based on median annual rate of ~\$92k and 28 service years, as well as expected CPI-W of 2.1% (actual CT COLA based on 60% of CPI-W up to 2%);

2.2

Challenges and opportunities for Connecticut

Budget includes value of \$20m in FY22 and \$155m in FY23 tied to opportunities from CREATES

Priority initiatives for implementation (FY22 & FY23)





Agency initiatives	Cross-agency initiatives
<ul style="list-style-type: none">• Close prison facilities and units• Optimize CTEC administrative and teacher levels• Increase revenue through application of analytics• Expand DECD contracting to AdvanceCT	<ul style="list-style-type: none">• Streamline hiring process; manage OT/absences• Centralize payroll• Manage workers' comp expense• Expand common payment platform• Streamline Affirmative Action reporting• Increase office co-location

Program led by Steering Committee with representation from OPM and DAS, supported by a project management office to track progress and savings

3.0

Key state-wide opportunities

Four major types of implementation challenges for consideration

	Description	Examples	Questions for Implementation
 <p>Opportunities already underway by agencies Ensure completion</p>	Opportunities currently being implemented by state agencies	<ul style="list-style-type: none"> • DoC prison closures • DRS tax digitization program • DoL unemployment modernization 	<ul style="list-style-type: none"> • How do we track progress? • How do we get early warning signs of challenges?
 <p>Opportunities with clear agency path Get started and then track</p>	Opportunities not underway, but with clear agency ownership	<ul style="list-style-type: none"> • New non-service transportation revenues • Increase office co-location 	<ul style="list-style-type: none"> • How do we create initial momentum for these?
 <p>Opportunities challenging to start Align stakeholders and catalyze decision</p>	Opportunities that require key decisions from leadership and political will to implement	<ul style="list-style-type: none"> • Increase use of non-profits for LMHA services • Cut low-ROI film/tax credits 	<ul style="list-style-type: none"> • How do we create buy-in, especially over the long term? • Should we prioritize a subset of these opportunities?
 <p>Cross-govt opportunities complex to deliver Shape and find ownership</p>	Opportunities that require coordination among multiple stakeholders to implement and manage	<ul style="list-style-type: none"> • Improve managerial value proposition and retention • Develop common grant platform • Consolidate human service agency back-office functions 	<ul style="list-style-type: none"> • Who is the logical owner? • How should we leverage Fellows to lead change?

Some questions to be resolved in order to implement CREATES opportunities



Who is accountable for implementation?

What is the role of agency leadership? Of OPM? Of DAS?

For initiatives without clear agency owners (e.g., workers comp), who should be accountable?

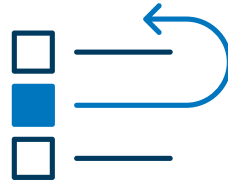


What team(s) is/are responsible?

What team is responsible for managing implementation?

What skills and capabilities do they need?

For digital opportunities, what support comes from the CIO group?



How do we prioritize opportunities?

How should initiatives be prioritized (e.g., service risk and cost value)?

Who makes the decision on which opportunities to pursue? How?

What are our limiting factors? (e.g., funding, agency change capacity)



How will change vary by agency?

How will implementation differ by agency?

How do we assess agency readiness for implementation?

How does each agency initiative fit in the overall CREATES roadmap?



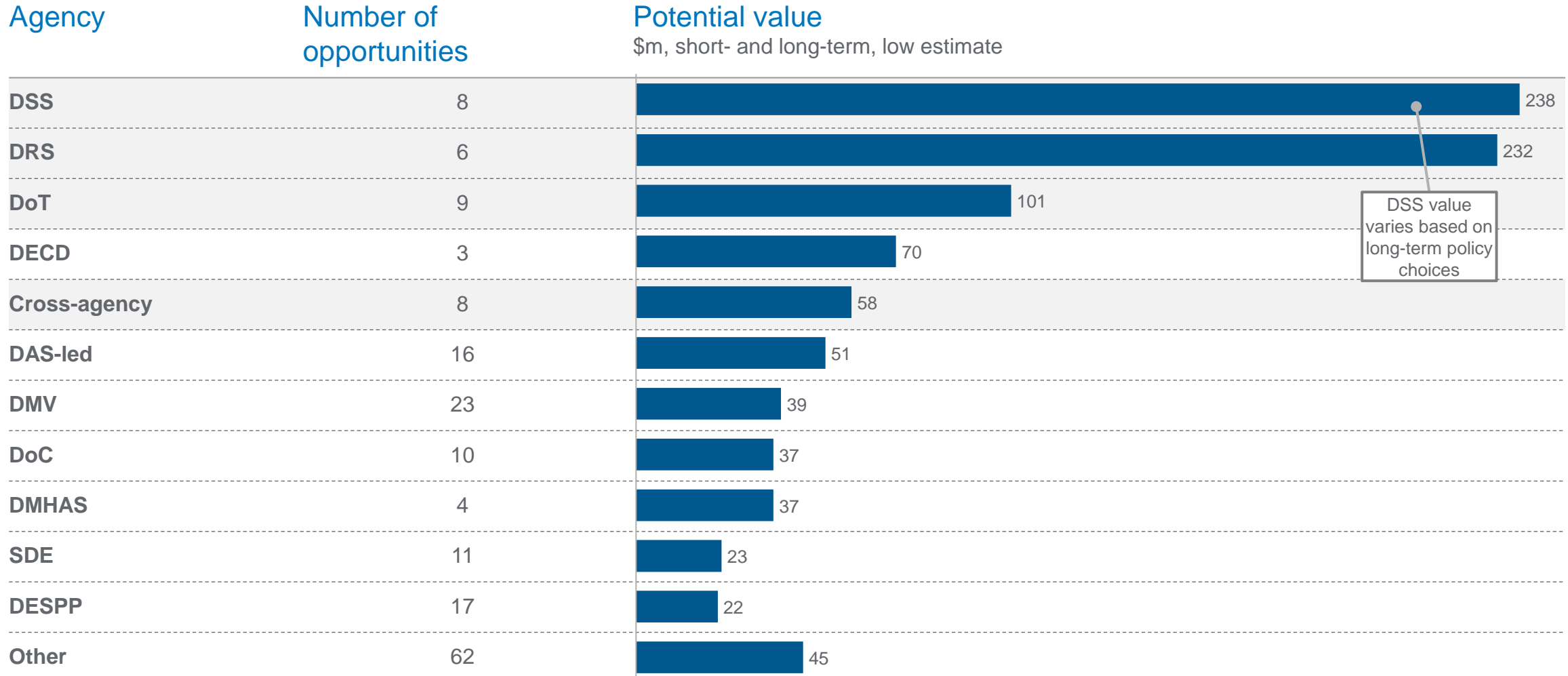
How do we monitor implementation?

How do we define success for each opportunity?

What goals/KPIs do we set?

How do we ensure ongoing leadership and agency alignment?

Number of opportunities and value varies by agency



The highest-value opportunities are spread across multiple agencies

~200 opportunities identified across 28 agencies

Identified opportunities by agency (1 of 10)

Agency	Opportunity	Description	Potential value
ADS	Consolidate LP, HHS and CHSP within ADS	Consider jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs	\$1-6m
Cross-agency	Develop common grant platform	Digitize and streamline grant-making processes across agencies via a common platform in order to reduce administrative costs, minimize agency employee capacity, and simplify provider interfaces	\$30-60m
	Integrate agencies with similar missions	Integrate DMV/DSST, DECED/DET and DEC with other agencies, principally DSS	\$12-20m
DAS	Streamline human service program functions	Consolidate or jointly administer programs housed in separate agencies that are providing similar services and/or directed towards common resident groups to simplify resident experience and reduce administrative costs	\$4-10m
	Hard wire coordination of human services	Create a central office overseeing all HHS agencies to coordinate key functions common to all agencies and streamline reporting	N/A
	Improve manager value proposition and retention	Make becoming a manager in state workforce more attractive in order to better compete with private sector and encourage upward mobility	\$15-25m
	Manage overtime/absences	Reduce 1.5x overtime expenses by optimizing staffing and scheduling as well as reducing avoidable absences	\$5-8m
	Manage workers comp expense	Reduce workers' compensation expenses by bringing benefits in-line with peer states, mitigating fraud, increasing safety and incentivizing return-to-work programs	\$1-6m
	Consolidate employment support administration	Consolidating the administration, procurement and oversight functions for employment supports and reducing overhead on contracted services	\$1-6m
	Digitize performance management	HR documents, records, and workflows to be automated via People Doc (HR software) subscription	<\$1m
	Digitize account/rebate	Rebate documentation is sent via certified mail or fax due to email security concerns, resulting in only ~20% of potential rebates being processed	<\$1m
	Digitize invoice processing and Purchasing Card receipts	Invoice and PO-related receipt processing currently requires heavy manual entry from associates, accountants, and supervisors	<\$1m
	Automate Private Application processing	Private Applications are received by mail and processed by technicians required to be processed within 30 days of mailing date	<\$1m
Automate Workers Compensation calculations and audits	Remove manual processes in calculating WC payments	<\$1m	
Streamline payroll review of completeness	Majority of payroll process already digitized-exceptions chasing down employees who haven't submitted timesheets	<\$1m	
Automate check processing	Checks currently received via mail and entered in multiple systems, often being "bounced" 4 or more times	<\$1m	

Full list by agency and current status in annex

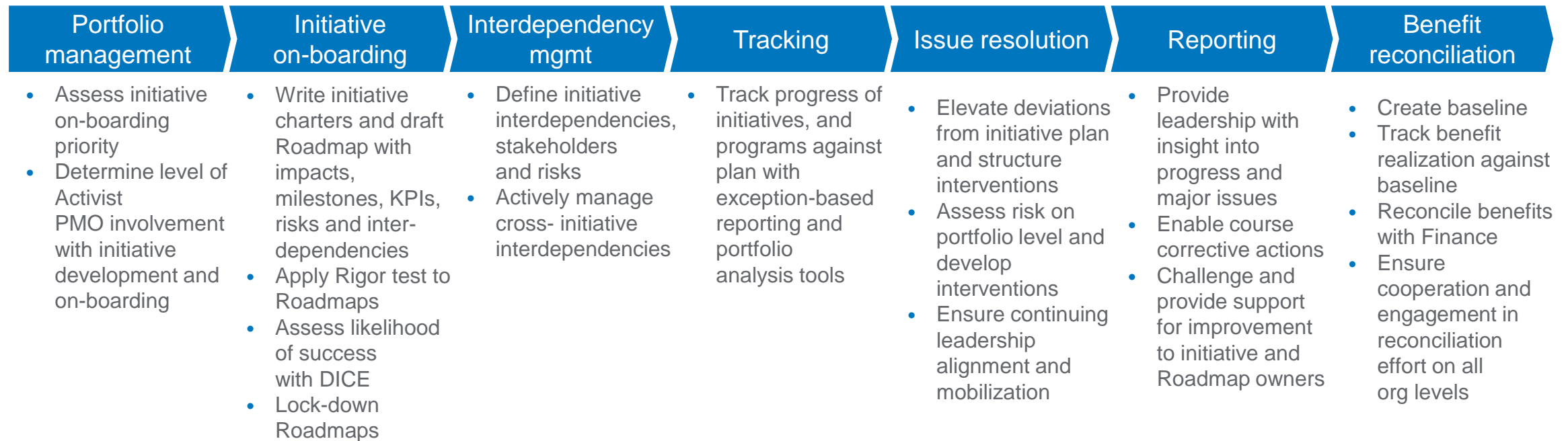
The 11 biggest opportunities represent ~70% of value

Top 11 opportunities

	Agency	Value
Long-term transition of Medicaid to value-based payments	DSS	\$200m+
Improve tax compliance	DRS	\$150-250m
Complete tax digitization program	DRS	\$80-100m
Cut low-ROI film/tax programs	DECD	\$68-100m
Align rail/bus service to resident needs	DoT	\$50-60m
Bid out public transit service operations	DoT	\$40-60m
Corrections reform	DoC	\$43m+
Increase office co-location	Cross-agency	\$32m+
Expand non-profits for LMHAS	DMHAS	\$20-50m
Optimize CTEC admin and teacher levels	SDE	\$20-25m
Manage overtime and absences	Cross-agency	\$15-25m+

Complexity means a rigorous implementation approach required

Rigorous program management



KPI framework

View on KPIs that provides insight into progress and achievement of strategic and financial targets

Several opportunities improve resident experience of public services (1 of 2)

Service Improvements

Bid out public transit service operations	<ul style="list-style-type: none">• Competitively bid rail contracts to reduce costs and improve performance. Incentivizes high quality transit service operations through competition, improving resident experience in transit.
Contract veterans convalescent care operations	<ul style="list-style-type: none">• Privatize operations of veterans' convalescent care facility. Incentivizes competition in healthcare services and leads to improved resident experience in healthcare.
Common doc mgmt and payment platforms	<ul style="list-style-type: none">• Digitize document management via a common platform across agencies and standardize payment processes state-wide (e.g., acceptance of credit cards). Expands digital platforms, increasing ease of use for residents.
Long-term transition of Medicaid to Value-Based Payments (VBP)	<ul style="list-style-type: none">• VPB incentivizes clinicians based on quality of care, improving resident healthcare experiences and outcomes.
DMV transactions online and third parties	<ul style="list-style-type: none">• Enhance ability for customers to pre-upload documents, reducing failed transactions and cutting transaction times.
Complete tax digitization program	<ul style="list-style-type: none">• Improve ability of residents to conduct full lifecycle of tax filings online (e.g., virtual assistance, complete filings, submit payments).
Digitize DMHAS patient record	<ul style="list-style-type: none">• Electronic Health Record (EHR) will improve DMHAS data capture and patient tracking, resulting in more consistent and efficient care delivery to residents

Several opportunities improve resident experience of public services (2 of 2)

Service Improvements

Streamline human service programs/functions	<ul style="list-style-type: none">• Consolidate or jointly administer programs housed in separate agencies that are providing similar services and/or directed towards common resident groups to simplify resident experience.
Improve manager value proposition and retention	<ul style="list-style-type: none">• Make becoming a manager in state workforce more attractive in order to better compete with private sector and encourage upward mobility. Increase workforce opportunities leading to improved resident experience in state employment.
Manage overtime/absences	<ul style="list-style-type: none">• Limits taxpayer expenses on direct OT spend as well as long-term pension costs related to OT. Reduction in absenteeism improves service continuity.
Manage workers comp expense	<ul style="list-style-type: none">• Increased focus on return-to-work programs, case management and rehabilitation helps reduce burden on remaining employees, reduces need for unpredictable overtime, and stabilizes staffing levels to provide more predictable and timely service to residents.
Align rail/bus service to resident needs	<ul style="list-style-type: none">• Modernize and synchronize bus systems schedules across districts, while rail transit services to move in-line with actual demand. These changes will contribute to prolonging solvency of the STF
Various digital opportunities	<ul style="list-style-type: none">• Opportunities to automate and/or digitize currently manual processes at individual agencies with potential for cross-agency solution (e.g., accepting credit cards, moving eligibility applications online, and expanding e-licensing)

Several opportunities require legislative change

Legislative change required

Corrections reform

- Political backing and plan to address labor/stakeholder issues. Legislation enabling DoC to regulate and maintain low prison populations.

Cut low-ROI film/tax programs

- Amend Chapter 208 Sec. 12-217jj to eliminate film production tax credit

DMV transactions online and third parties

- Legislative action required to expand third-party partners, scope of activities permitted and expansion of kiosks

Improve manager value proposition and retention

- Legislation addressing sections No. 1937-E (which superseded 1624-E) allowing granting managers with the same percentage increases as bargaining unit employees. In addition, adjustments to maximum salary ranges should be enacted to ease compression issues.

Manage overtime/absences

- Several legislative changes required, including caps on pensionable overtime, enablement of selective usage of DROP, elimination of four-hour minimums, enabling verification of FMLA and other leave.

Manage workers comp expense

- Revise statute limiting partial and total disability durations to match peer states (Sec. 31-307, 307b and 308). In addition, legislative action to transfer post-retirement payments to pension expenses rather than W.C. budget, implementing state-approved second medical opinion providers, formularies and preferred drug lists (PDL), and reducing maximum wage coverage.

Align rail/bus service to resident needs

- Public hearings required for service changes lasting more than one year
-

Several opportunities mitigate risk for the State

	Risk mitigation
Common doc mgmt and payment platforms	<ul style="list-style-type: none"> Reduces risk of disruption to business operations due to clerical/secretarial/administrative retirements by further automating and standardizing processes
DMV transactions online and third parties	<ul style="list-style-type: none"> Decrease revenue backlog by moving transactions previously done in-person to online and self-service kiosks Reduce manual processes and bring FTEs per capita in-line with digitally advanced peers, mitigating backlogs as retirements increase and volumes return (e.g., state re-openings, REAL ID)
Streamline hiring process	<ul style="list-style-type: none"> Initiatives identified (streamlining approvals, reducing barriers to external hires, providing more autonomy to agencies, etc.) reduce the time needed to identify, recruit and onboard new hires by 17 weeks
Manage overtime/absences	<ul style="list-style-type: none"> Reduce overtime, optimize schedules and accelerate hiring to control and mitigate risk of occupational injuries and absenteeism
Manage workers comp expense	<ul style="list-style-type: none"> Increases auditing to control abuse and reduce medical severities
Improve tax compliance	<ul style="list-style-type: none"> Increases tax compliance and systematically engages stakeholders (e.g., preparers) to reduce unintended fraud Increases usage of data analytics and AI to identify advertent and inadvertent fraud and targeting suspicious tax preparers
Increase non-profit engagement for LMHAs and group homes	<ul style="list-style-type: none"> Reduces risk of disruption to resident-facing services due to service worker and clinical retirements by shifting to non-profit operation
Digitize DMHAS patient record	<ul style="list-style-type: none"> Reduces risk of incorrect patient data processing and increases capacity of DMHAS facility employees to take on additional workload caused by retirements

Implementation phase of CREATES requires understanding of priorities and path forward



CREATES opportunities

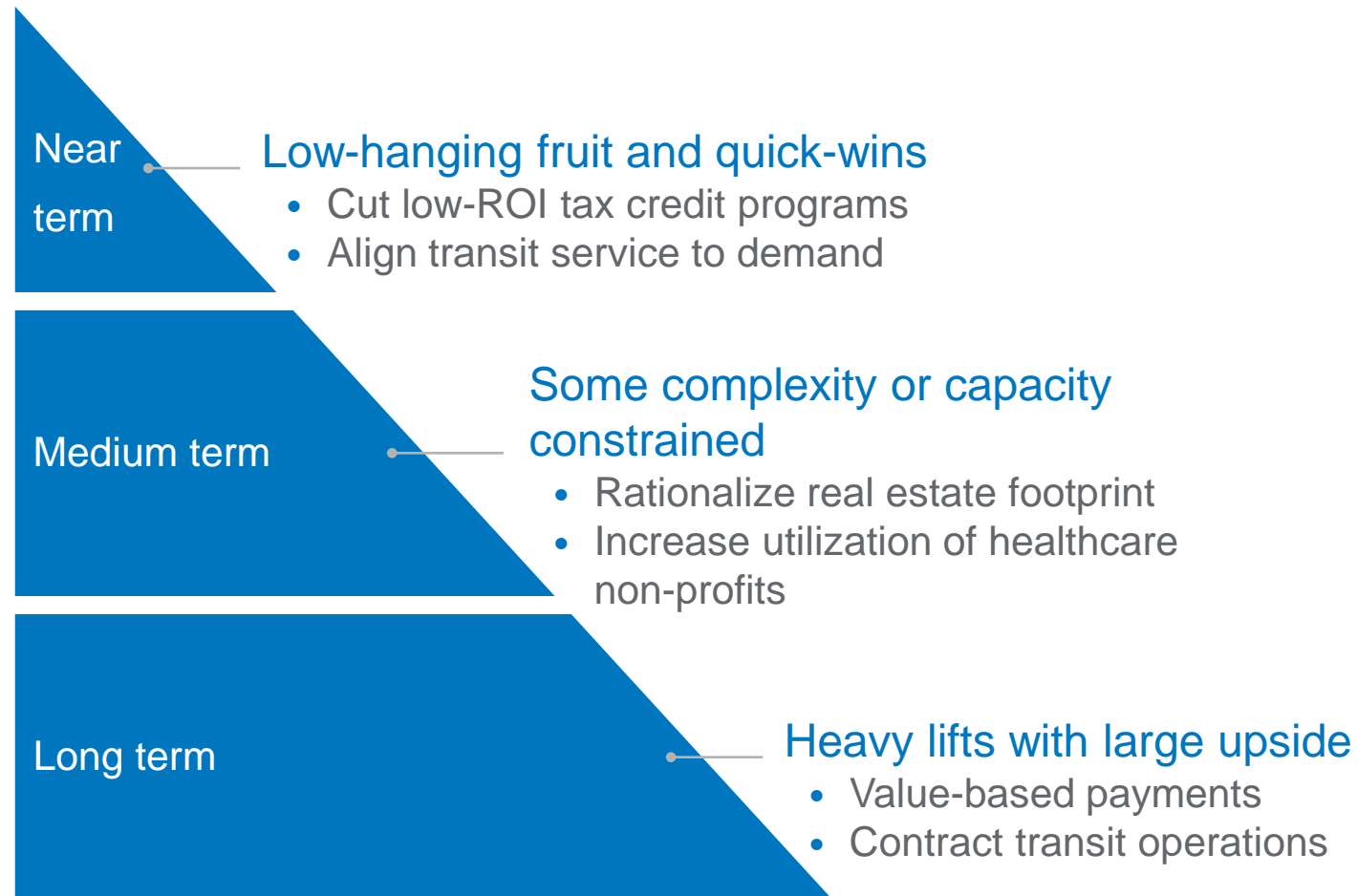
- Identified 200+ opportunities, from which 34 were filtered and will require executive attention due to complexity
- Some opportunities are already underway, while others require further planning
- Many have clear agency owners, plans and teams capable of execution – others require support in some capacity or require policy/bargaining enablers
- Across all initiatives, will need ability to track milestone progress and measure benefits

Suggested approach



- 1 Clarify accountable owner, responsible team and level of support required for each initiative
- 2 Build required capability, including central PMO to track full program
- 3 For opportunities without them, develop detailed implementation roadmap including milestones and timelines

Implementation waves provide a path to realizing opportunities while aligning on need for additional stakeholder activities







Stakeholder engagement and actions required

- Bargaining changes to provide more flexibility in work rules and streamlining hiring processes
- Legislative action to amend statutes, giving agencies the flexibility needed to modernize
- Resident input required to ensure optimal design of customer-facing initiatives

3.1

Modernize management of the state workforce

Four personnel management drivers reviewed

Drivers	Observations	Challenges	Potential opportunity
Hiring and recruiting 	<ul style="list-style-type: none"> • Current hiring processes can take 5-6 months or more to complete • Hurdles to hiring external talent • Retirement surge likely to exacerbate delays 	<ul style="list-style-type: none"> • Many changes will require bargaining • Must balance simplification of processes with appropriate checks (i.e., OPM oversight) 	<ul style="list-style-type: none"> • Streamline approval workflows and EEO/AA processes • Remove duplicative approvals • Ease burden to hire externally • Utilize AI / analytics to ID candidates <p>Required to address retirement surge, reduces absenteeism/OT, and millions of dollars in potential efficiencies</p>
Management retention 	<ul style="list-style-type: none"> • 46% eligible for retirement while others seeking BU positions • Manager comp down 10% since 2009 (inflation adjusted) • Manager retention cited as a risk in several commissioner interviews 	<ul style="list-style-type: none"> • Increasing managerial pay may be unpopular with unions, media and public – requires strong data-driven defense 	<ul style="list-style-type: none"> • Increase compensation to ensure equitable pay relative to BU workers • Communicate lack of benefit from retirement changes • Provide additional recognition and upward mobility potential <p>Required to address retirement surge</p>
Overtime expenditures 	<ul style="list-style-type: none"> • \$256m spend per year, at higher rates than peer states 	<ul style="list-style-type: none"> • Most changes require bargaining • OT is a major component of compensation for some staff • Some OT is desirable (i.e., straight-pay, variable demand) 	<ul style="list-style-type: none"> • Reduce absenteeism, optimize schedules and accelerate hiring • Amend statutes/provisions that increase OT needs • Cap pensionable OT <p>Tens of millions of dollars in annual potential savings</p>
Workers' compensation 	<ul style="list-style-type: none"> • \$105m spend per year • CT provides more generous benefits than nearby states • Excessive W.C. leads to OT needs 	<ul style="list-style-type: none"> • Most changes require bargaining or legislation • Some changes may require political capital 	<ul style="list-style-type: none"> • Limit duration for temporary disability • Increase auditing to control abuse • Focus on return-to-work (i.e., light duty) • Use settlements to opportunistically buy-out claims • Reduce medical severities <p>Millions of dollars in annual potential savings</p>

Each of these four factors have significant ties to the retirement surge and must be addressed before 2022



Hiring and Recruiting

State's already lengthy hiring timelines likely to be exacerbated by surge in vacancies

Without addressing, agencies will rely on more costly measures (e.g., overtime, TWRs)



Management Retention

Low value proposition for managers has led to difficulty in hiring and retaining

46% of managers eligible for retirement by July 1, 2022 – high risk of knowledge loss



Overtime & Absenteeism

Vacancies from retirement surge likely to increase need for OT to backfill for retirees

With fewer remaining employees, more likely to require mandatory (i.e., 2x) overtime



Workers' Compensation

Largest driver of absenteeism and OT is workers' comp

Reducing absenteeism from W.C. can free OT capacity for retirement surge

3.1.1

Streamline the hiring process

Hiring issues impact all departments



Inability to conduct workforce planning

Uncertainty on vacancy timing since employees can rescind retirement

No stringent deterrence for providing minimal / no notice period

Lack of ability to overlap employees for training



Multiple approvals needed

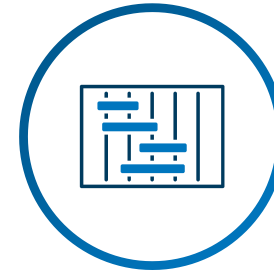
Several layers of approval required from multiple sources (e.g., agency management, DAS HRBP, OPM)



Difficult to hire external candidates

Mandatory Lists provide obstacle to identifying highest quality candidates

Minimal flexibility to considering workers' experience for salary or adjusting total comp



Lengthy review process

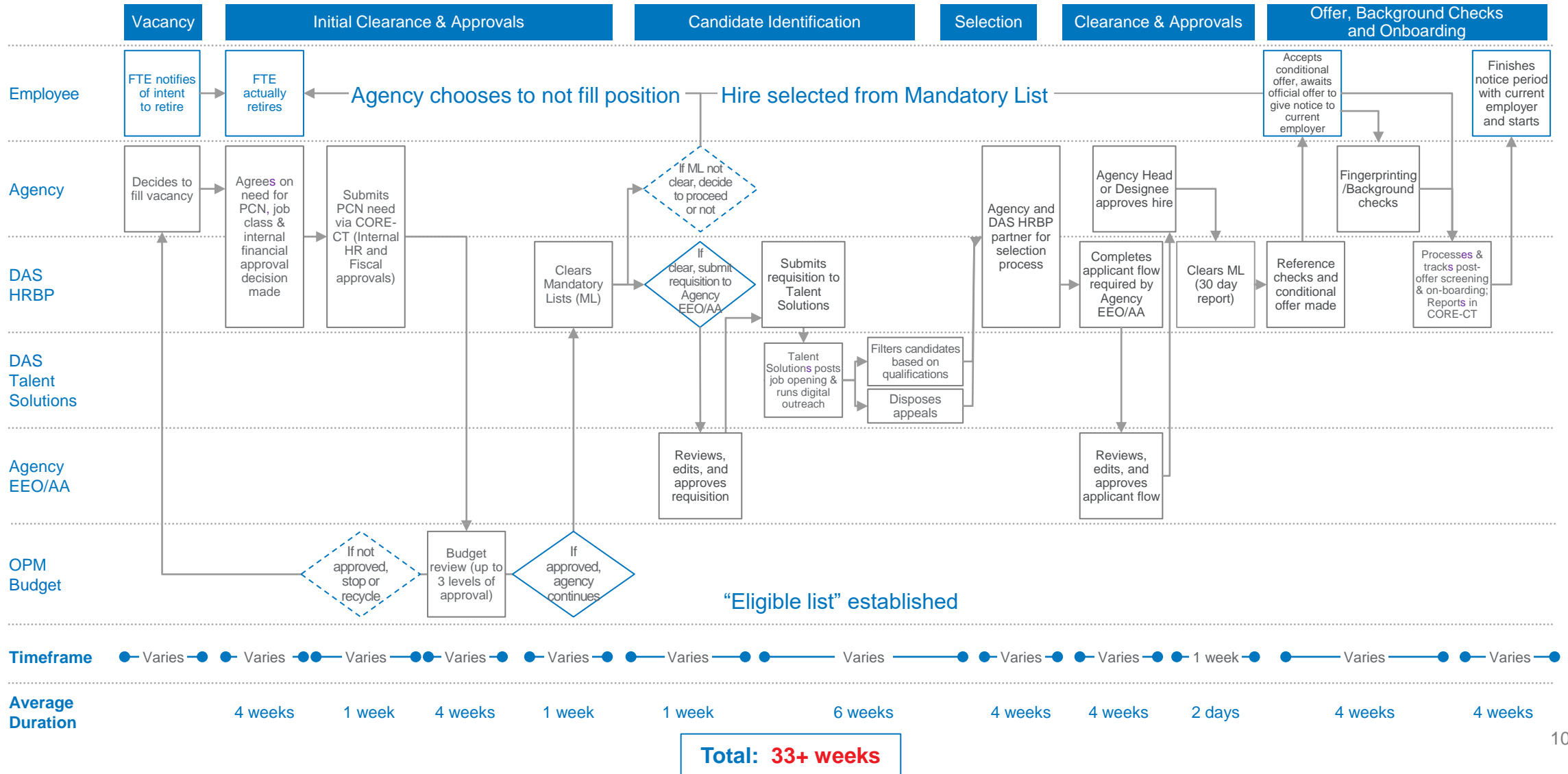
Average hiring process takes 6 months and often extends closer to a full year



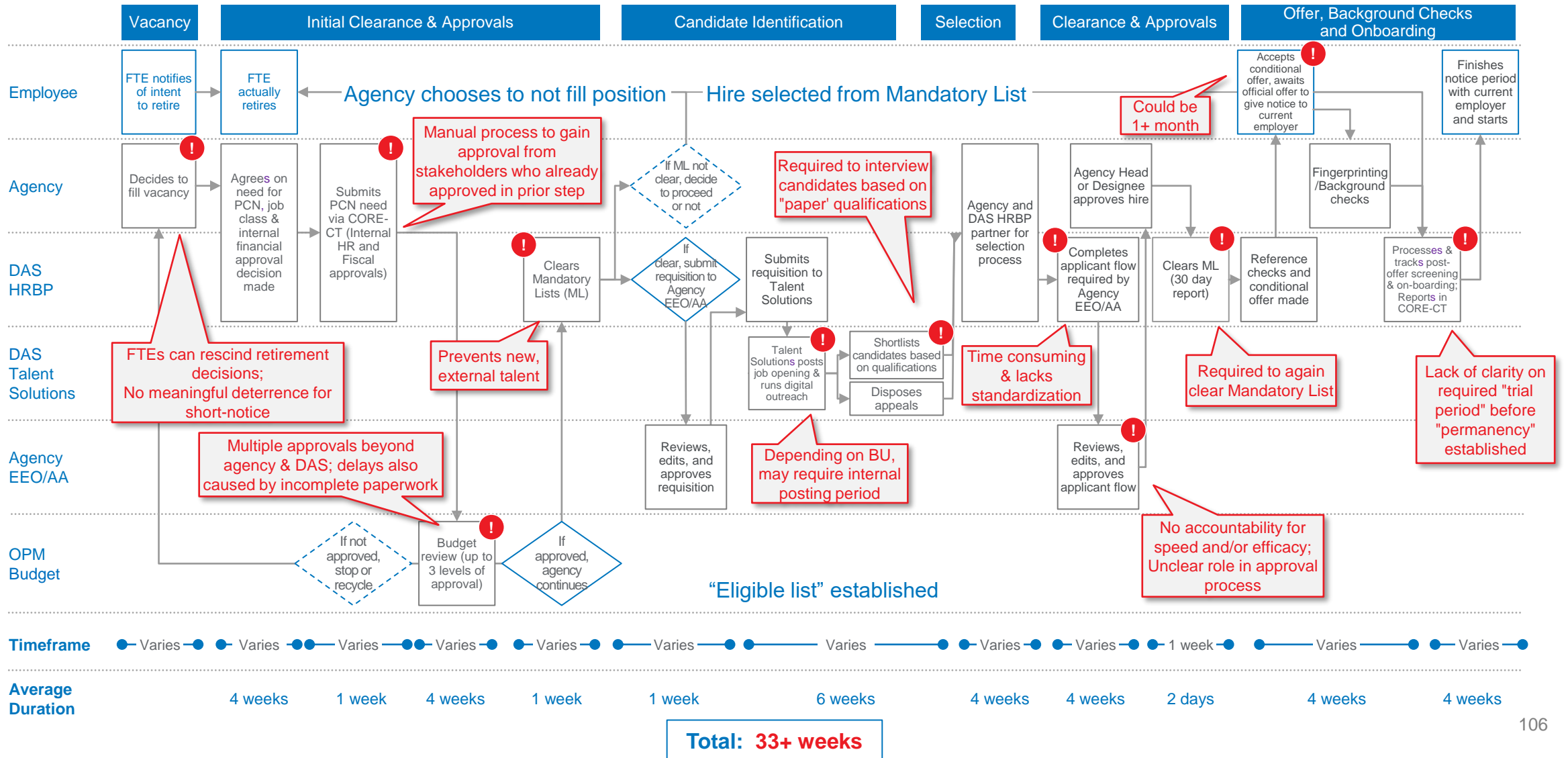
Inability to correct mistakes

Hires permanent after 6 months but cannot be laid off for poor performance without ambiguous time to demonstrate progress










Current process | Average of 33 weeks to fill vacancy driven by multiple approvals, incomplete requests, background checks and timing uncertainties



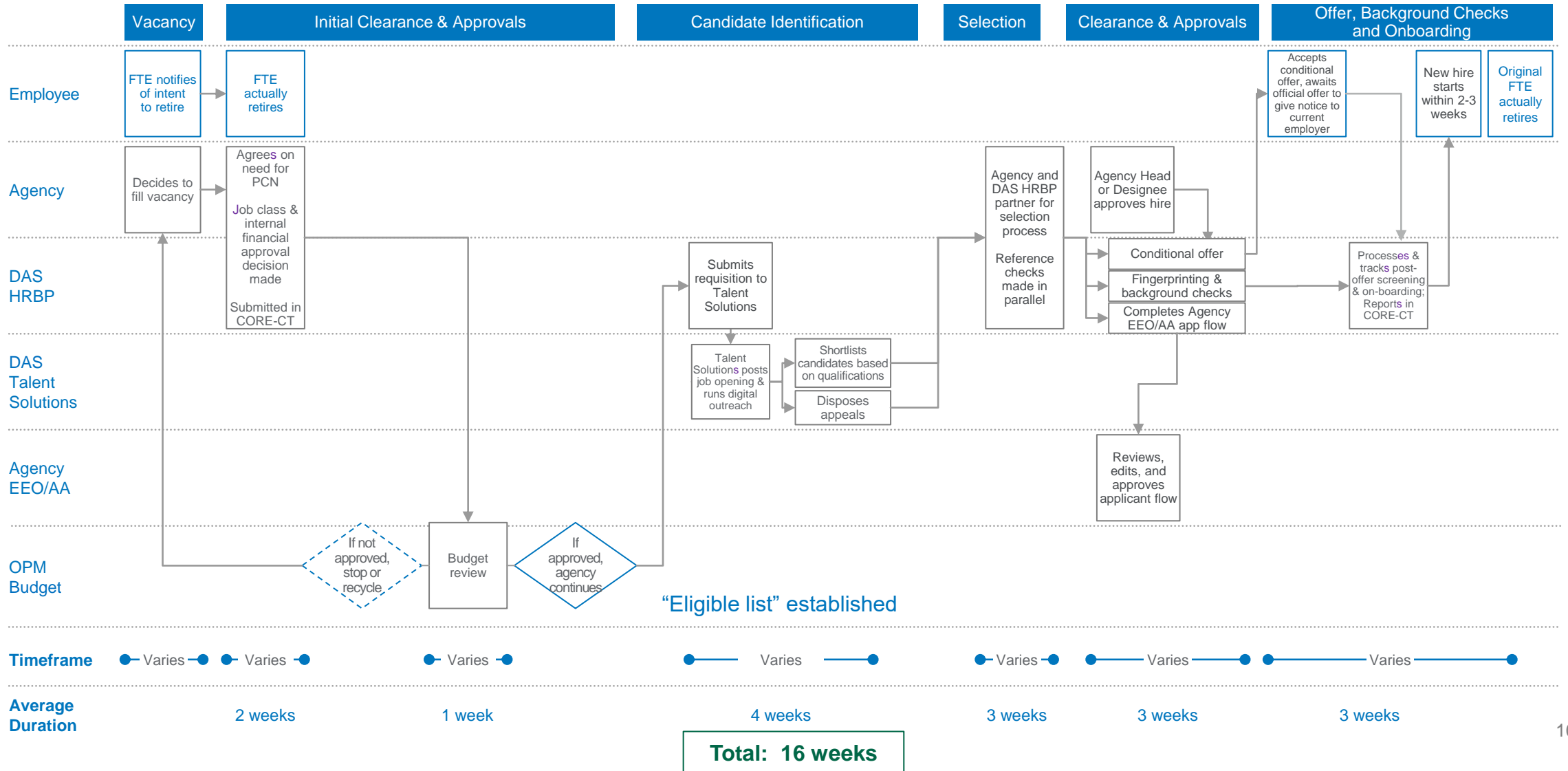
Current process | Issues observed across the hiring process



Process changes could cut months from hiring process and provide flexibility

Recommendation	Rationale	Impact
 Clarify hiring process statewide	<ul style="list-style-type: none"> Inconsistent awareness of permissible hiring processes (i.e., not knowing when they can initiate the recruitment process) 	Minimize need for TWRs
 Incentivize employees to retire on previously agreed upon date	<ul style="list-style-type: none"> Provide agencies with certainty & visibility into staffing needs, allowing them to start the process upon initial departure notice Also allows for overlap to transfer knowledge 	Immediately commence process at time of notice
 More stringent deterrence for quitting/retiring on short-notice or at inconvenient times	<ul style="list-style-type: none"> Current system has no significant consequences for workers who retire with little or no notice period (i.e., < 2 weeks); more meaningful consequences for those who may seek to return to state workforce Requires expensive stopgaps (e.g., teachers retiring October 1st) 	Minimum 2 weeks notice
 Standardize approval workflow	<ul style="list-style-type: none"> Establish consistent approval workflow integrated into CORE-CT 	1 week
 Eliminate internal-exclusive posting period & duplicative approvals	<ul style="list-style-type: none"> Delays recruitment process without any clear benefits Budget approval duplicative but provides "check"; simplify 	5+ weeks saved
 Give more discretion to agency hiring managers	<ul style="list-style-type: none"> Managers often required to interview too many candidates based on "paper" qualifications 	2-3 days saved (on average)
 Eliminate Mandatory Lists (use one-shot job fairs as needed)	<ul style="list-style-type: none"> Waste of resources if not cleared on second check, inhibits ability to hire new talent and leads to reluctant vacancies 	1+ week, avoid resource waste, remove hurdle to new talent
 Streamline, clarify & parallel process EEO/AA after offers	<ul style="list-style-type: none"> Each agency required to develop their own EEO/AA plans & reports Lack of accountability and clarity on their approval role 	1-2 weeks (at least)
 Standardize offer-acceptance and start-date window	<ul style="list-style-type: none"> Current process allows offerees to delay acceptance/start, resulting in building backlogs or needing expensive consultants/TWRs 	Up to 5 weeks + savings on more expensive workers

Proposed hiring process saves ~17 weeks by removing unnecessary steps and parallel processing while also better enabling knowledge transfer



Reforms would provide significant financial and time savings

Vacancies require combination of TWR extensions and significant overtime while jeopardizing service continuity for Connecticut residents

System strain likely to be further exacerbated by HR personnel retirements

Retirement Surge has potential to increase vacancies by 5-10x, overwhelming recruiting team

Several million

Savings from 10% reduction in overtime across non-24/7 agencies

Several million

Savings from reducing TWR usage by 15 weeks

35k+ weeks

Weeks saved per year from recruiting process

~13k weeks

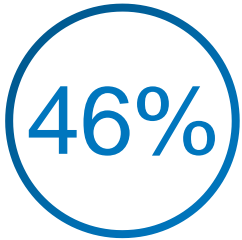
Potentially saved while filling 864 current vacancies¹

Based on vacancies as of 11/4/2020
Note: Assuming no savings on HR personnel

3.1.2

Improve manager value proposition
and retention

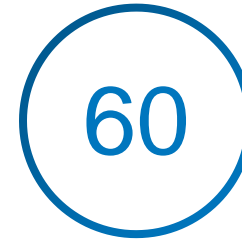
Managers significantly impacted by the retirement surge



Share of statewide managers eligible for retirement by July 1, 2022



Positions that could become vacant due to the Retirement Surge



Managers officially transitioning into bargaining unit positions, with more likely to follow



Median service years today of eligible employees

Manager value proposition for Connecticut often less appeal than value proposition for bargained employees



Effective base pay reductions

Many managers have seen comp outpaced by inflation, while some earn less in base pay than bargaining level employees



Reduced earning potential

Lack of overtime means loss of significant earnings upside



More hours and stress

Increased hours and accountability without commensurate rewards



Less job security

Lack of bargaining agreements means no protection from layoffs



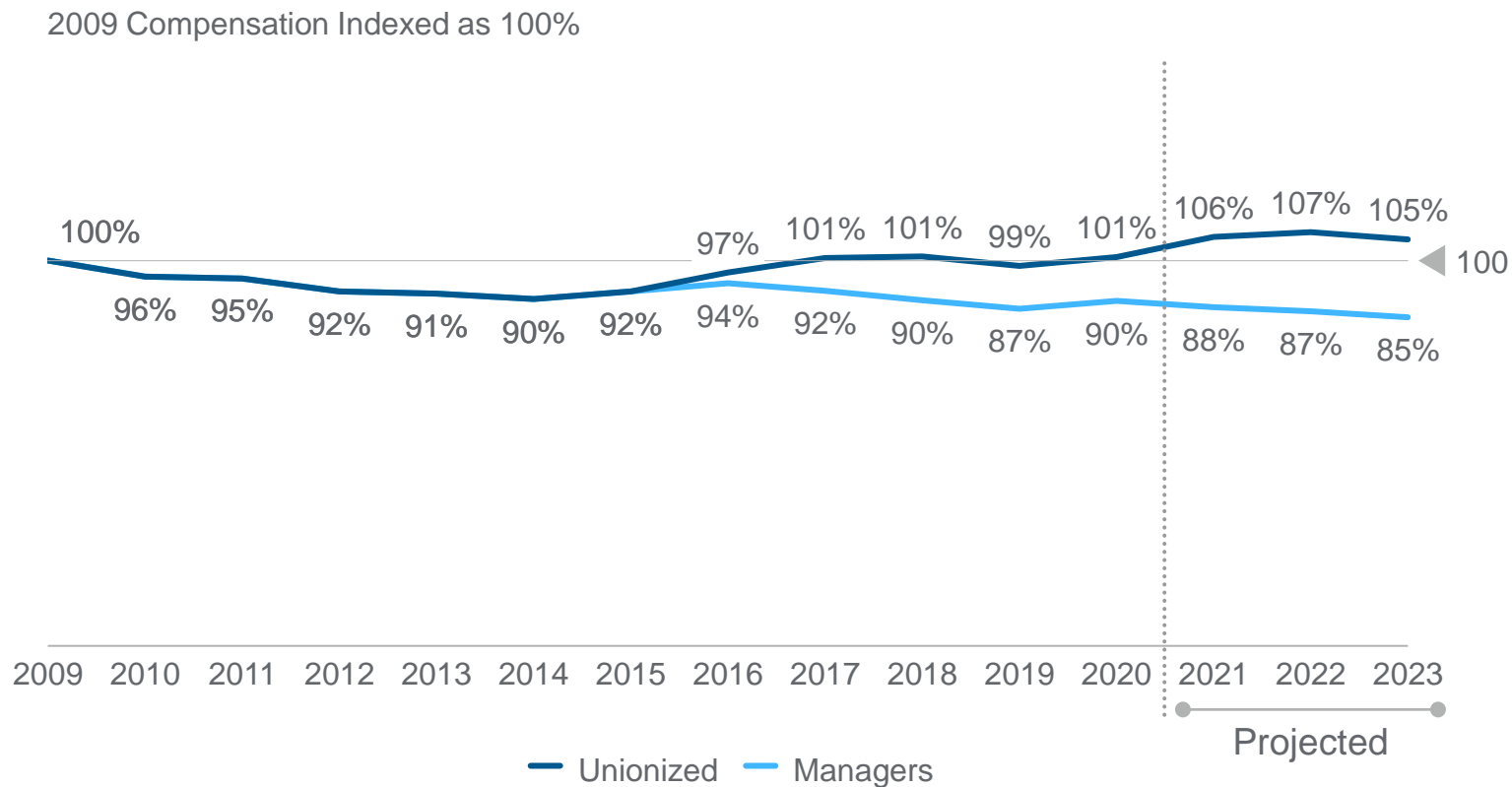
Lack of ancillary benefits

Inferior non-cash benefits (e.g., telework, per diems/stipends, etc.) and higher costs for similar healthcare

Five key elements of employee value proposition drive employee satisfaction and help reduce turnover



MAC analysis | Previous analysis showed that base compensation has improved for union employees but declined for managers, accounting for inflation



Divergence in pay began in 2015 and has continued to widen since

Example: 25% managers' comp premium in 2009 expected to be eliminated by EOY 2023

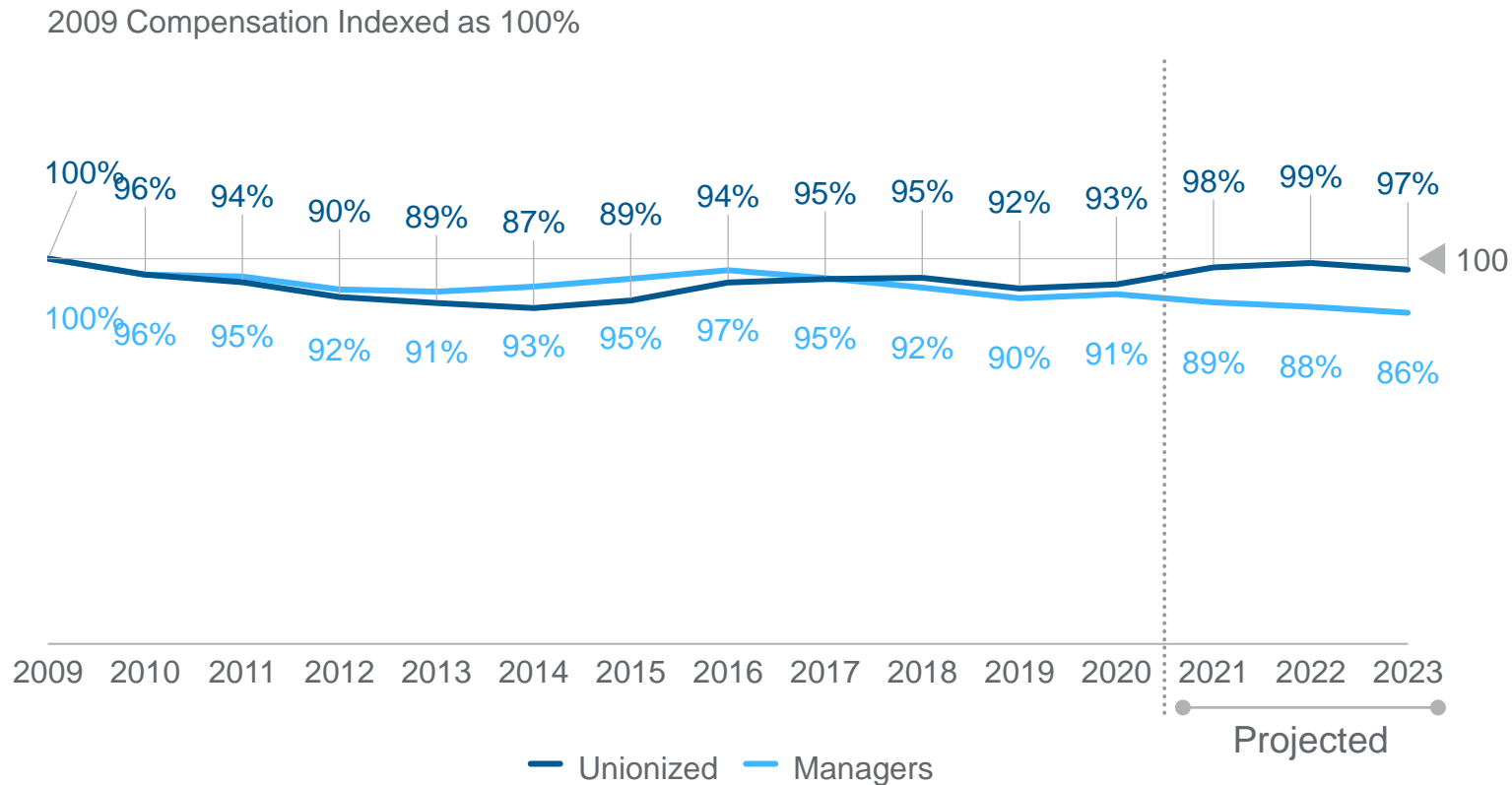


Unionized employees received 3 additional COLAs (2015, 2016, 2020)

Managers given one PARS since 2009 vs. five for unionized workers

Note: Compensation indexed to 2009 starting levels; changes include inflation, COLA, PARS (step-ups) and healthcare contributions
Source: CT Management Advisory Council

DAS Analysis | Base compensation has improved for union employees but declined for managers, accounting for inflation







Using DAS more conservative data, managers' still see relative premium reduction

Unionized employees received additional COLAs plus lump sums (not included in analysis) not received by management

Managers given one PARS since 2009 vs. five for unionized workers

Note: Compensation indexed to 2009 starting levels; changes include inflation, COLA, PARS (step-ups) and healthcare contributions
 Source: CT DAS (<https://portal.ct.gov/-/media/DAS/Statewide-HR/A---Z-Listing-Task-PDFs/Mass-Salary-Chart.pdf>)

Numerous opportunities exist to improve managers' value proposition

	Rationale	Possible actions	Additional Considerations
Increase Pay 	<ul style="list-style-type: none"> Pay inequity vs. union employees most frequent complaint raised by managers 	<ul style="list-style-type: none"> Hawaii model: any raises negotiated by labor must be matched for managers "Slow drip" approach: small annual adjustments that catch up over time Increase pay to be more competitive immediately 	<ul style="list-style-type: none"> May encounter political backlash for providing pay for leadership during a time of budgetary constraint
Communications 	<ul style="list-style-type: none"> Managers may overestimate benefits from retiring pre-2022 Recognition and purpose key to improving employees' sense of engagement and motivation² 	<ul style="list-style-type: none"> Communicate benefits from remaining beyond 2022, including offset of COLA from additional service years Increase acknowledgement and engagement from senior leadership (e.g., commissioner mentoring, statewide appreciation) 	
Performance management 	<ul style="list-style-type: none"> Focus on retaining and rewarding only top-performing managers Managers demoralized by lack of performance feedback 	<ul style="list-style-type: none"> Vary compensation and bonuses based on a clear, objective performance management system Incorporate stakeholder feedback in designing system, goals and implementation plans 	<ul style="list-style-type: none"> PM must be tailored to fit unique needs of each agency Requires continuous feedback from colleagues
Intangibles 	<ul style="list-style-type: none"> Non-monetary benefits increasingly important Managers thrive with additional autonomy and sense of career development L&D focused intangibles can improve productivity for the employer long-term 	<ul style="list-style-type: none"> Flexible work locations & schedules Additional vacation days More discretion (e.g., hiring decisions, budget control) Supplemental training/leadership & development programs (including reskilling) Opt-in internship programs to reduce burden of small tasks while also providing mentoring opportunities Access to family and financial planning workshops 	<ul style="list-style-type: none"> Many surveys show learning, career development, appreciation & WLB rank above comp for top engagement levers Antiquated sentiment pre-COVID prevented managers from working from home Also helps compete for young talent and versus private sector

HI and MA are examples of how to executive compensation improvements



Slow-Drip Increases

Approach

- Statutorily allowed non-bargaining managers to receive same or greater compensation adjustments received by BU employees

Pros

- Ensures equity gap does not diminish over time
- May discourage outsized adjustments to unionized employees if the State must match for managers

Considerations

- Fails to close existing equity gap (simply prevents wider gaps)
- Less likely to face pushback



Immediate and Variable Increases

- \$1,000 discretionary bonuses awarded to managers
- Accompanied by performance management system

- \$1,000 discretionary bonuses awarded to managers
- Accompanied by performance management system

- Requires strong leadership to "own" and communicate rationale
- Important to make metrics clear, transparent and consistent

Five best practices for rewards and recognition

Public sector agencies will have specific requirements within each of these dimensions

Select examples

Drive performance & impact



- One-off, surprise rewards for employees who go above and beyond (e.g., paid days off, lunch with leadership, gift cards)
- Annual recognition teams and individuals for their contributions to the agency and the federal government (SAMMIES, Ike awards)
- Discretionary year-end surprise small bonuses combined with public recognition ceremony

Engage leadership & workforce



- Web-based, peer nominated recognition
- Great Manager Award: experiential awards, employee nominated
- "Kudos to You" awards, where employees can recognize their peers and award reimbursement for expenses

Honor right people with right rewards



- Presidential-level recognition for recipients from across 24 agencies (supplements their own award ceremonies)
- 30-day paid leave for employees involved with new product launches
- Sabbaticals for employees ranked as consistent or high-performers

Have transparent criteria



- Personalized gift and memento for annualized tenure
- Awards that combine specific customer and employee outcomes
- Clear metrics enabling matrix placement with review panels

Build a culture of recognition

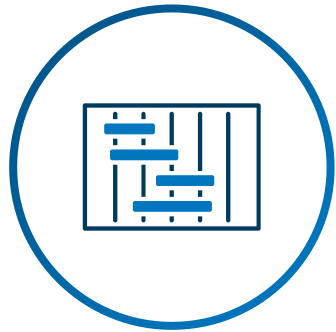


- A goal of # of times for each employee to be recognized each year
- Starting each staff meeting/huddle with a story of recognition
- Award badges to employees who reflect core values

3.1.3

Manage overtime/absenteeism

Four primary drivers of overtime across state agencies



Scheduling

Suboptimal schedules result in overlapping staff or consistent gaps



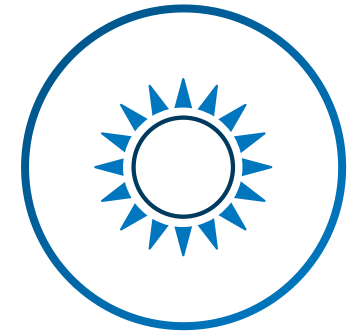
Statutes and Labor Rules

Structural causes of excess OT hours at higher costs (e.g., minimum call-backs)



Vacancies

Slow hiring process, constrained budgets and hurdles to external talent

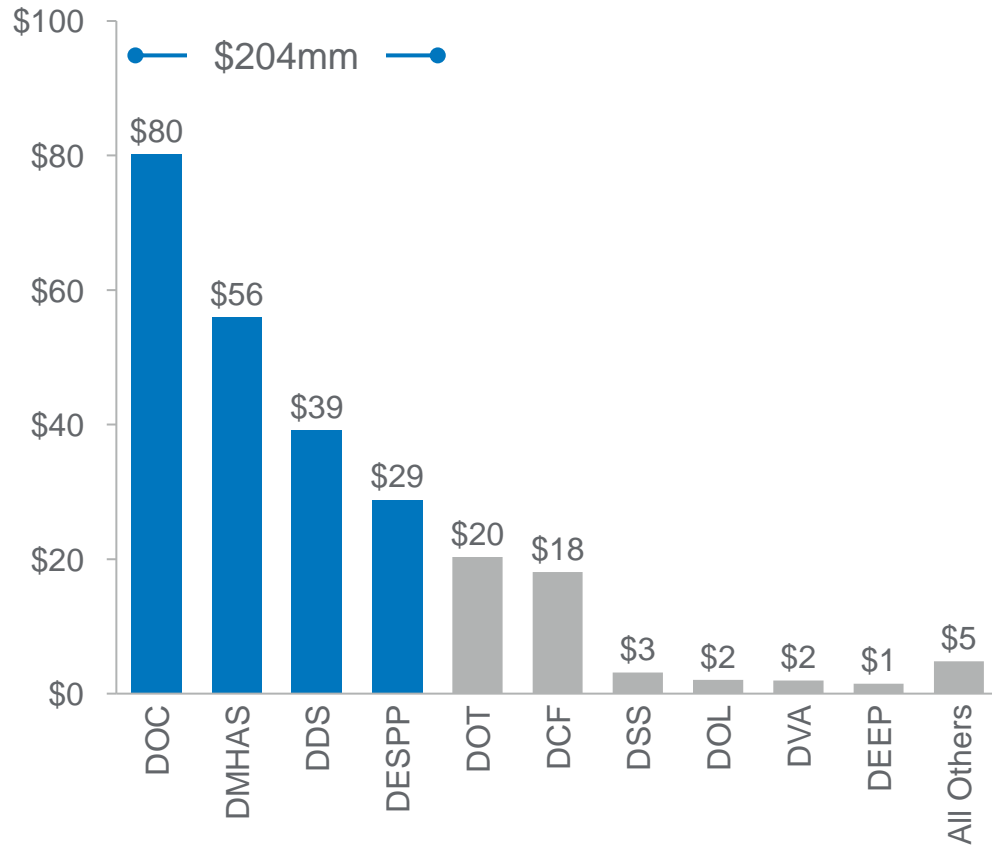


Absenteeism

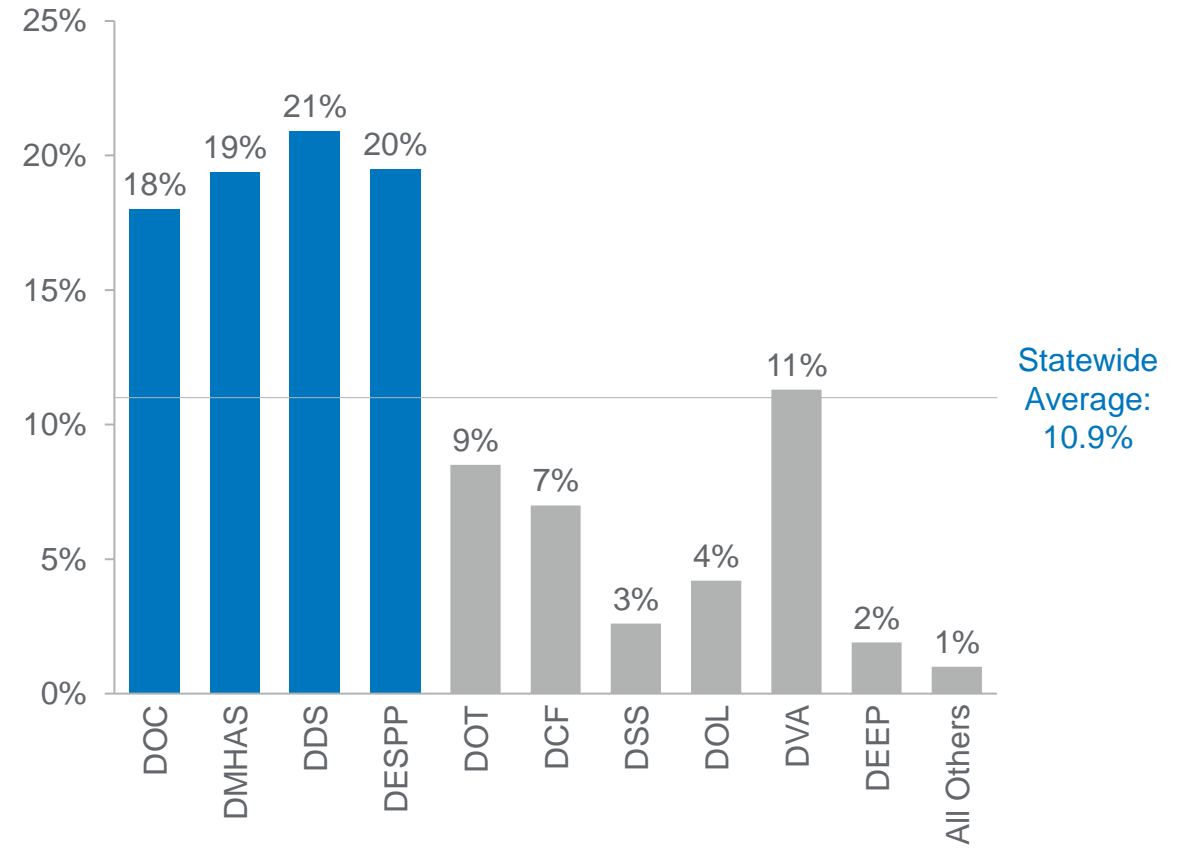
More generous benefits than neighboring states

Four agencies drive 80% of \$256mm statewide overtime spend

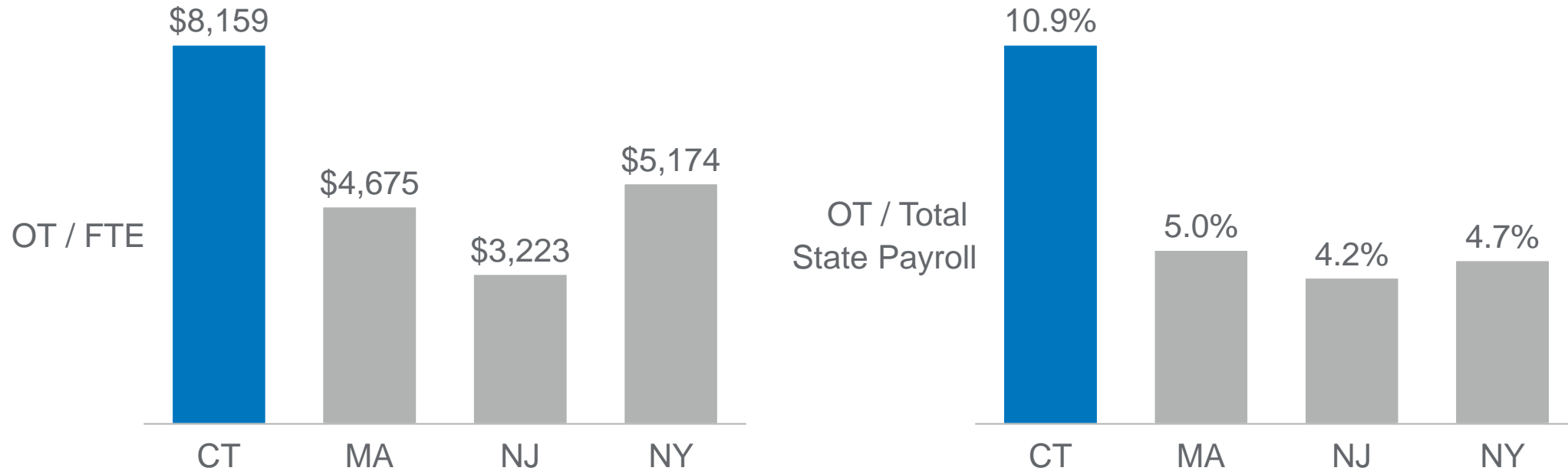
OT spend (\$mm)



Share of all wages spent on OT

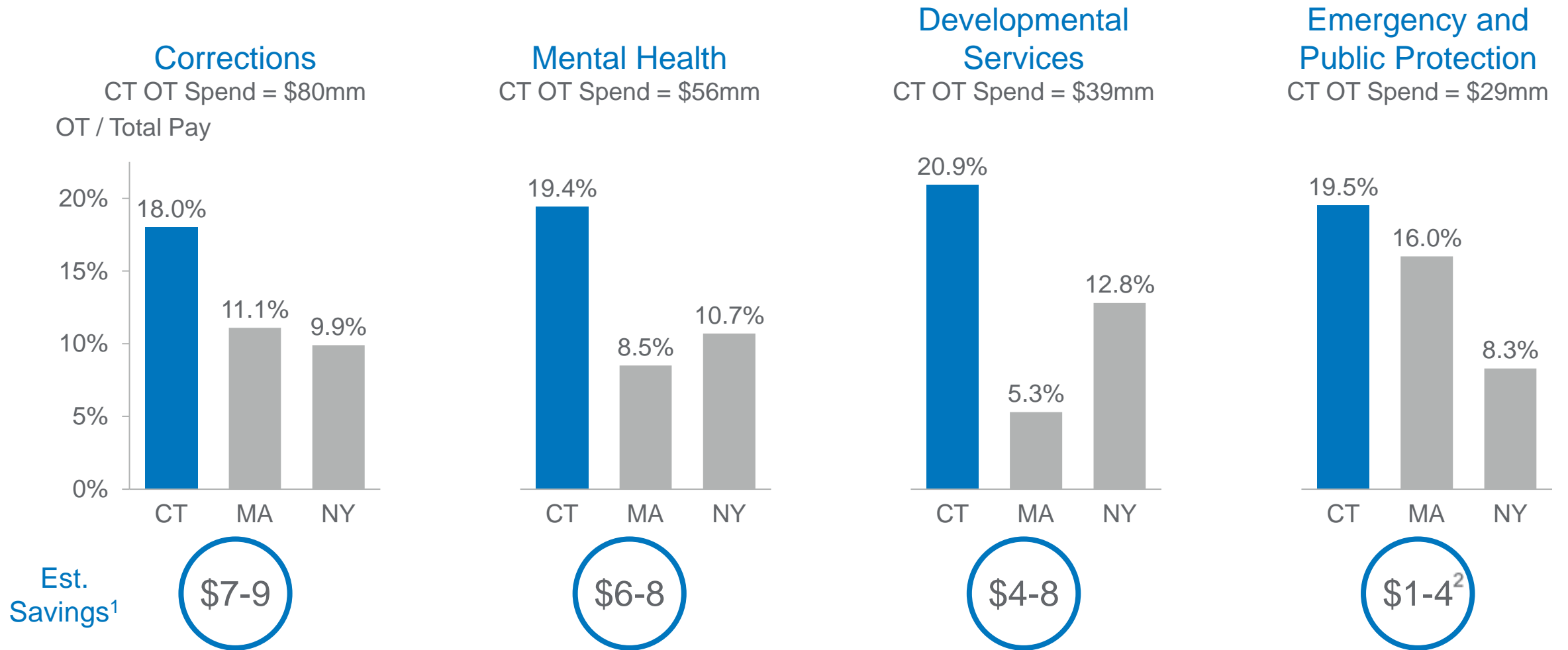


Connecticut spends a higher share of total payroll on overtime than neighboring states



Note: Total payroll includes full-time salary, part-time salary, other compensation and overtime
Source: State comptroller's office (CT, 2020; NY, 2018; MA, 2018), Office of Civil Service Commission (NJ, 2018)

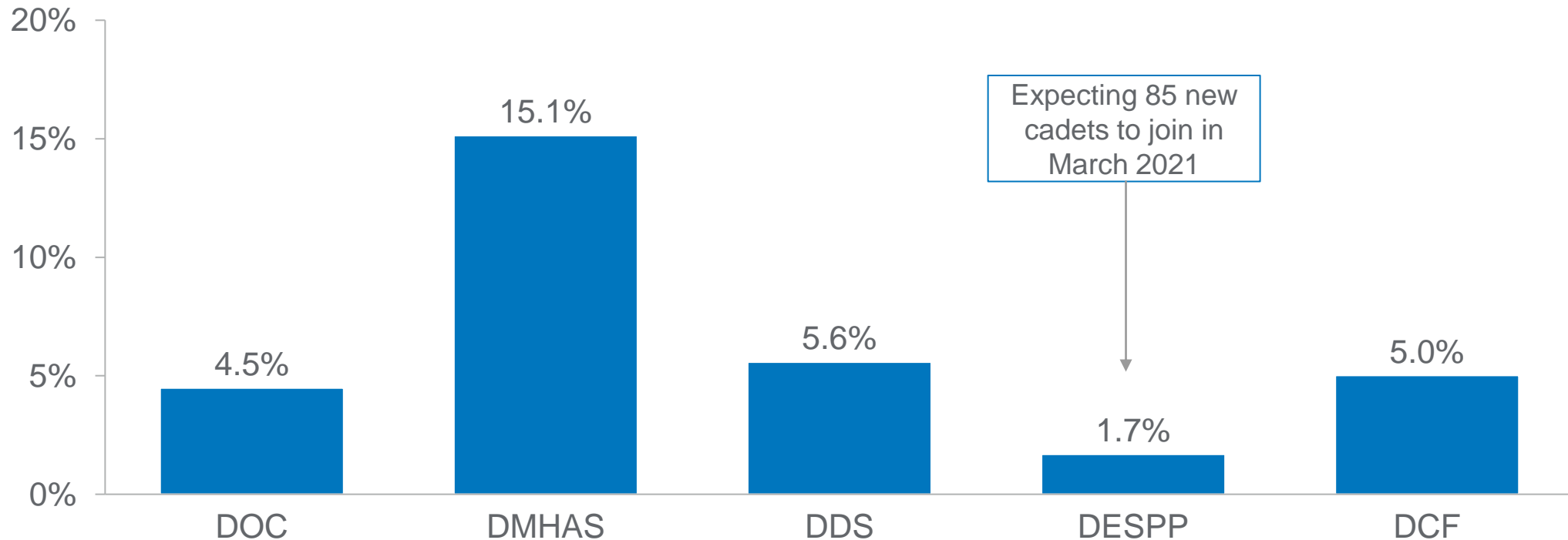
CT spends more than MA and NY across all major service categories



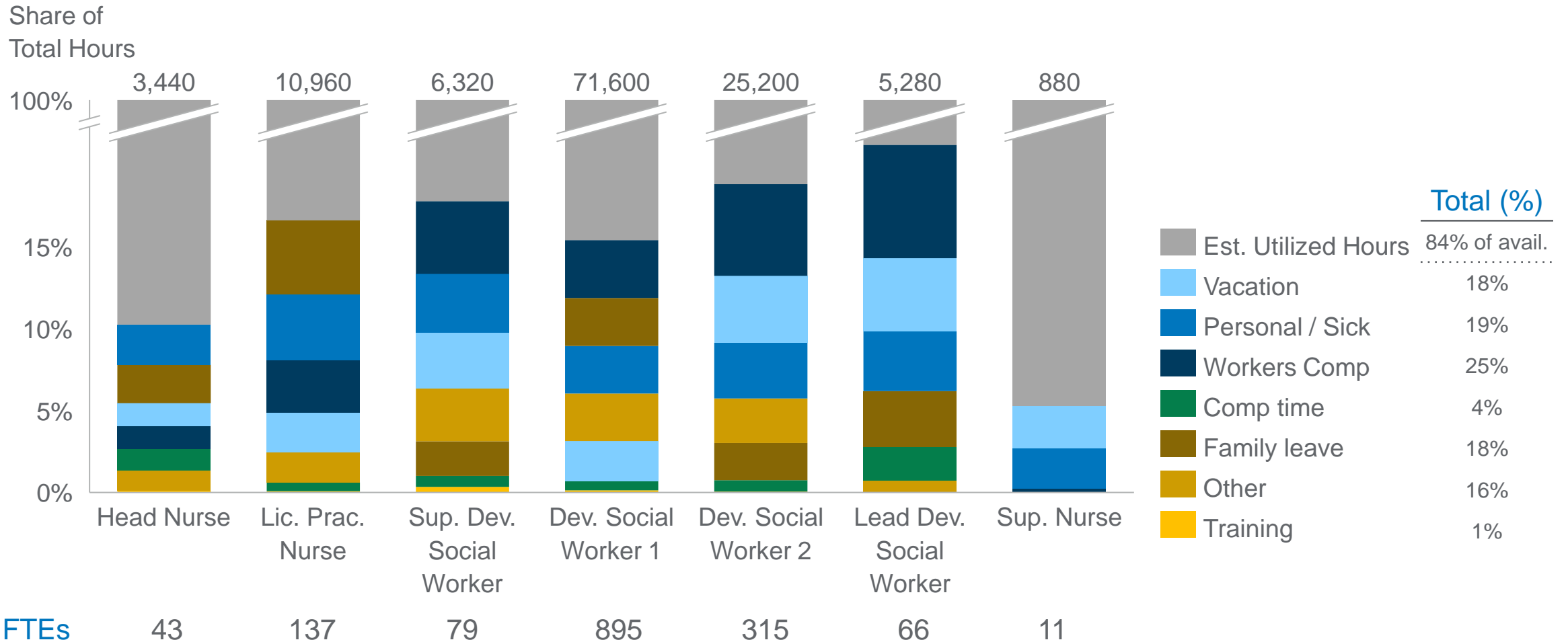
1. Estimated savings range calculated using MA and NY data and haircut by 75% 2. DESPP potential savings as high as \$10m per year at 1,100 trooper level per agency interviews
 Note: Total payroll includes full-time salary, part-time salary, other compensation and overtime
 Source: State comptroller's office (CT, 2020; NY, 2018; MA, 2018), Office of Civil Service Commission (NJ, 2018)

Pre-freeze approved vacancies vary as share of total positions across largest-OT agencies – DMHAS vacancies driven by private sector competition for nurses

Approved Vacancies
/ Positions

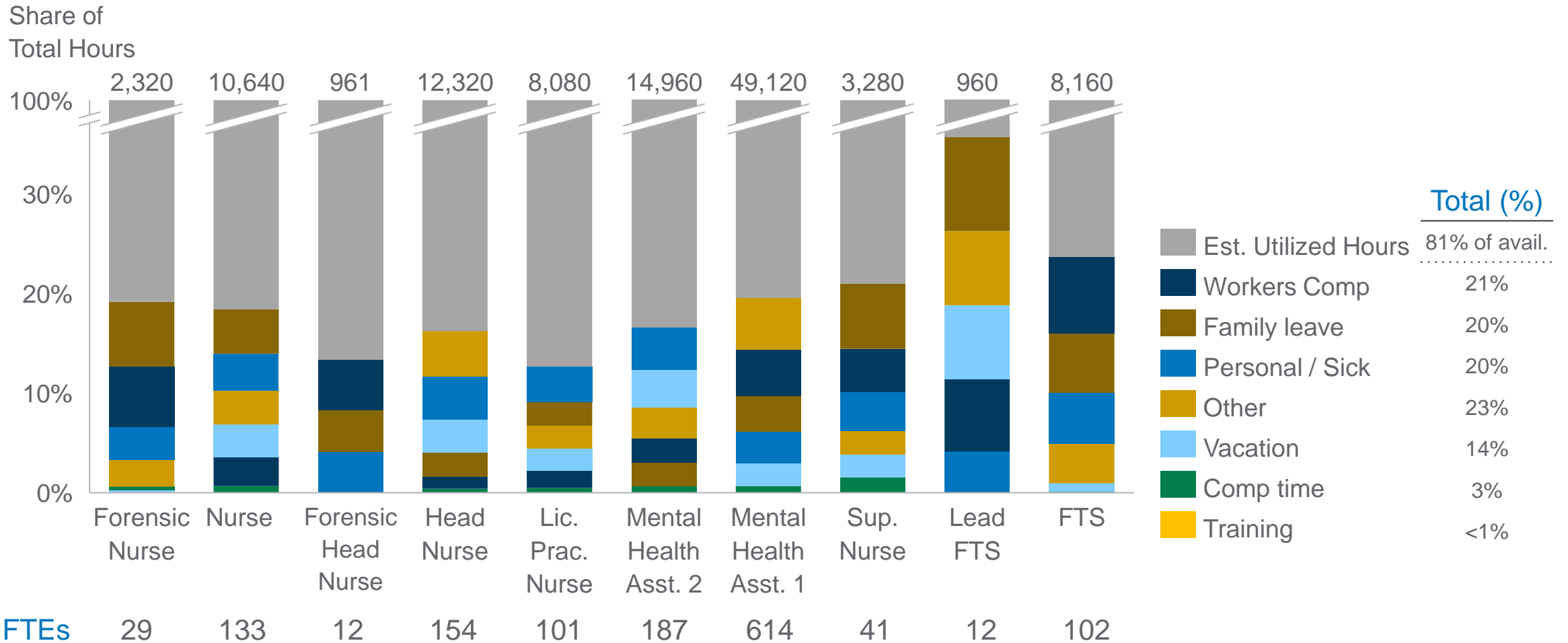


DDS | Workers Compensation drives a quarter of absenteeism, driven primarily by Development Social Worker 1 and 2 employees



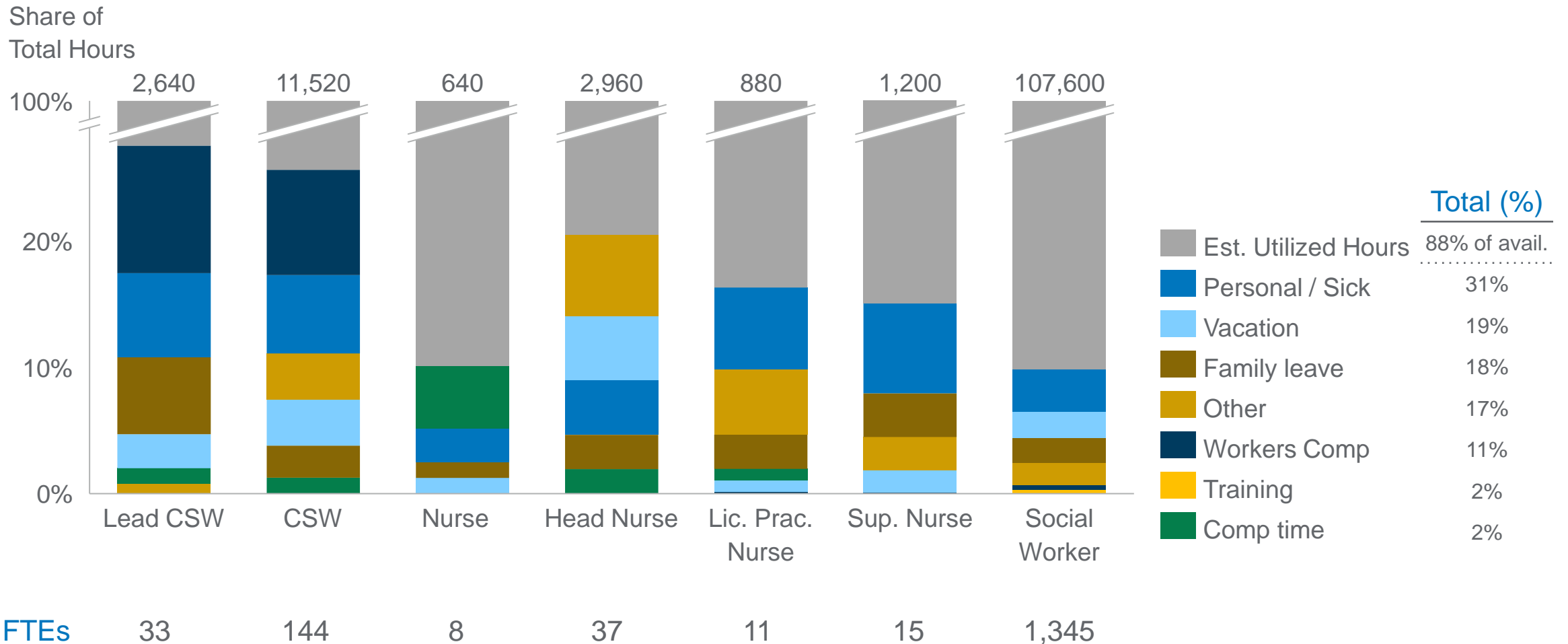
Note: Approved vacancies on September 30, 2020: 127 (5%)
 Source: Office of Labor Relations (October 2020), Employee data from STARS Database (9/20/2020)

DMHAS | Other category (23% of absenteeism) driven by unpaid sick leave as workers run out of paid time off



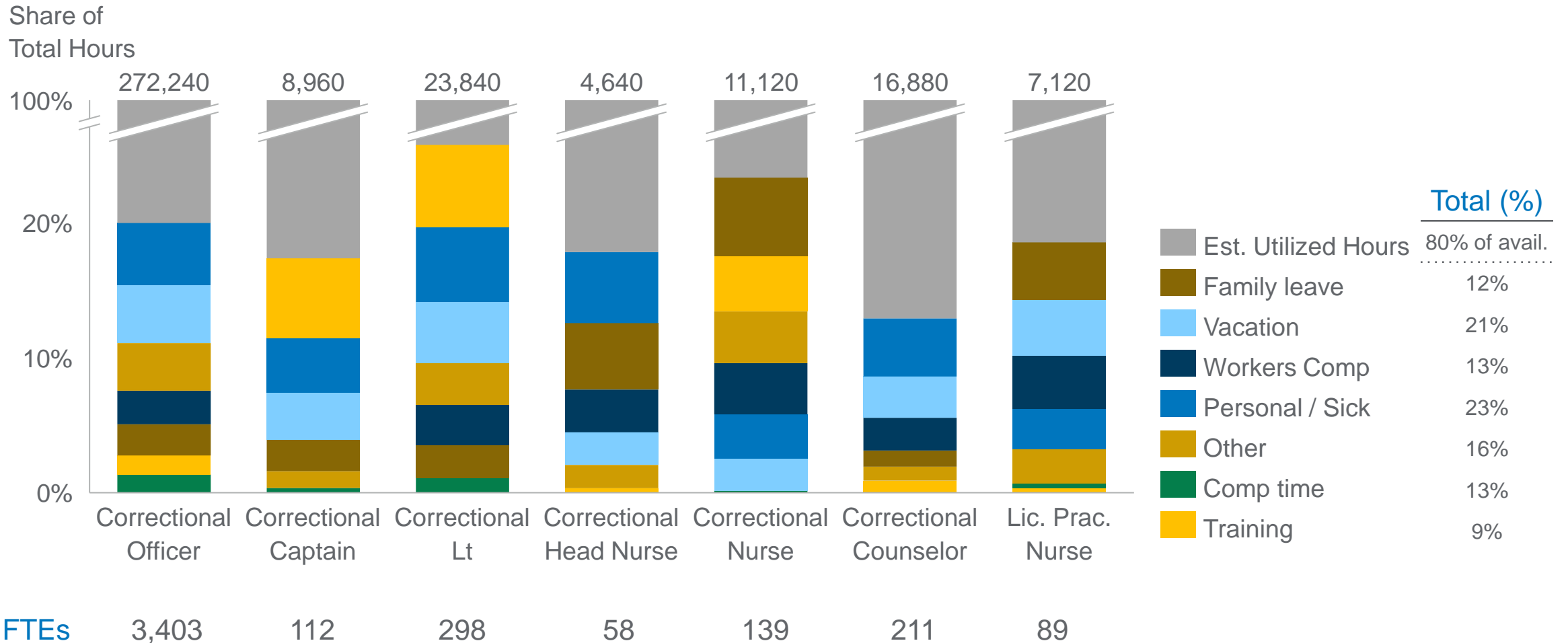
Note: Approved vacancies on September 30, 2020: 503 (15%)
 Source: Office of Labor Relations (October 2020) , Employee data from STARS Database (9/20/2020)

DCF | Personal / sick leave drives absenteeism as 9-day pay period leads to higher instances of call-outs on "non-weekend off" weeks



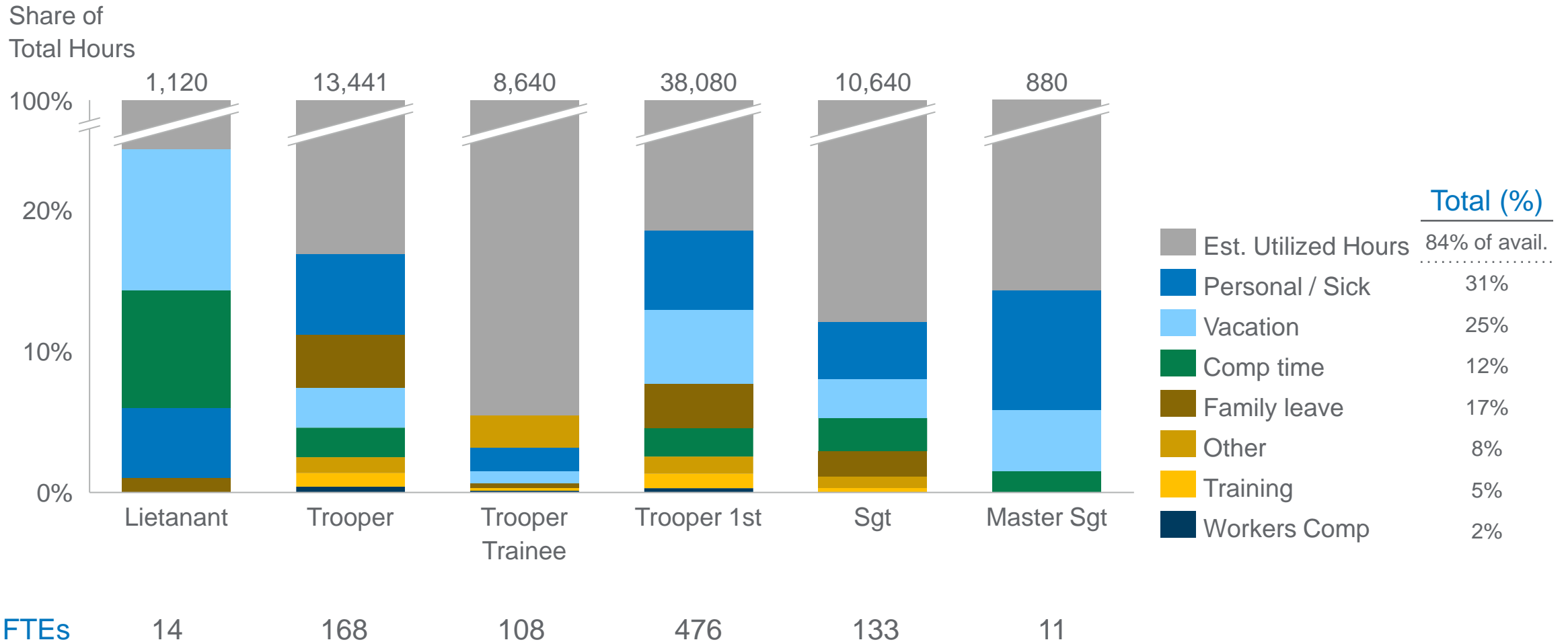
Note: Approved vacancies on September 30, 2020: 154 (5%)
 Source: Office of Labor Relations (October 2020) , Employee data from STARS Database (9/20/2020)

DOC | Absenteeism driven by personal / sick leave and vacation, while training also drives significantly higher share than other agencies



Note: Approved vacancies on September 30, 2020: 276 (4%)
 Source: Office of Labor Relations (October 2020) , Employee data from STARS Database (9/20/2020)

DPS | Absenteeism driven primarily by personal / sick leave and vacation; reduced trooper levels and expanded roles cited as factors in requested time off



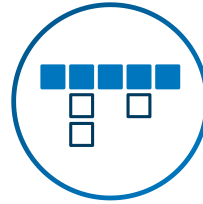
Note: Approved vacancies on September 30, 2020: 27 (2%)
 Source: Office of Labor Relations (October 2020) , Employee data from STARS Database (9/20/2020)

DDS reduced overtime spend by 10% with an approach that replicable for other agencies



Context

- Agency had significant number of vacancies in a 24/7, high stress field
- Labor workers were facing significantly long hours
- Timeline to onboard new recruits could reach a full year or more



Approach

- Replaced more expensive OT wages (50% premium on higher bases) with new employees (<40% premium on entry-level bases)
- Negotiated with labor union to remove Mandatory Lists to facilitate external hiring
- Mandatory Lists and internal posting periods were replaced with one-shot job fairs



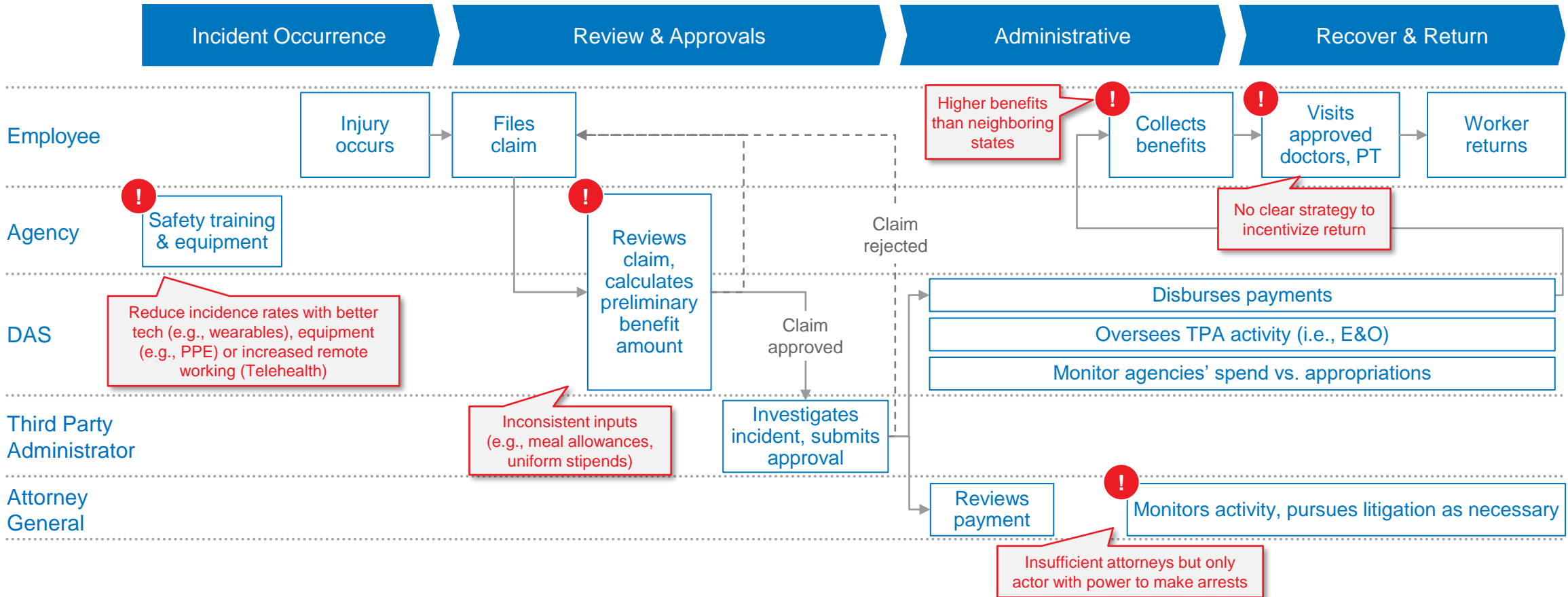
Outcome

- Reduced OT spend by 10% in a single year
- Employee satisfaction improved (i.e., pulse checks)
- Reduced hiring and recruiting timeline by three months

3.1.4

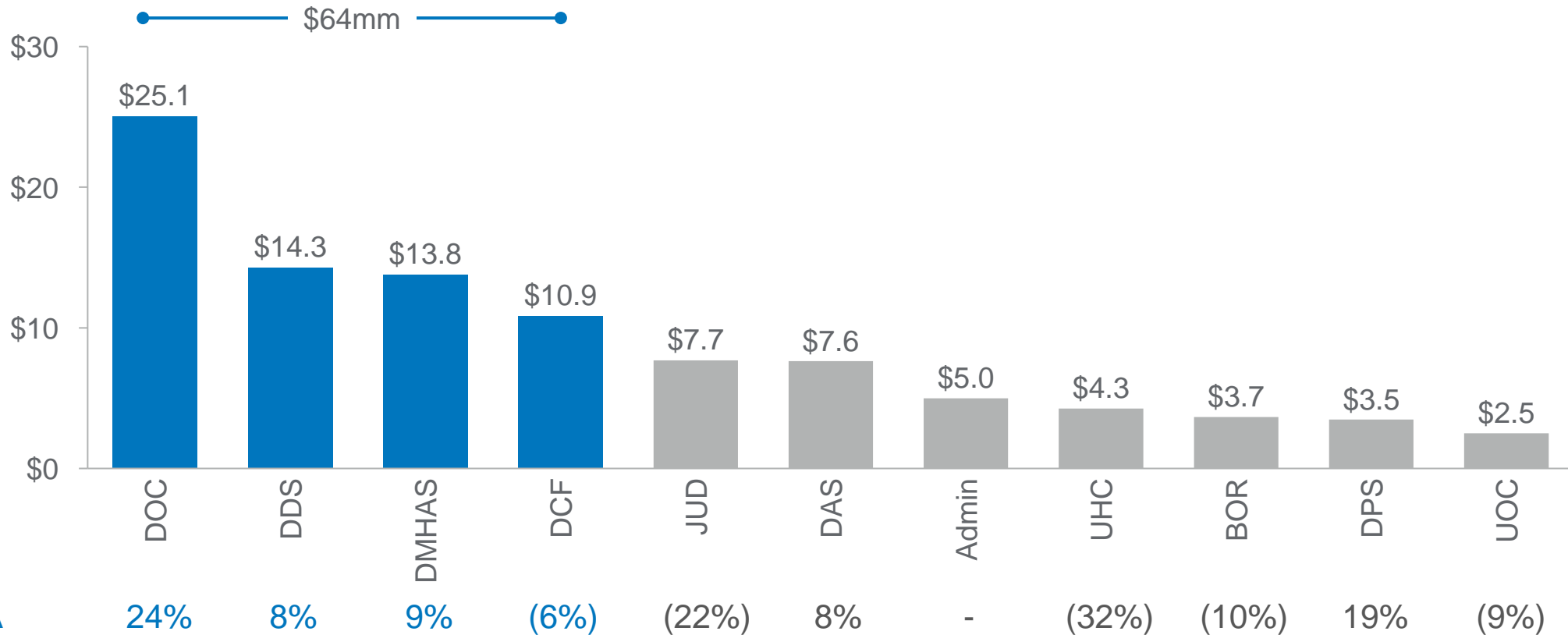
Workers' compensation

Multiple issues in current process for workers' compensation



CT spends ~\$100m per year on workers' compensation – 65% in four agencies

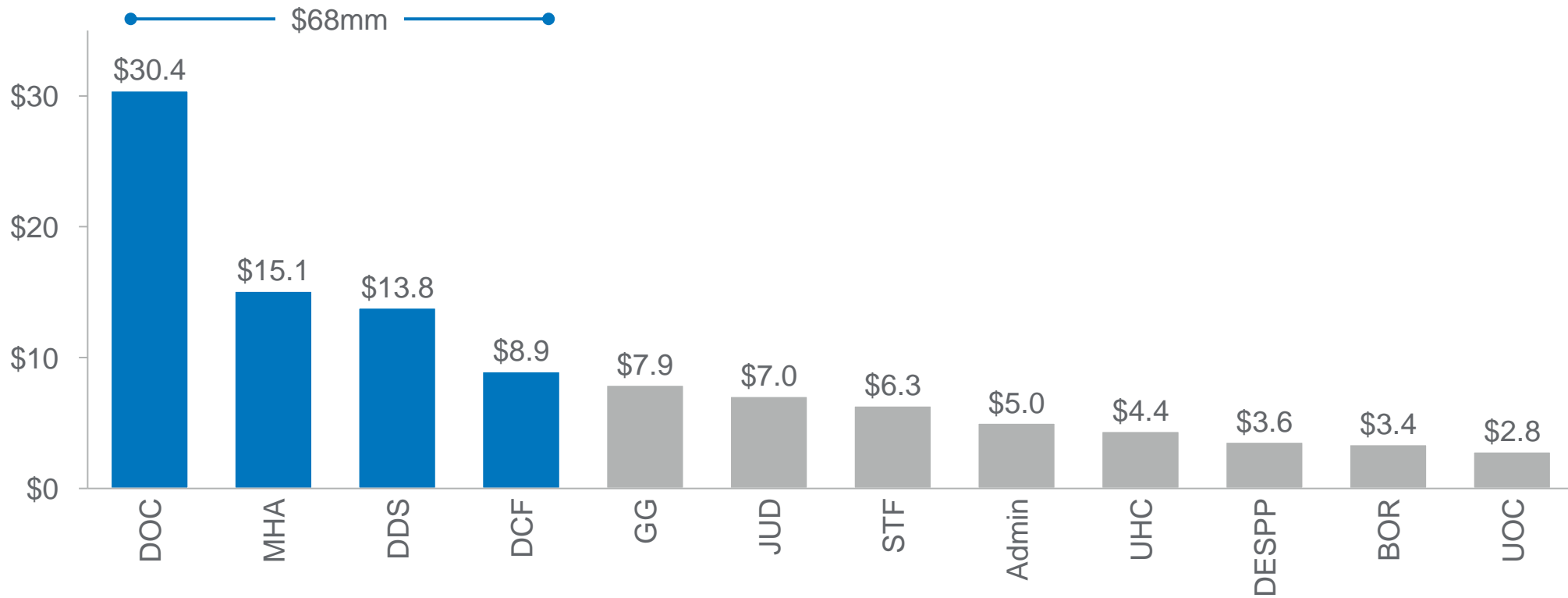
FY20 WC
Spend (\$mm)



Note: W.C. expenses include medical and indemnity spend
Source: DAS Workers Compensation Unit

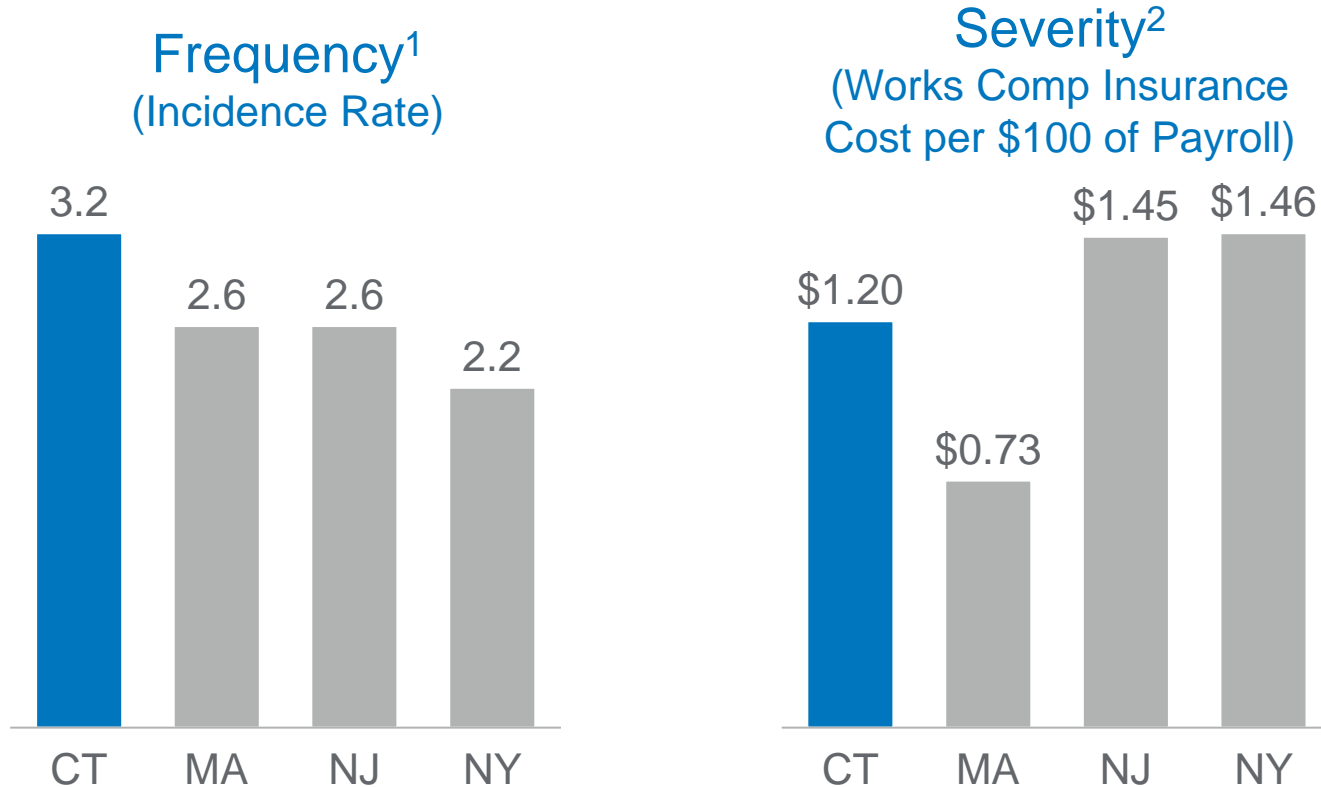
CT spends ~\$100m per year on workers' compensation – 65%+ in four agencies

FY20 WC
Spend (\$mm)



Note: W.C. expenses include medical and indemnity spend
Source: DAS Workers Compensation Unit

CT workers' comp more generous than neighbors in duration and higher-frequency



Important for Connecticut to receive periodic benchmarks of other states from T.P.A. / broker to identify sources of higher risks and cost

1. Incidence rate defined by BLS as # of injuries & illnesses per 100 FTE workers 2. Severity for this chart defined as Average W.C. Insurance Cost per \$100 of Payroll per State
Source: U.S. Bureau of Labor Statistics, National Academy of Social Insurance (NASI)

Benchmarking workers' compensation across states

		CT	MA	NY	NJ
Population (M)		3.6	6.9	19.5	8.9
Total State FTEs		33,394	85,779	236,307	132,425
Total Average Workers Compensation Rate		\$1.20	\$0.73	\$1.46	\$1.45
Incidence Rate¹		3.2	2.6	2.2	2.6
Temporary and Permanent Total Disability	Benefit	75% after-tax	60% (temporary) / 67% (permanent)	2/3 * avg. weekly wage * % of disability	70% of gross wage
	Max weekly benefit	\$1,373 (total) \$1,174 (partial)	\$1,488	\$967	\$969
	Min weekly benefit	\$275	\$298	N/A	\$258
	Duration	Life	156 weeks	< 525 weeks	450 weeks
Temporary Partial Disability	Benefit	75% after-tax	60% of wage difference but < 75% of TTD benefits	2/3 * avg. weekly wage * % of disability	70%
	Max weekly benefit	\$1,174	\$1,488	\$967	\$969
	Min weekly benefit	None	\$298	\$150	\$258
	Duration	Life	260 weeks	< 525 weeks	400 weeks
Permanent Partial Disability	Benefit	Varies by schedule	Varies by schedule	Varies by schedule; 2/3 of earnings differential	Varies by schedule
	Max weekly benefit	\$1,174	\$1,498	Varies by schedule	\$969
	Min weekly benefit	\$50	\$298	Varies by schedule	\$35
	Duration	< 520 weeks	Life	< 525 weeks	< 600 weeks

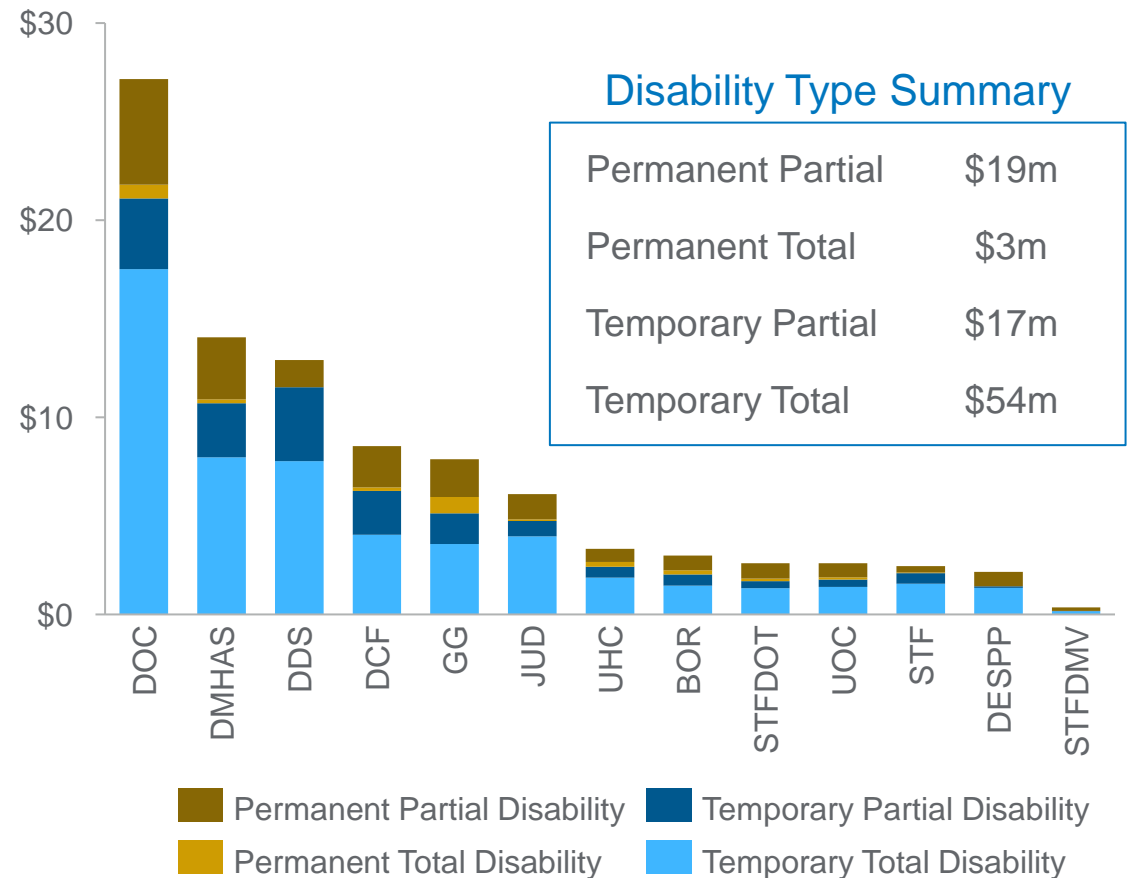
Sources: <https://wcc.state.ct.us/memos/2020/2020-18.htm>; https://www.bls.gov/iif/soii-chart-data-2018.htm#BLS_table_8_footnotes; <https://wcc.state.ct.us/download/acrobat/Benefit-Rate-Table-2020-2021.pdf>; <https://www.nj.gov/labor/wc/content/stats.html#Benefit-Rates>; <https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/>; <https://www.mass.gov/service-details/learn-about-workers-compensation-benefits>

CT has significant temporary disability expenditures (76% of total W.C.) as well as more generous terms than neighbors, including lifetime temporary disability

	Temp. Partial	Temp. Total
CT	Life	Life
MA	156 weeks	260 weeks
NJ	400 weeks	450 weeks
NY	< 525 weeks	< 525 weeks



FY20 W.C. Expense (\$m)



Note: W.C. expense includes medical and indemnity spend
 Source: DAS Workers Compensation Unit

Four main cost drivers could lead to significant savings in workers' compensation

Cost Drivers

Observations

Challenges

Potential opportunity

Frequency



- Higher incidence rates than neighboring states
- Majority of claim expenses come from three agencies (DOC, DDS, DMHAS)

- Resources needed to implement agency-specific training programs (e.g., costs for wearables, staff)
- Telework benefits not applicable to DOC (highest W.C. costs)

- Receive quarterly-annual benchmarking from T.P.A.
- Workplace safety training, equipment & wellness programs
- Incentivize managers to drive incidents lower
- Investigate root causes of injuries
- Teleworking where possible to reduce injury potential
- Fraud prevention & detection through Insurtech, cross-state DOL data sharing and focusing on high claim doctors/offices

\$2-4mm

Severity (Medical and Indemnity)



- Complicated benefit calculations due to varying statutes
- One of only States in the country to avoid enacting reforms providing less generous benefits since 2004
- Expenses split 60/40 among indemnity and medical, respectively

- Significant political capital required
- Multiple cost factors may result in more limited choices for beneficiaries (e.g., generics, physician choice, etc.)

- Using formularies to control outliers / caps on reimbursement (when more cost-effective alternatives are available)
- Preferred drug list (PDL) for W.C. and Medicaid programs (e.g., WA state) that leverages evidence-based drug review process
- Utilize settlements fund to opportunistically buy-out claims
- Conduct medical bill reviews to minimize rack-rate payments
- Cap on maximum wage coverage
- Buy-outs to reduce NPV of expenditures
- Exclusion of work-related comp. ancillary to base salary (e.g., uniform stipend)
- Partner with younger, less expensive doctors
- Offload risk from balance sheet via re-insurance

\$1-5m

Duration of claims paid



- No cap on "temporary" total benefits (MA caps at 3 years)
- Currently spending \$22mm on claims beyond 8 years old; unclear split between temporary and permanent

- Significant political capital required
- Consideration required for most significant injuries (e.g. amputees)

- Case management driven by outcomes
- Caps on duration of wages paid
- Returning employees back to work more quickly (return-to-work)
- Full-time, Part-time, Light duty/transfers
- Offsets from payments upon retirement from SS, pension benefits, etc.

\$1-2m in potential savings by reducing spend on 15+ year claims by 10-20%

Administrative costs



- Third-party fee of \$5mm p.a.

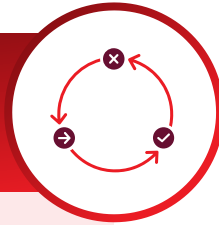
- Potential learning curve for new Administrator

- T.P.A. re-bid to ensure maximum service value, including scaling coverage across State government for similar oversight functions (e.g., Medicaid, OT, Family Leave)
- Reductions in E&O
- Maximizing value via benchmarking, added services, etc.

TBD

Ideal future design of workers' compensation program focuses on reducing costs and complexity

Current Process Pain-Points and Inefficiencies



- High benefits relative to neighboring states
- Complex calculation of eligible wages
- No cap on duration of “temporary” workers’ compensation
 - 100% of wages for 5 years, 50% thereafter
- Insufficient focus on returning workers
- Lack of investigators and arrest powers
 - 1 attorney for all municipalities & employers
- No central resources to assist agencies on safety and injury prevention strategies
- Agencies process claims and submit expense reimbursements to DAS



Ideal Future Design

- 70% cap on wages for eligible workers
- Standard benefit calculations (i.e., salary only)
- 3 year cap on maximum allowed wages for temporary workers’ compensation benefits
- Incentivize employees to return to work, even if partial or in alternative roles
- More transparency and flexibility around settlements to reduce long-term costs
- Agencies responsible for implementing workplace safety training and monitoring with performance impacts to reimbursement shares

Multiple levers can be pursued to provide savings on workers' comp expenses



Frequency of Claims

- Reduce frequency to be in-line with MA (\$2-4mm savings)
 - Investigate cases to ID causes
 - Target abusers (individuals, doctors) using advanced analytics & social media; publicize fraudulent actors
 - Incentivize managers to improve workplace safety
 - Dedicate safety training units at high incidence facilities
 - Encourage wellness programs



Severity of Claims

- Reduce indemnity and medical costs (60/40 split)
 - Conduct medical bill reviews to minimize rack-rate payments
 - Partner with younger doctors
 - Increase funding to buy-out long-term claims at discounted lump sums
 - Disincentivize use of non-generics (when feasible)
 - Simplify benefit calculations (i.e., work apparel stipends)



Claim Duration

- Cut length of claims for temporary and partial disabilities
 - Cap temporary disability terms to be in-line with neighboring states (3-8 years)
 - Monitor physical therapy utilization rates
 - Utilize case managers with outcome-driven payments
 - More strongly emphasize back-to-work programs including expanded light-duty roles

3.1.5

Return corrections staffing to previous level

Overview of Department of Corrections facilities and staffing

Facility Level(s)	Facility	Type of Facility	Location	Staff		Inmate Population		Inmates per CO		Physical Bed Capacity		Facility Use		Building Date	Trade Programs
				Total	COs	2019	2020	2019	2020	2018	2019	2020			
2	Willard-Cybulski CI	CI	Enfield	218	155	1103	434	7.12	2.80	1104	100%	33%	1990	Yes	
3	Brooklyn CI	CI	Brooklyn	113	78	452	321	5.79	4.12	456	99%	66%	1990		
3	Carl Robinson CI	CI	Enfield	332	249	1413	807	5.67	3.24	1441	98%	55%	1985	Yes	
3	Osborn CI	CI	Somers	347	279	1322	988	4.74	3.54	1886	70%	48%	1963	Yes	
4	Bridgeport CC	CC	Bridgeport	254	179	690	598	3.85	3.34	840	82%	74%	1958		
4	Cheshire CI	CI	Cheshire	450	314	1234	1098	3.93	3.50	1392	89%	79%	1913	Yes	
4	Garner CI	CI – Mental Health	New Town	275	195	543	521	2.78	2.67	684	79%	72%	1992	Yes	
4	Hartford CC & UCHC Medical Unit	CC & Medical Unit	Hartford	324	244	869	733	3.56	3.00	984	88%	76%	1977		
4	Manson Youth Institute	Youth	Cheshire	285	314	286	215	0.91	0.68	670	43%	33%	1982	Yes	
4	New Haven CC	CC	New Haven	252	183	689	607	3.77	3.32	716	96%	88%	1976		
5	Northern CI	CI	Somers	209	165	80	90	0.48	0.55	584	14%	14%	1995		
2 - 5	York CI	CI - Female	Niantic	505	346	907	516	2.62	1.49	1458	62%	34%	1994	Yes	
3 & 4	Corrigan-Radgowski CI	CI	Montville	411	300	727	845	2.42	2.82	1489	49%	38%	1994		
4 & 5	MacDougall-Walker CI	CI	Suffield	589	437	1441	1813	3.30	4.15	2151	67%	61%	1993	Yes	

State average was 3.6; currently 2.8 compared to U.S. average of 4.0

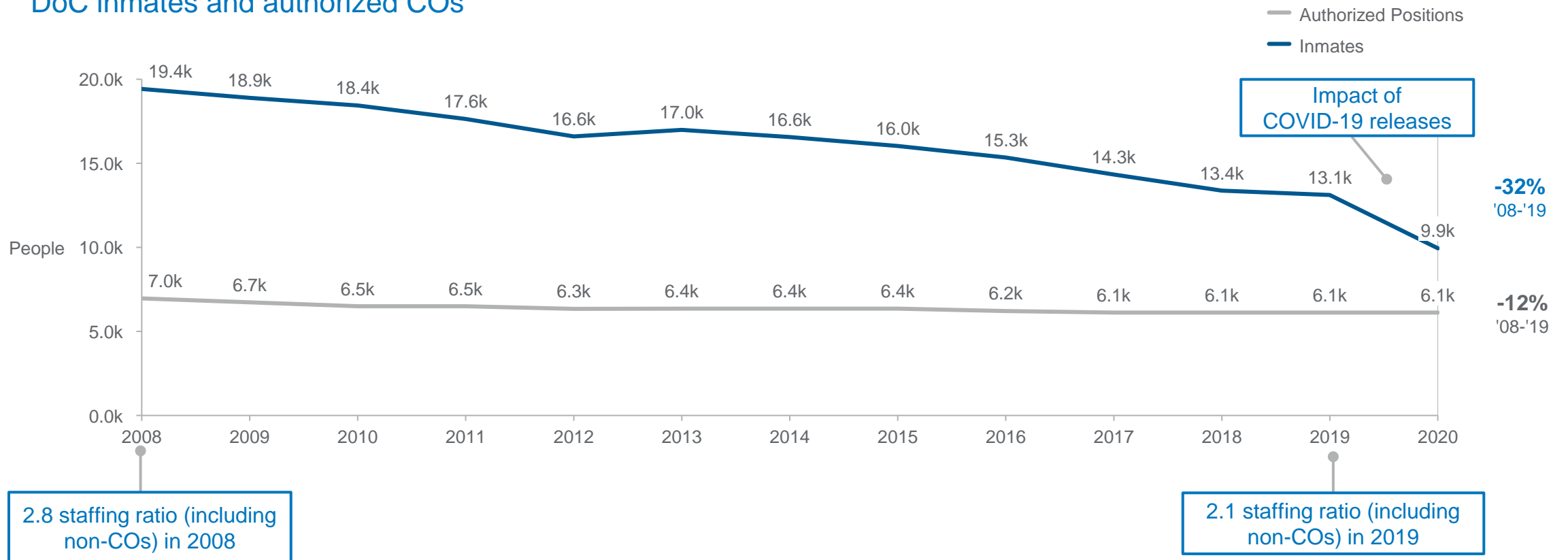
Facility utilization average was 74%; currently at 56% utilization

1. CI is for sentenced individuals (prison), CC houses unsentenced individuals (jail)

Sources 1) Staffing: 2020 DOC filled staffing spreadsheet. 2) 2019 Inmate Population from Monthly Statistics on DOC website. 3) 2018 Physical Bed Capacity taken from DOC bed capacity vs. filled as of 10-31-18. All documents were provided by DOC budget analyst on 10/7/2020. Facility Utilization = Inmate Population/Physical Bed Capacity

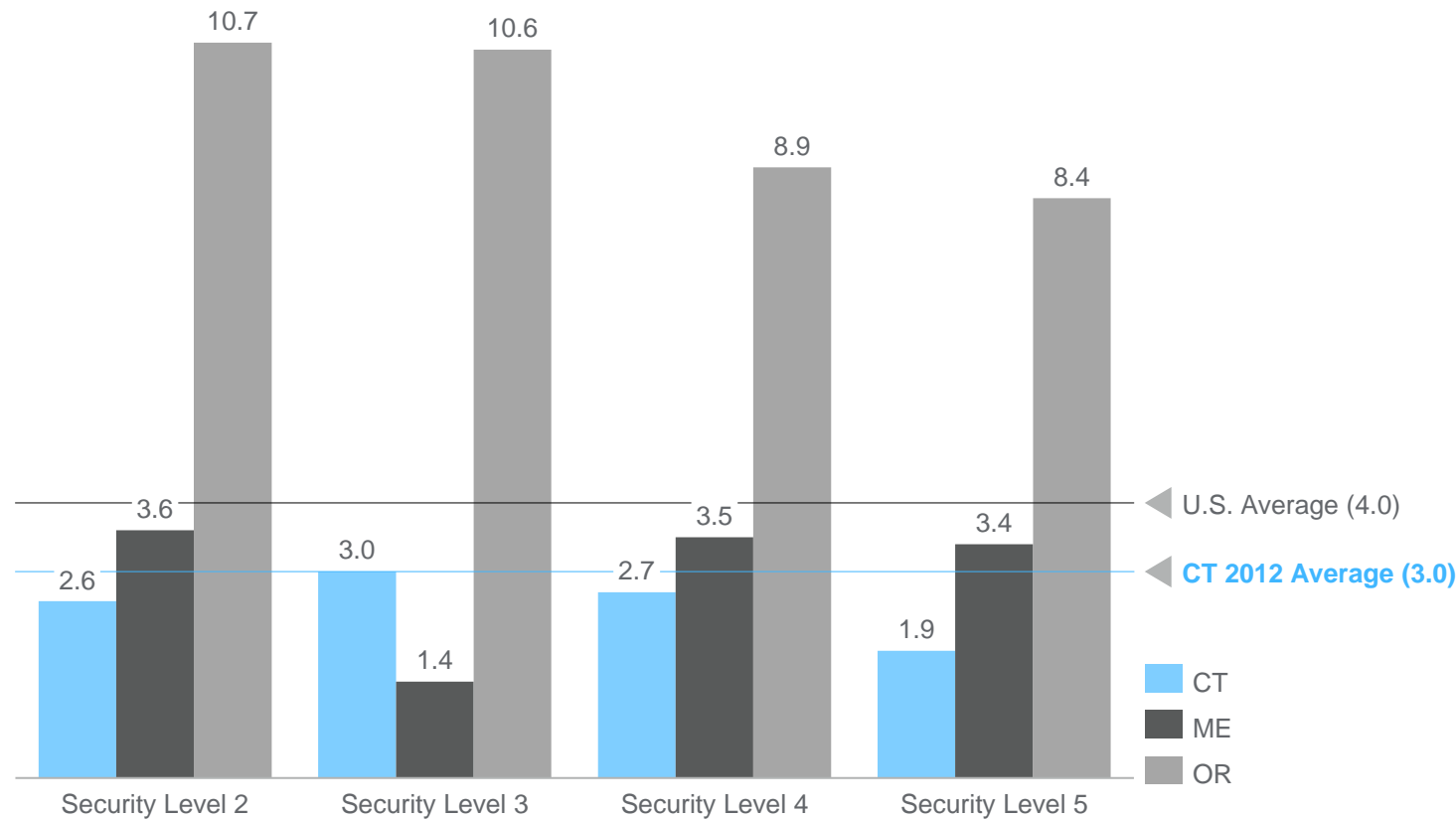
Prison population has declined over the past decade, to less than 10,000 at the end of 2020

DoC inmates and authorized COs



Source: Source: OPM, Corrections Sub-Committee Report facilities tab, BCG analysis 2) 2008 and 2019 staffing ratio taken from DOC website: authorized positions/incarcerated inmates.

Connecticut staffing ratio lower than peers; potential to return to previous staffing ratio (still lower than national average) through accepting CO retirements



Impact of increasing staffing ratio (inmates/CO)

If CT returned to a staffing ratio of 3.0:1 (still less than US average of 4.0:1)

Number of COs 3,438 □ 2,873

Staffing ratio: 2020 DOC filled staffing spreadsheet. Inmates/CO+Warden = Staffing ratio. 2) Cost savings = (Current Staffing – Proposed staffing) * average CO salary (\$64,000)
 Source: 1) 2019 Inmate Population taken from Subcommittee spreadsheet. All documents were provided by DOC budget analyst on 10/7/2020. 2) 2008 & 2012 CO from <https://www.correctionalofficeredu.org/connecticut/>

3.1.6

Setting an optimal Connecticut State Police target and civilianizing admin functions

Retirements offer the opportunity to define a new target CSP staffing level

Drivers

Observations

Ideas for discussion

Challenges



Set target staffing level

- Currently 923 troopers, down from 1,100 three years ago; CSP staffing target 1,200 (to be confirmed)
- Projected to further decline by ~100 due to retirement surge
- Police levels lower than in peer states, especially after retirements

- Reach staffing levels based on peer benchmarks; understand where more police are needed to ensure public safety and impact of lower numbers
- Review drivers of OT, including non-protective work, and address through operational and labor negotiations where possible

- Existing CSP capacity is limited due to non-enforcement and administrative responsibilities given to CSP (e.g., data entry, boxing regulation)
- Currently face high levels of OT (20% of total comp), which could be a sign of under-staffing



Increase cadet graduations from academy

- Trooper levels require advance planning due to academy structure; 80-100 new troopers after nine-month program

- Increase target academy class size if required to achieve higher staffing level

- Length of training program means personnel levels 'locked in' in advance
- Cadet drop-outs increase uncertainty in future trooper numbers



Reduce admin and non-police duties given to CSP

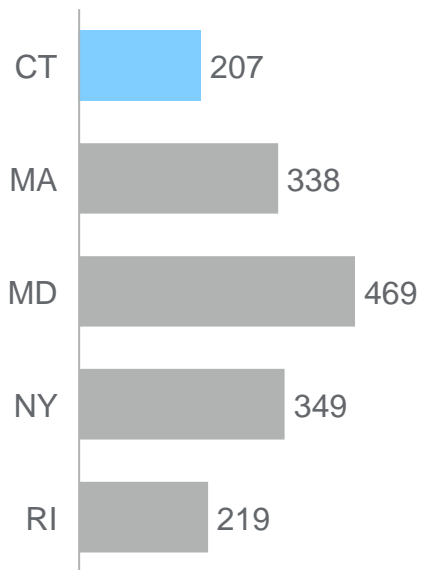
- CSP enforce state laws (e.g., on freeways) and provide essential policing services in rural areas
- Role largely defined by statute but has expanded over time (e.g., sport event enforcement)

- Reduce OT pressure on CSP by potentially civilianizing administrative tasks, e.g., clerical work, weigh stations
- Explore civilianizing non-enforcement police activity, e.g., responding to mental health crises
- Explore potentially transferring some responsibilities to counties and municipalities

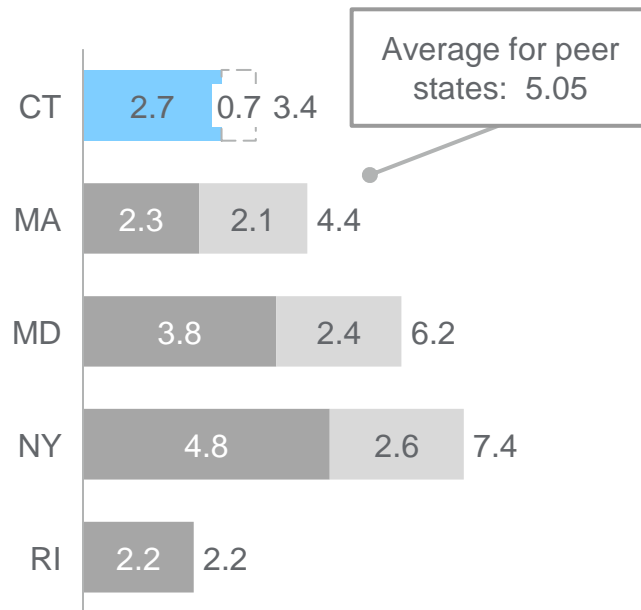
- Alternative policing is political and requires coordination among response providers (e.g. social workers, mental health workers)

Top-down benchmarking suggests that state police numbers are low compared to peers

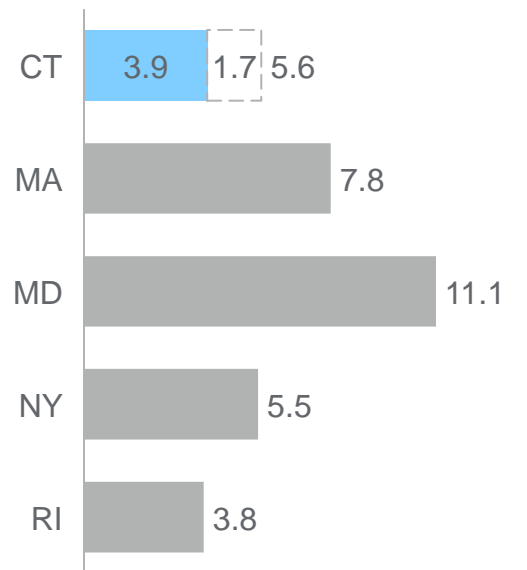
CT has a low crime rate relative to their peers



Trooper level is low compared to peers



Troopers / 100 highway mi is low compared to peers



■ Crime Rate Per 100k

■ State police per 10k residents

■ County Officers per 10k residents

□ State Police if staffing goal is reached (1,200)

■ Troopers per 100 highway mi

□ With Staffing Goal (1,200)

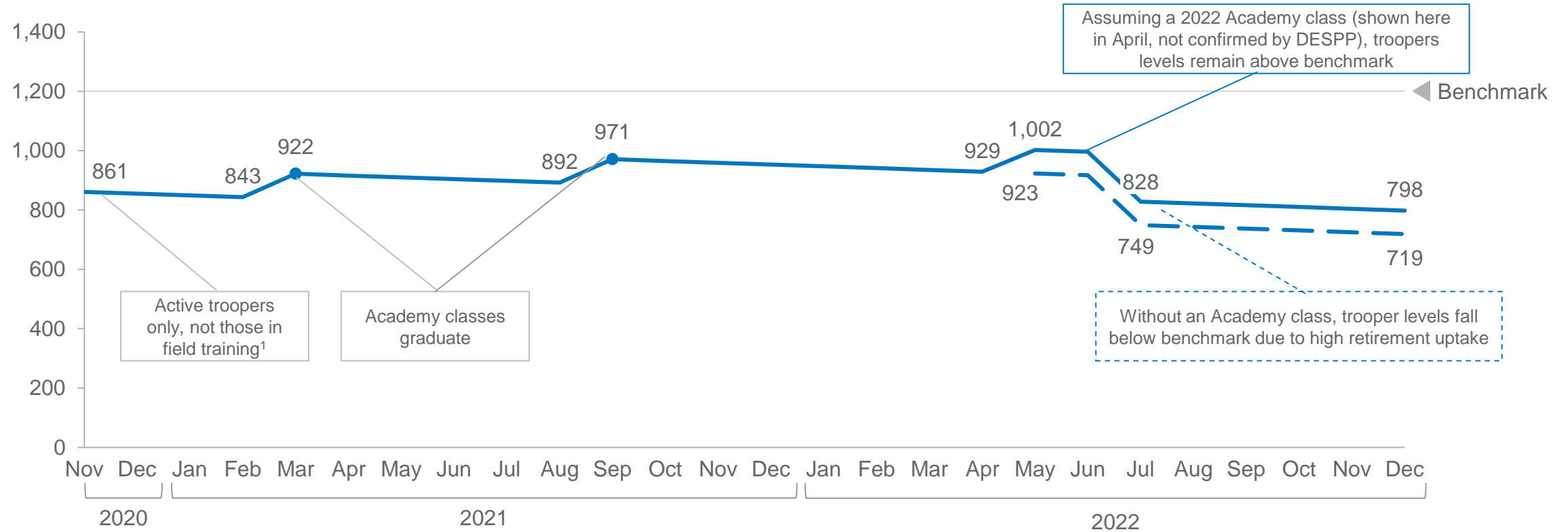


- Matching peer benchmarks would require ~1200 troopers
- Department is able to address trooper capacity challenges by achieving a CSP target of 1,100

Analysis assumes maintaining current senior leadership of Lieutenants and Captains
 Source: <http://www.ipsr.ku.edu/ksdata/ksah/trans/15trans3x.pdf>

Expected levels of retirements will bring staff levels even lower than peer benchmarks; need to align Academy class with staffing needs for 2022

Number of troopers



1. 930 total troopers shown on previous page includes both active and those in training
 Source: CSP Current Outlook 2020-02-1.pdf

Drawing on other alternative workforces for some responses could potentially reduce pressure on state police and help manage staff levels

State Police responsibilities	Potential alternative worker	Rationale	Current share of police time based on Rice study ¹
Non-emergency 9-11 calls pertaining to mental health	Mental health workers	Eliminates crisis intervention training for police	9%
Non-emergency 9-11 calls unrelated to mental health	Social workers	Targeted response based on civilian need (e.g. homelessness, drug abuse)	
Reporting on non-injury, non-DUI accidents	Private company (e.g. On Scene Services)	Routine task; does not require sworn in personnel	30%
Patrolling rural regions	Private organizations or neighborhood watch groups	Sworn officers may not be required for non-violent calls in rural areas	15%
Managing highway weight stations	DMV	DMV currently supports DESPP in this function and they have the tools necessary	
Code enforcement (e.g. cite handicapped parking violators)	Civilian police service officer	Routine task; does not require sworn in personnel	
Investigation support (e.g. online searches for case info)	Civilian police service officer	Does not require sworn in personnel	4%
Missing persons (e.g. phone banks and command centers)	Civilian police service officer	Does not require sworn in personnel	
Sex offender registries	Civilian police service officer	Highly administrative; does not require sworn in personnel	

Responses to some incidents may require multiple types of staff (e.g. social worker and police)

Opportunity to increase CSP capacity by **25%-30%** through alternative policing models

Potential to further increase CSP capacity by civilianizing administration functions



Team	Activity which could be civilianized	Description
Office of Field Operations	Traffic Services Unit	Safety inspections, collision analysis and reconstruction service
	Research, Development, and Planning Section	Updating and expanding policies and procedures, and automating how the agency collects, analyzes, and disseminates data
Office of Administrative Services ~50 FTE	Infrastructure Planning and Management Unit,	Key physical infrastructure projects are managed to improve the more than fifty facilities throughout the agency
	Fleet Administrative Unit	Oversees the maintenance and continued development of more than 1,900 vehicle assets
Misc. ~20 FTE	Finger Printing	Oversees finger printing services
	Administrative Services	Provides administrative support to agency office for duties including but not limited to analysis, accounting, etc.



Civilianizing admin functions could free up to **70 troopers** and lead to savings of ~\$1m¹

Savings = FTE count from Office of Administrative Services org chart (+20 to factor misc. administrative services) = 70FTE. (70*87.0k) – (70*75.0k) = \$1.5m to \$1.7m)

Backup | Police cost more than civilians, civilianization leads to savings

Category	Job title	Avg. Annual Rate (\$k)	Category Avg. Annual Rate (\$k) ¹
Police (protective services)	State Police (NP-1)	\$87	\$87
	State Police Lts & Captains (NP-9)	\$135	
	Protective Services (NP-5)	\$77	
Social worker	Clinical social worker	\$83	\$88
	Clinical social worker Associate	\$94	
Mental health worker	Mental Health Assistant 1	\$54	\$57
	Mental Health Assistant 2	\$64	
	Mental Health Associate	\$77	
Administrative	Administrative Clerical (NP-3)	\$61	\$75
	Admin and Residual (P-5)	\$90	
	Managerial	\$107	
	Exempt/Elected/Appointed	154.3	
	Confidential	81.2	

Note: 1) Annual rate is a weighted average

3.1.7

Optimize CTEC administrative and teacher levels

Greatest opportunity from matching benchmark class sizes and centralizing administrative functions

Drivers

Observations

Potential opportunity

Challenges



High school instructors

- Student/teacher ratios currently at 11 students per instructor, lower than CT average
- With retirement surge, student/teacher ratios will reach 12.4 (more in line with CT districts)

- Allow CTEC instructor retirements without replacing educators
- Manage capacity issues resulting from retirements by sharing staff across CTEC schools and sharing non-vocational staff (e.g., English) with municipalities

- Limited ability to reduce teacher numbers and maintain program viability
- CTEC employees are state employees, making coordination with municipalities difficult



Administrative costs

- Administrators represents 11% of CTEC school staffing, compared to <5% of similarly sized districts in CT

- Centralize administrative services as a district rather than in individual schools

- Central office already lean; will require organization re-structure to increase central office capacity



Program rationalization
(covered previously)

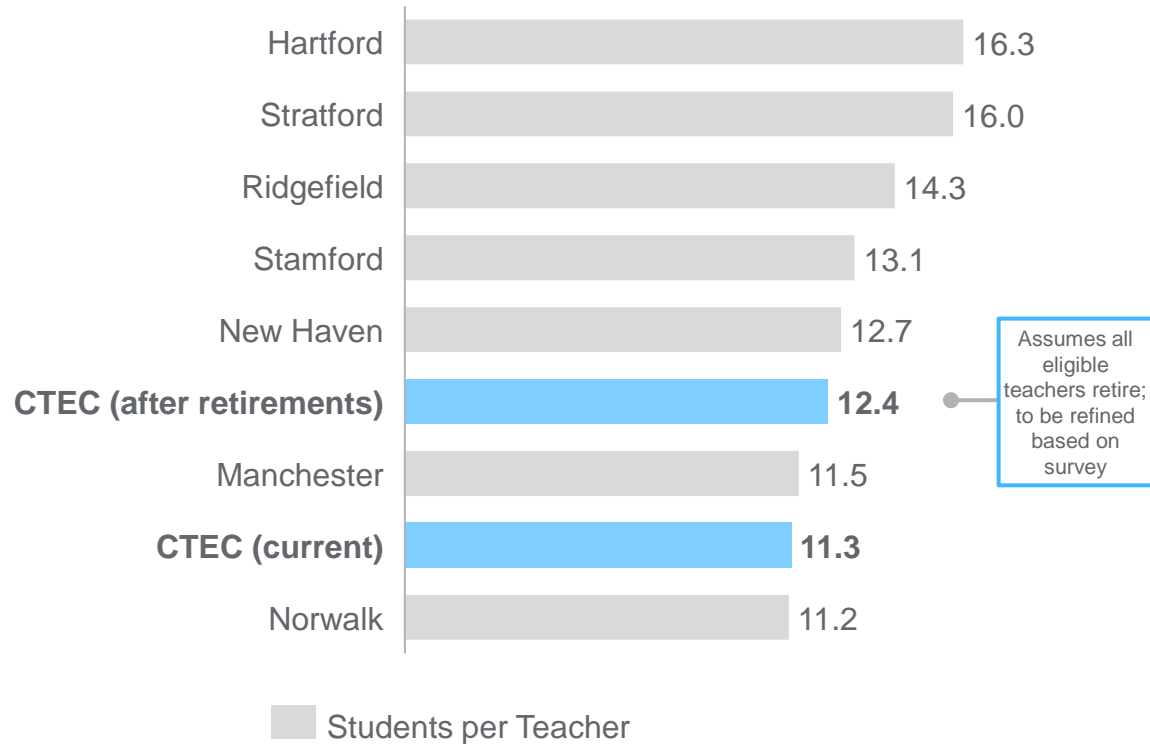
- Most programs at scale (>100 students total or >20 students at an individual site)

- At a school level, rationalize classes with student enrollment <20
- At a program level, rationalize programs with student enrollment <100
- Limited opportunity (<\$1m in savings)

- Program consolidation creates political complexities regarding access to education

CTEC is well positioned to accept instructor retirements; after retirements student/teacher ratios would be more in line with peers

Student/teacher ratios for Connecticut districts



To accept instructor retirements without rehiring CTEC should consider sharing instructors

Opportunity

Share instructors with municipalities in same geography

Share instructors among similar programs

Considerations

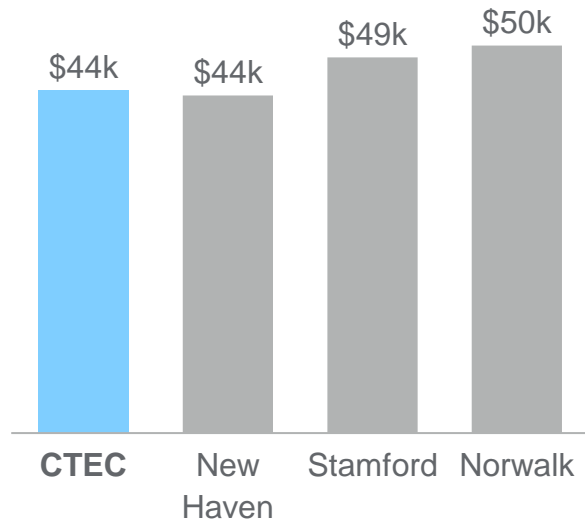
Financial arrangements with municipalities would be complex; CTEC teachers are state employees

Program offerings vary by location; have faced challenges with inducing teachers to travel to nearby schools

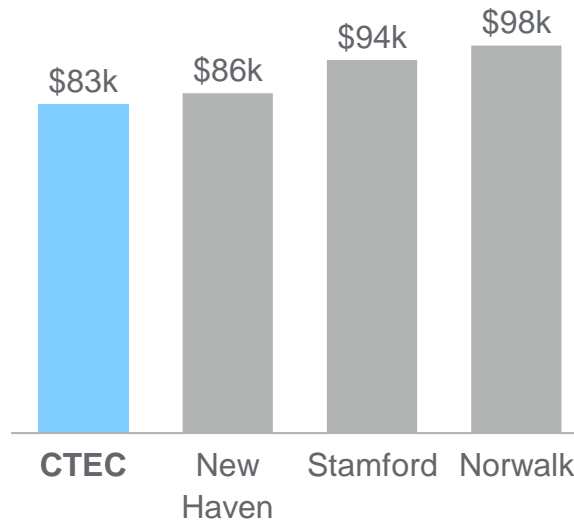
Note: Savings calculated by using personnel cost only. $((0.05) * (1585)) - 126 = 46$; $46 * \text{average personnel cost } (\$90k)$; $889 * 90k = \$12m$
 Source: 1) <http://edsight.ct.gov/SASPortal/main.do> 2) FY20ExpensesSchoolProgramEnrolStaff110420 provided by Maura Kjam

CTEC annual salary for instructors is largely in line with other CT districts

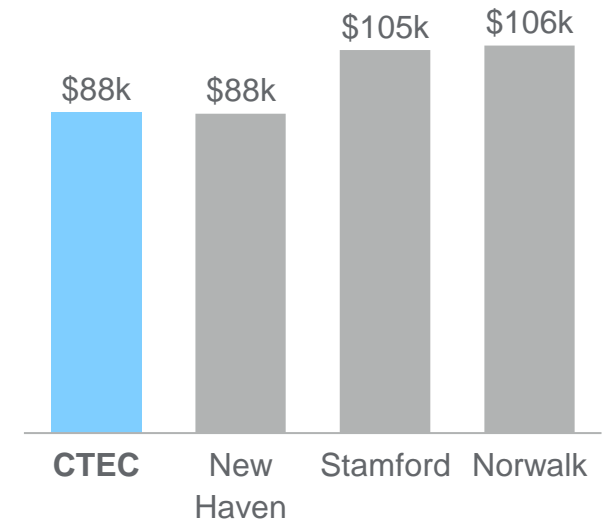
**New hire –
Bachelor's degree**



**New hire –
Master's degree**



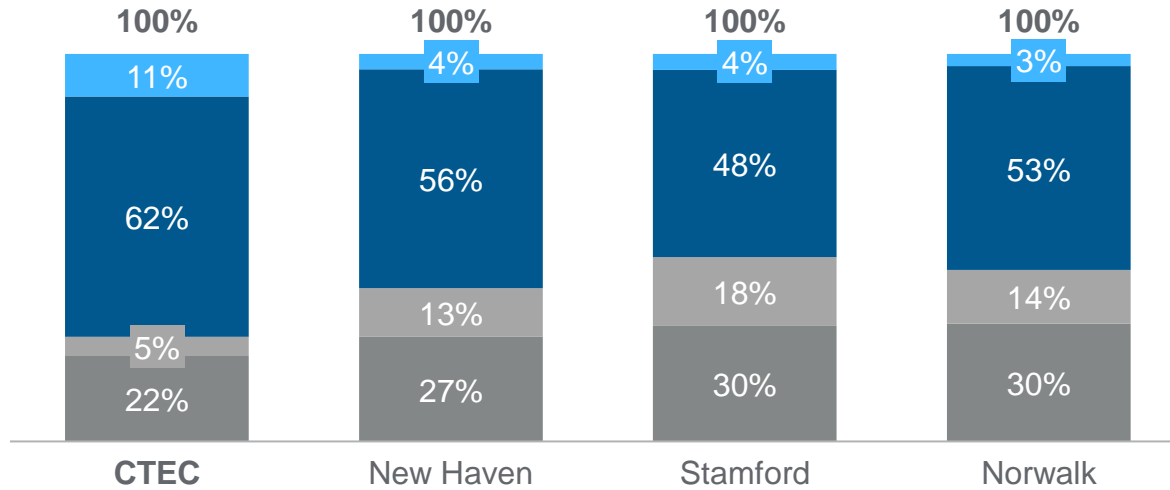
**Six years experience –
Master's degree**



Note: CTEC salaries are straight average across all CTEC regions
Source: <https://www.teachercontracts.conncan.org/questions/salary>

CTEC spends more on overhead than other CT districts due to decentralization

FTE breakdown by Connecticut school district



Enrollment	11.6k	21.2k	16.1k	11.5k
Schools/ Programs	20	60	25	21

■ Administrative
 ■ General Education
 ■ Special Education
 ■ Other Support

Other CT districts centralize back office support functions at a district level

Opportunity for CTEC to treat state school system as a single district; creates opportunity to centralize back office support functions (e.g. rationalize business officers and legal services)

Savings from reducing administrative personnel to 5% in line with other Connecticut districts could be **\$5-10m**

Note: Savings calculated by using personnel cost only. $((0.05) * (1585)) - 126 = 46$; $46 * \text{average personnel cost } (\$90k) = \$4.1m$
 Source: 1) <http://edsight.ct.gov/SASPortal/main.do> 2) FY20ExpensesSchoolProgramEnrolStaff110420 provided by Maura Kjar

3.2

Streamline services and pool resources

3.2.1

Integrate agencies with similar missions

State should review integration opportunities for four benefits which have potential to mitigate retirement surge risks

Integration benefits mitigating retirement surge

Approach

Focused on opportunities which would mitigate retirement surge risks

Did *not* look for reorganization opportunities simply to reduce number of agencies

Developed list based on outside-in review and agency interviews



Mission and decision clarity

Streamlined accountability for given services or clients

Faster decision making

Eliminating risks that issues 'fall between the cracks' due to lack of ownership

However, ensure 'checks and balances' on decisions maintained (e.g., on spending)



Client experience and outcomes

Streamline service design for few handoffs and time-consuming 'back and forths'

Improve policy and service design with stronger ownership

Create obvious 'homes' for various service types



Scale and excellence in capabilities

Increase ability to invest in new skills and knowledge

Facilitate common platforms across service types (e.g., shared eligibility platform)

Ensure agencies have scale required for 'seat at the table' in cross-government decisions



Administrative and operational efficiency

Reduce administrative or management costs from increased scale

Eliminate duplicative functions or streamline program spend

3.2.2

Further centralize shared services

Greatest potential opportunity in further centralizing finance and facility functions

Drivers

Observations

Potential opportunity

Challenges



Finance

- Budgeting and audit functions centralized, with strong spend control
- Some financial managed by individual agencies e.g. payroll and AR/AP

- Explore centralizing financial functions including payroll and AR/AP

- Requires buy-in from agencies



Facilities, real estate and asset management

- State has a hybrid model, with some facility functions centralized in DAS/OPM and significant teams in some departments (e.g., DOT, DEEP, Military)
- Greater central coordination may be required to rationalize real estate footprint

- Explore centralizing maintenance and security functions where done by state employees and procurement where not
- Maintain decentralized model for unique assets (e.g., parks in DEEP)

- Real estate asset types differ e.g. vehicle garages versus national parks
- Hard to consolidate due to non-specific management roles e.g. maintenance vs. construction



HR and procurement

- Most HR functions already centralized
- Procurement part centralized, with some carve-outs (e.g., professional services to OPM, capital projects to DoT)

- Potential to further integrate some functions in HR (AA/EO reporting) and procurement (professional services), but limited efficiency opportunity

- Functions already largely centralized



IT

- Current decentralized model undergoing centralization as a result of IT efficiency project

- Limited immediate opportunities to further centralize beyond what is planned

- Project underway to further centralize

Reviewed seven corporate functions for opportunities to achieve efficiencies by coordinating similar activity across departments and achieving scale (1 of 2)

Shared service function	Current centralization or coordination	Similar across multiple depts	Efficiency benefits from scale	Opportunities to explore
Finance				
• Budgeting	• Centralized through OPM	✓	✓	
• Payroll	• Not centralized	✓	✓	☆
• AR/AP	• Not centralized	✓	✓	☆
• Audits	• Centrally coordinated and executed	✓		
• Pension calculation	• Centralized through OSR/CORE-CT for state employees	✓	✓	
• Pension payments	• Partially centralized (state employees and teachers)	✓	✓	
HR				
• Job posting/recruiting	• Centralized through DAS	✓	✓	
• Grievances	• Centralized through DAS	✓	✓	
• Labor relations	• Centralized through OPM OLR	✓	✓	
• Diversity and targeted recruiting	• Partially centralized through DAS	✓	✓	
• AA/EO reporting	• Limited centralization; each dept creates own AA report	✓	✓	☆
• Workforce planning	• Coordinated between DAS and departments	✓	✓	
Procurement				
• Contracting for amounts >\$200k	• Centralized through DAS	✓	✓	
• Professional services	• Carved out to OPM	✓	✓	
• Roadways	• Carved out to DoT		✓	
• Construction	• Carved out to specialized team in DAS		✓	
• Large health/human services contracts	• Carved out to OPM		✓	
• Contracting for amounts <\$200k	• Conducted by individual departments	✓		

Reviewed seven corporate functions for opportunities to achieve efficiencies by coordinating similar activity across departments and achieving scale (2 of 2)

Shared service function	Current centralization or coordination	Similar across multiple depts	Efficiency benefits from scale	Opportunities to explore
IT				
• Desktop support	• Further coordinating through IT efficiency project	✓	✓	
• New system development	• Further coordinating through IT efficiency project	✓	✓	
• IT infrastructure	• Further coordinating through IT efficiency project	✓	✓	
• Back-end system support	• Further coordinating through IT efficiency project	✓	✓	
• Data analysis	• Central data team in OPM, some depts have capability		✓	
• Tech policy	• Centralized in OPM			
Real Estate/Asset Management				
• Asset acquisition and disposals	• Coordinated across OPM, DAS and departments	✓	✓	
• Office space planning	• Coordinated across OPM and DAS	✓	✓	
• Asset management	• Function within each department (e.g., DEEP, DOT)		✓	
• Facility maintenance (internal)	• Each department has own staff or procures service	✓	✓	☆
• Fleet management	• Coordinated where there are large fleets (DAS/DOT)	✓	✓	☆
• Site security (internal)	• Multiple department-level contracts, some coordination	✓	✓	☆
Legal/Legislation				
• Development of policy	• Coordinated across constitutional offices and departments			
• Legislative engagement	• Specialized teams in each department			
• Legal advisory	• Specialized teams in each department and central AG team			
Communication				
• Strategic communications	• Not a shared function		✓	
• Communications execution	• Not a shared function		✓	

Detail on potential shared services opportunities

	Function	Potential opportunity	Rationale and risks	Impact
Finance ~300 FTE across state agencies	<ul style="list-style-type: none"> Payroll 	<ul style="list-style-type: none"> Centralize function 	<ul style="list-style-type: none"> Duplicative financial process Remove risks of inefficiency 	<ul style="list-style-type: none"> Addresses retirement surge risk from losing senior finance management in large agencies (e.g., DESPP, DRS) ~\$5-10m savings from consolidating finance functions
	<ul style="list-style-type: none"> AR/AP 	<ul style="list-style-type: none"> Centralize function 	<ul style="list-style-type: none"> Duplicative accounting process Cut operational costs to improve department's organization and speed 	
Facilities and real estate ~150 facilities and ~25 security FTE across agencies	<ul style="list-style-type: none"> Facility maintenance (internal) 	<ul style="list-style-type: none"> Increase coordination across departments and coordinated/centralized contracting 	<ul style="list-style-type: none"> Duplicative processes Create consistency in control of standards and procedures Increasing quality and equipment reliability 	<ul style="list-style-type: none"> Enables greater coordination of property strategy and financial savings from consolidation ~\$1-5m savings from consolidating facility management and security functions
	<ul style="list-style-type: none"> Fleet management 	<ul style="list-style-type: none"> Review fleets and potentially further centralize 	<ul style="list-style-type: none"> Consolidate DAS/DOT car efforts Avoid overhead and redundancy 	
	<ul style="list-style-type: none"> Site security (internal) 	<ul style="list-style-type: none"> Move to as single state team and coordinated/centralized contracting 	<ul style="list-style-type: none"> Inefficient to have responsibility lie with agency Achieve cost savings through economies of scale 	
HR	<ul style="list-style-type: none"> AA/EO reporting 	<ul style="list-style-type: none"> Automate or centralize AA reporting Explore single report for executive branch 	<ul style="list-style-type: none"> Process is extremely time consuming Requires a significant number of reports Pain-point identified across agencies 	<ul style="list-style-type: none"> Minimal, but major pain point for agencies

1. Based on org charts received from agencies totaling >75% of state headcount

Centralizing payroll function mitigates significant retirement risks while providing opportunity to realize several million dollars in savings

Current context and retirement surge risk

- Payroll responsibilities today currently handled by 80+ FTEs within each agency, though only ~30 handle bulk of actual processes
- Significant risk of being unable to manage payroll functions across the State following 2022 retirement surge
- Moreover, non-payroll employees at higher rates often assist with payroll (e.g., A&R)

Proposal to consolidate within OSC

- Transition and centralize payroll and benefits within OSC across 30 FTEs
- Allow for attrition of dozens of eligible FTEs
- Transfer remaining workers who are not centralized and elect not to retire to other functions / job classes of equal rate and status
 - Eliminate permanent positions to avoid future backfilling



- Several million dollars in potential annual savings from:



- 50% expected attrition of eligible workers performing payroll functions today
- Reduced overtime (e.g., spreading agency-specific spikes in payroll across centralized FTEs)
- Eliminating need for higher-rate job classes supplementing payroll duties (e.g., HR, A&R)

3.2.3

Streamline similar human service programs and support functions

We examined human service programs from multiple angles

Agency and OPM input

Interviews conducted with agency commissioners and OPM analysts to identify potential overlap

Additional discussions to verify services provided and populations serviced

Program research and review

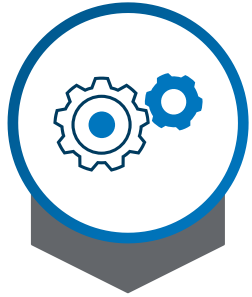
Research conducted through publicly available information on agency websites

Biennial budget document review

External benchmarking

Compared CT program structure to peer states

Program and service streamlining can lead to several benefits



Policy coordination and improved outcomes

Complementary policy design across programs

Coordinated decision making across programs



Simplified resident experience

Targeted outreach efforts

Consolidated “access points” (e.g., websites, phone lines)



Reduced administrative costs

Less need for reporting and data processing

Physical location combination



Reduced program costs

Duplicative services streamlined

Increased economies of scale

Mapping client and service types can be used as a framework to identify areas of overlapping service provision

	Children/ adolescents	Parents/ caregivers	Elders	People with physical disabilities	People with intellectual disabilities (or autism, non-disability)	People with mental health issues	People with substance use issues	People with illness (e.g. HIV/AIDS)	Providers (e.g. physicians)	Community (e.g. schools)
Health coverage (Medicaid, waivers, etc.)										
Direct care provision (in-/out-patient treatment)										
Direct care provision (Daily living)										
Housing (accommodation, placement, assistance)										
Interpersonal assistance (counseling, respite, community involvement, etc.)										
Employment/skills training										
Payments (direct/grant)										
Physical goods (food, medical equipment, etc.)										
Transportation										
Education and information										
Licensing, credentialing, and documentation										

Significant agency overlap in some areas...

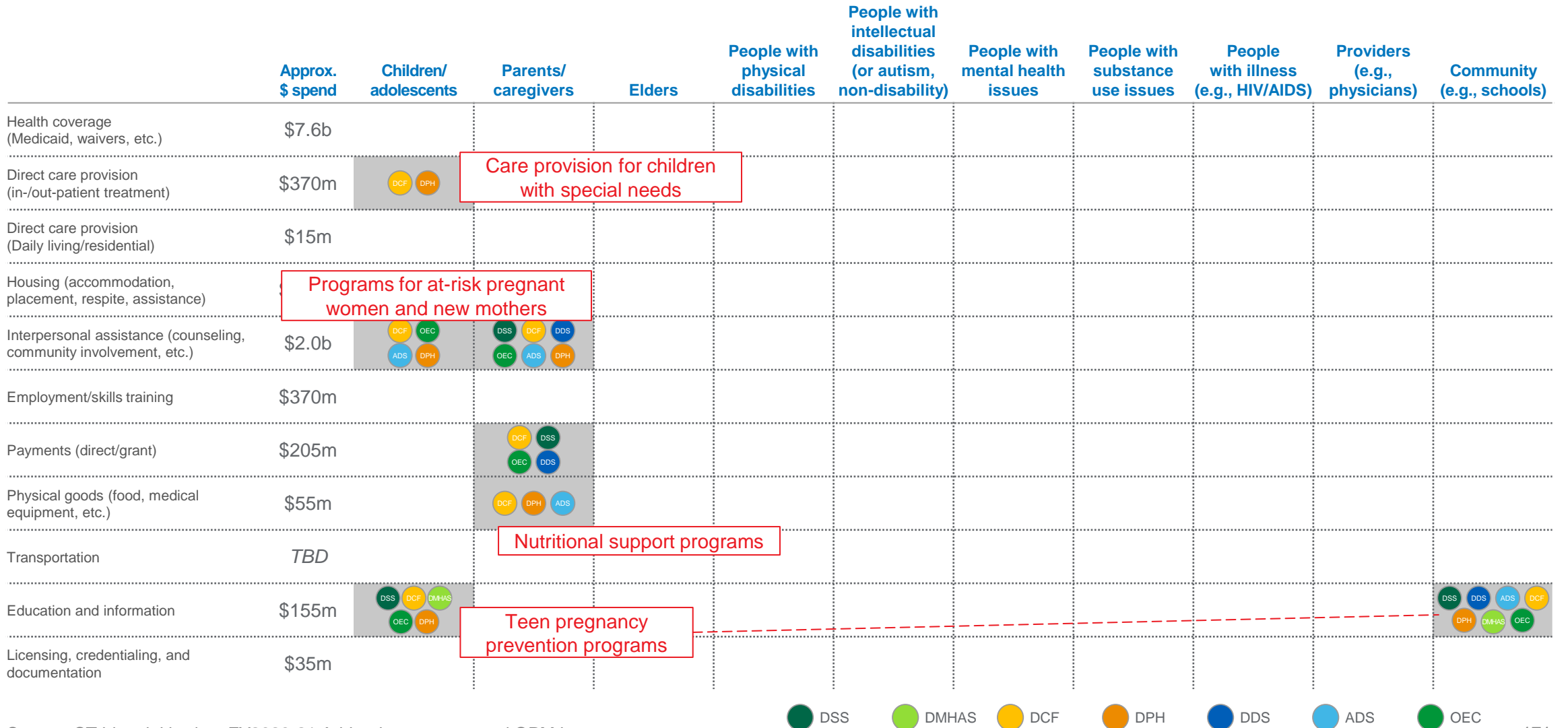
Validated with individual agencies and OPM

	Approx. \$ spend	Children/ adolescents	Parents/ caregivers	Elders	People with physical disabilities	People with intellectual disabilities (or autism, non-disability)	People with mental health issues	People with substance use issues	People with illness (e.g., HIV/AIDS)	Providers (e.g., physicians)	Community (e.g., schools)
Health coverage (Medicaid, waivers, etc.)	\$7.6b	DSS, DCF	DSS	DSS, ADS	DSS	DSS, DDS	DSS	DSS	DSS		
Direct care provision (in-/out-patient treatment)	\$370m	DCF, DPH				DDS	DMHAS	DMHAS	DPH		
Direct care provision (Daily living/residential)	\$15m	DCF	DCF	DSS, ADS	DDS	DDS	DMHAS	DMHAS	DPH		
Housing (accommodation, placement, respite, assistance)	\$470m	DCF	DDS	DSS, ADS, DMHAS	DDS, DMHAS, ADS, DSS	DMHAS, DDS	DMHAS	DMHAS	DMHAS		DPH
Interpersonal assistance (counseling, community involvement, etc.)	\$2.0b	DCF, OEC, ADS, DPH	DSS, DCF, DDS, OEC, ADS, DPH	ADS	ADS	DDS	DMHAS	DMHAS	DPH	DPH	DSS
Employment/skills training	\$370m	DCF	OEC	ADS	DSS, ADS	DDS	DMHAS	DMHAS		DPH	DPH
Payments (direct/grant)	\$205m	DCF	DCF, DSS, OEC, DDS	DSS	DSS	DDS	DSS	DSS	DSS, DPH	DCF, DPH	DCF, DPH, OEC, DSS, DMHAS
Physical goods (food, medical equipment, etc.)	\$55m	DCF, DPH	DCF, DPH, ADS	ADS	ADS	DDS	DMHAS	DMHAS	DPH	DPH	DPH
Transportation	TBD	DCF		DSS	DSS, ADS	DDS	DMHAS	DMHAS			
Education and information	\$155m	DSS, DCF, DMHAS, OEC, DPH	DCF, DMHAS, OEC, DPH	DCF, DPH, DSS, ADS	DSS, DPH, ADS	DDS, DSS, DCF, DPH	DCF, DPH, DMHAS	DCF, DPH, DMHAS	DMHAS, DPH	DCF, DPH	DSS, DDS, ADS, DCF, DPH, DMHAS, OEC
Licensing, credentialing, and documentation	\$35m		DCF		DSS, ADS					DCF, DSS, DPH	DDS, DPH, DCF, OEC

Source: CT biennial budget FY2020-21 Addendum; agency and OPM input












... suggests four key opportunities for program streamlining



Source: CT biennial budget FY2020-21 Addendum; agency and OPM input







Key opportunities to coordinate human services programs

Service type	Agencies with relevant programs	Opportunities	\$ spend does not include all administrative costs; total spend likely higher	\$ spend (State spend)	Est. potential savings
Nutritional assistance	  	<ul style="list-style-type: none"> Consolidate administration of federally-funded programs within DSS to simplify service delivery and reduce administrative costs Combine state-funded programs within DSS to simplify service delivery and reduce program costs through increased economies of scale 		\$96m (\$4m state)	<\$1m+
Care provision for children with special healthcare needs	 	<ul style="list-style-type: none"> House DPH program in DCF's Medical Health and Wellbeing Services to leverage existing health care administration capabilities and resources and reduce administrative and program costs 		\$2m (\$2m state)	<\$1m+
Teenage pregnancy prevention education and interpersonal support	 	<ul style="list-style-type: none"> De-duplicate educational programming across programs could streamline service delivery and increase federal funding 		\$2m (\$1m state)	<\$1m+
Interpersonal support for at-risk pregnant women and new mothers	 	<ul style="list-style-type: none"> Consolidate administration of DPH programs and facilitate coordination with DCF to streamline service delivery and reduce administrative costs 		\$41m+	TBD
Total				\$141m+ (\$7m state)	\$2m+

All spend FY 2020 recommended and does not include cost of administration; savings estimates include estimated share of Personal Services expenditure
 Source: FY2020-2021 Biennial Budget Addendum; OPM input; BCG analysis

Program detail | Nutritional assistance

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Supplemental Nutrition Assistance Program (SNAP)		Payments to low-income/asset households for purchasing food (formerly called Food Stamps)	Federal	\$50m
Special Supplemental Nutrition Program for Women, Infants and Children (WIC)		Food, healthcare referrals, nutrition education, and breastfeeding support provided to low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk	Federal	\$41m
The Emergency Food Assistance Program (TEFAP)		Contract with Connecticut Food Bank, Inc. and Foodshare, Inc. to distribute USDA commodities to food pantries, shelters, etc.	Federal	\$1m
Commodity Supplemental Food Program (CSFP)		Supplemental food products provided by US Department of Agriculture (USDA) to low-income people 60 or older	Federal	<\$1m
Elderly Nutrition Program		Meals provided to people 60 or older; home-delivered or served at sites such as senior centers, schools, churches, etc. No specific income requirements – services are targeted based on economic/social need, living situation (rural vs. urban), English proficiency, and more	State	\$3m
Connecticut Nutrition Assistance Program (CTNAP)		Contract with Connecticut Food Bank, Inc. to bulk purchase nutritionally beneficial foods for distribution to needy households	State	\$1m



Recommendation	Policy coordination/ improved outcomes	Simplified resident experience	Reduced admin costs	Reduced program costs
Consolidate administration of federally-funded programs (SNAP, CSFP, TEFAP) within DSS	✓	✓	✓	
Combine state-funded Elderly Nutrition Program and CTNAP within DSS	✓	✓	✓	✓

Est. potential savings
<\$1m+





All spend FY 2020 recommended and does not include cost of administration; savings estimates include estimated share of Personal Services expenditure
Source: FY2020-2021 Biennial Budget Addendum; OPM input; BCG analysis

Program detail | Care provision for children with special needs

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative		Health, education, and recreation service coordination, payment for services, and family respite for income-eligible children under 21 at elevated risk for chronic physical, developmental, behavioral, or emotional conditions	State	\$2m
Medical Health and Wellbeing Services at DCF		Branch of DCF responsible for administering and monitoring health care to children in DCF custody	n/a	




Recommendation	Policy coordination/ improved outcomes	Simplified resident experience	Reduced admin costs	Reduced program costs	Est. potential savings
House CYSHCN and Medical Home Initiative in DCF's Medical Health and Wellbeing Services and leverage existing health care administration capabilities and resources					<\$1m+

All spend FY 2020 recommended and does not include cost of administration; savings estimates include estimated share of Personal Services expenditure
Source: FY2020-2021 Biennial Budget Addendum; OPM input; BCG analysis

Program detail | Teenage pregnancy prevention education and interpersonal support

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Connecticut Personal Responsibility Education Program (PREP)		Pregnancy, HIV, and STD awareness and prevention educational sessions conducted in schools and other community settings for adolescents	Federal	<\$1m
Teen Pregnancy Prevention Initiative		Initiative to prevent adolescent pregnancy spanning multiple programs, including intensive after-school educational and support programs (Comprehensive Children's Aid Society Carrera Model/CCM) and school-based community-service programs (Teen Outreach Program/TOPS)	State	\$1m






Recommendation	Policy coordination/ improved outcomes	Simplified resident experience	Reduced admin costs	Reduced program costs
Cut educational programming duplicative with PREP from Teen Pregnancy Initiative and shift primary focus to school-based community-service programs	✓	✓	✓	✓
Jointly administer PREP and Teen Pregnancy Prevention Initiative within DSS	✓	✓	✓	

Est. potential savings
<\$1m+




All spend FY 2020 recommended and does not include cost of administration; savings estimates include estimated share of Personal Services expenditure
Source: FY2020-2021 Biennial Budget Addendum; OPM input; BCG analysis

Program detail | Interpersonal support for at-risk pregnant women and new mothers

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Special Supplemental Nutrition Program for Women, Infants and Children (WIC)		Food, healthcare referrals, nutrition education, and breastfeeding support provided to low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk	Federal	\$41m
Healthy Choices for Women and Children		Home visits, need assessments, substance abuse and parenting education, and service referrals for pregnant/postpartum women residing in Waterbury who use or are at risk of using substances	Federal	TBD
Save Haven Act for Newborns		Program allowing a parent to voluntarily give up custody of infant age 30 days or younger to DCF without being arrested for abandonment	n/a	








Recommendation	Policy coordination/ improved outcomes	Simplified resident experience	Reduced admin costs	Reduced program costs	Est. potential savings
Consolidate administration of WIC and Healthy Choices for Women and Children programs within DPH and facilitate coordination with DCF					TBD

All spend FY 2020 recommended and does not include cost of administration; savings estimates include estimated share of Personal Services expenditure
Source: FY2020-2021 Biennial Budget Addendum; OPM input; BCG analysis

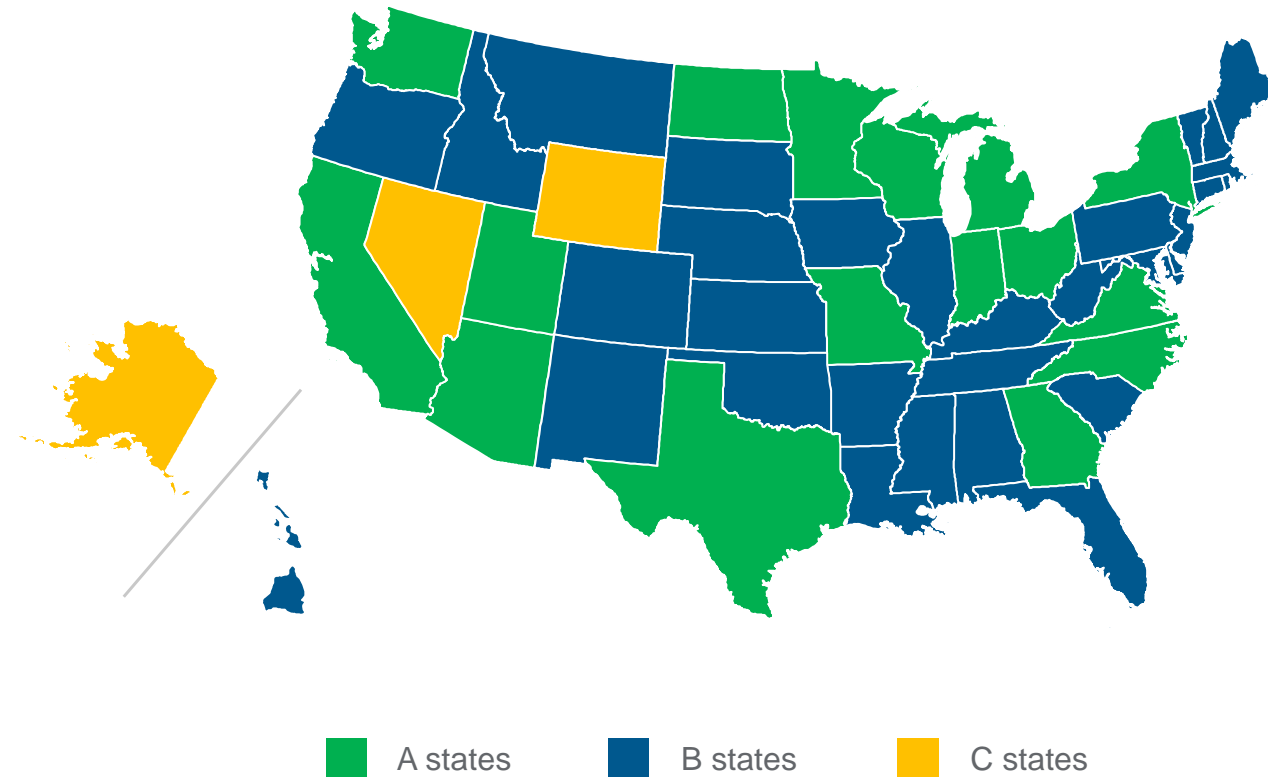
3.3

Digitize resident services and internal processes

Central digital team could spearhead execution of the most impactful automation/digitization opportunities with a focus on state-wide solutions

Agency	Opportunity	Est. annual FTE hours saved	Est. annual cost savings	Detail
	Implement electronic health record	50-60k+	\$15-20m+	<ul style="list-style-type: none"> • Electronic health record would streamline chart management, medication administration, inventory control, and activities at DMHAS facilities and reduce central IT workload • Increased staff efficiency would result in improved patient outcomes • Improved intake, billing, and reporting processes would reduce lost revenue
	Automate/digitize new hire process	100-125k+	\$2-5m+	<ul style="list-style-type: none"> • Includes listings, candidate review, and onboarding; already in progress • HR documents, records, and workflows to be automated via People-Doc (HR software) subscription
	Streamline “purple sheet” document review process	25-50k+	\$1-2m+	<ul style="list-style-type: none"> • Approval process for documents often involves multiple passes through various departments including Legal, Fiscal, Commissioner's office, etc. • Automated process with ability to pre-flag required reviewers based on standard set of rules (e.g. any mention of statutes requires Legal review) would reduce time spent per document and minimize irrelevant reviews
	Modernize initial claims processing	50-60k+	\$1-1.5m+	<ul style="list-style-type: none"> • Customer service representatives currently review claims for completeness and perform data transfers • Modernization process will allow claimant to enter claim directly and remove need for processing – already in progress • Anticipated timeline for modernization: 1-2 years
	Digitize site case management	40-50k+	\$1-1.5m+	<ul style="list-style-type: none"> • Responders currently use a step-by-step approach that requires individual processing by many departments - remediation can last months or years • Opportunity to leverage Business One Stop web platform for dispatch and notification module • Initiative in very early development – projected to take 2+ years

Context | CT digital maturity relatively well-regarded nation-wide; B+ grade in Center for Digital Government 2020 survey ranked below 16 states



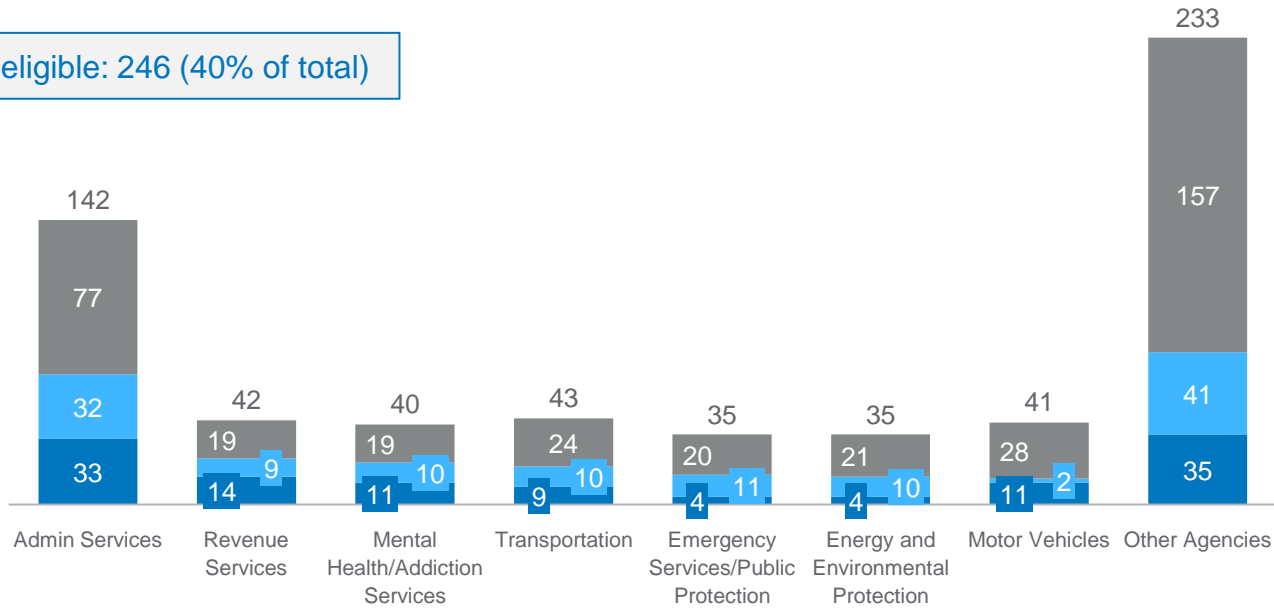
Grade	Total states receiving	States receiving
A	5	Georgia, Michigan, Missouri, Ohio, and Utah
A-	11	Arizona, California, Indiana, Minnesota, New York, North Carolina, North Dakota, Texas, Virginia, Washington, and Wisconsin
B+	14	Colorado, Connecticut , Delaware, Hawaii, Idaho, Illinois, Maine, Maryland, Massachusetts, Mississippi, Montana, Pennsylvania, Rhode Island, and Tennessee
B	13	Arkansas, Florida, Iowa, Kentucky, Nebraska, New Hampshire, New Jersey, New Mexico, Oklahoma, Oregon, South Carolina, Vermont, and West Virginia
B-	4	Alabama, Kansas, Louisiana, and South Dakota
C+	2	Nevada and Wyoming
C	1	Alaska

Digital capability spread across departments; expected substantial retirement uptake among IT employees presents opportunity to accelerate digital reform

Current IT employees retirement-eligible in July 2022

■ Not eligible ■ Eligible - early ■ Eligible - full

Total eligible: 246 (40% of total)



Share retirement eligible

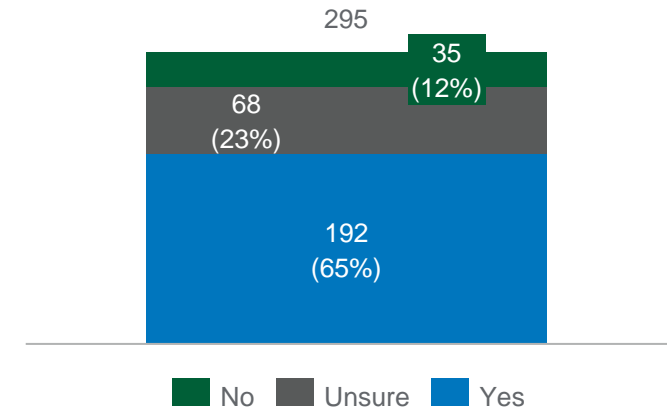


Includes all positions with "IT" in job description or "Data Processing" as job function

Note: Color coding is based on % eligible: 0-15% green, 15-25% amber, >25% red; hazardous duty eligible employees included in 'Normal Ret.-Eligible'








Source: CT STARS database

Responses from Science and Tech employees re. intent to retire by 2022 (as of 12/10)










- Assuming projected 65% uptake applies to all IT employees, ~25% of state IT workforce may retire in 2022
- Retirements present an opportunity to accelerate reform and elevate Connecticut's digital capabilities to best-in-class levels

CT has opportunities to improve strategy, common platforms, capability development and procurement, many of which are addressed by current efforts

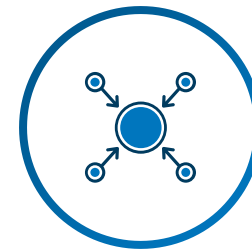
Function	Detail	Key capabilities	Status in CT	Rationale
 Strategy, policy, architecture and governance	<ul style="list-style-type: none"> Set overarching digital and IT strategy & governance (inc. architecture, data and cyber) Provide architecture support to priority cross-department projects 	<ul style="list-style-type: none"> Digital and IT strategy and portfolio support Digital advocacy Service design support Critical cyber response support 	Significant opportunity	<ul style="list-style-type: none"> IT workforce mostly decentralized; centralization in progress, but challenging to execute quickly due to agency pushback Prioritization framework for individual agency requests unclear
 Delivery of common platforms	<ul style="list-style-type: none"> Deliver state-wide platforms Support departmental and agency migration to common platforms 	<ul style="list-style-type: none"> Central delivery of common and core platforms for state-wide usage 	Significant opportunity	<ul style="list-style-type: none"> Individual agencies tend to operate on different platforms Potential for certain platforms to be expanded, e.g. ImpaCT for eligibility determination
 Customer experience (residents and business)	<ul style="list-style-type: none"> Develop state-wide design standards for customer experience Centrally coordinate cross-department life events Lead user research 	<ul style="list-style-type: none"> Ethnographic research 	Improvements in process	<ul style="list-style-type: none"> Citizen and Business One Stop initiatives in progress to establish common "front door" and standardize resident and business intake
 Data and analytics	<ul style="list-style-type: none"> Set state-wide standards and governance for data storage, quality, capture, security, and sharing Provide analytics support to priority use cases 	<ul style="list-style-type: none"> Data sharing governance 	Improvements in process	<ul style="list-style-type: none"> Ongoing P20 WIN initiative is working to establish state-wide data governance framework OPM implementing flexible and durable legal agreements for data sharing
 Capability building and innovation	<ul style="list-style-type: none"> Coach/guide agencies on how to provide digital capabilities Provide assurance for digital programs 	<ul style="list-style-type: none"> Innovation hub and incubator 	Significant opportunity	<ul style="list-style-type: none"> Individual agencies currently have decision rights regarding new initiatives Digital Services Team not mandated to drive end-to-end change
 IT, digital procurement, and efficiency	<ul style="list-style-type: none"> Extend state-wide procurement of IT Support departments in reaching transformation targets 	<ul style="list-style-type: none"> Central procurement for key digital and IT categories Support to departments and agencies in meeting government IT taskforce targets 	Significant opportunity	<ul style="list-style-type: none"> Agencies often unclear on services offered by DAS/OPM and struggle to manage procurement and digital spend
 Investment mgmt. and assurance	<ul style="list-style-type: none"> Co-authorize funding decisions for digital and IT investments Provide early-stage initiative input & ongoing assurance 	<ul style="list-style-type: none"> Digital and IT transparency 	Exemplar	<ul style="list-style-type: none"> Close alignment between DAS and OPM on funding decisions

Efforts underway with some visible successes (e.g., Business and Citizen One Stop), and room to push further

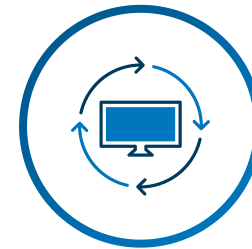
Ongoing initiatives address many key functions...

Initiative	Relevant functions
IT centralization	<i>All</i>
	 Strategy, policy, architecture and governance
Digital Services Team efforts (e.g. Business and Citizen One Stop)	 Delivery of common platforms
	 Customer experience (residents and business)
	 Capability building and innovation
P20 WIN expansion	 Strategy, policy, architecture and governance
	 Data and analytics
	 Customer experience (residents and business)
Agency-led projects	<i>All</i>

... while further defining state-wide operating model will drive more effective outcomes across agencies



Further centralize digital & data initiatives



Clarify Digital Services Team role; strategy-focused rather than implementation



Implement state-wide digital strategy with a resident-centric focus

Peer state centralization efforts indicate that strong top-down messaging, rather than a consensus-based approach among agencies, drives most effective results



Massachusetts

- Restructured IT as a centralized function reporting directly to the governor
- Heavy emphasis on contract consolidation and unified, off-the-shelf systems with minimal agency-specific solutions



New York

- Underwent significant IT centralization, though a few major entities remain outstanding
- Built single data center and harmonized software, with teams to manage agency-specific software
- Improved speed and functionality state-wide

Key takeaways

- Individual operating units tend to resist centralization, making it challenging to achieve consensus
- Strong endorsement from the governor crucial to successful reform
- Structural reform can be executed in a shorter time window and have lasting impact



Dedicated central digital teams have driven success in other states



Georgia Office of Digital Services

- Streamlined, user-centric central website
- Improved digital accessibility for people with disabilities
- Proactive and productive utilization of social media



Utah Department of Technology Services

- Created single sign-on system encompassing ~900 digital services, allowing solutions and updates to be deployed system-wide rather than agency by agency
- Utilized AI to process user feedback and identify priority initiatives



Michigan Department of Technology, Management, and Budget

- Combined functions ensure lean and efficient automation and digitalization
- Standardized legacy application modernization process



Automation/digitization opportunities | DAS (I/III)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Automate/digitize new hire process (Workforce)	<p>100-125k+</p> <ul style="list-style-type: none"> Primarily conducted by administrative staff; high retirement rate expected 	\$2-5m+	<ul style="list-style-type: none"> Includes listings, candidate review, and onboarding HR documents, records, and workflows to be automated via People-Doc (HR software) subscription 	✔
Digitize performance management (Workforce)	<p>20-25k+</p> <ul style="list-style-type: none"> All 3 payroll staff retirement eligible 	\$750k-1m+	<ul style="list-style-type: none"> HR documents, records, and workflows to be automated via People-Doc (HR software) subscription 	✔
Digitize accident/lien notices (Collections)	<p>15-20k+</p> <ul style="list-style-type: none"> Primarily conducted by administrative staff; high retirement rate expected 	\$750-900k+	<ul style="list-style-type: none"> Relevant documentation is sent via certified mail or fax due to email security concerns, resulting in only ~20% of potential liens being processed Discussions re. new system ongoing—RFQ initiated, significant investment required Additional staff capacity likely to increase revenue capture 	✔
Digitize invoice processing and Purchasing Card receipts (Business Office)	<p>7.5-10k+</p> <ul style="list-style-type: none"> Digitization would free up capacity in accounting staff, potentially reducing need for backfills 	\$400-500k+	<ul style="list-style-type: none"> Invoice and P-card receipt processing currently requires heavy manual entry from associates, accountants, and supervisors Standardizing purchase orders, implementing optical readers, and moving to electronic receipts would free capacity of accounting staff 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DAS input; CT STARS



Automation/digitization opportunities | DAS (II/III)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Automate Probate Application processing <i>(Collections)</i>	<p>8-10k+</p> <ul style="list-style-type: none"> Primarily conducted by administrative staff; high retirement rate expected 	\$300-400k+	<ul style="list-style-type: none"> Probate Applications are received by mail and processed by Technicians—required to be processed within 30 days of mailing date System being tested that will send Probate Applications to electronic report accessible by DAS-DAS working to ensure proper information included to facilitate routing to Large or Small Estates groups Additional staff capacity likely to increase revenue capture 	✓
Automate Workers' Compensation calculations and audits <i>(Workforce)</i>	<p>8-10k+</p> <ul style="list-style-type: none"> Primarily conducted by administrative staff; high retirement rate expected 	\$200-300k+		
Streamline payroll review of completeness <i>(Business Office)</i>	<p>1-1.25k+</p> <ul style="list-style-type: none"> All 3 payroll staff retirement eligible 	\$30-40k+	<ul style="list-style-type: none"> Majority of payroll process already digitized—exception is chasing down employees who haven't submitted timesheets Timesheets currently are generated by one system (TPS) and must be submitted in CoreCT, increasing likelihood of delinquency TPS being phased out for other functions (e.g. leave requests, overtime approvals) New system that feeds CoreCT directly could decrease delinquency 	✓

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DAS input; CT STARS



Automation/digitization opportunities | DAS (III/III)

Initiative in progress Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Automate check processing (Collections)	<p>1-1.25k+</p> <ul style="list-style-type: none"> Primarily conducted by administrative staff; high retirement rate expected 	\$25-35k+	<ul style="list-style-type: none"> Checks currently received via mail and entered in multiple systems, often being “touched” 4 or more times DAS Collections IT implementing system that will require only one entry and facilitate bulk transmittals to business office—expected by EoY 2020 Additional functionality could include direct CoreCT interface and auto-scanning into Bank of America (state's bank) Additional staff capacity likely to increase revenue capture 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DAS input; CT STARS

Automation/digitization opportunities | DDS (I/II)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Implement online portal for Individual Service Plan	<p style="text-align: center;">3-3.5k+</p> <ul style="list-style-type: none"> Increases capacity for case workers, potentially reducing need for backfill 	\$100-150k+	<ul style="list-style-type: none"> 12k+ Plans a year are developed in conjunction with service providers and with input from the individual and guardian, requiring signed approvals Efficiency benefit for staff as well as improved access and usability benefit for beneficiaries, families/guardians, and providers (if applicable) Providers would see a particular benefit in licensing checks that often cite missing documentation. 	
Implement online service eligibility application	<p style="text-align: center;">1.5-2k+</p> <ul style="list-style-type: none"> Application processing performed by administrative staff and psychologists; high retirement rate expected 	\$75-100k+	<ul style="list-style-type: none"> Eligibility applications received in paper and scanned into FileBound scanning system (avg. 750/year) Applicants/families/guardians cannot access information or status Online centralized application with smart prompts could generate efficiencies for staff and improved access for residents for multiple agencies 	
Automate payment/payment tracking system	<p style="text-align: center;">400-450+</p> <ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	\$5-10k+	<ul style="list-style-type: none"> Monthly payments are manually entered into accounts in CORE Automated payment and payment tracking system would reduce or eliminate manual process work for agency staff while allowing provider business owners to monitor and track as well as report on payments from state 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DDS input; CT STARS

Automation/digitization opportunities | DDS (II/II)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Cross-agency contact information maintenance	<p style="text-align: center;">5-8k+</p> <ul style="list-style-type: none"> Increases capacity for case workers, potentially reducing need for backfill 	\$5-10k+	<ul style="list-style-type: none"> Case Managers review contact information annually Identity information could be managed across agencies/platforms and kept better up to date 	
Automate Affirmative Action reporting	<p style="text-align: center;">200-250+</p> <ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	\$5-9k+	<ul style="list-style-type: none"> Creation of the Affirmative Action Plan requires extensive analysis of conditions in the employment market on annual basis Automation of Affirmative Action reporting across agencies could benefit agency staff and increase capacity within EEO offices to proactively work towards achieving goals 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DDS input; CT STARS



Automation/digitization opportunities | DEEP (I/III)

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize site case management	<p style="text-align: center;">40-50k+</p> <ul style="list-style-type: none"> Minimizes need for administrative and IT oversight; high retirement rates expected 	\$1-1.5m+	<ul style="list-style-type: none"> Implement Release Based approach to site remediation (activities that occur after a spill or other incident) Responders currently use a step-by-step approach that requires individual processing by many departments Remediation can last months or years for major incidents Opportunity to leverage Business One Stop web platform for dispatch and notification module Initiative in very early development – projected to take 2+ yrs 	✓
Paper record digitization	<p style="text-align: center;">3-4k+</p> <ul style="list-style-type: none"> File room maintained by administrative staff; high retirement rate expected 	\$100-120k+	<ul style="list-style-type: none"> Majority of records remain in hard copy, requiring manual file pulls – online access would greatly reduce administrative effort Digitization of materials in progress – hazardous waste manifests already online, spill reports in progress (1.3m pages) Remediation files will be bulk of effort (3.8m records, many m pages) Will require additional funding to complete 	✓

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DEEP input; CT STARS



Automation/digitization opportunities | DEEP (II/III)

✓ Initiative in progress ⚪ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitization/scanning of incoming mail	<p>3-4k+</p> <ul style="list-style-type: none"> Mail sorted and distributed by administrative staff; high retirement rate expected 	\$100-120k	<ul style="list-style-type: none"> Would need to be compatible with general records digitization initiative to ensure proper sorting of incoming documents Previous DEEP document taxonomy work could be leveraged 	
Migrate pesticide licensing to ELMS eLicensing system	<p>1.5-2k+</p> <ul style="list-style-type: none"> FTE managing system retirement eligible; would reduce administrative effort required, making backfill easier 	\$50-75k+	<ul style="list-style-type: none"> 8-month projected expected to go live by EoY 2020 for 7k licenses/year Potential opportunity to expand and include pesticide registrations as well (12k annually) 	✓
Enhance and expand e-permitting via EZ File	<p>1.5-2k+</p> <ul style="list-style-type: none"> Permitting activities conducted by analysts and IT; high retirement rate expected 	\$50-75k+	<ul style="list-style-type: none"> 5 permits already included, with 5 more in progress (certificate of permission, structures, dredging and fill, spill contractors and transporters) and general permits planned – will require continual investment Overall, 1500-2500 authorizations issued/year E-permitting would automate quality control for customers as well, saving effort for both state and customers and improving customer experience by reducing need for re-work on improperly filled-out forms 	✓

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DEEP input; CT STARS



Automation/digitization opportunities | DEEP (III/III)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Further automate/digitize municipal grant processes	600-625+ <ul style="list-style-type: none">Grants require heavy engagement across departments, particularly fiscal and IT; high retirement rates expected	\$25-30k+	<ul style="list-style-type: none">50 projects currently under managementExisting contract with DocuSign to streamline signature processCould be part of state-wide initiative	

Initiative in progress Discussed, not in progress

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DEEP input; CT STARS



Automation/digitization opportunities | DESPP (I/IV)

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Streamline case reporting and review (Division of Scientific Services)	<p style="text-align: center;">2-2.5k+</p> <ul style="list-style-type: none"> Primarily performed by Forensic Science Examiners; high retirement rate expected 	\$100-125k+	<ul style="list-style-type: none"> Includes redaction and review of case discovery material, sample status queries, paperwork reconciliation, etc. Multiple systems currently utilized (Acrobat, instrumental software, spreadsheets, printed materials) Would reduce manual effort required from case management 	
Implement grant management system at DEMHS	<p style="text-align: center;">1.5-2k+</p> <ul style="list-style-type: none"> DEMHS staff multi-tasking – would free capacity and potentially reduce need for general department backfills 	\$70-80k+	<ul style="list-style-type: none"> DEMHS oversees typically oversees 140 subgrants with number recently doubling due to supplemental funding, in addition to other programs Grants management system may provide options currently not available, such as creating reports, updating existing information (rather than re-entry), etc. Could be utilized agency wide 	
Accept credit cards agency-wide	<p style="text-align: center;">1-1.5k+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$60-70k+	<ul style="list-style-type: none"> Credit card reconciliation process will replace current manual reconciliation of funds received via check May reduce daily bank deposits via armored car service Improves customer experience and payment timeliness 	
Digitize quality control activities	<p style="text-align: center;">1-1.5k+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$40-50k	<ul style="list-style-type: none"> Includes inventory monitoring, reagent quality control, process review required by accreditation, instrument/equipment maintenance Currently requires manual vendor queries and spreadsheets 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DESPP input; CT STARS



Automation/digitization opportunities | DESPP (II/IV)

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Implement online ordering for bookstore (Fire)	<p style="text-align: center;">1-1.5k+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$50-60k+	<ul style="list-style-type: none"> Bookstore currently requires phone, email, or in-person ordering Current Point of Sale software no longer supported and requires update Implementing online sales would reduce administrative effort and help bookstore compete with e.g. Amazon, increasing revenues 	
Upgrade electronic student registration and payment (Fire)	<p style="text-align: center;">750-1k+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$70-80k+	<ul style="list-style-type: none"> Existing SABA system antiquated and requires upgrade Systems used by regional fire schools are superior and could be exemplars Pilot testing of LMS system in progress 	✓
Digitize student certification (Fire)	<p style="text-align: center;">750-1k+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$60-70k+	<ul style="list-style-type: none"> Testing largely in-person at multiple locations Certifications currently distributed in physical copy Ideal future system would allow students to download directly Pilot testing remote testing and use of state college/university computer labs in progress 	✓

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DESPP input; CT STARS



Automation/digitization opportunities | DESPP (III/IV)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize officer and instructor certification processes and documents	<p align="center">250-275+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$10-12k+	<ul style="list-style-type: none"> Includes initial certification for new officers, recertification, cross-state certification Officers must be recertified every 3 years (~2800 per year), in addition to hundreds of new officers each year ~1500 instructors statewide require recertification every 1-3 years Documents are paper-based and data entry processes are manual Automation would reduce incomplete submissions and ease time demands on officers 	
Automate basic training data entry, maintenance, and planning/logistics	<p align="center">150-175+</p> <ul style="list-style-type: none"> Primarily conducted by IT and administrative staff; high retirement rate expected 	\$5-7.5k+	<ul style="list-style-type: none"> Significant manual data entry, with oversight required for 6 satellite academies 	
Fully digitize CLESP-related data for accreditation	<p align="center"><100</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$1-1.5k	<ul style="list-style-type: none"> Data storage inconsistent across agencies – some are digitized, others require hand searches of files 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DESPP input; CT STARS



Automation/digitization opportunities | DESPP (IV/IV)

✔ Initiative in progress ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Automate/further centralize grant-making at State Police	TBD	TBD		
Update fleet/fuel tracking system	TBD	TBD		
Accept credit card payments for background/records checks	TBD	TBD		
Digitize firearm license renewals	TBD	TBD		
Digitize early steps of Sex Offender and Deadly Weapon Offender Registries	TBD	TBD		

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DESPP input; CT STARS

Automation/digitization opportunities | DMHAS

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Implement Electronic Health Record	<p style="text-align: center;">50-60k+</p> <ul style="list-style-type: none"> Increases capacity for direct-service worker (nurses, physicians, etc.), potentially reducing need for backfill 	\$15-20m+	<ul style="list-style-type: none"> Electronic Health Record would streamline chart management, medication administration, inventory control, and activities at DMHAS facilities and reduce central IT workload Increased staff efficiency would result in improved patient outcomes Improved intake, billing, and reporting processes would reduce lost revenue 	✔
Automate shift staffing via KRONOS	<p style="text-align: center;">20-24k+</p> <ul style="list-style-type: none"> Optimizes scheduling and increases nurse capacity 	\$750k-\$1m	<ul style="list-style-type: none"> Lean HR resources limit ability to implement KRONOS Would require seed money and/or resource allocation 	✔
Centralize and automate Affirmative Action reporting	<p style="text-align: center;">5-8k+</p> <ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	\$300-350k+	<ul style="list-style-type: none"> Affirmative Action reporting currently requires year-round staff and generates thousands of hard-copy pages 	
Data sharing across agencies	<p style="text-align: center;">2-2.5k</p> <ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	\$100-125k+	<ul style="list-style-type: none"> Cross-agency data sharing is a major component of Behavioral Health Homes, Targeted Case Management; Medicaid initiatives of CHESS, 500 Familiar Faces, and the 1115 waiver; DMHAS works with the 2 Administrative Services Organizations Advanced Behavioral Health and Beacon Health Options 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DMHAS input; CT STARS



Automation/digitization opportunities | DOT (I/VII)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize bridge/building/sign support Inspection	TBD	TBD	<ul style="list-style-type: none"> Utilize InspectTech application 	
Further digitize project management	TBD	TBD	<ul style="list-style-type: none"> Potential applications for project estimations, bids, designs, analytics, and more Utilize AASHTOWARE, Estimator/Adobe SVG, Compass, BidExpress, and more 	
Further digitize pavement data tracking	TBD	TBD	<ul style="list-style-type: none"> Estimate and track lifecycles, costs, condition, history, and more Utilize Deighton dTIMS and Vision 	
Digitize tracking of municipal capital projects	TBD	TBD	<ul style="list-style-type: none"> Utilize LOTCIP Database 	
Digitize job log for customer care center	TBD	TBD		

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.
Source: DOT input



Automation/digitization opportunities | DOT (II/VII)

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Hardwire components of statewide traffic signal systems	<i>TBD</i>	TBD		
Digitize service memo and work order system	<i>TBD</i>	TBD		
Implement adaptive traffic control system	<i>TBD</i>	TBD	<ul style="list-style-type: none"> Traffic signal timing would change based on actual traffic flow 	
Model traffic congestion to identify additional solutions	<i>TBD</i>	TBD		
Digitize consultant invoice process	<i>TBD</i>	TBD	<ul style="list-style-type: none"> Streamline consultant invoice and payment process Reduce the number of steps and employee/ management touches in the process. 	

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.
Source: DOT input



Automation/digitization opportunities | DOT (III/VII)

✔ Initiative in progress ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Streamline environmental permitting	TBD	TBD	<ul style="list-style-type: none"> • Develop an environmental permitting process that allows for the early action and revisions in both design and permitting • Establish the needed flexibility for the Design-Build process while still addressing the environmental regulations and guidance documents 	
Digitize guiderail database	TBD	TBD		
Digitize right-of-way data	TBD	TBD	<ul style="list-style-type: none"> • Create mosaic to display all right-of-way assets owned by DOT in blueprint fashion • Create dataset of all right-of-way assets 	
Digitize police report data	TBD	TBD	<ul style="list-style-type: none"> • Create searchable database 	
Increase use of electronic forms	TBD	TBD	<ul style="list-style-type: none"> • Utilize cloud-based document management system and lean internal processes • Standardize critical business processes across districts 	

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.
Source: DOT input



Automation/digitization opportunities | DOT (IV/VII)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize scenic land strip data	TBD	TBD		
Digitize tracking of physical inventory	TBD	TBD	<ul style="list-style-type: none"> Utilize mobile applications 	
Implement electronic signature technology	TBD	TBD		
Implement facility management work order system compatible with existing systems	TBD	TBD	<ul style="list-style-type: none"> System should tie into Financial, Inventory Control, and Asset Management modules 	

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.
Source: DOT input



Automation/digitization opportunities | DOT (V/VII)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize disadvantaged business and contractor prequal process	TBD	TBD	<ul style="list-style-type: none"> Allow disadvantaged businesses (DBEs) to apply and renew status online 	
Digitize code enforcement for municipal building departments	TBD	TBD	<ul style="list-style-type: none"> Utilize off-the-shelf software package that deals with permitting/inspection / close-out / occupancy to improve organization 	
Implement adaptive traffic control system	TBD	TBD	<ul style="list-style-type: none"> Traffic signal timing would change based on actual traffic flow 	
Digitize tracking of fuel station tank volume	TBD	TBD		
Digitize material storage documents	TBD	TBD		

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included. Source: DOT input



Automation/digitization opportunities | DOT (VI/VII)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize Highway Safety Office grants management	TBD	TBD	<ul style="list-style-type: none"> Utilize web-based grant application and reimbursement system that will generate timely submission of accurate enforcement grants and reimbursements utilizing electronic signature capabilities 	✓
Further digitize internal permitting for water/natural resources unit	TBD	TBD		
Digitize regulation and permitting of livery transportation companies	TBD	TBD	<ul style="list-style-type: none"> Utilize RCIS application 	✓
Increase tracking of Major Traffic Generator applications	TBD	TBD		✓
Digitize tracking of vehicle repairs	TBD	TBD		

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.
Source: DOT input



Automation/digitization opportunities | DOT (VIII/VII)

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Update Newington/Bridgeport Access database	TBD	TBD	<ul style="list-style-type: none"> Replace the existing Access databases used in Newington and Bridgeport Ops., Centers with more current programs Determine if custom database solutions can be replaced by a new product developed and supported by IT 	
Potentially outsource closed loop traffic signal system software	TBD	TBD	<ul style="list-style-type: none"> Highway Operations currently investigating whether closed loop traffic signal system software will remain on the DOT network (which will require additional IT resources) or whether it could be outsourced to run on the Cloud 	✓
Expand use of cellular modems for closed loop traffic signal systems	TBD	TBD	<ul style="list-style-type: none"> Replace existing dial-up modems 	
Digitize and standardize FEMA reimbursement request process	TBD	TBD		
Automate equipment resource allocation and distribution	TBD	TBD		

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.
Source: DOT input

Automation/digitization opportunities | DSS

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Streamline Affirmative Action data download from CoreCT	<i>TBD</i>	TBD		
Converting case visit documentation system to Salesforce	<i>TBD</i>	TBD		
Further automate call centers	<i>TBD</i>	TBD		
Further automating eligibility document approval process	<i>TBD</i>	TBD		

Initial investment to automate/digitize process not included
Source: DSS input



Automation/digitization opportunities | OEC

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Utilize Citizen One Stop for resident call support	<i>n/a – already outsourced to United Way</i>	\$800-900k	<ul style="list-style-type: none"> Receiving resident calls estimated to result in ~30% reduction in call volume to United Way and simplify system for residents CCDF funds could be applied elsewhere as needed 	✓
Utilize mobile inspections	<p>10k+</p> <ul style="list-style-type: none"> Reduces work for licensors; high retirement rate expected 	\$400k+	<ul style="list-style-type: none"> Replace current paper forms and reduce travel time for licensors Potential for real-estate cost reduction due to licensors no longer needing office space to process paperwork 	✓
Automate grant reporting activities	<p>3-3.5k+</p> <ul style="list-style-type: none"> Grant-related staffing already low, with further retirements expected 	\$150-175k+	<ul style="list-style-type: none"> Majority of OEC budget is from federal grants – meeting requirements requires significant effort Providers often produce multiple reports for different programs OEC using Preschool Development Grant to develop program reporting software and automate data reports 	✓
Add live fingerprint scans for background checks	<p>2.5-3k+</p> <ul style="list-style-type: none"> Reduces administrative work; high retirement rate expected 	\$100-125k+	<ul style="list-style-type: none"> Reduce need to mail cards, re-process unusable submissions, etc Could be incorporated into state-wide background check system 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: OEC input; CT STARS



Automation/digitization opportunities | OPM

✓ Initiative in progress ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Automate grant reporting activities	<p><i>TBD</i></p> <ul style="list-style-type: none">Reduces administrative work; high retirement rate expected	<i>TBD</i>	<ul style="list-style-type: none">Grant reporting performed by several divisions within OPMCentralizing could create standard forms and reduce administrative effortLarge investment and federal funding monitoring required	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: OPM input; CT STARS

Automation/digitization opportunities | SDE (I/III)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Streamline “purple sheet” document review process	<p style="text-align: center;">25-50k+</p> <ul style="list-style-type: none"> Administrative staff process large numbers of documents; high retirement rate expected 	\$1-2m+	<ul style="list-style-type: none"> Approval process for documents often involves multiple passes through various departments including Legal, Fiscal, Commissioner's office, etc. Documents that are irrelevant for a given department generate unnecessary churn and administrative complexity Automated process with ability to pre-flag required reviewers based on standard set of rules (e.g. any mention of statutes requires Legal review) would reduce time spent per document and minimize irrelevant reviews 	
Continue automation of certification processes	<p style="text-align: center;">50-60k+</p> <ul style="list-style-type: none"> Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	\$1-1.5m+	<ul style="list-style-type: none"> BESC has undergone several years of LEAN training to streamline processing with declining staff/resources Existing online certification system, Connecticut Educator Certification System (CECS), processes ~60-70% of applications online DocuSign and eCert being considered to modernize additional processes—concerns about costs and inability to handle nuances (e.g. educators holding multiple certificates), respectively Conversations with Parchment to streamline etranscript process ongoing 	✔

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: SDE input; CT STARS

Automation/digitization opportunities | SDE (II/III)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Standardize contracts and streamline online grant approval process	<p style="text-align: center;">400-500+</p> <ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	\$20-25k+	<ul style="list-style-type: none"> Contract templates do not currently exist; process could be automated so only new/specific information changes and boiler plate language (e.g. assurances) remains fixed Approval forms currently require both wet signatures and online system approval Expand existing online system capabilities to include additional grants, e.g. Perkins grants 	
Automate Teacher Negotiation Act (TNA) supervision	<p style="text-align: center;">300-400+</p> <ul style="list-style-type: none"> Increases capacity of Educational Consultants, potentially reducing need for backfill 	\$20-25k+	<ul style="list-style-type: none"> Office of Commissioner of Education facilitates local board of education negotiations and must supervise TNA process, track and post timelines/dates, assign mediators and arbitrators, etc 	
Digitize HR forms and integrate with CORE	<p style="text-align: center;">700-900+</p> <ul style="list-style-type: none"> Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	\$15-20k+	<ul style="list-style-type: none"> Existing HR processes involve duplicative approvals and manual data transfer between systems Opportunities include: <ul style="list-style-type: none"> Allow for online timesheet approval and reimbursements Issue automated reminders for outstanding forms Expand existing systems to facilitate new processes, e.g. use Electronic Leave Request system for telework approval 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: SDE input; CT STARS

Automation/digitization opportunities | SDE (III/III)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Streamline awards scoring and program monitoring	<p style="text-align: center;">100-150+</p> <ul style="list-style-type: none"> Increases capacity of Educational Consultants, potentially reducing need for backfill 	\$5-9k+	<ul style="list-style-type: none"> Existing processes include significant manual data transfers, e.g. Qualtrix to Excel, Educator Data Base to EASTCONN dashboards, and systems could be streamlined Candidate awards/programs for review include: <ul style="list-style-type: none"> - Teacher Education and Mentoring Program (TEAM) - Anne Marie Murphy Paraeducator of the Year 	
Automate Alliance District data monitoring	<p style="text-align: center;">100-150+</p> <ul style="list-style-type: none"> Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	\$4-5k+	<ul style="list-style-type: none"> Data for 33 Alliance Districts (districts with low Accountability Index measures) is reviewed 3x/year to inform monitoring meetings Process could be further automated 	

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: SDE input; CT STARS

3.3.1

Common payment platform

Payment processes differ across agencies despite availability of common payment platform

What we heard

- Individual agencies determine processes for receiving payments with no central mandate
- Agencies are primarily responsible for procuring and deploying relevant technology and systems
- Payment methods include cash/check, PayPal, and credit cards and can vary within agencies
- Payment processing is often highly manual and requires high administrative capacity to e.g. process cash and check payments

DAS and Office of the Treasury input

- Office of the Treasury houses master credit card processing contract with GlobalPay – last renegotiated FY20
- Est. ~17% of state-wide transactions¹ are processed via GlobalPay platform with average fees of 1.3-3.3%
- Existing GlobalPay contract limits functionality – e.g. no ability to accept payments from digital wallets
- Visibility is limited on end-to-end payment process, making it challenging to identify opportunities for improvement

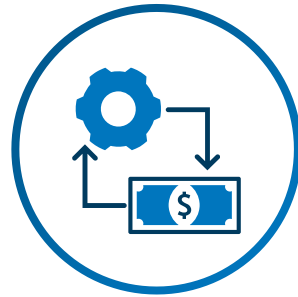


1. Excludes UConn and other non-SDE education systems, federal grants, escheats, recoveries, interest, refunds of prior year expenditures, non-sales/use taxes, and DRS sales/use taxes
Source: Agency engagement; DAS and Office of the Treasury input

Further streamlining payment processes could help realize several sources of value



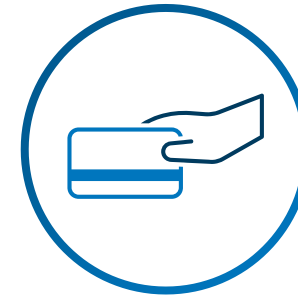
Lower fees/charges
by optimizing use of
lower-cost
platforms/payment
methods



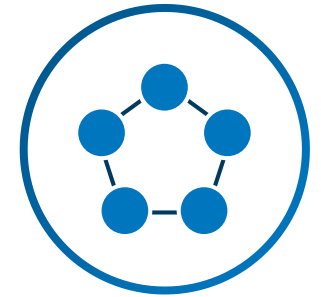
Reduced operational costs through
increased automation
and fewer employees
needed to process
payments, staff call
center



Revenue uplift
from increased
compliance, earlier
payment



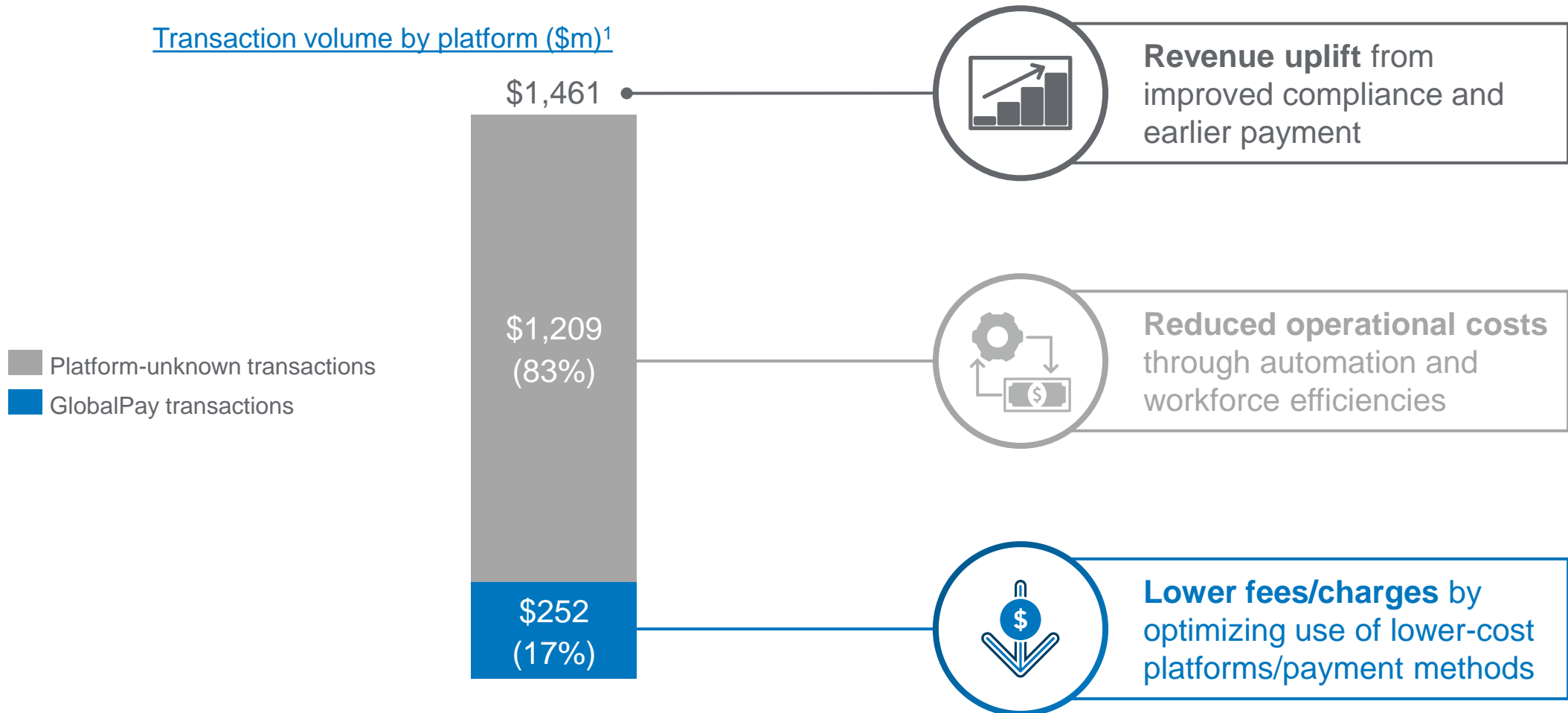
Simplified resident experience for
submitting and tracking
payments



Streamlined operating model with
clearer visibility into
state-wide fees,
transaction volumes,
and processes

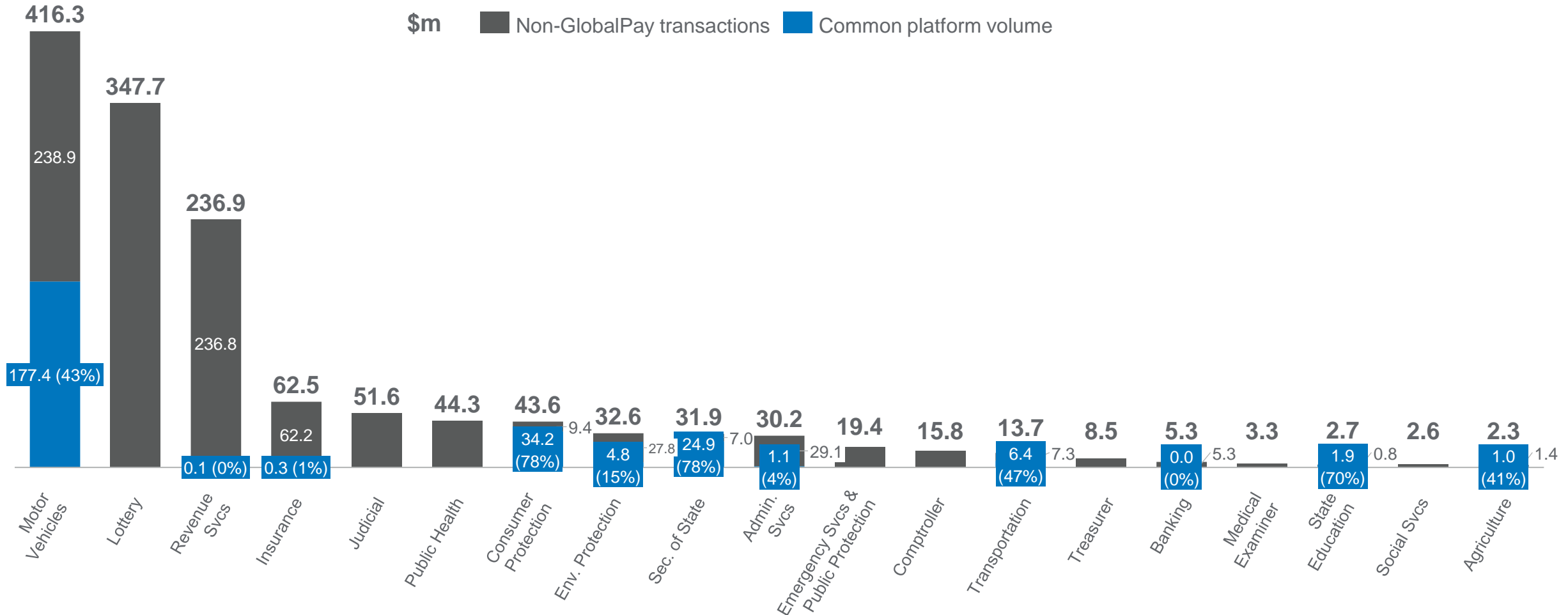
Est. ~17% of transaction value processed via the common platform; opportunity to realize savings and increase total revenue through streamlining processes

Transaction volume by platform (\$m)¹



1. Excludes UConn and other non-SDE education systems, federal grants, escheats, recoveries, interest, refunds of prior year expenditures, non-sales/use taxes, and DRS sales/use taxes
Source: DAS input; State of Connecticut General Ledger report; GlobalPay transaction volumes via Office of the Treasurer

Utilization of common platform is uneven, with many agencies and departments not utilizing it at all despite high transaction volumes



Note: All figures are for FY20; excludes ~\$26m in GlobalPay transactions categorized as "State of CT - License"; excludes UConn and other non-SDE education systems; excludes "XCX" category from General Ledger report; revenue figures exclude federal grants, escheats, recoveries, interest, refunds of prior year expenditures, non-sales/use taxes, and DRS sales/use taxes
 Source: State of Connecticut General Ledger report; GlobalPay transaction volumes via Office of the Treasurer

3.3.2

Common document management platform

Implementing a state-wide digital document management system could improve data hygiene and increase capacity individual agency capacity

What we heard

- “ Any time we need to provide a policy update, we send blast faxes to facilities
- “ We have millions of detailed records in hard copy
- “ Employees of all levels have to manually enter data every day to keep up
- “ We receive all our eligibility applications on paper and each takes hours to process

Potential benefits of a state-wide digital system



Improved data hygiene and visibility into historical records



Reduced workload for clerical and administrative staff freeing capacity for other tasks and reducing need to backfill vacant positions



Increased standardization of interfaces for residents, providers, and other third parties



Reduced physical footprint allowing for more efficient use of office space

3.3.3

Automate Affirmative Action reporting

Automating and centralizing Affirmative Action reporting could generate significant efficiencies and reduce manual effort for individual agencies

Multiple agencies have dedicated Affirmative Action staff (not exhaustive)¹



Transportation: 9 employees



Correction: 5 employees



Mental Health/Addiction Services: 4 employees



Developmental Services: 3 employees



Motor Vehicles: 3 employees



Labor: 1 employee



Manual effort, lack of standardization were common pain points raised during agency engagement



The yearly Affirmative Action plan is thousands of pages long and requires year-round staffing



Affirmative Action staff involvement is very variable across agencies



It would make more sense for [Agency X] not to individually handle Affirmative Action reporting

Est. 75-100+² FTE of effort dedicated to AA reporting state-wide not including central team
Automation and centralization could result in 30%+ reduction in work required (20-30+ FTE, \$1.5-\$2m+)

1. List not exhaustive – totals represent all Equal Opportunity Employment positions listed for select agencies in CT STARS data 2. Estimate scaled across 41 agencies – CT STARS data shows 38 positions across 14 agencies
Source: CT STARS data; DoL input; Commissioner interviews; BCG experience

3.3.4

Department of Motor Vehicles (DMV) digitization

As retirements hit front- and back-office staff, multiple levers to mitigate build-up of wait-times and backlogs



Extend employee time/productivity

- Extend hours
- Leverage alternate shift models (e.g., split shifts, 9x80, 4x10, etc.)
- Maximize staffing during morning and lunch rushes
- Focusing on predictability of hours to lower absenteeism



Add temporary capacity

- Leverage temp employees during peak periods and/or to support the REAL ID surge
- Use mobile units and employees in highest demand branches



Add long term capacity

- Add additional terminals to busiest branches
- Outsource select services to contractors (e.g., AAA) or to schools
- Open new branches (either DMV operated or out-sourced)

Best practices observed at other DMVs nationally

Efficiency

- Issue ticket immediately upon arrival—give greeters tablets to check people in and start / complete transactions while in line
- Improve triage efficiency and leverage express/priority lanes based on complexity of transactions
- Use online verification of documents to reduce time in branch
- Direct customers to self-service kiosks/computers for transactions that could be completed online

Accessibility

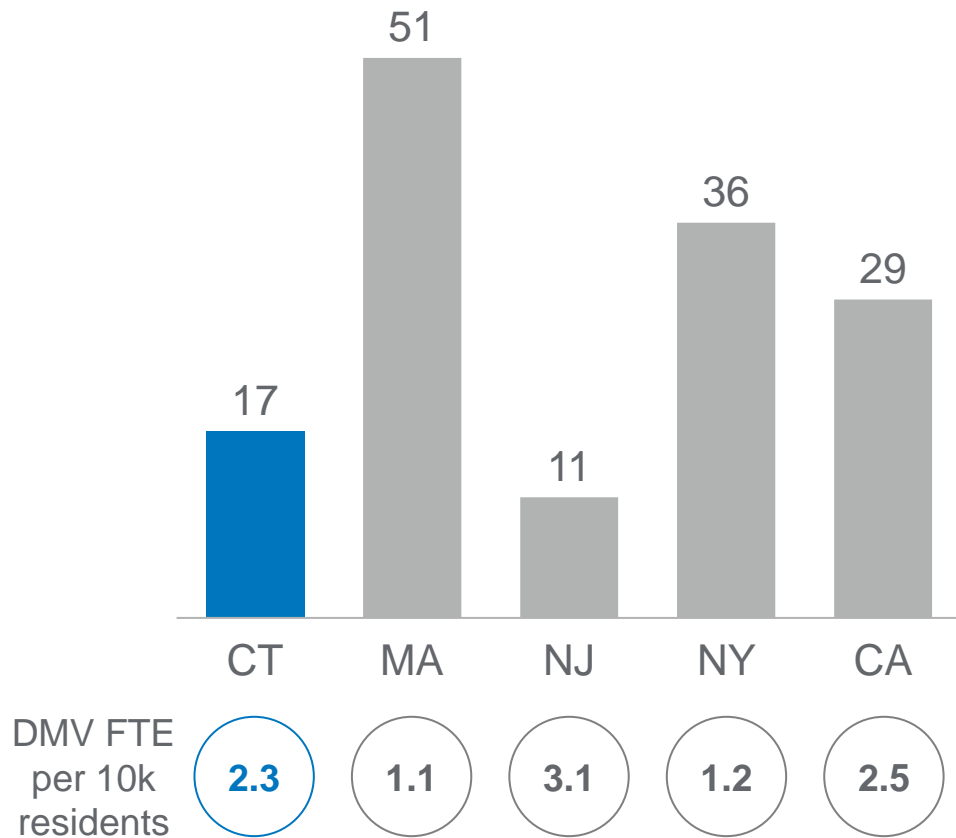
- Have 24/7 accessible self-service kiosks at various locations
- Expand usage of partner third-parties that offer DMV services
- Employ a mobile branch for accessibility and support

Data and performance tracking

- Track performance and customer satisfaction and use to drive real-time business decisions and long-term strategy

Transaction channel | CT offers fewer transactions online than other states; opportunity to add renewals, duplications, COAs and more

Observed transactions online by state¹



Potential Opportunities

- Bringing per capita staffing in line with MA and NY would yield annual savings of tens of millions of dollars
- Do-It-Yourself services and virtual offices shift tasks to customers and allows for reduction in backfilling needs, while bringing forward much-needed revenue during COVID-19 pandemic
- Primary transactions to prioritize include:
 - Pre-apply online for new licenses
 - Vehicle registration
 - Change of Address (inc. on driver's license / ID)
 - Renew driver's license (including CDL) and state ID (*in progress for non-CDL*)
 - Renew driver's license (including CDL) and state ID
 - Payment of infraction, reinstatement fees, etc.
 - At-home knowledge testing (class D)
- Shifting full and partial transactions online reduces wait times
 - Critical to implement changes before REAL ID demand surge
 - Validate documents before completing transactions in-person (exception for REAL ID)

1. Not exhaustive – reviewed and collapsed to ensure appropriate comparisons
Note: Based on state DMV websites for online services
Source: State budgets, personnel reports

Within DMV, customer-facing representatives and inspectors are bulk of retirement eligible workers – potential for long wait-times and backlogs

Function	Cost (\$m)	FTE	FTE retirement eligible
Motor Vehicle Examiner/Analyst	\$19.5	351	83 (24% of current)
Motor Vehicle Inspector/Agent	\$4.6	71	18 (25% of current)
MV Operating License Agent	\$4.0	65	20 (31% of current)
Secretary / Clerk / OA	\$2.3	52	18 (25% of current)
IT Analyst	\$3.1	30	30 (27% of current)
Processing Technician	\$1.5	26	12 (46% of current)
Motor Vehicle Program Coord.	\$1.7	18	8 (44% of current)
Other	\$12.4	151	41 (40% of current)
Total	\$49m¹	764	228 (30% of current)

1. Number does not tie to programmatic budget due to rounding; Excludes fringe benefits

Note: Includes federal and state funding

Source: STARS database as of 1/5/2021, Connecticut 2020-2021 Biennial Budget Program Addendum

Based on other states who have invested in DMV digitization efforts, CT could realize tens of millions of dollars in expense savings and revenue uplift



DMV Expense Reductions

	Internal Target (High)	Internal Target (Low)	Rec. Adj. to FY23 Budget
DMV FTEs/ 10K residents	1.2	1.8	1.9
FTE savings	~400	~165	~150
Cost savings	~\$26m	~\$11m	~\$8-10m



DMV Potential Top-Line Impact

	Internal Target (High)	Internal Target (Low)	Rec. Adj. to FY23 Budget
Revenue backlog	Unknown		
Est. revenue backlog reduction	~\$9m	~\$6m	\$5-7m
Potential net budget impact	~\$35m	~\$17m	~\$13-17m

Assumptions and Takeaways

- Top-down and bottoms-up analysis indicate annual expense savings potential of at least several millions of dollars
- CT DMV staffing per capita ratio is ~2x that of more digitally mature peers (MA and NY)
- Leadership did not cite revenue or transaction backlogs as an issue, but agency lacks ability to accurately measure
 - Given prevalence of backlogs at DMVs nationwide pre-pandemic, highly manual processes within CT DMV and pandemic-induced branch closures, significant backlogs are expected
 - Benchmark states further along on digital maturity curve than CT

Priority should be on moving high value transactions online as well as further digitizing those already online (i.e., increased share or components)

Transactions/processes to (further) digitize	2019 Volume	FTEs saved	Cost reduction (\$M)	CT	MA	NJ	NY	CA
New Registration	220+	49	~\$2.0				✓	
Cancel Registrations	293K	26	~\$1.1	✓	✓			
Driver Services—Medical Reporting Schedule	62K	22	~\$1.3				Unknown	
Check Payment Processing for Services	71K	11	~\$0.8				Unknown	
Driver's License Renewal	96K	16	~\$0.7	Delayed	✓	✓	✓	✓
Boat Registration Renewals	86K	11	~\$0.6		✓			✓
Driver License Duplicates	61K	11	~\$0.6	Delayed	✓	✓	✓	✓
Change of Address	53K	4	~\$0.2	Delayed	✓	✓	✓	✓
		150	\$8M					

Once digitized, CT should use financial and convenience incentives for self-service tools

Bulk of recommended savings can be found within <10 transactions

Additional transactions to further digitize w/o CT data

CDL New Issuance	~1K	Data Not Available		✓		✓	
CDL License Renewal	16K			✓			✓
Non-Driver ID Renewal	7K			✓		✓	✓
Transfer Out-of-State License	N/A						
CDL Downgrade to Passenger License	N/A				✓		

Prioritize transactions with (i.) high volumes, (ii.) self-service in peer states and (iii.) those likely to see increases in demand

Note: Assumes 50% of FTE time spent on transaction processing (remainder spent on paperwork, idle, breaks, etc.)
Source: CT DMV, external analysis

Statutory changes required to expand scope of partner transactions and ease burden on DMV from retirement surge

Limited use of partners today...



Partners limited to AAA and Nutmeg Credit Union¹

Statutes permit these partners to perform few functions, including:

- License/ID renewal
- License/ID replacements
- Change of address and/or name
- Copy of driver's history

Transactions which involve more complexity (e.g., titles and registrations, paying municipal vehicle property tax owed) not permitted or feasible without data integration

Self-service kiosks not approved for usage in CT

...should be expanded to increase capacity at DMV branches for complex transactions

Cannibalizing partner functions may produce limited net efficiency opportunities, necessitating expanded scope of activities for partners and usage of kiosks

- Transactions currently allowed should be included in DMV's online service offerings
- Requires statutory changes

Offload more complex tasks to third-parties who see partnership as win-win

- ~40% of Nutmeg's new accounts came from DMV affiliated branches²

Partner-model enables residents to be serviced more quickly and allows DMV to rationalize footprint without placing burden on residents



Transaction channel | DMV goal should aim to limit customers' in-person appearance to a single time as all transactions become digitized and automated



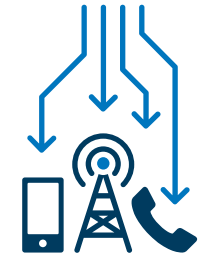
Ideal future state should need customers onsite at a branch once in their lifetime



Leverage electronic verification from other trusted federal and state agencies wherever possible (e.g., DRS, DOL)

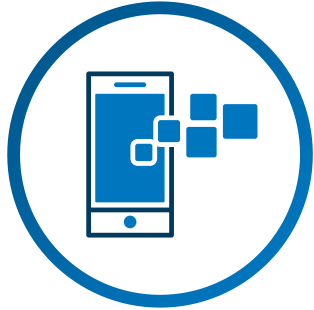


All paperwork and transactions should be digitized and automated



All services that can be performed outside of a DMV location should be made available (e.g., mobile, web site, partners, etc.)

Multiple technologies and shared-services can be used to ease burden on manual back-office processes



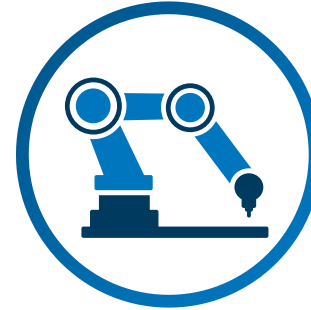
Enhance online customer portal

- Self-service appointment scheduling with optimized scheduling
- Chatbots / voicebots to answer FAQs
- Real-time status check
- Self-uploading of documents with AI for validation



Digital document reading and storage

- Use of Natural Language Understanding, Optical Character Recognition and Robotic Process Automation to read and upload documents
- Use of e-Signature software to mitigate need for "wet signatures", print & mail operations



Back-office automation






- Expanded use of electronic payments
- Automatic banking / check deposits
- Streamlined IT systems
- Integration with other state agencies for single resident POV (i.e., Citizen One Stop integrating DRS, DMV, DOL, etc.)



Performance management

- Implement real-time performance management dashboards to enable reps. and managers to view performance trends
- Include token rewards (e.g., gift cards, commissioner calls, etc.) to drive productivity

Online benchmarking (I/V)

Services	Est. Volume/ Impact Rank					
		Connecticut	Massachusetts	New Jersey	New York	California
Apply for a State ID	High		✓			
Cancel Registration and License Plates	High	✓	✓			
CDL—Complete New Issuance (must have passed road test)	High		✓			
CDL—Renew My Commercial (Class A, B, C) Driver's License	High		✓		✓	✓
Change My Address	High		✓	✓		✓
Change Name on My License/ID	High		✓			
Pay Emissions Test Late Fee	High	✓				
Pay My EZ Pass Fees	High		✓			
Pay My License and Road Test Fees	High		✓			
Pay My Vehicle Sales Tax	High		✓			
Pre-upload REAL ID Documents	High	No	No	No	No	Yes
Register My Vehicle	High		✓		✓	
Register to vote online here	High	✓	✓		✓	
Reinstate My License	High				✓	
Reinstate My Registration	High		✓	✓		
Renew a Motor Carrier Permit	High					✓
Renew my Driver's License	High		✓	✓	✓	✓
Renew non-driver ID	High		✓		✓	
Renew Registration	High	✓	✓	✓	✓	✓
Replace Damaged License Plates	High	✓				
Replace My License ID	High		✓	✓	✓	✓

Online benchmarking (II/V)








Services	Est. Volume/ Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Replace My Lost/Damaged Plate	High		✓			
Replace My Plate Return Receipt	High		✓			
Replace My Registration	High	✓	✓	✓	✓	
Replace My Title	High		✓		✓	
Replace non-driver ID	High				✓	
Transfer My Out of State License	High		✓			
Apply for a Learner's Permit	Medium		✓			
CDL—Downgrade to a Passenger License	Medium		✓			
Order a Disability Placard or Plate	Medium		✓			
Order a Special/Vanity Plate	Medium	✓	✓	✓	✓	✓
Pay driver responsibility assessment	Medium				✓	
Pay for additional road test	Medium				✓	
Pay Infraction Ticket (e.g., parking and traffic tickets)	Medium	✓	✓	✓	✓	
Pay insurance lapse civil penalty	Medium				✓	
Pay suspension termination fee	Medium				✓	
Reprint Registration Certificate (There is no fee to reprint a registration certificate online)	Medium	✓				
Request a Duplicate Title	Medium					✓
Request a Temporary Driver License Extension	Medium					✓
Request Replacement Sticker or Registration Card	Medium					✓

Online benchmarking (III/IV)

Services	Est. Volume/ Impact Rank					
		Connecticut	Massachusetts	New Jersey	New York	California
Restore license after revocation	Medium				✓	
Schedule to take a road test	Medium	✓	✓	✓	✓	
Senior License Renewal (must be at least 74 years old)	Medium		✓		✓	
Transfer a Title	Medium					✓
Transfer My Out of State Registration	Medium		✓			
Add/Remove a Lienholder on a Title	Low		✓			
Add/Remove Affidavit of Non-Use	Low					✓
Amend My Registration	Low		✓			
Appeal a ticket conviction	Low				✓	
Apply for a Liquor ID	Low		✓			
Apply for a Salvage/Owner Retained Title	Low		✓			
Apply for a Vehicle Salesperson License	Low					✓
Be an organ, eye, or tissue donor	Low		✓	✓	✓	
Calculate Estimates of Vehicle Registration/Licensing Fees	Low					✓
CDL—COMMERCIAL Permit Exam (Class A, B, or C)	Low		✓			
CDL—Self Certify a Commercial Driver's License	Low	✓	✓			
Check Driver's License Status	Low	✓			✓	
Check driving privilege status and points	Low				✓	
Check Property Tax, Insurance, Emissions and Other Compliance Issues	Low	✓				

Online benchmarking (IV/V)

Services	Est. Volume/ Impact Rank					
		Connecticut	Massachusetts	New Jersey	New York	California
Child Safety Class Registration	Low	✓				
Complete a Notice of Transfer and Release of Liability	Low					✓
Correct a Title	Low		✓			
Driver's License Suspension Payments	Low	✓	✓			✓
Extend My Temporary Plate	Low		✓			
File for Planned Non-Operation	Low					✓
Fill out a Driver License/ID card Application	Low					✓
Find a Traffic School	Low					✓
Find vision test location near you	Low				✓	
Get a copy of a TVB ticket	Low				✓	
IRP—Register a New Vehicle	Low		✓			
IRP—Renew My Apportioned Registration	Low		✓			
Look up an Active Motor Carrier Permit Holder	Low					✓
Look up Occupational Licensing Status	Low					✓
Lookup Registration Status	Low	✓				
Partial Year Registration (PYR)	Low					✓
Pick Up My Vanity Plate	Low		✓			
Replace My Liquor ID	Low		✓			
Request a Crash Report	Low		✓			
Request a Public Driving Record	Low		✓	✓		✓

Online benchmarking (V/V)



Services	Est. Volume/ Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Request a Refund of Vehicle/Vessel fees	Low					✓
Request your Vehicle Record	Low					✓
Schedule and or Pay for a Salvage Inspection	Low		✓			
Submit a Medical Exam Report	Low					✓
Take a Professional Driver Instructor Exam	Low		✓			
Take a School Pupil Transport Exam	Low		✓			
Title My Vehicle	Low		✓			
Track License/ID Delivery Status	Low	✓				
Transfer Vehicle to a Surviving Spouse	Low		✓			
Update Lawful Presence Verification	Low		✓			
View Fatal Crash Administrative Hearings	Low				✓	

Automation/digitization opportunities | DMV (I/IV)

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Further digitize new registrations	<p>30-40k+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$700-900k+	<ul style="list-style-type: none"> Online dealers already perform ~30% of new registrations DMV recently deployed Out of State Dealer Registration and Pre Registration portals 	✓
Streamline Medical Reporting schedule	<p>15-20k+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$500-600k+	<ul style="list-style-type: none"> Single process with single notice would replace 3 separate processes (establishing due date, notifying driver, and suspending for non-compliance) 	
Fully digitize registration cancellation	<p>20-24k+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$400-500k+	<ul style="list-style-type: none"> DMV already allows online cancellation if plate has not expired; seeking to fully digitize 	✓
Automate check payment processing for services	<p>8-10k+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$250-350k+	<ul style="list-style-type: none"> In-person staff currently required to receive checks by mail, apply payments to customer accounts, and prepare bank deposits 	
Complete digitization of Driver's License renewals	<p>10-12k+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$250-300k+	<ul style="list-style-type: none"> Currently being digitized via Salesforce project Lockbox mail-in process being stood up as well, and CIOU and DS Divisions are processing mail-in renewals Business partners already provide ~45% of renewals 	✓

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included.

Source: DMV input; CT STARS

Automation/digitization opportunities | DMV (II/IV)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Digitize boat registrations renewals	<p>80-100k+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$250-300k+	<ul style="list-style-type: none"> DMV has previously worked on a venture with CT Dealers and Marine Trade Assoc to allow renewals online using Dealer Online System 	
Digitize Driver's License duplicates	<p>8-10k+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$200-250k+	<ul style="list-style-type: none"> DMV seeking to digitize via Salesforce project as well – duplicates currently processed in-person 	✔
Digitize address updates	<p>3-3.5k+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$50-75k+		✔
Automate Driver's History requests	<p>1.5-2k+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$30-40k+	<ul style="list-style-type: none"> Typically requires multiple examiners 	
Automate Ignition Interlock Device (IID) removal authorization	<p>1-1.4k+</p> <ul style="list-style-type: none"> Conducted by analysts; high retirement rate expected 	\$25-50k+	<ul style="list-style-type: none"> Automated notice to customer and IID vendor that IID requirement is complete would free analysts to do other work 	

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included.

Source: DMV input; CT STARS

Automation/digitization opportunities | DMV (III/IV)

✓ Initiative in progress
 ✓ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Fully digitize registration renewals	<p>1-1.5k+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$20-30k+	<ul style="list-style-type: none"> ~85% of renewals conducted through mail-in lockbox system or online – remaining 15 % will visit branch Renewals being expanded to DMV business partners such as AAA and Nutmeg. 	✓
Digitize billing process	<p>500-600+</p> <ul style="list-style-type: none"> Conducted by accounting staff; high retirement rate expected 	\$20-25k+	<ul style="list-style-type: none"> Billing process currently manual and includes: sending invoice letters to customers, manual QuickBooks tracking, processing flags/restrictions on customer accounts, collection enforcement actions, and cashiering payments 	
Automate call center resident support where feasible	<p>750-1k+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$15-20k+	<ul style="list-style-type: none"> ~45 calls received daily 	
Fully automate Affirmative Action reporting	<p>500-600+</p> <ul style="list-style-type: none"> One of 3 Equal Employment Opp. Staff retirement-eligible 	\$15-20k+	<ul style="list-style-type: none"> Already partially automated; CHRO is charged with fully automating per statute 	✓
Implement portal for medical professionals to complete medical reports	<p>200-350+</p> <ul style="list-style-type: none"> Conducted by analysts; high retirement rate expected 	\$10-12k+	<ul style="list-style-type: none"> Online form would force medical professionals to complete and answer all required sections/questions, eliminating incomplete/unreadable forms that need to be handled multiple times Portal would store completed forms, similar to CDL portal 	

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included.

Source: DMV input; CT STARS

Automation/digitization opportunities | DMV (IV/IV)

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Fully automate customer refund request processing	<p>150-200+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$5-8k+	<ul style="list-style-type: none"> Requests received from customers, branches, and contact center (email) Majority entered into CIVLS in automated fashion, but ~10% are still processed manually 	
Digitize boat cancellations	<p>200-250+</p> <ul style="list-style-type: none"> Conducted by administrative staff; high retirement rate expected 	\$3-5k+	<ul style="list-style-type: none"> Multiple employees may be required depending on season 	
Digitize title duplications	<p>150-200+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	\$2-4k+		
Complete digitization of registration duplicates	<p><100+</p> <ul style="list-style-type: none"> Conducted by examiners; high retirement rate expected 	<\$1k	<ul style="list-style-type: none"> DMV's online system can already service this transaction DMV business partners will also be able to service this transaction 	✔

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included.

Source: DMV input; CT STARS

Fees | DMV fees in-line with peers; opportunity to add CPI-indexing, safety inspections and EV fees

	CT	MA	NY
New License	\$84.00	\$75.00	\$164.50
Duration (years)	5.5-7 years	5	8
License Renewal	\$72.00	\$50.00	\$64.50
Duration (years)	6	5	8
Renewal Late Fee	\$25.00	None; 2 years cap	\$25-40 for < 60 days, \$75-300 for 60+
Commercial License	\$70.00	\$75.00	\$164.5-180.5 (MCTD)
Duration (years)	4	5	8
REAL ID Cost	\$30.00	\$25 upgrade	Same
Commercial Renewal Late Fee	\$25.00	N/A	\$0 (2 years)
Duplicate License	\$30.00	\$25.00	\$17.50
Make any change to license	\$30.00	\$25.00	\$12.50
Out of State License conversion (Class D)	\$124.00	\$115.00	\$65.00
License Exam	\$40.00	\$20.00	\$10.00
Learner's Permit	\$19.00	\$30.00	\$80.00
Duplicate Learner's Permit	\$19.00	\$15.00	\$17.50
Non-Driver ID (new)	\$28.00	\$25.00	\$9.00
Duration (years)	7	5	4
Inspection Cost	\$20	\$35	\$21
Frequency	Bi-annual	Annual	Annual
Safety / Emissions	Emissions	Both	Both

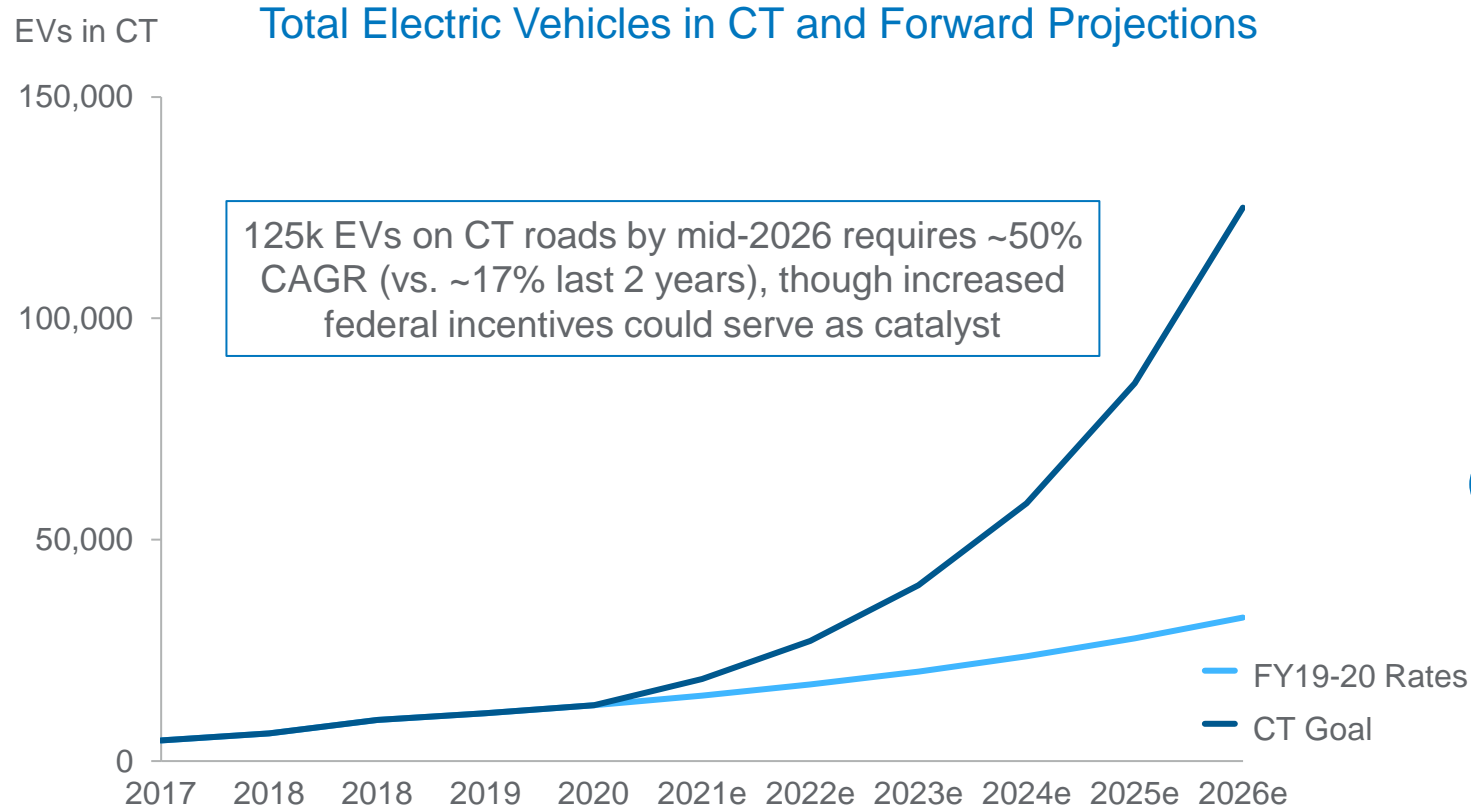
Potential Opportunities

- No obvious candidate for fee increase (in-line with peers)
- Opportunity to add safety inspections without added cost to State (inspections carried out by private dealers)
- Indexing fees to inflation provides consistent, palatable revenue increases and are seen in other states (e.g., CA, NC, PA)
- Charging for EV & fuel-efficient vehicles offsets gas tax declines, ensures equitable contribution
 - 28 States, including CA, charge \$50 to \$200 for electric vehicles
 - 12.6k EVs in CT as of July 2020¹



1. <https://www.ncsl.org/research/energy/new-fees-on-hybrid-and-electric-vehicles.aspx>

New revenue sources | Adding a fee for fuel-efficient vehicles produces little revenue at current EV adoption, but could grow to \$2m+/year



- ~12.6k electric vehicles currently on CT roads today (17% growth YoY)
- Goal of reaching 125k fuel-efficient vehicles by 2025 would result in 20k+ new registrations annually
 - \$2m incremental revenue
 - <\$1m p.a. at current pace
- Demand-impact likely to be minimal and/or mitigated by new administration
- Consider means-testing new fees to prevent countering adoption goals

3.3.5

Complete revenue services digitization program

DRS entering second of four phases for tax digitization program

Initiative goals

- Improve ability for filers to engage with DRS online (myconneCT), including:
 - Filing taxes
 - Sending and receiving messages
 - View filing history and outstanding payments
- Shift channel mix of tax filings from predominantly paper returns to predominantly electronic returns
- Reduce filing errors and allow agency to manage attrition from retirement surge

Keys to sustaining progress

- Strong project management leadership to hold program accountable to key milestones
- Engagement with variety of stakeholders (e.g., residents, preparers, auditors, policy makers, other agencies, etc.) to optimize design, interface, functionality and data architecture
- Integrating with data-driven tax compliance program to maximize revenue uplift



\$495m

Revenue uplift
expected in first 5
years after program
completion

3.3.6

Unemployment Insurance (UI) modernization

Automation/digitization opportunities | DOL

✔ Initiative in progress
 ✔ Discussed, not in progress

Opportunity`	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail	In progress?
Modernize initial claims processing	<p style="text-align: center;">50-60k+</p> <ul style="list-style-type: none"> Initial claims processing currently conducted by clerical staff with anticipated high retirement rate 	\$1-1.5m+	<ul style="list-style-type: none"> Customer service representatives currently review claims for completeness and transfer from Salesforce Standard Claim Queue to TICS (Telephone Initial Claims System) and IBM (processing, payment, etc.) Anywhere from 40-100+ processors working at any given time depending on volumes Modernization process will allow claimant to enter claim directly and remove need for processing Anticipated timeline for modernization: 1-2 years 	✔
Implement DocuSign for UI Reemployment Services & Eligibility Assessment Program	<p style="text-align: center;">2-2.25k+</p> <ul style="list-style-type: none"> Reduces administrative effort; high retirement rate expected 	\$50-60k+	<ul style="list-style-type: none"> Currently being tested Would reduce time spent on intake processes and allow for more efficient direct service provision Additional cost savings on printing, mailing, and other physical materials 	✔

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included
 Source: DOL input; CT STARS

3.3.7

Digitize DMHAS patient record

Implementing an electronic health record for DMHAS facilities could generate significant time and cost efficiencies

Context

- DMHAS operates 6 local mental health authorities (LMHAs) and two additional in-patient facilities
- DMHAS' lack of an electronic health record (EHR) results in non-standard and heavily manual processes across facilities
- Crucial positions such as nurses and mental health assistants have high numbers of 2022-retirement-eligible employees, creating risk of service disruption at facilities



Key benefits of an EHR include, but are not limited to...

- **Improved patient care** as a result of better care documentation, access to data, and monitoring of outcomes
- **Increased staff capacity** due to automation and standardization of processes such as medication administration, chart management, and patient intake
- **Cost savings** due to better visibility into spend, lower staff hours, and reduced administrative overhead

DMHAS estimates that implementing an EHR could save 50-60k+ employee hours and \$15-20m+ annually while improving resident health experiences and outcomes

3.3.8

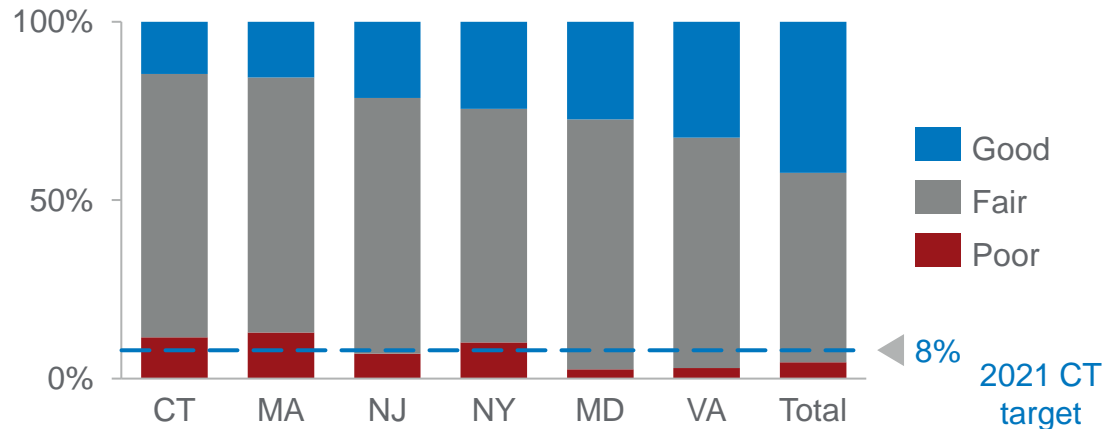
New maintenance and inspection tools

New tools | Using aerial inspection drones mitigates risk in area with large number of retirements and could save up to \$17m

\$120m currently spent on bridge renewals, but still behind condition target

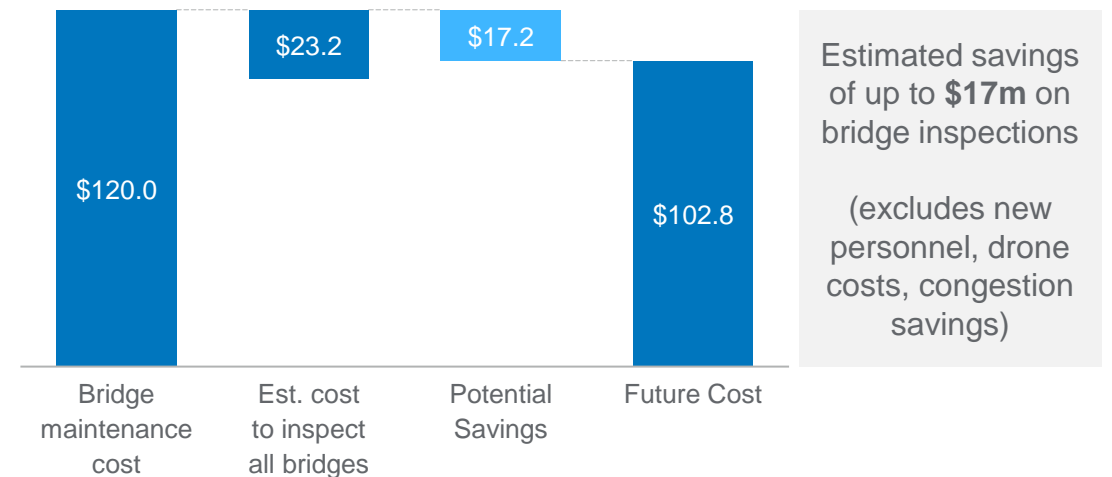
- Significant progress made over last ten years at risk from retirement surge and STF insolvency concerns
- 11 of 14 DOT bridge inspectors retirement-eligible

Share of bridges by FHWA Structural Condition (FY19)



Opportunity to invest in new tools that save money, time and lives

- Drones free capacity, reduce use of expensive snooper trucks and dangerous rappelling, helps prioritize repairs and attracts new talent (i.e., university partnerships)
- Estimated cost of \$1,200 per bridge deck inspection compares to \$4,600 under manual procedures¹



1. Assumptions by AASHTO: Manual cost for 2 people for 8 hours at \$100/hr + 2 lane closures at average cost \$1,500/lane vs. UAS 2 people (pilot and spotter) for 1 hour at \$600/hr
 Note: CT DOT responsible for inspecting 5,049 bridges (1,020 NHS) and maintaining 4,044 annually
 Source: Condition of Connecticut's Roadway Bridges 2020, 2019 AASHTO UAS/Drone Survey of All 50 State DOTs

3.3.9

Common contracting and grant
platform

Connecticut administers a diverse portfolio of ~4,400 total grants worth ~\$14b

Grant type	Total # of grants (unique SIDs)
Other Than Local Governments	249
Local Governments	104
Federal Grants	2,435
Federal Stimulus Grants	141
Non-Federal Grants	542
Pass Through Grants	48
Restricted State Grants	462
Grant Transfers	395
Total	4,376

Examples of diversity in CT grants

State-designed grants to major providers

- Example: Board and Care for Foster Children program through DCF supports 3,750 children in foster care with a budget of ~\$137m¹

Federal programs administered by state agencies

- Example: Wildlife Restoration grant administered by DEEP with a budget of ~\$5m¹

Small one-off state grants

- Example: Arts Education grants administered by DECD's Connecticut Office of the Arts went to one recipient with budget of \$50k²



1. All Biennial figures FY2020 Recommended 2. FY19

Source: CT Office of the State Comptroller; CT expense data; DECD 2019 Annual Report; FY2020-2021 Biennial Budget Program Addendum

Six key stages of a grant's 'life cycle'



Engagement between agencies, communities, and providers



Grant design and recipient selection



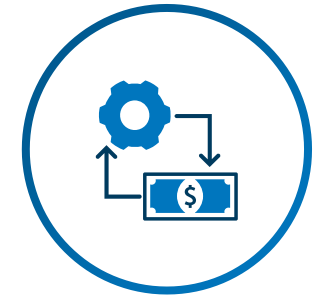
Agreement creation and execution



Performance, compliance, and outcome monitoring



Fraud and risk management



Underspend and recovery management

All stages may not apply to certain grants

A central grant hub could play a role in each stage



A central grant hub could address several issues raised in interviews

Interview input

- “ Across state agencies, there is a lot of variety in processes
- “ I feel like we end up duplicating a lot of work across agencies
- “ As a nonprofit it is confusing that [Agency 1] wants our costs by week then [Agency 2] wants the same data, but provided by month
- “ We're so stretched! I just need to get the reports done—there's no time to think strategically

Potential benefits



A central team provides additional rigor to ensure value for money for the state



Another jurisdiction saved 20-30% through centralization and a further 10-20% through automation



A central hub increases standardization of processes and interfaces while giving providers a single point of contact



Reduced administrative obligations free up staff to engage with partners and seek additional sources of funding



Case study | Another jurisdiction's centralization efforts were informed by five guiding principles

Guiding principles



Focus on insights from community and partnerships with providers, supported by efficient administration



Align resource allocation to areas of greatest need



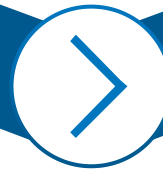
Establish consistent operational approach



Institute single-point accountability for service providers



Build capabilities with cross-agency functionality



Potential implications for CT

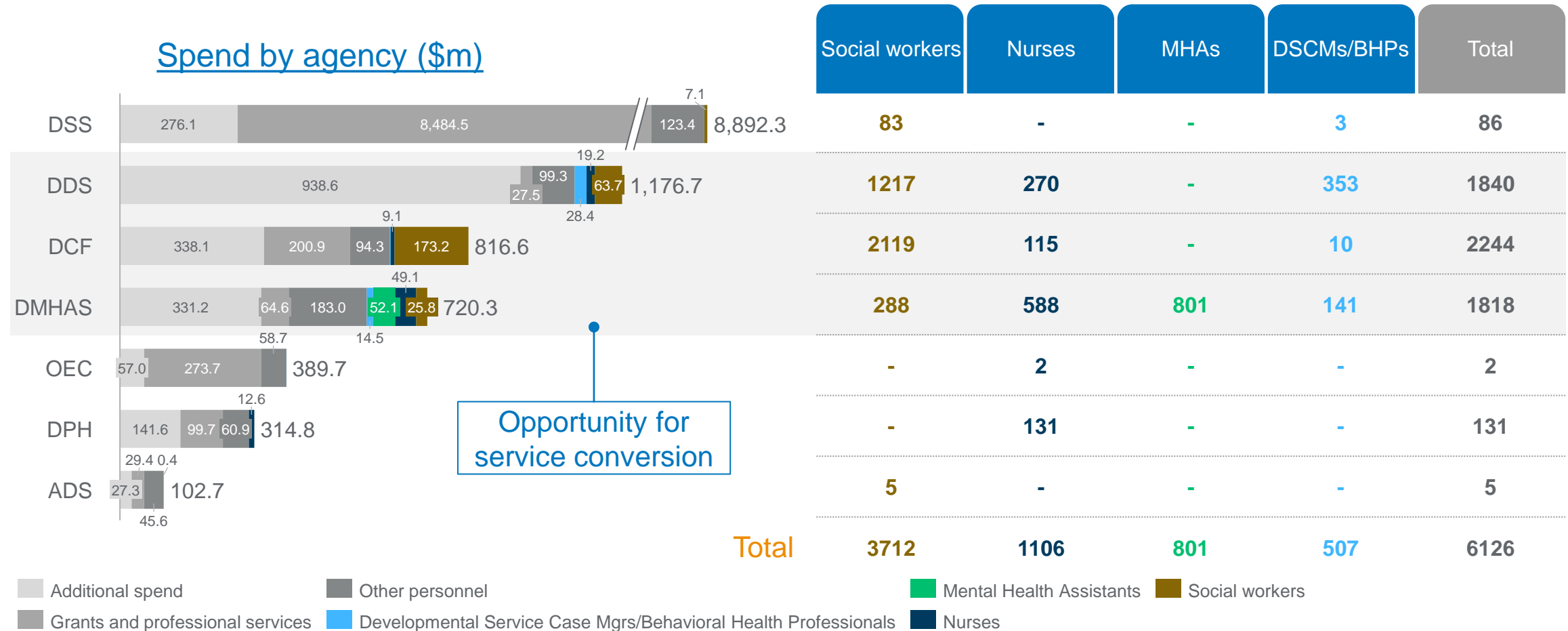
- Administration streamlined, consolidated and automated
- Partnerships and insights work conducted by designated relationship managers
- Grant “footprint” optimised with increased presence in communities of need
- Use of standardized forms, reporting templates, costing model, etc.
- Relationship managers act as single point of contact for service providers
- Integrated management of grants operating across multiple jurisdictions and/or program areas
- Shared platform/s able to remain integrated with individual agency program and policy changes

3.4

Optimize sourcing

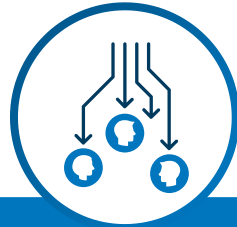
Sourcing opportunities most relevant for agencies with high spend on direct-service personnel: DCF, DDS, and DMHAS

Spend by agency (\$m)



Note: Indicated spend by job group does not include full overtime expenditure
 Source: CT STARS; CT expense data

Four key criteria to evaluate when considering service conversion



Available market

Competitive provider market should be established



Same or better service quality

Private provider client services and outcomes should be of same or better quality as state-run programs



Cost savings

Private provider services should be provided at lower cost than state services

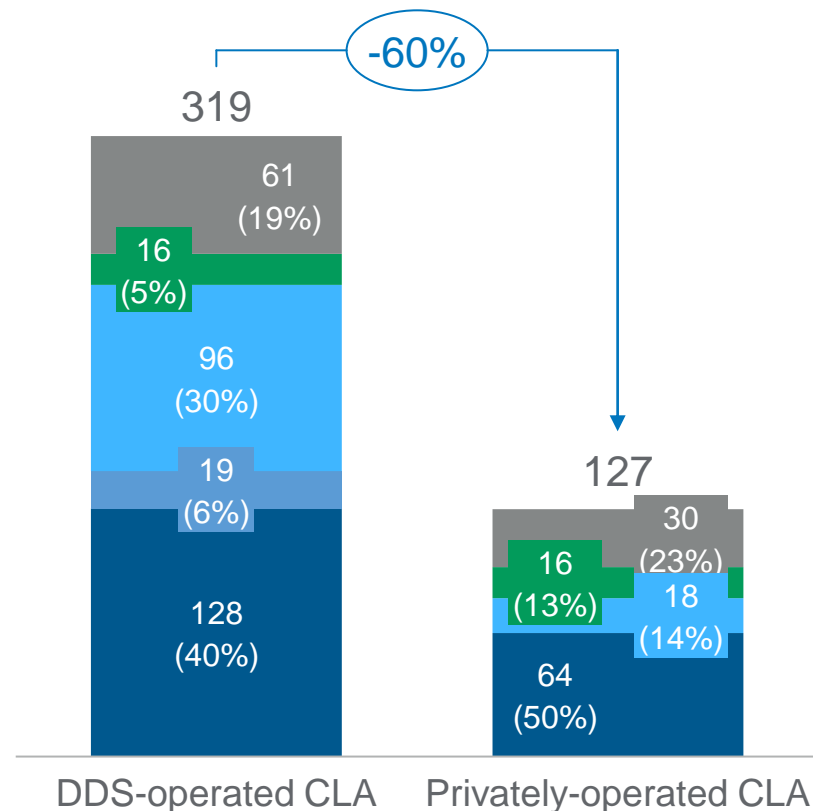


Implementation feasibility

Sourcing should be feasible given union contracts and political optics (e.g. prevent perception that state is "abandoning" clients)

Previous CT experience with private group homes demonstrates that non-profit costs can be significantly less than public sector

Annual cost breakdown per group home (CLA) client by component (FY10, \$k)



Salary

- State salaries are far higher than those of private providers
- Private wage recently rose to \$14.75/hour but still ~33% lower than state
- Qualifications the same, but employee mix may be different

Overtime

- Private providers build OT into rate, incentivizing controlling oT
- Collectively-bargained 35-hour work week drives higher OT

Benefits

- State offers more generous health benefits than private providers

Room and board

- DDS payments in lieu of taxes and facility ownership reduces state expenditure relative to private providers

Additional expenses

- Includes workers' comp, administrative costs, centralized DDS support, and more

Reviewed six opportunities identified through top-down analysis and interviews; current view is that three are worth exploring for ability to mitigate retirement risk

	# clients served	State employees (% eligible to retire)	Available market	Quality	Approx. cost savings ²	Implementation feasibility
1 Local mental health authorities (expand current offer)	~14,000	~1,500 (24%)	<ul style="list-style-type: none"> Seven LMHAs already privately operated 	<ul style="list-style-type: none"> Seven non-profit LMHAs all meet quality targets, lowest score 90% 	~\$50-100m+	<ul style="list-style-type: none"> Previous challenges soliciting bids at low enough rates to generate savings and offset revenue loss
2 Group homes for people with intellectual/developmental disability (expand current offer)	511	~2,000 (41%)	<ul style="list-style-type: none"> Most group homes are privately operated Some challenges with highest-need clients 	<ul style="list-style-type: none"> Nonprofit service providers found to have fewer quality issues 	~\$60-80m+	<ul style="list-style-type: none"> Client continuity may be disrupted State may need to remain "provider of last resort" for high-need clients
3 Veteran convalescent care (new offer)	125 ¹	175 (30%)	<ul style="list-style-type: none"> Nursing home providers 	<ul style="list-style-type: none"> Contracted facility quality similar to state-run facilities in states which have contracted 	\$4-5m	<ul style="list-style-type: none"> Facility recently opened; transition logistics complex High level of political sensitivity
4 Foster care services (new offer)	3,750	~400 (15%)	<ul style="list-style-type: none"> Numerous state providers 	<ul style="list-style-type: none"> Other state privatization efforts often compromised quality 	\$3-12m+	<ul style="list-style-type: none"> Potentially constrained by consent decree Savings would need to offset revenue loss
5 DMHAS inpatient treatment facilities (new offer)	TBD	~900 ³ (25%)	<ul style="list-style-type: none"> Uncertain 	<ul style="list-style-type: none"> Uncertain 	None anticipated due to higher private-sector compensation	<ul style="list-style-type: none"> Acute care facilities consistently seek to transfer long-term clients to state facilities already
6 Children's psychiatric facility (Albert J. Solnit) (new offer)	TBD	~200 (25%)	<ul style="list-style-type: none"> Uncertain 	<ul style="list-style-type: none"> Uncertain 		<ul style="list-style-type: none"> Reimbursement system would need to be adjusted; state currently pays for 5 days

1. Facility capacity, 2. Does not capture impact of lost revenue (e.g., from federal programs) 3. Incl. Connecticut Valley and Whiting Forensic hospitals only to avoid double-count with LMHAs
Source: Agency org charts; CT Program Review and Investigations Committee study; CT and provider cost data; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum

3.4.1

Non-profit engagement for providing LMHAs

Further conversion of Local Mental Health Authorities to nonprofit operation could generate substantial efficiencies

State-provided services

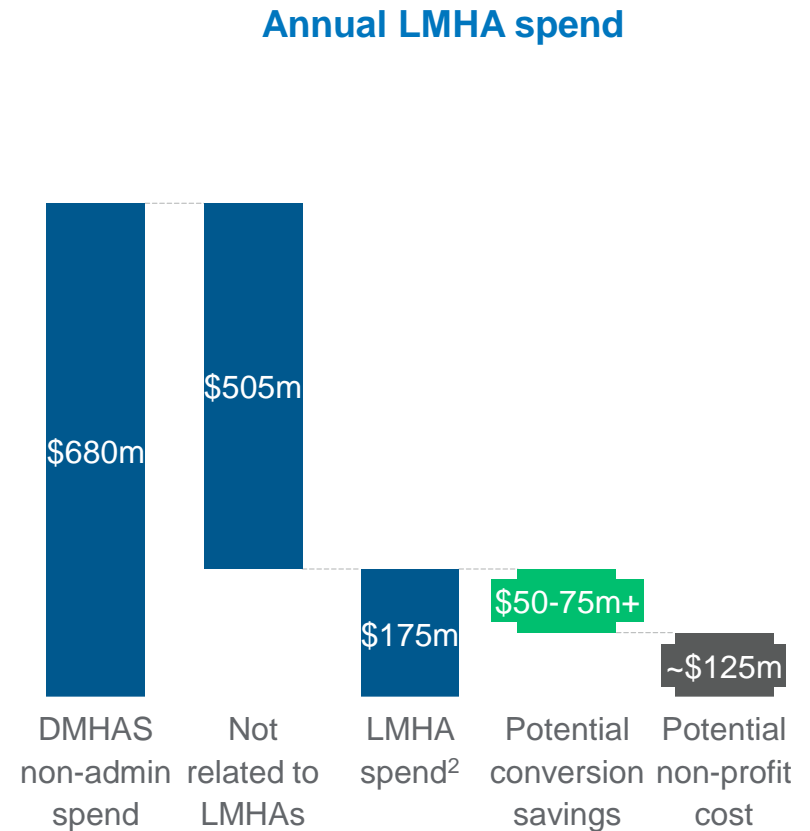
- 6 state-operated Local Mental Health Authorities (LMHAs) provide therapeutic and crisis intervention services to people with mental illness
- State-operated LMHAs serve ~12k clients a year

Available market and quality

- Seven LMHAs are already operated by community non-profits
- All non-profits met client satisfaction targets with respect to quality and overall performance

Potential efficiency

- With potential annual cost savings of ~\$7k+ per client, converting state-operated LMHAs to nonprofit operation could save \$50-75m+¹
- Conversion efforts could focus on full LMHAs or specific services, e.g. Young Adult Services



1. Low end of range halves maximum savings assuming state remains provider of last resort; upper end represents estimated maximum 2. Personal Services spend

All Biennial figures FY2020 Recommended

Source: DMHAS EQMI Provider Quality Reports; DMHAS input; CT and provider cost data; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum

3.4.2

Expand non-profits for group homes

Additional efficiency potential via conversion of state-operated group homes for people with intellectual/developmental disability to nonprofit operation

State-provided services

- 3 Intermediate Care Facilities (ICFs), the Southbury Training School (STS), and 32 Community Living Arrangements (CLAs) provide health care, rehabilitation services, vocational services, and more to clients
- In FY2020, 533 Connecticut residents were projected to have received support

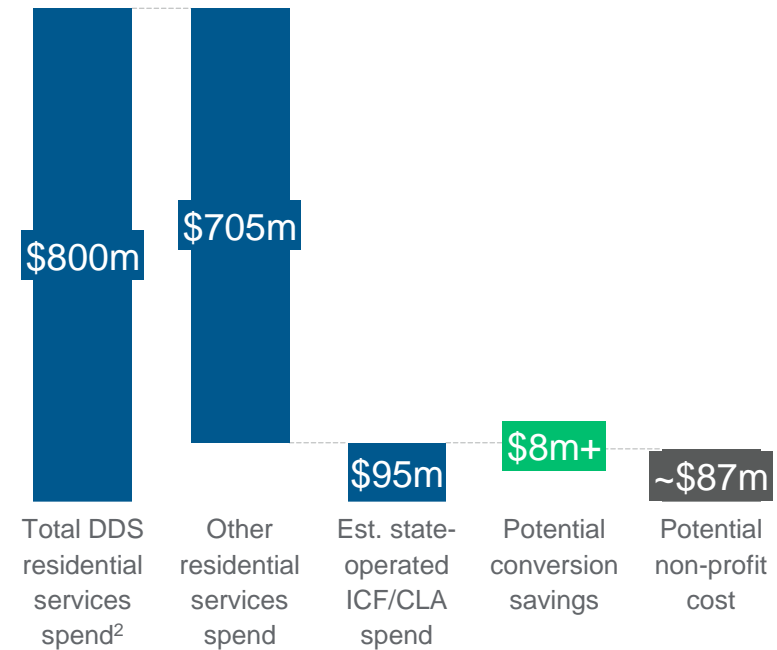
Available market and quality

- Vast majority (800+) of CT group homes privately operated
- 2011 study conducted by CT Program Review and Investigations Committee found that privately-operated facilities had fewer deficiencies per facility based on DDS and DPH inspections

Potential efficiency

- With annual cost savings of ~\$250k+ per CLA, converting state-operated CLAs to nonprofit operation could save \$8m+¹ without compromising service quality

Annual DDS residential spend



1. Range factors in potential variety in pension tiers of workers 2. Incl. Community Residential Spend (DSS account) and Residential Supports (DDS department)
 All Biennial figures FY2020 Recommended
 Source: DDS input; CT Program Review and Investigations Committee study; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum

3.4.3

Competitive bid rail for bus contracts

Transport | CT commuter rail has among the worst fare recoveries in the region

	New Haven	New Canaan	Danbury	Hartford	Shore Line East	Waterbury	NJ Transit	MBTA
Operator	Metro-North	Metro-North	Metro-North	Amtrak, TASI/ACI	Amtrak	Metro-North		
Ridership (k)	40,375	1,525	740	658	595	343	89,562	31,177
Ridership change YoY	1%	1%	(5%)	N/A	(17%)	(0%)	N/A	N/A
Fare Recovery	69%	23%	9%	5%	5%	7%	55% ³	62%
Subsidy / Ride	\$3.85	\$4.90	\$24.13	\$43.30	\$55.28	\$24.46	\$5.12	\$4.68
Total Revenue (m)	\$361	\$2	\$2	\$2	\$2	\$1	\$567	\$239
OpEx (m)	\$516	\$10	\$20	\$30	\$35	\$14	\$1,025	\$384
Net Subsidy	(\$156)	(\$7)	(\$18)	(\$29)	(\$33)	(\$14)	(\$458)	(\$146)

\$257mm+ in annual subsidies for rail operations¹

Ways to improve fare recovery to peer benchmark (~35%)⁴

- Reduce service on some/all commuter rail lines to match demand
 - Ridership down 30%+ during COVID
 - Telework trend + net-migration out of NYC

Replace high-cost commuter trains with shuttle bus service

Bid out rail operations for more competitive pricing

Implement minimum farebox recovery rates⁵

Achieving 35% fare recovery leads to ~\$30m+⁶ savings

1. Excludes Hartford Line subsidy given assistance from federal funding through FY21 2. Difference in revenue from current fare recovery rates vs. 30% 3. 2014 Fare recovery rates ranged from 19.6% for Atlantic City line to 88.4% Trenton/Princeton Northeast Corridor (2nd lowest line rate = 39.9%) 4. Bottom two NJ commuter lines are 20% and 40%, lowest system-wide line Seattle Sounder (33%) (Nationwide commuter rail average is ~50%) 5. Seattle Sounder policy 6. Based on improving Fare Recovery to 35% across CT commuter lines currently below
 Note: Data used – 2019 for New Haven, Hartford, SLE; 2018 for Waterbury; 2017 for New Canaan, Danbury
 Source: Federal Transit Administration (U.S. DOT), CT DOT; MBTA FY19 Final Itemized Budget

Transport | CT rail lines have among the worst fare recoveries in the region

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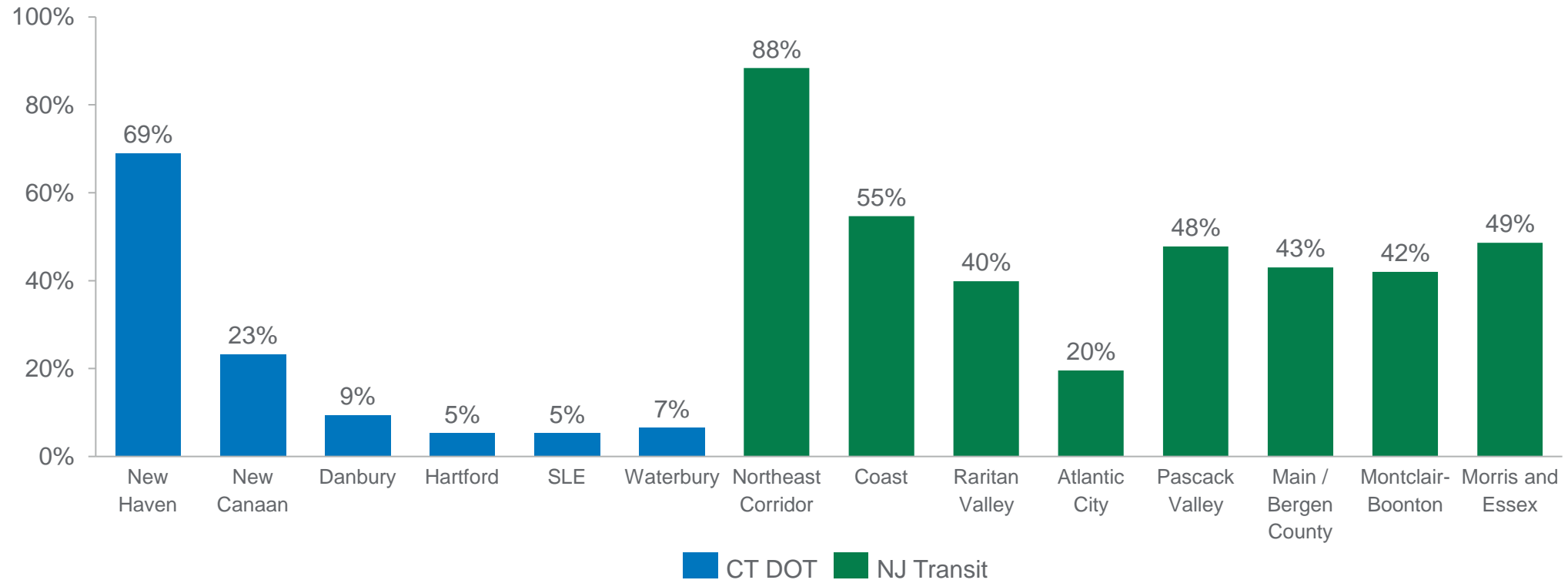
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Note: Data used – 2019 for New Haven, Hartford, SLE; 2018 for Waterbury; 2017 for New Canaan, Danbury
Source: Federal Transit Administration (U.S. DOT), CT DOT; MBTA FY19 Final Itemized Budget

Transport - backup | CT commuter rail lines receive less revenue per operating expense than lines on New Jersey Transit

Farebox Recovery



Note: CT rates are from FY2018-19 data, while NJ rates are for FY 2016
Source: https://www.njleg.state.nj.us/legislativepub/budget_2016/DOT_NJT_response.pdf

Transport | Case study: Sound Transit minimum recovery policy



Context

- Seattle has three modes of public transportation:
 - Express bus
 - Light rail
 - Commuter rail
- Mission of the Sound Transit is to seek the highest possible farebox recovery maintaining fares at levels consistent with the fare policy principles
 - i.e., fares should be clear, discounted for those in need, and changes should be acceptable by customers

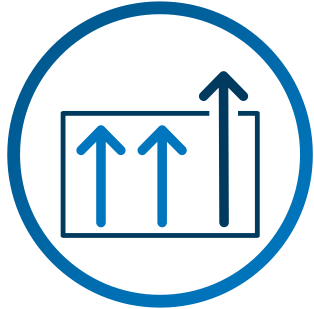
Policy

- Instituted minimum thresholds for farebox recovery ratios:
 - Express bus = 20%
 - Commuter rail = 23%
 - Light rail = 40%
- Once a farebox ratio falls below the threshold, the Sound Transit Board triggers action for a fare rate increase

Fare change policy

- Proposal for fare change presented within annual review:
 - CEO presents proposal to the Board, including analysis of revenue, operating costs and fare structures
 - Proposal must consider impact of rate changes on fare structures and coordinate with RTAs to reduce pricing complexity, as is applicable
- Exceptions granted if thresholds breached due to services being in start-up phase (i.e., line expansions)

Rail Contracting | CT rail operations are relatively expensive and would likely benefit from increased competition



CT Rail Operations More Expensive

- CT transit operating expenses higher than neighboring peers and nationwide transit districts
- Expenses appear high using multiple metrics to account for several variables



Obstacles from Past & Current Negotiations

- Significant internal concern on opening negotiations given unfavorable ARSA negotiation outcome
- Decade-long bus litigation also creating mental impediment to potentially start "second-front" tensions



Competitive Process Could Unlock Value

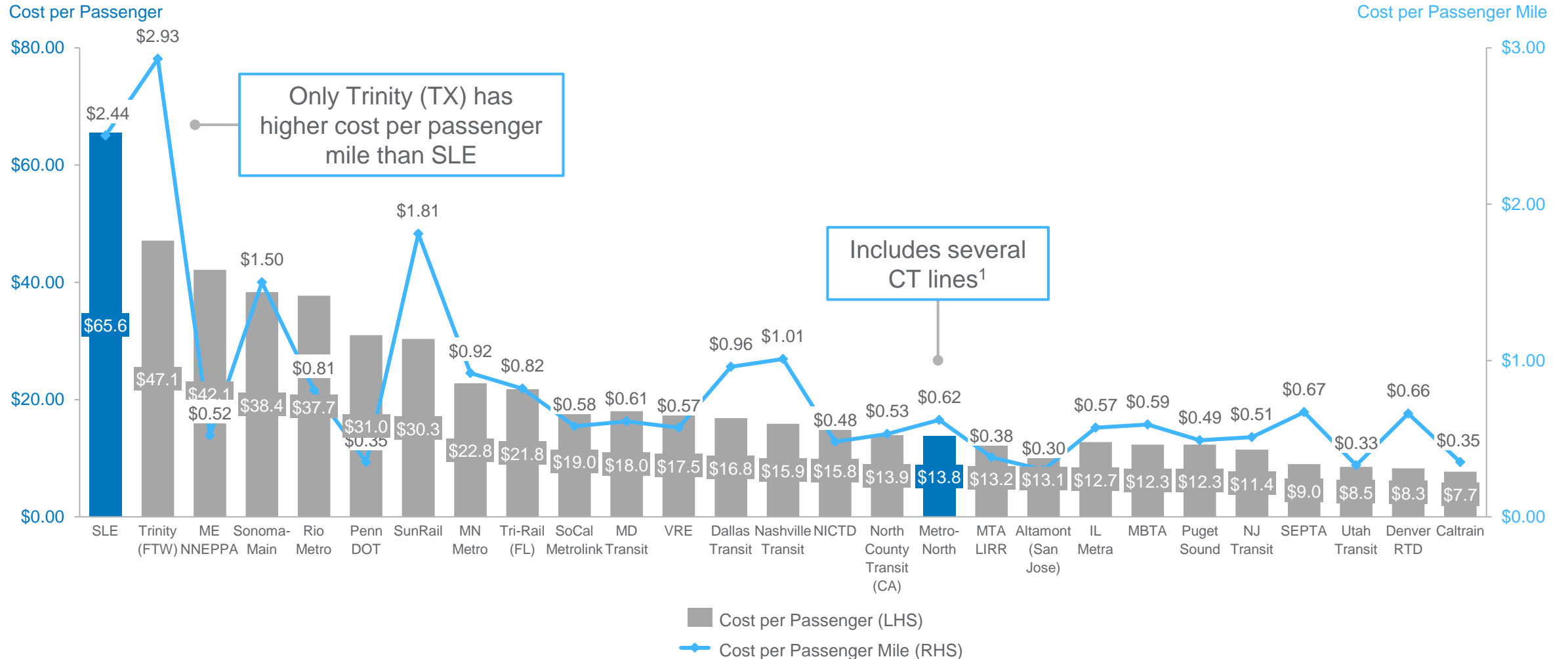
- Transit authorities domestically and abroad have turned to competitive RFPs to reduce costs
- CT DOT awarded some Hartford Line operations to TASI but lacks data to compare operating expenses



Accountability a Key Consideration

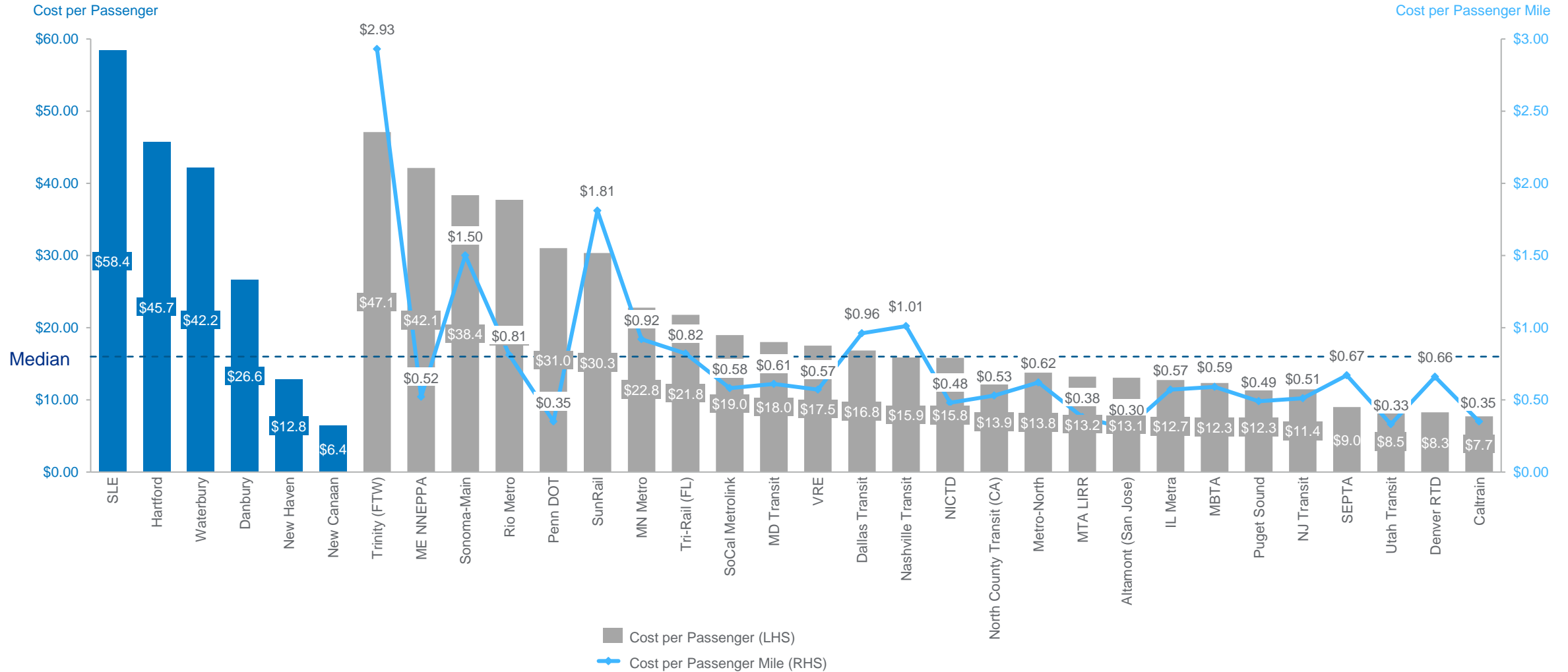
- Important to construct performance safeguards for riders / residents
- Requires upfront leadership to counter inaccurate backlash

CTrail Shore Line East costs compared to other light rail systems



1. The New Haven Line, New Canaan Branch, Danbury Branch, & Waterbury Branch are incorporated into the listed Metro-North costs.

Rail Contracting | New Haven and New Canaan are only CT rail lines with cost per passenger below national median



Source: Federal Transit Administration – National Transit Database 2019

Rail Contracting | Top-down and external benchmarking indicate potential for savings in rail contracts

NTD Data Analysis

- Reviewed operating and financial metrics for 27 commuter rail operations across USA
- While costs can be driven by geographical, demographical and labor-specific nuances, CT operations ranked among the highest cost nationally



- Cost / Hour: 25th (3rd to last)
- Cost / Passenger: 27th
- Cost / Passenger Mile: 26th
- Fare Recovery¹: 26th

Comp State Benchmark

- In 2003, MBTA bid out operations (previously ran by Amtrak)
- Awarded to partnership between Veolia, Bombardier and Alternate Concepts
- After initial extension, Keolis awarded subsequent contract in 2012 bid process



- MBTA estimated inflation-adjusted realized **savings of 15-20%**



Opportunity

- 15-20% on CT rail operation expenses (~\$567m FY18) would result in savings between \$40-60m
- Potential savings of \$10-20m under phased implementation, with additional long-term upside
- Potential to translate successful process to bus operations

\$10-20m

Challenges

- Difficulty in obtaining reliable and comparable data (internally and nationally) necessitates additional work to validate opportunity
- Potential backlash from Metro-North, Amtrak
- Complexity of bidding process and negotiations requires prior experience for optimal outcomes

1. Based on fares and thus should not be looked at in isolation to compare cost efficiencies 2. Haircut reflects targeted approach to segment of rail operations before expanding to additional lines (upside potential from competitively bidding system-wide operations)
Source: Federal Transit Administration – National Transit Database 2019

Transport | Bus minimally impacted by retirement, but can make more efficient

Drivers

Observations

Potential opportunity

Challenges



Competition in bus operations

- State has not previously bid out full bus operations competitively
- CT has complex system of operations and maintenance

- Conduct competitive RFP/bid process to include parties who have been successful winning state and local bids in recent years
 - E.g., TransDev, Keolis, Coach, etc.

- Internal concerns stemming from ARSA arbitration against NY/Metro-North
- Best value provider may face "outsider" backlash



Asset ownership

- CT owns 669 buses, shelters for 3,500+ and maintenance garages but outsources work

- Outsource full operation (including asset ownership)

- Ownership ensures more seamless transition between operators



Subsidy rates for local transit districts

- Total spend of \$30m p.a. with subsidies of 90-97%
- High number of MPOs (14)

- Limit dollar value or subsidy amount for local bus operations
- Incentivize local planning authorities to re-design service to reflect modern usage while encouraging bicycle development

- At odds with Governor's push to increase service and lower fares

3.4.4

Contract operations of Veterans' convalescent care

States have realized 30-40% efficiencies from contracting nursing home services for veterans



Michigan

“ Privatized about 170 nursing assistants to save around \$4 million. Total service outsourcing saved \$8m of \$20m budget
– Governor Snyder, Michigan Radio ”



Texas

“ The average cost of assisted living less than the nationwide average representing substantial savings
- Veteran Aid ”



Montana

“ Private contractors to run veteran nursing home cut \$3.37m from \$10m budget
– Independent Record ”



Utah

“ Average cost of assisted living in Utah is significantly less than the nationwide price tag
- Veteran Aid ”

**MI saved 40% of budget by contracting services; MT saved 34%
UT and TX services were contracted from conception and are
consistently lower than other similar facilities**

Reducing cost of CT's veterans healthcare and rehabilitative services by 30-40% results in savings of ~\$4-5m¹

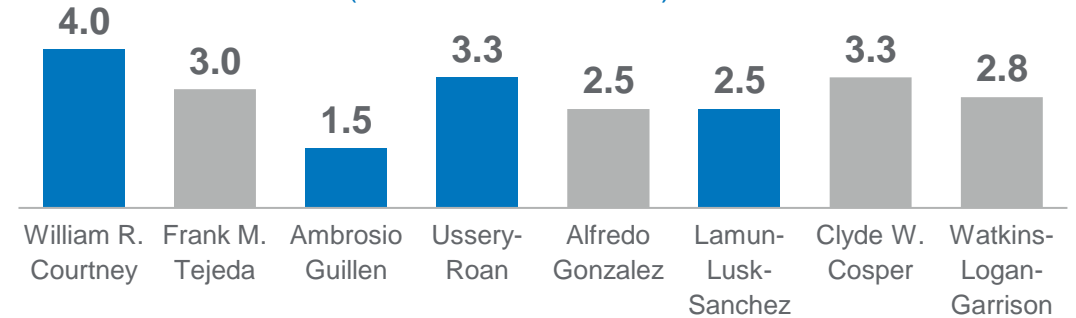
¹Estimate of potential savings calculated by taking average peer savings (37%) applied to CT Veterans Health Care Services and Residential and Rehabilitative Services budget
Source: Michigan Public Radio, VeteranAid, CMS

In other states, quality of contracted veterans' care facilities similar to state-managed facilities

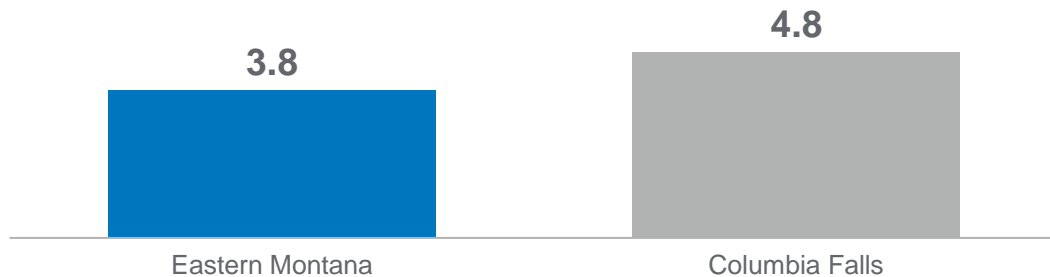
Michigan (Home for Veterans)



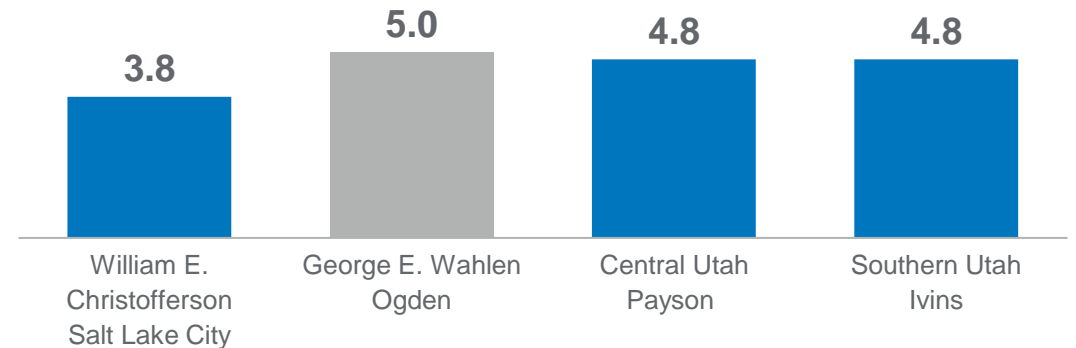
Texas (State Veterans Home)



Montana (Veterans Home)



Utah (Veterans Home)



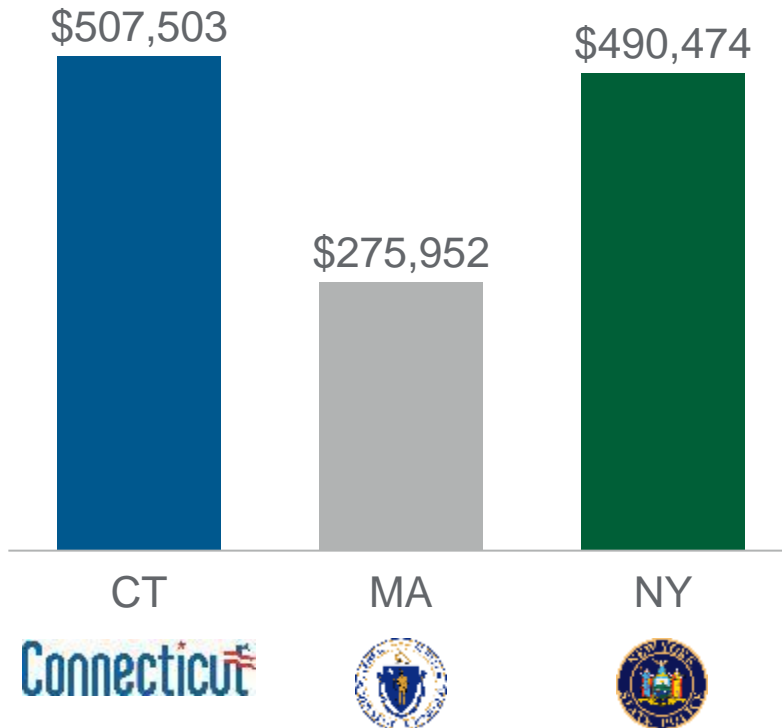
¹Grand Rapids Veteran Home not CMS certified; score calculated from average consumer rating and meeting of quality standard reports
 Note: CMS Five-Star Quality Rating System ranges between 1 and 5, with 5 being the best rating. Utah serves as "best in class" veteran home case example
 Source: CMS, VeteransAid

3.4.5

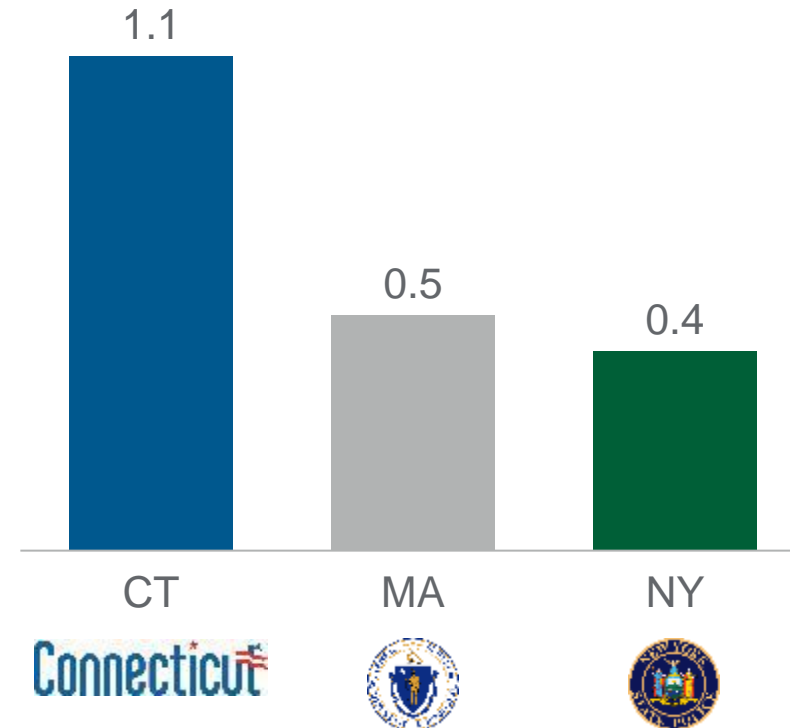
Transportation structure and maintenance contracting

Transportation | Connecticut spend per capita is higher than MA and NY, and personnel per capita is more the double both neighboring state staffing levels

\$ state spend per 1000 citizens



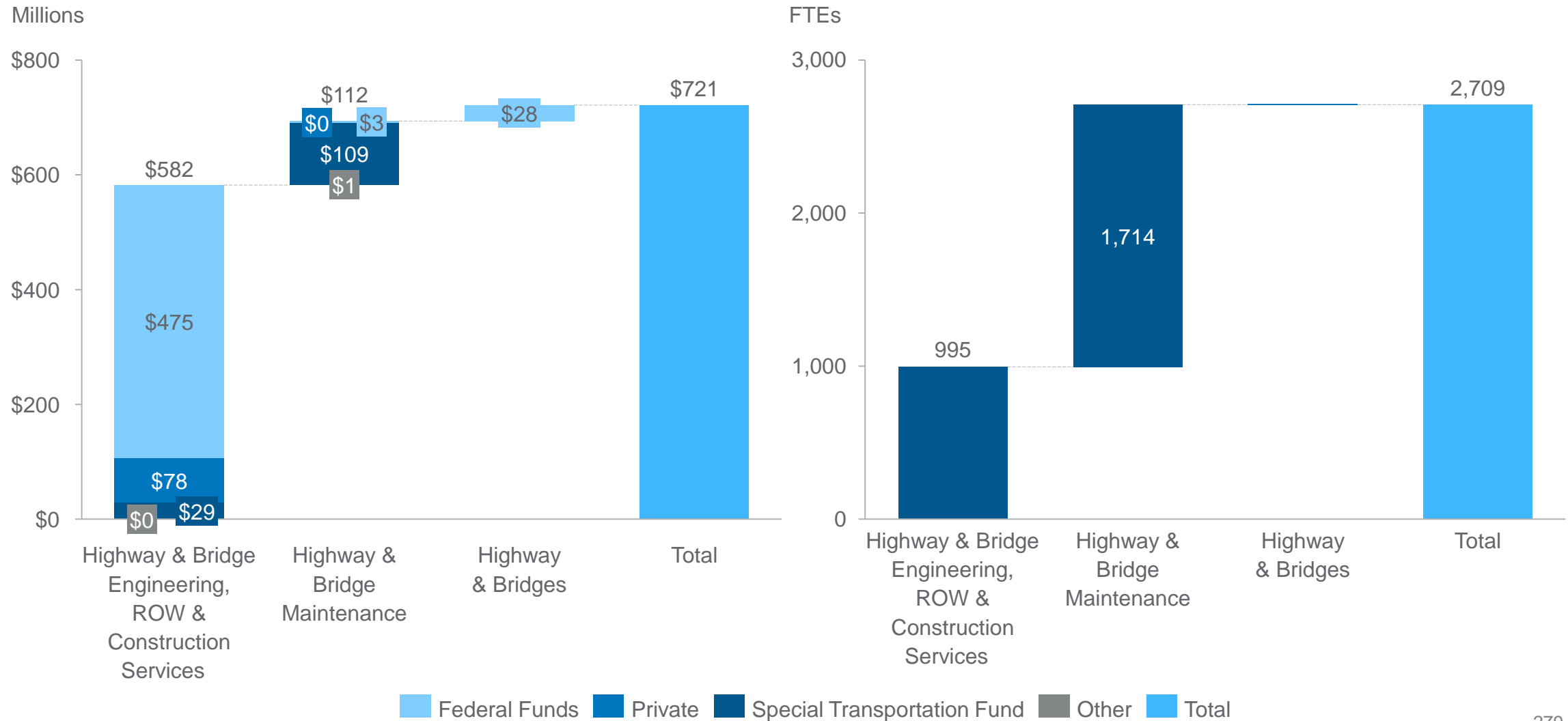
Cluster FTE per 1000 citizens



Source: CT biennial budget FY2020-21 Addendum; CT STARS data; MA Governor's Budget FY2020 Recommendations; New York State Office of State Comptroller (FY19)

Transport | \$721m spent yearly on road planning, maintenance, construction

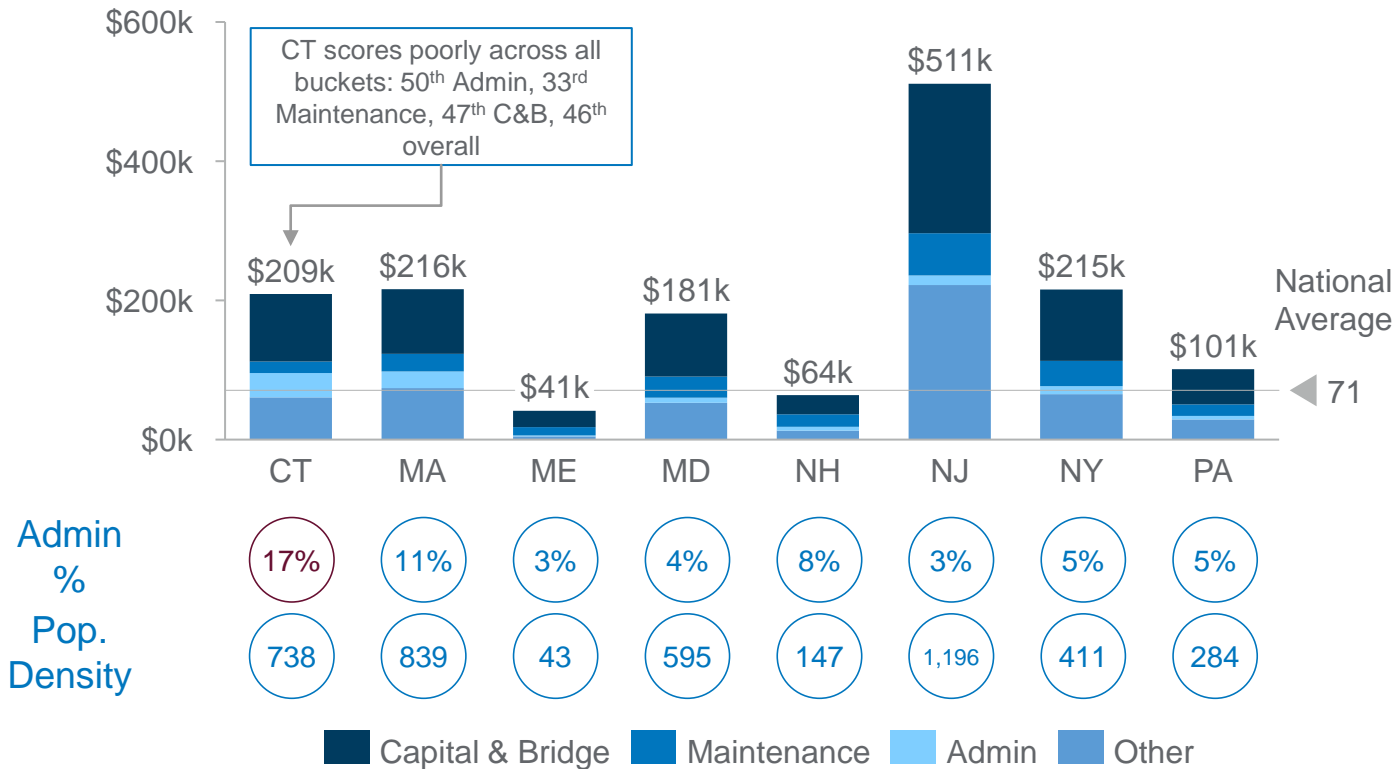
All FTE are funded out of the Special Transportation Fund



Transport | CT road construction and maintenance costs per lane-mile are broadly in-line with peers, with the exception of administrative costs

Total disbursements per state-controlled lane-mile

\$721m total spending, \$216m state-funded



Potential cost-reduction drivers

Administrative costs

- Includes general and main office expenditures as well as vacation and OT
- These costs can be managed by implementing alternate work schedules, streamlining approvals and contracting process
- Up to \$30m potential savings (matching MA's 11% admin cost share)

Though in-line with other states, other best practices observed in controlling capital and maintenance costs include

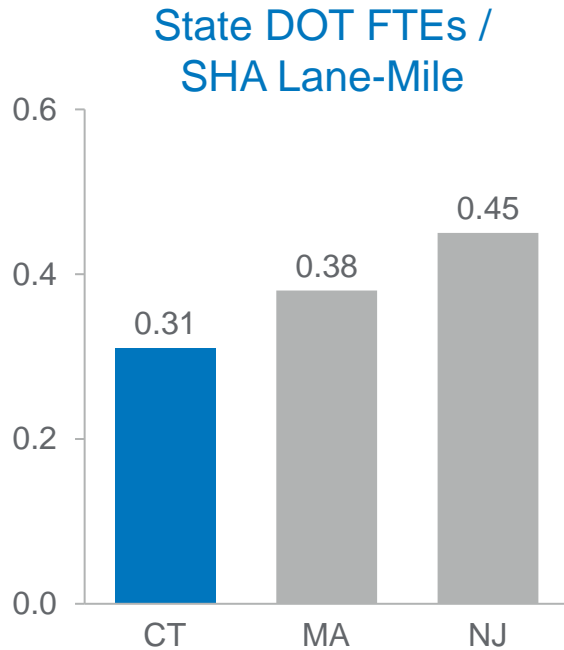
- Reduce material costs through lean engineering; benchmark to FHWA CCI and NH DOT CCI
- Prioritize high-return projects, e.g., expand bottleneck ramps vs. add highway lanes
- Tie performance to future contract awards to improve on-time and in-budget projects

1. Admin includes general and main-office expenditures in support of state-administered highways; NJ counts employee benefits as Maintenance while CT includes this cost in Administrative disbursements

Note: Inc. Capital & Bridge, Maintenance, Admin, Highway Law Enforcement / Safety, Interest & Bond Retirement

Source: 2019 24TH Annual Highway Report (Reason.org)

Organization structure | CT DOT personnel in-line with peers on lane-mile basis, so attrition must be managed through multiple options



Grade-up job classifications

Opportunity detail

- Increase breadth of responsibilities across job titles to improve productivity

Challenges

- Will encounter pushback from labor that may require concessions
- DOT has complex system of classifications



Outsource more where contractors already used

- Outsource workload by geographic regions with strict performance KPIs
- Increase outsourced workload where contracting already exists
- Use added work to re-negotiate prices
- Prioritize projects that are complex and/or require OT hours for DOT labor

- Will encounter labor pushback
- Requires cost-benefit analysis to ensure outsourcing only where cost-effective



Right-size org structure and increase flexibility for attracting, retaining talent

- Increase ability to attract & retain top talent / managers (i.e., fix inversions)
- Ensure proper mix and ratios across job levels (e.g., prioritize backfilling Principal, Supervising and TE3s)
- Update and add new job descriptions to ensure relevance for future DOT
- Drop requirement for CDL and add TSE (Admin) position at reduced rate

- Time-consuming and challenging exercise
- Requires full buy-in from leadership



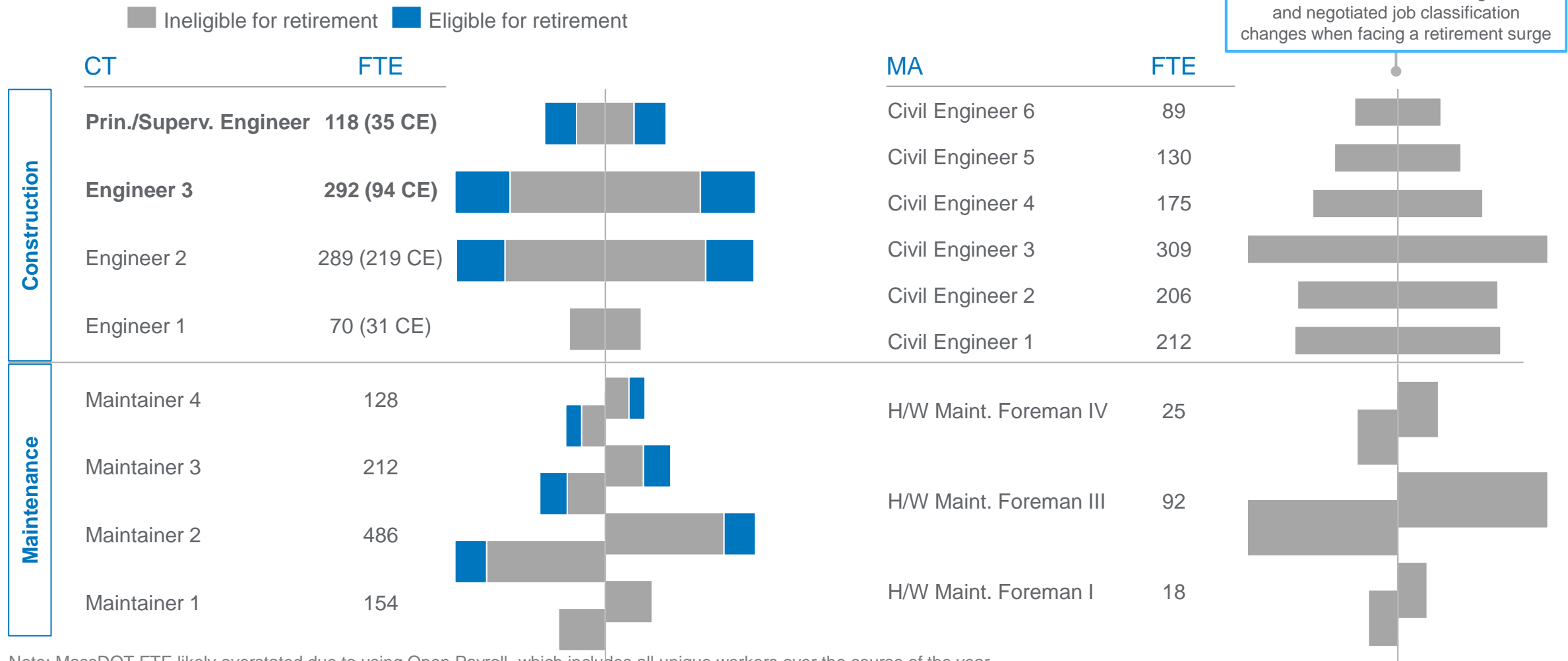
Leverage inmate population to supplement workforce

- Enable CT DOC inmates to perform daily work (e.g., road and ROW maintenance) as well as ad hoc that requires OT (e.g., snow removal)

- Potential backlash on using inmate labor – countered by data-driven impact on reduced recidivism and skills training

Organization structure | Retirement surge unlikely to alter current job ratios, but must prioritize backfilling Principal, Supervising and Engineer 3 positions

MassDOT conducted a full org review and negotiated job classification changes when facing a retirement surge



Note: MassDOT FTE likely overstated due to using Open Payroll, which includes all unique workers over the course of the year
 Source: 2019 Massachusetts CTHRU Payroll data, CT STARS as of 9/20/2020

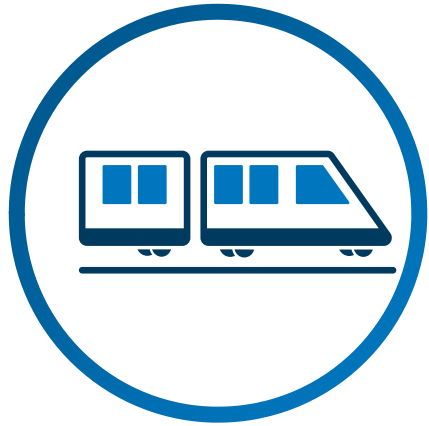
3.5

Design services to meet resident needs

3.5.1

Align rail/bus service to resident needs

Transit capacity | Transit ridership 70-90% below pre-COVID levels and likely to remain suppressed – reduced service levels can meet demand and cut costs



Reduce rail schedules



Replace highest subsidy rail lines with shuttles



Reduce express bus service levels



Cap regional bus transit subsidies

Alignment of rail and bus service levels to rider needs could save \$40m+

Current context and ridership trends

- Rail ridership remains 70-90% below pre-pandemic levels
- Bus ridership also down, but a relatively modest 25%
- Beyond pandemic, ridership likely to remain depressed vs. 2019 levels as remote work becomes more prevalent



Proposal to bring service in-line with demand

- DOT New Haven service change proposal estimates **annual savings of ~\$35m**
- 40% reduction in SLE service yields **annual savings of \$5m**
- DOT Express Service Efficiency proposal **saves \$3m+ in annual subsidies**
- Estimated annual savings from above solutions can be further supplemented by changes to remaining transit lines, replacement of rail with shuttle buses
- Impact can be mitigated by replacing rail with more cost-efficient bus services

Transit capacity | Recent reduction in New Haven service during COVID provides example of potential savings

Context

New Haven Line (NHL) primarily supports commuters working in New York City

Strong fare recovery (~69%) but significant decline in ridership due to the COVID

Despite low and stable infection rates in NYC metro, commuting has not rebounded

Approach

Reduced New Haven Line service to better match new demand trends

- Lower off-peak frequency
- Required coordination with NY York State, Metro-North

Maintained flexibility to ramp up service levels if demand returns to pre-pandemic levels

- Vaccine unlikely to be widely distributed before April 2021 at earliest
- Longer-term, many service-related companies have announced plans to continue teleworking through 2021 or permanently

Results

\$4.0M

Systemwide monthly savings

\$2.9M

CT's share of monthly savings

\$35M

Projected annual savings for CT

Transit capacity | Replacing some rail service with shuttles can alleviate political blowback while saving money



Current SLE Economics



Illustrative Bus Economics

Current subsidy / passenger	\$55.28	\$4.88
2019 Farebox Rate	5.3%	16.1%
Rolling Stock	45+ trains, 15 stations, rail lines	Buses, maintenance garage
One-way fare	\$10.25	\$12-20 ¹
Weekday Travel Time	60-80 minutes	~50 minutes ²
Employees / car ³	~1 Amtrak train conductor = \$60k	1 Bus driver = \$45k
Passengers / hour	3 cars * 0.5 trips * 100 = 150	1 bus * 3 trips * 75 = 225

Estimated benefits

- \$20-25m savings in operating subsidies⁴
- Reduced emissions
- Similar / reduced travel time

Political considerations

- High investment already made in rail infrastructure
 - Use stations for buses
 - Swap trains to other lines, sell off unneeded
 - Raise fares or seek alternative funding or control (PPP)
- Dependence of local community on commuter rail
 - Not supported by data
 - Shuttles viable transit option

1. Based on Greyhound tickets 2. Based on Google Maps & Waze travel data for weekday peak times, but TBC with DOT based on 2018-19 bus replacement program
 3. GlassDoor (https://www.glassdoor.com/Hourly-Pay/Amtrak-Conductor-Hourly-Pay-E2912_D_KO7,16.htm) 4. ~500k trips per year * \$40 to \$50 subsidy saved per trip
 Note: Amtrak owns and controls the Northeast Corridor east of New Haven, while DOT owns the rail west of New Haven. Ttrains are dispatched by Metro-North
 Source: Shore Line East website, [https://en.wikipedia.org/wiki/M8_\(railcar\)](https://en.wikipedia.org/wiki/M8_(railcar))

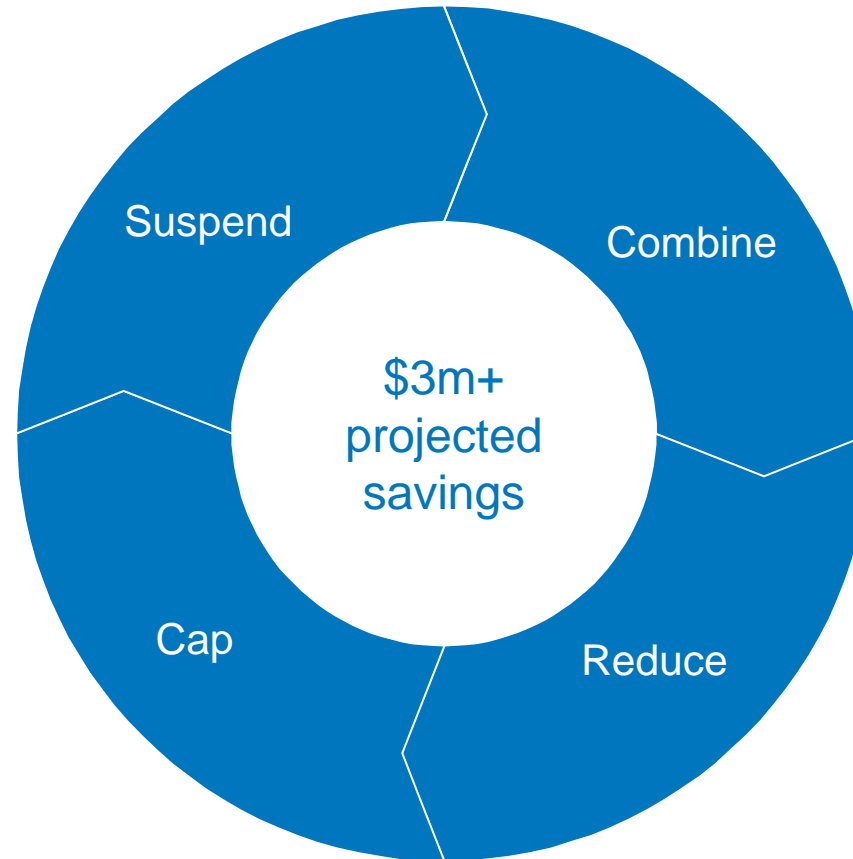
Transit capacity | DOT has already identified \$3m in annual savings on express bus service – extending similar actions systemwide can increase efficiencies

Temporarily or permanently discontinue low-ridership routes

- Identify routes with low ridership today as well as pre-pandemic
- Consider impact pandemic
- Minimize disruption by ensuring close proximity to alternative transit

Cap subsidies for local and/or private operators

- 90-95% subsidies to regional transit districts should be leveraged for system re-designs
- Not included in express bus savings proposal



Join routes to reduce redundancies

- Collapse nearby routes to save driver hours, reduce bus maintenance needs, etc.

Service level reductions

- Cutting off-peak / weekend service, adding time between arrivals, etc.

3.5.2

Adopt value-based health payments

Value-based payment | Detail, key enablers, and relevant analyses



Key questions

- How comfortable is the state that value-based care can be defined and measured effectively?
- How long is the transition expected to take?
- How would you assess the efforts of the Healthcare Innovation Committee in moving to value-based models?



Value-based models include

- **Pay for Performance (P4P):** Reimbursement contingent on metric-driven outcomes
- **Bundles:** Predetermined payment for an "episode of care", with providers covering any additional costs
- **Global payment/capitation:** Fixed prepayment covering all medical care for enrollee/s for predetermined period of time



Key enablers

- Longitudinal multi-payor claims and clinical patient data (e.g., though a health information exchange)
- Clear data reporting requirements and provider capabilities to meet those requirements
- Specific incentives and enforcement for providers as managed by ASOs
- Measurable and objective metrics and data to evaluate care quality and outcomes



Initial analyses

- Determine penetration of, and success in, value-based arrangements to date
- Assess potential for value-based payments based on examples and benchmarks from elsewhere
- Design and execute pilot programs for select value-based programs, and scale once impact is demonstrated

3.5.3

Control health spending and
maximize federal funding

Reduce wasteful spending | Detail, key enablers, and relevant analyses



Key questions

- What is the state's role in fraud/waste/abuse prevention?
- How would you assess the state team's effectiveness?
- What are the contractual obligations of the ASOs in this area and how would you assess the state's oversight?



Examples include

- **Fraud**
 - Claims for services not provided
 - Claims for deceased or pre-birth patients
 - Claims for impossible services such as operations on three limbs
- **Waste**
 - Payments on behalf of patients receiving coverage from third parties, other states, etc.
 - Costs incurred by avoidable provider error (e.g., post-operative infections, incorrect procedures, etc.)
- **Abuse**
 - Improper billing practices (e.g., upcoding)
 - Overtreatment or over-servicing of patients



Key enablers

- Robust ASO fiduciary oversight
- Comprehensive historical claims data for beneficiaries
- Data sharing mechanisms to ensure patient eligibility
- Sophisticated internal data analysis capabilities to identify patterns of fraudulent and inappropriate spend
- Advanced analytics that raise issues of unnecessary or improbable services
- Market-facing mechanism to address issues, including:
 - Provider outreach and education
 - Coordinated care programs and guidelines



Initial analyses

- Examine claims data from multiple ASOs for patterns, aberrations, and outliers, to determine potential financial value at stake and establish fact base to determine appropriateness of additional investment in above enablers
- Benchmark Connecticut's analytical capabilities against best-in-class states such as Pennsylvania, Texas

Maximize federal funding | Detail, key enablers, and relevant analyses



Key questions

- How often does DSS review opportunities to maximize federal participation?
- Are there certain areas of Medicaid that have historically been paid for with only state dollars?



Ways to optimize rebates and funding include

- Maximize federal participation by ensuring that benefit design covers all areas that are federally matched
- Rebates granted under new federal programs, such as HARP-related (Health and Recovery Plans) drugs
- Establish buying consortium with other states for e.g., drug purchasing
- Ensuring that “clawback” payments to federal governments are being made only on behalf of eligible patients



Key enablers

- Regular monitoring of changes to federal programs and resulting potential rebates
- Program design to optimize federal funding
- Data sharing to ensure patient eligibility



Initial analyses

- Examine Connecticut state ledger to identify program-level discrepancies between potential and actual federal matching

Other states and organizations have realized substantial savings opportunities by controlling waste and maximizing funding



Curtailling individuals overusing services

- Molina identified \$150m-200m+ in payments to providers with costs 3+ standard deviations above average



Standardizing non-value-based pricing

- Ohio reduced variation between highest- and lowest-priced facilities from \$140 to \$77 per day by transition to price-based, fee-for-service payment model for skilled nursing



Requiring alternative care

- Michigan found that requiring "prehabilitation" prior to surgery significantly reduced length of stay (~15% reduction) and total episode payments (~10% reduction)



Further revenue maximization

- New York State audits in January 2020 identified ~\$425m in uncollected drug rebates from the federal government

3.5.4

Improve tax compliance

Near-term DRS
opportunity
focused on
improving audit
assessment

\$450M

Audit assessment value in FY 2018

\$193M

Projected revenue collection in FY 2019

\$75M -
\$120M

Potential revenue uplift from 40-60% increase
in audit assessments and downstream
collections¹

~\$10M

Anticipated upfront investment required²

\$30M

Achievable per year even with implementation
hurdles

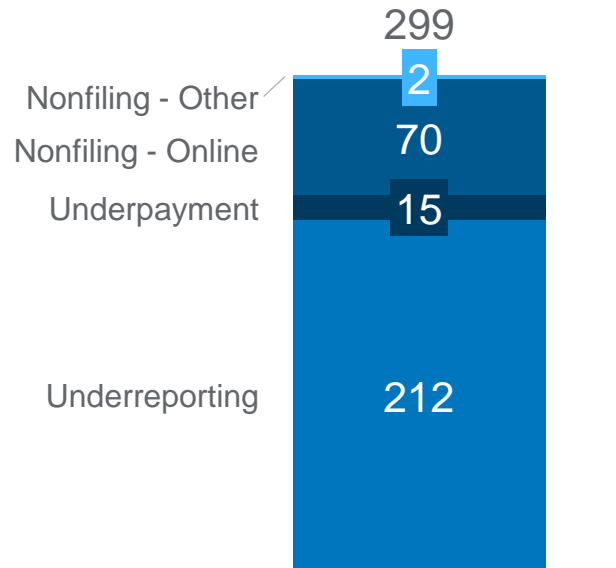
1. Estimate based on prior experience; assumes 6-12 month audit timelines

2. Includes upfront expense for program set-up, IT capital spend, 10-20 new DRS FTEs

Source: 2020-21 Biennial Budget, BCG analysis

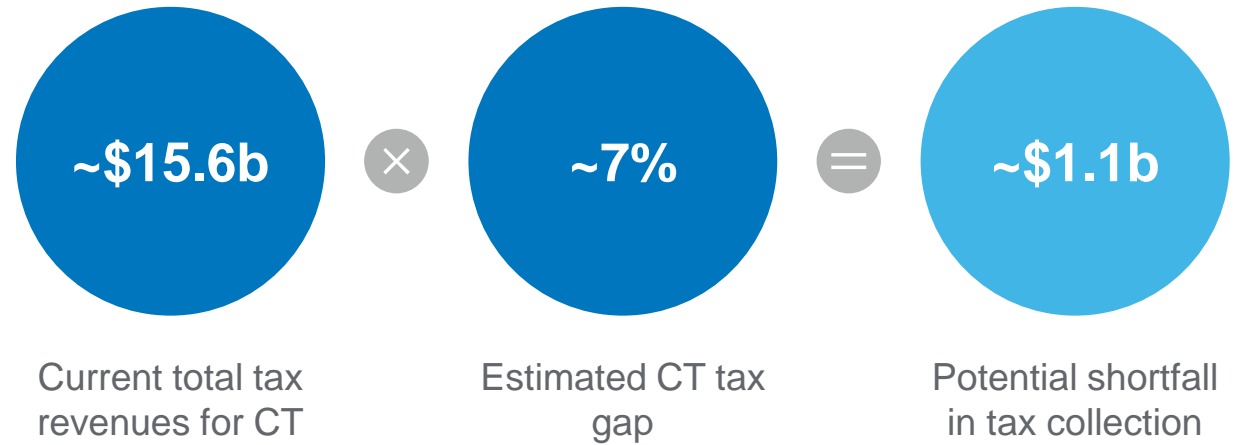
Current tax gap could be ~\$1.1b based on 2017 DRS tax gap analysis

Drivers of CT Sales and Use tax gap 2017 (\$m)



Equivalent to ~7% of total Sales and Use tax in 2017

Estimated shortfall of ~\$1.1b in tax collection for CT



Data-driven tax compliance can address each of the drivers of the tax gap by identifying non-compliance and determining the appropriate treatments

Illustrative

Drivers of non-compliance

Non-filers

Estimate income of individuals in jurisdictions based on data e.g., historical returns, social media etc. to determine those that are tax-eligible

Income under-reporting

Estimate 'actual' income based on available information and look-alikes, e.g., payment card receipts for businesses (Form 1099-K)

Improper deductions and credits

Estimate deductions based on drivers, e.g., calculating mortgage interest based on home value and interest rates



Treatments

- Different types of audits
 - Single versus multiple issue
 - Correspondence versus field audit
- Non-audit treatments
 - Return preparer outreach
 - Soft notices

Four approaches to facilitate tracking improvements in voluntary compliance – pivotal to sustaining momentum and expanding use cases



Leverage IRS NRP¹

- IRS conducts comprehensive audits on 15k filings
- Findings help create profiles/filters for future audit priorities
- CT should coordinate with IRS to obtain historical data



Taxpayer Surveys

- Increase awareness of enhanced DRS capabilities through local media
- Conduct taxpayer surveys to measure awareness and sentiment towards compliance and digitization programs



CT Research Program

- Conduct annual comprehensive audits on randomly selected but stratified sample of CT taxpayers
- Resource intensive program (e.g., audit personnel, time, etc.)



Advanced Analytics

- Embedded algorithms that track flow of revenue and collections across taxpayers over time
- Compare reported business revenues with third-party data (cross-agency and private sector)

3.5.5

Cut low-ROI film and tax programs

DECD | 48% of employees eligible for retirement, creating need to streamline

Program	Budget (m)	Cost/job created	State net revenue and ROI	Other outcomes
CT Aerospace Reinvestment Act (UTX/RTN)	\$400m authorized \$335m earned 2015-19	N/A (not measured) ⁴	N/A (not measured) ⁴	<ul style="list-style-type: none"> New HQ built New labs, infrastructure, R&D
Special Act (LMT)	\$220m awarded \$5.7m in 2019	1,126 new jobs \$27,000/job	\$6.4m in 2019 112% ROI	
Stranded Tax Credit/ Sales and Use Tax Offset	\$50m authorized \$6mm awarded ²	N/A	\$27.4 over 10 years ³ 55% ROI	
Urban & Industrial Site Reinvestment Tax Credit	\$950m authorized \$450m awarded since 2010	~34,000 new jobs \$13,000/job	\$284m since 2010 63% ROI	<ul style="list-style-type: none"> Broad array of industries benefitted
Film, TV and Digital Media Tax Credits	\$730m since 2010 \$157m awarded in 2019	3,500 jobs per year \$45,000/job	(\$680m) since 2010 (193%) ROI	<ul style="list-style-type: none"> Stimulated investment in education
Insurance Reinvestment Fund Tax Credit	\$170m credits issued since 2011	N/A (not focus)	\$20m since 2011 12% ROI	<ul style="list-style-type: none"> Broad array of industries benefitted
Property Tax Abatements (Enterprise Zones)	\$3m in 2019	N/A (not focus)	~\$10m per year 333% ROI	<ul style="list-style-type: none"> Investments in underdeveloped areas
Direct financial assistance	\$146m provided in 2019 \$1.4bn portfolio	6,000 jobs/year \$24,000/job	\$132m since 2010 9% ROI	<ul style="list-style-type: none"> \$6bn non-DECD funds (4.2x leverage)

Potential opportunities to improve outcomes

- Outsource programs/initiatives to non-profits (AdvanceCT) to avoid need to back-fill retirees on-balance sheet (48% eligible)
- Implement data sharing with DRS and DOL to automate grant recipient performance and compliance monitoring
- Ensure Abatement program does not present double-dipping with federal Opportunity Zones
- Validate value of Film, TV and Digital Media Tax Credit program, and potentially modify Insurance Reinvestment Act

1. Includes income and sales taxes 2. Program authorized to award \$50m, but only 1 application approved 3. Projected—does not have sufficient data 4. 17,000 total jobs in CT with \$1.9b total payroll
Source: 2019 DECD Annual Report

Summary of savings from eliminating the film and digital TV tax credit

~\$73m

In annual tax credits provided

\$0.68

In revenue lost per dollar of tax credit provided

~\$50M

Potential revenue loss avoided by eliminating the credit

3.5.6

Find new transportation revenues

Fees | DMV fees in-line with peers; opportunity to add CPI-indexing, safety inspections and EV fees

	CT	MA	NY
New License	\$84.00	\$75.00	\$164.50
Duration (years)	5.5-7 years	5	8
License Renewal	\$72.00	\$50.00	\$64.50
Duration (years)	6	5	8
Renewal Late Fee	\$25.00	None; 2 years cap	\$25-40 for < 60 days, \$75-300 for 60+
Commercial License	\$70.00	\$75.00	\$164.5-180.5 (MCTD)
Duration (years)	4	5	8
REAL ID Cost	\$30.00	\$25 upgrade	Same
Commercial Renewal Late Fee	\$25.00	N/A	\$0 (2 years)
Duplicate License	\$30.00	\$25.00	\$17.50
Make any change to license	\$30.00	\$25.00	\$12.50
Out of State License conversion (Class D)	\$124.00	\$115.00	\$65.00
License Exam	\$40.00	\$20.00	\$10.00
Learner's Permit	\$19.00	\$30.00	\$80.00
Duplicate Learner's Permit	\$19.00	\$15.00	\$17.50
Non-Driver ID (new)	\$28.00	\$25.00	\$9.00
Duration (years)	7	5	4
Inspection Cost	\$20	\$35	\$21
Frequency	Bi-annual	Annual	Annual
Safety / Emissions	Emissions	Both	Both

Potential Opportunities

- No obvious candidate for fee increase (in-line with peers)
- Opportunity to add safety inspections without added cost to State (inspections carried out by private dealers)
- Indexing fees to inflation provides consistent, palatable revenue increases and are seen in other states (e.g., CA, NC, PA)
- Charging for EV & fuel-efficient vehicles offsets gas tax declines, ensures equitable contribution
 - 28 States, including CA, charge \$50 to \$200 for electric vehicles
 - 12.6k EVs in CT as of July 2020¹



1. <https://www.ncsl.org/research/energy/new-fees-on-hybrid-and-electric-vehicles.aspx>

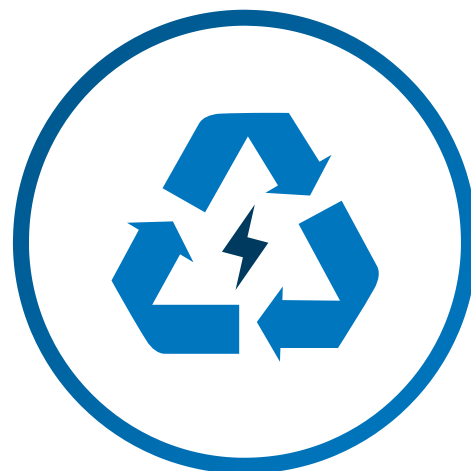
New revenue opportunities to explore include one-time and ongoing sources

Primary focus



Optimizing Existing Revenues

- Politically difficult but minimal financial, statutory hurdles (exception: minimum farebox recovery rates)



New Recurring Revenues

- Provide new sources of cash flow that are predictable and can be tied to specific construction projects



New Non-Recurring Revenues

- Non-repeatable programs that can generate cash flow but cannot be relied upon for future fiscal years

Additional revenue opportunities across DOT and DMV include increased fees on existing services as well as new innovations



Solar & wireless installations

- Install solar and wireless equipment along on State property
- Converts unused physical space into climate-friendly assets
- Potential to add at least \$1m in revenue p.a.



Electric vehicle registration fees

- Add EV/Hybrid fees to more equitably distribute road infrastructure costs
- 28 of 50 states charge \$50 to \$200+ fees
- Potential to add several million dollars p.a.



Vehicle safety inspections

- Introduce safety inspections in-line with peers
- Ensures vehicles are safe in addition to emission compliant
- Requires no additional resources
- At least several million dollars p.a.



Increased advertising

- Explore more aggressive digital and print ads across public transit, ROW and customer apps (e.g., naming rights, transit wrapping, geo-based ads)
- Potential to add several million dollars p.a.



Annual blue signs program






- Convert ROW blue sign ads from one-time to annual fees
- Requires legislative action to amend statutes



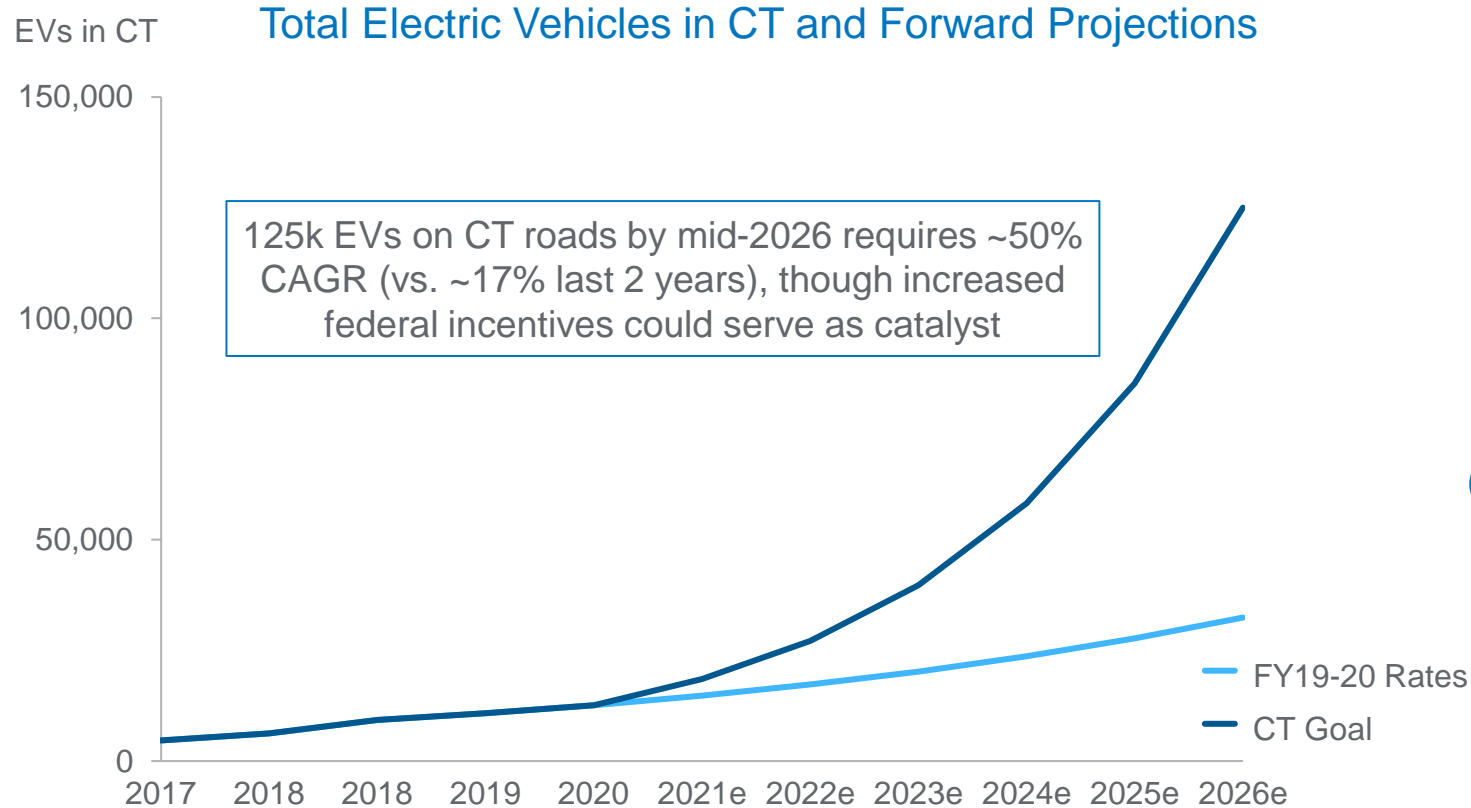
Retained revenue

- Incentivize agencies to find untapped revenue potential
- Align agency incentives with taxpayer interests
- Potential to add at least \$1m in revenue p.a.

DOT | Non-core revenue opportunities could generate more than \$10m per year

	Drivers	Observations	Challenges	Potential opportunity
Recurring	 <p>ROW solar installations</p>	<ul style="list-style-type: none"> Highway ROWs provide opportunity for P3 deals (e.g., MA-Ameresco) Financial benefits complemented by policy/environmental goals (Executive Order No. 1 2019 "Lead by Example") 	<ul style="list-style-type: none"> Must understand federal and state requirements where applicable State may lock into purchasing electricity at rates that may or may not be below market rates long-term 	<ul style="list-style-type: none"> Develop solar panel installations along DOT-owned highways and atop physical assets <p>Potential revenue \$1-5m+ near-term, significant LT upside (\$10-20m+)</p>
	 <p>Wireless leasing program</p>	<ul style="list-style-type: none"> Many states use ROW and state property to lease wireless facilities (e.g., Caltrans, TxDOT Small Cell Leasing) 	<ul style="list-style-type: none"> Must understand federal and state requirements where applicable 	<ul style="list-style-type: none"> Proliferation of telecommunication needs (e.g., IoT, 5G) present opportunity to lease space/towers to telecommunications companies <p>Potential revenue \$1-5m+</p>
	 <p>Increased advertising</p>	<ul style="list-style-type: none"> Significant digital and print advertising potential across ROW, public transit, customer-facing applications Naming rights becoming more common means of revenue generation in transit (e.g., SEPTA, CTA) and non-traditional industries (e.g., NHL) 	<ul style="list-style-type: none"> May require technology updates to modernize ad displays Station naming rights require investment to change signage/displays 	<ul style="list-style-type: none"> Refresh and optimize advertising strategy across State property (i.e., garbage cans to transit apps) Advertising partnerships (e.g., station naming rights, digital grocery aisles, location-based visual and audio ads) <p>Potential revenue \$5-10m+ pending current advertising revenue status</p>
Non-Recurring	 <p>Convert Blue Sign ads to annual leases</p>	<ul style="list-style-type: none"> CT DOT collects one-time fee for ads Peer states have found significant delinquent payments on blue signs 	<ul style="list-style-type: none"> Potential negative impact and/or perception from enforcing collections on businesses amid pandemic 	<ul style="list-style-type: none"> Conduct extensive audit to ensure vendors are current on payments \ <p>Potential revenue <\$1m</p>
	 <p>Retained revenue programs</p>	<ul style="list-style-type: none"> Encourage innovation by incentivizing agencies to find untapped revenue potential 	<ul style="list-style-type: none"> Must ensure incentives are aligned with taxpayers' best interests Balancing act between increased autonomy and oversight to ensure fair market value obtained and proceeds monitored for compliance 	<ul style="list-style-type: none"> Allow agencies to retain revenue for activities that generate one-time cash flows on underutilized assets (e.g., \$0.7m for CTA selling scrap metal, \$1.5m for South Bend) <p>Potential revenue <\$1m</p>

New revenue sources | Adding a fee for fuel-efficient vehicles produces little revenue at current EV adoption, but could grow to \$2m+/year



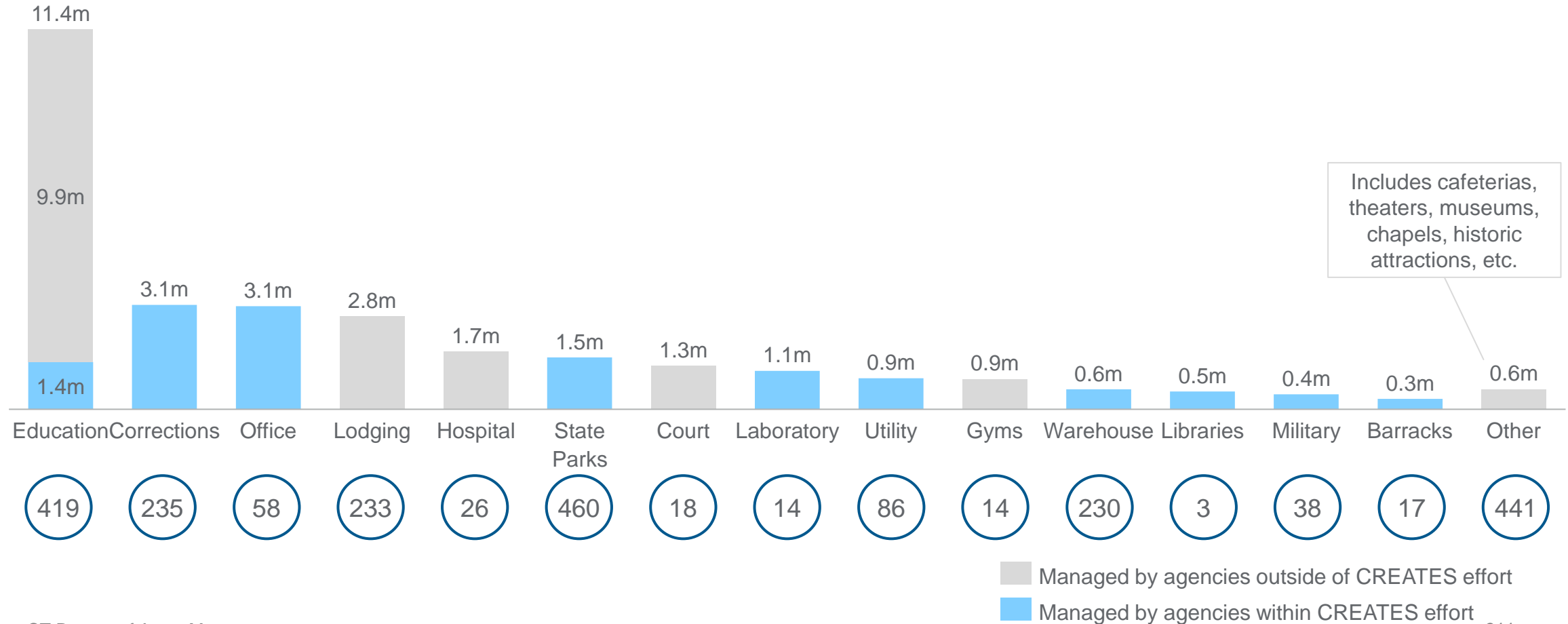
- ~12.6k electric vehicles currently on CT roads today (17% growth YoY)
- Goal of reaching 125k fuel-efficient vehicles by 2025 would result in 20k+ new registrations annually
 - \$2m incremental revenue
 - <\$1m p.a. at current pace
- Demand-impact likely to be minimal and/or mitigated by new administration
- Consider means-testing new fees to prevent countering adoption goals

3.6

Rationalize state assets

Context | Universities, prisons, and offices are the majority of CT's real estate

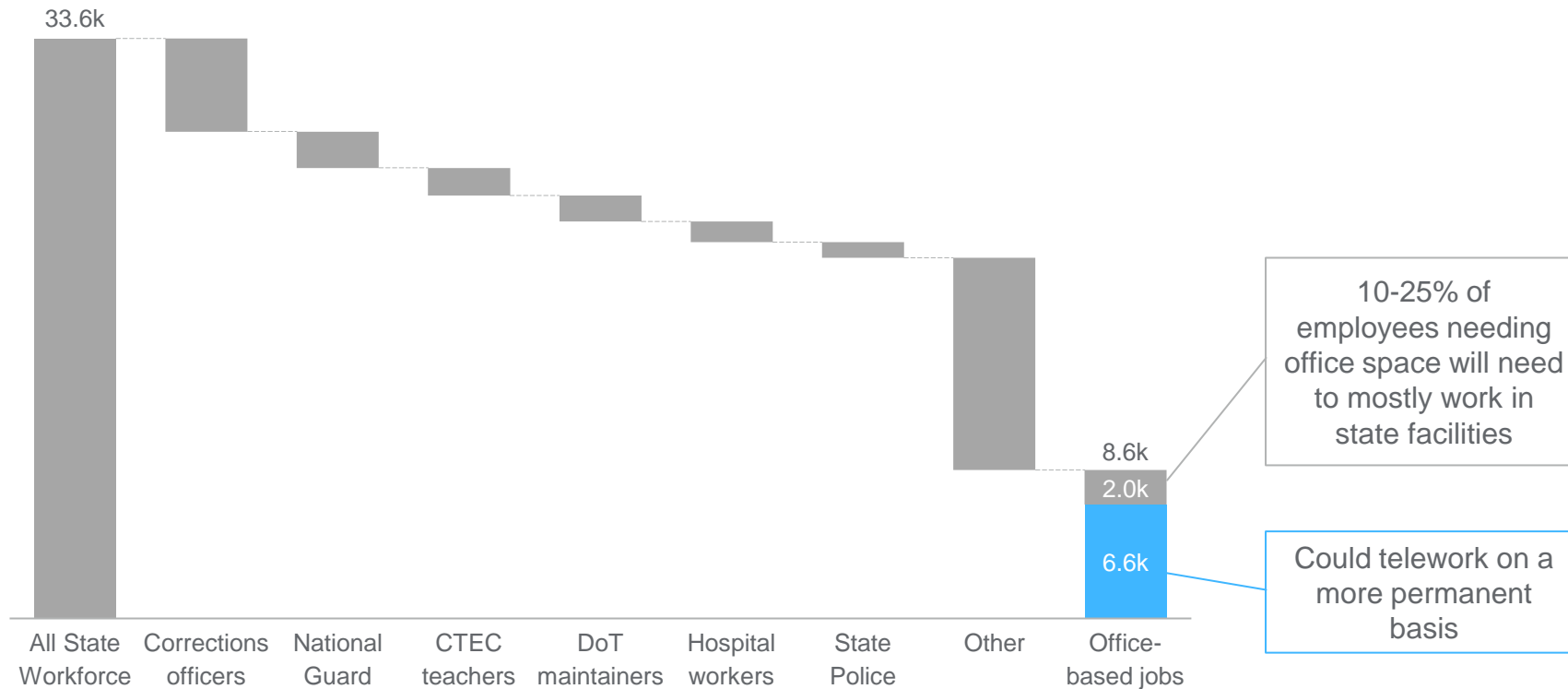
Connecticut state real state assets
Sqft



Source: CT Bureau of Asset Management

Office buildings | About 7,000 state employees could feasibly telework on a permanent basis (with occasional attendance at offices)

Majority of state employees have field/client-facing duties



Currently the state has 220 sq ft per employee, compared to internal benchmark of 150 sq ft

Opportunity to decrease office space footprint to match existing needs.

Office buildings | Range of options for state's real estate strategy post-COVID

Detailed analysis underway; need to confirm what to include in report

Status quo	Co-location opportunities already identified	Increased co-location in Hartford, 1-2 days telework	Desk-sharing by default, 2.5 days telework	Hoteling by default, >2 days per week telework
No change in existing real estate footprint	Share four buildings among similar departments to maximize occupancy	Share buildings among similar departments and work remotely 1-2 days/week	Share buildings; Work remotely 1-2 days/week, with employees alternating desk space	Share spaces among employees through a reservation-based system to maximize occupancy
<ul style="list-style-type: none">• \$0 savings	<ul style="list-style-type: none">• \$4-5m opex savings• \$170m capex savings• \$10 investment required	<ul style="list-style-type: none">• \$10-20m opex savings• \$200m+ capex savings• \$10s of millions in investment required	<ul style="list-style-type: none">• \$30m+ opex savings• \$300m+ capex savings• \$10s of millions in investment required	<ul style="list-style-type: none">• \$50m+ opex savings• \$500m+ capex savings• \$100s of millions in investment required

Office buildings | Variety of constraints to consider in rationalizing office space



Re-stacking is expensive and requires initial investment for long-term return



Re-locating employees may impact the economy of the community (e.g. restaurants and local businesses)



Building costs vary greatly and may require a clean up cost to sell based on level of building condition (e.g., dilapidated buildings)



State employees may not favor hoteling or desk sharing office models; may require union bargaining in some cases

3.6.1

Increase office co-locations

Greatest potential source of savings from office space consolidation

Savings could be used to fund e.g., investments in digitization, though some investment in re-fit required

Drivers



Office buildings

Observations

- Workforce down ~26k since 2010
- Ongoing efforts for co-location
- CT teleworking largely successful; manager feedback that many jobs can be remote
- ~\$30m spent annually on leases

Potential Opportunity

- Increase co-location of departments
- Increase teleworking and desk sharing
- Retrofit to allow hoteling
- Divest real estate in poor condition
- \$100s of millions in potential savings, depending on policy (see following)

Challenges

- Requires policy changes e.g., to teleworking
- Requires one-time cost for relocating and re-stacking offices

3.6.2

Match prison footprint to current population

Department of Corrections facility closure overview

Connecticut's imprisoned population has declined over the last decade

- Prison population was 18,431 in 2010 and 9,946 at end of 2020
- This decrease has accelerated in the last year due to inmate releases due to COVID-19

Connecticut currently has more prison capacity than it needs

- Currently DoC manages 14 prisons with an overall occupancy rate of 56%
- Number of facilities contributes to high levels of overtime for corrections officers

Closing three facilities can be done safely and lead to cost savings of about \$41.5m/year by FY23

- After targeted closures, CT will have enough capacity at all levels of security
- Closures can be done in a way which preserves innovative services (e.g., medical, vocational)

Fewer facilities leads to opex savings and opportunities to rationalize CO workforce

- Staffing ratio (inmates per CO) was historically 3.6 and has decreased to 2.8 due to COVID-19
- The national average for staffing ratio is 4.0

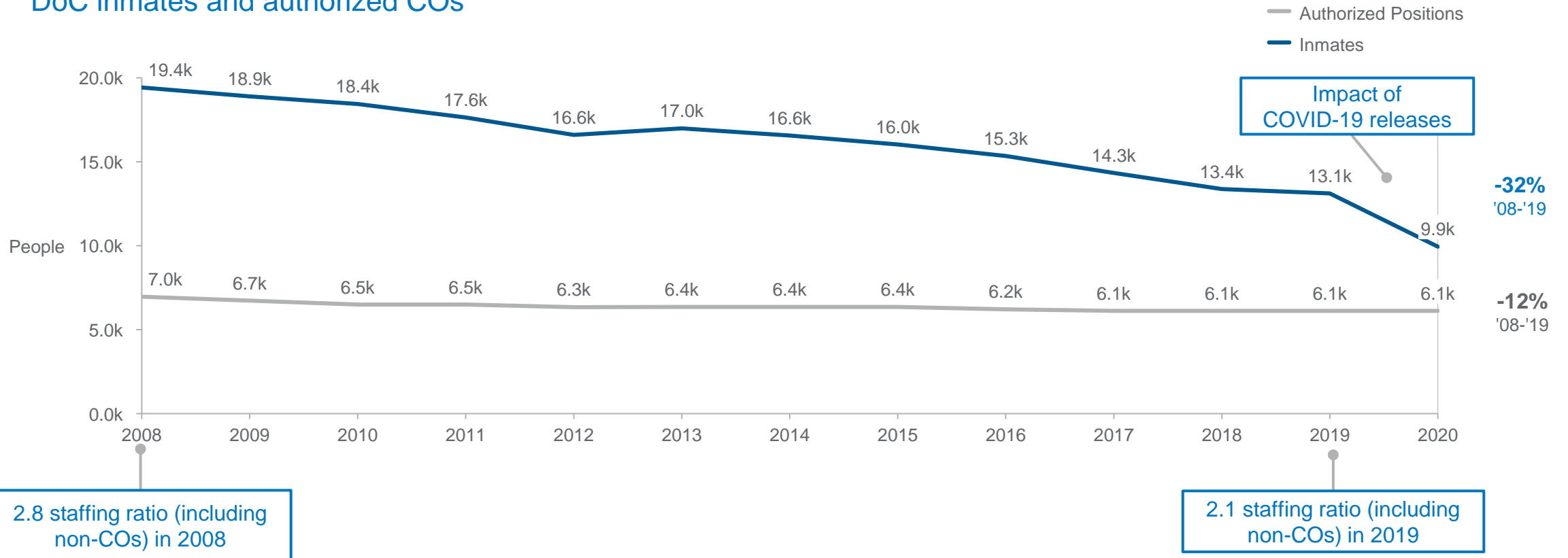
Department of Corrections budget for FY20-FY22

SID	SID Description	FY20 Expense	FY21 Appropriation	FY22 Current Services Budget
10010	Personal Services	\$405,702,633	\$412,958,209	\$421,428,097
10020	Other Expenses	\$68,983,104	\$69,596,565	\$69,596,565
12235	Workers Compensation Claims	\$30,488,797	\$31,115,914	\$31,115,914
12242	Inmate Medical Services*	\$103,014,389	\$107,970,535	\$108,856,425
12302	Board of Pardons and Paroles	\$5,796,673	\$6,927,233	\$6,974,828
12327	STRIDE	\$63,551	\$73,342	\$73,342
16007	Aid To Parld & Dischrgd Inmats	\$1,351	\$3,000	\$3,000
16042	Legal Services To Prisoners	\$774,056	\$797,000	\$797,000
16073	Volunteer Services	\$55,340	\$87,725	\$87,725
16173	Community Support Services	\$33,810,537	\$34,129,544	\$34,224,200
		\$648,690,431	\$663,659,067	\$673,157,096

Note - FY21 Inmate Medical Expenses line does not include an FY20 Carry Forward for Hepatitis C treatment in the amount of \$7,810,439. Filled General Fund Personal Services positions total 5,225 while Funded positions total 5,270. FY 20 Overtime totals \$68,390,050

Prison population has declined over the past decade, to less than 10,000 at the end of 2020

DoC inmates and authorized COs



Source: Source: OPM, Corrections Sub-Committee Report facilities tab, BCG analysis 2) 2008 and 2019 staffing ratio taken from DOC website: authorized positions/incarcerated inmates.

Overview for Department of Corrections facilities

Facility Level(s)	Facility	Type of Facility	Location	Staff		Inmate Population		Inmates per CO		Physical Bed Capacity		Facility Use		Building Date	Trade Programs
				Total	COs	2019	2020	2019	2020	2018	2019	2020			
2	Willard-Cybulski CI	CI	Enfield	218	155	1103	434	7.12	2.80	1104	100%	33%	1990	Yes	
3	Brooklyn CI	CI	Brooklyn	113	78	452	321	5.79	4.12	456	99%	66%	1990		
3	Carl Robinson CI	CI	Enfield	332	249	1413	807	5.67	3.24	1441	98%	55%	1985	Yes	
3	Osborn CI	CI	Somers	347	279	1322	988	4.74	3.54	1886	70%	48%	1963	Yes	
4	Bridgeport CC	CC	Bridgeport	254	179	690	598	3.85	3.34	840	82%	74%	1958		
4	Cheshire CI	CI	Cheshire	450	314	1234	1098	3.93	3.50	1392	89%	79%	1913	Yes	
4	Garner CI	CI – Mental Health	New Town	275	195	543	521	2.78	2.67	684	79%	72%	1992	Yes	
4	Hartford CC & UCHC Medical Unit	CC & Medical Unit	Hartford	324	244	869	733	3.56	3.00	984	88%	76%	1977		
4	Manson Youth Institute	Youth	Cheshire	285	314	286	215	0.91	0.68	670	43%	33%	1982	Yes	
4	New Haven CC	CC	New Haven	252	183	689	607	3.77	3.32	716	96%	88%	1976		
5	Northern CI	CI	Somers	209	165	80	90	0.48	0.55	584	14%	14%	1995		
2 - 5	York CI	CI - Female	Niantic	505	346	907	516	2.62	1.49	1458	62%	34%	1994	Yes	
3 & 4	Corrigan-Radgowski CI	CI	Montville	411	300	727	845	2.42	2.82	1489	49%	38%	1994		
4 & 5	MacDougall-Walker CI	CI	Suffield	589	437	1441	1813	3.30	4.15	2151	67%	61%	1993	Yes	

State average was 3.6; currently 2.8 compared to U.S. average of 4.0

Facility utilization average was 74%; currently at 56% utilization

1. CI is for sentenced individuals (prison), CC houses unsentenced individuals (jail)






Sources 1) Staffing: 2020 DOC filled staffing spreadsheet. 2) 2019 Inmate Population from Monthly Statistics on DOC website. 3) 2018 Physical Bed Capacity taken from DOC bed capacity vs. filled as of 10-31-18. All documents were provided by DOC budget analyst 10/7/2020. Facility Utilization = Inmate Population/Physical Bed Capacity

3.6.3

Consolidate specialized assets

Greatest potential source of savings from office space consolidation

Savings could be used to fund e.g., investments in digitization, though some investment in re-fit required

Drivers	Observations	Potential Opportunity	Challenges
 DRS help centers	<ul style="list-style-type: none"> • DRS closed facilities, transitioned to virtual without complaints 	<ul style="list-style-type: none"> • Maintain virtual services post-COVID • ~\$1m in efficiencies 	<ul style="list-style-type: none"> • May require "clean-up cost" for selling
 DMV service centers	<ul style="list-style-type: none"> • CT has more DMV sites than peer, despite similar population density • Some services already offered in third party locations 	<ul style="list-style-type: none"> • De-branch low-volume DMV locations • Increase use of third-parties to maintain network density (e.g. AAA) • Investigating efficiencies with DMV 	<ul style="list-style-type: none"> • Political resistance to store front closure
 Fleet maintenance	<ul style="list-style-type: none"> • Multiple agencies maintain garages (DOT, DESPP, DEEP) 	<ul style="list-style-type: none"> • Consolidate garages • Investigating cost efficiencies with DAS 	<ul style="list-style-type: none"> • Cost for to re-locate/stack
 Police barracks	<ul style="list-style-type: none"> • District consolidation means fewer facilities needed • Some barracks dilapidated 	<ul style="list-style-type: none"> • Consolidate barracks, divest dilapidated buildings • Investigating cost efficiencies with CSP 	<ul style="list-style-type: none"> • Cost for to re-locate/stack
 Corrections	<ul style="list-style-type: none"> • Inmate population down across security levels 	<ul style="list-style-type: none"> • Consolidate ~3 prison facilities • \$13-15m in potential savings 	<ul style="list-style-type: none"> • Labor and political challenges as discussed

4.0

Agency-by-agency impact and opportunities

Department of Administrative Services

Department of Administrative Services | Agency profile



Program or department	Budget (\$M)	Type	FTE budget ¹	FTE ²	Description
Facilities & Property Mgmt	41.6 4.9	Program / personnel / grants	\$2.4M	37	<ul style="list-style-type: none"> Acquire, sell & transfer property as well as leasing state-owned property to private and nonprofits as appropriate Administers operating, maintenance & security of state-owned RE
Enterprise Systems & Technology	25.9 8.0	Program / personnel	\$12.8M	138	<ul style="list-style-type: none"> Improve effectiveness & resolve business issues To provide and maintain a standardized technology system (BEST) to streamline government operations, increase efficiency, facilitate better decision-making and eliminate redundant systems for the statewide human resources and procurement functions
Central Administration	31.8	Program / personnel / grants	\$23.9M	420	<ul style="list-style-type: none"> Set agency policy; allocate & monitor agency programs & resources; provide legal & legislative support to DAS Provide statewide procurement, communications, HR, workers' comp & Affirmative Action services Billing & collection services for several health agencies Provide and maintain statewide vehicle fleet
Boards and Commissions	22.2	Program	\$0.8M	9	<ul style="list-style-type: none"> Oversee leasing, sale & acquisition of real estate, as well as proposals for hiring of architects /engineers To hear and determine all claims against the state Determine method by which CT insures itself against losses & develop and implement risk management / loss prevention programs related to state insurance plans
Construction Management	-1.7 9.0 1.8	Programs / personnel	\$8.1M	114	<ul style="list-style-type: none"> To manage the planning, design and construction of state-owned facilities, including qualifications-based selection of architects, engineers, procurement, etc. Provide tech. assistance to agency facility managers Administers licensing and certification programs and continuing education for local building officials.
Total	\$130.3M state \$1.8M federal \$11.1M other		\$48.0m	718	

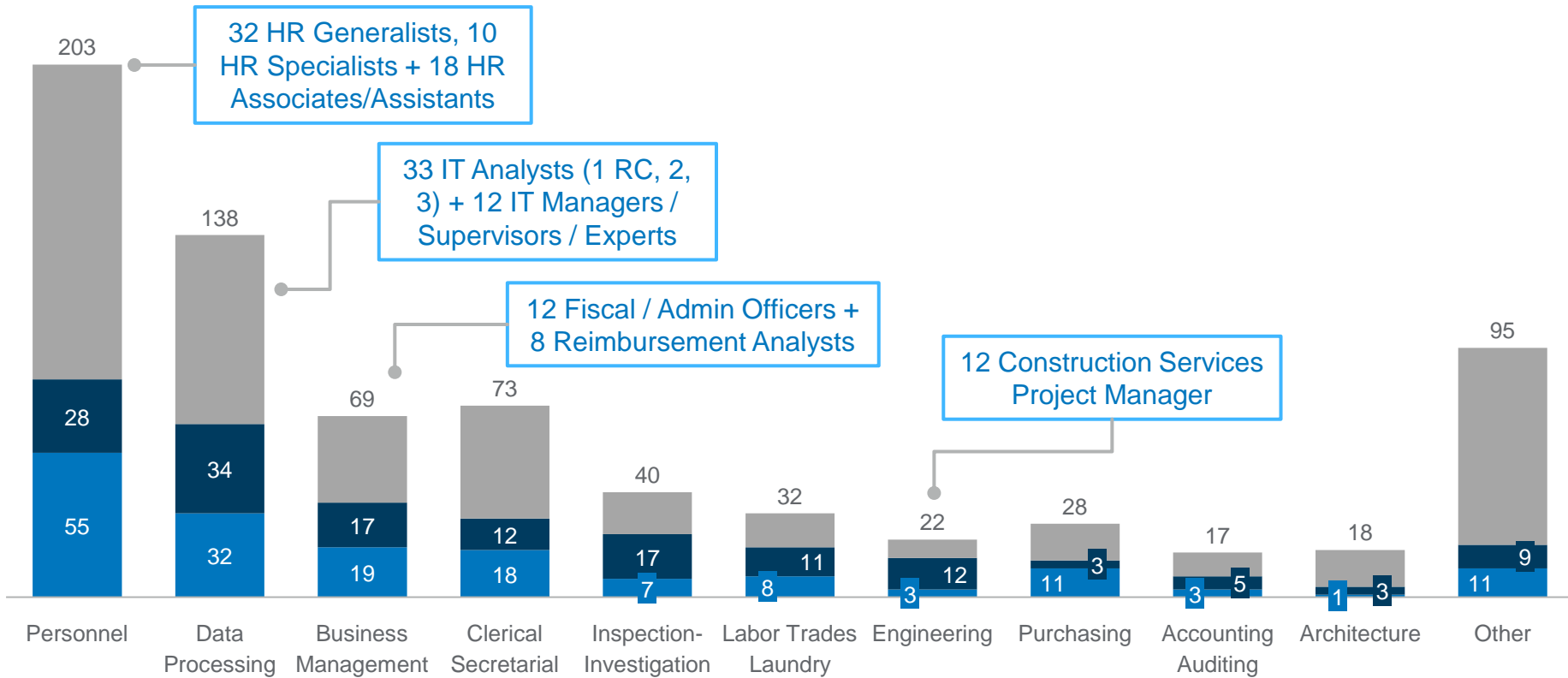
1. Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point; Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DAS | Initial view is HR Personnel and Data Processing staff are among highest risk for staff retirements

319
Total Eligible



Job Functions

Normal Ret./ Total HC



Early Ret./ Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



DAS | Primary retirement surge risks



HR, business management and clerical/secretarial staff represent largest risks from retirement surge

- DAS already establishing plans to reduce backfilling needs through increased automation and efficiency
- Hiring processes expected to be streamlined through AI initiatives
- Unit-specific plans being developed to prevent backfilling certain positions (i.e., hire one new employee for every three retirees)



Shared services, including key business functions, at-risk without backfilling strategy or further centralization



IT-backfilling likely to be critical for prioritization

- IT workers often difficult to attract and retain – personnel critical to DAS providing shared-services support



Reduction in personnel combined with future telework policy could reduce real estate costs while also removing a significant source of work (leases, facility management, etc.)



Department of Administrative Services | Operational opportunities (I/II)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Sell 18-20 Trinity and 30 Trinity St.	Facilities & Property Management	<ul style="list-style-type: none"> Building requires \$40M in expected CapEx renovations on 18-20 Trinity 30 Trinity assessment value of \$2.5mm 	H \$2.5mm+ assessment \$40M+ Capex avoided
Flexible workforce model and reduction of real estate footprint	Agency-wide	<ul style="list-style-type: none"> Increase permanent offering of remote work to broaden pool of candidates, improve WLB, reduce operational footprint and transition toward flexible employment policies State pays \$50mm in annual leases but can have sufficient owned capacity if telework and hoteling persist post-pandemic 	H See "Real estate" section for further details
Right-size agency through attrition	Agency-wide	<ul style="list-style-type: none"> ~320 FTEs eligible for retirement (43% of positions) Retirement surge seen as opportunity to right-size agency that has lacked an organizational review in recent years Significant opportunity to manage attrition with minimal backfill in select areas – exceptions potentially required in areas likely to see significant uptick in workload around retirement surge (e.g., HR, offset somewhat by AI) 	H \$8-10m in potential savings from 80-100+ FTEs
Workers' compensation savings	Central Administration; Boards and Commissions	<ul style="list-style-type: none"> Reduce claim durations using common-sense reform to prohibit lifetime "temporary" benefits Implement safety, health and wellness, and return to work incentive programs to reduce frequency of incidents Use advanced analytics to increase fraud detection Create case management system to proactively engage injured employees and doctors to ensure appropriate support is provided Create an annual settlement fund used to buy out long-term claims at a discount without disrupting individual agencies' pools 	M Potential savings of millions of dollars per year

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)



Department of Administrative Services | Operational opportunities (II/II)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
eProcurement platform	Central Administration	<ul style="list-style-type: none"> Utilize statewide eProcurement platform that allows approved vendors to bid on requests while enabling agencies to go outside the system for specialty needs (e.g., DOT materials, time-sensitive requests, validated better value) Use data analytics to identify high spend areas for maximizing savings 	M Millions of dollars in potential savings statewide
Digital by default, automate/digitize paperwork	Enterprise Systems & Technology	<ul style="list-style-type: none"> Migrate all documentation, paperwork & comms to digital platforms (e.g., electronic correspondence, cloud storage) Utilize RPA, OCR, NLU, e-signatures, etc. softwares and scale them across State government to have a cohesive and synchronized digitization strategy and further progress towards an integrated database (e.g., Citizen One Stop) 	M Millions of dollars in potential savings statewide
Right-size vehicle fleet	Central Administration	<ul style="list-style-type: none"> DAS fleet of 3,600 should be reduced given agencies admit they have excess number of vehicles along with less need for vehicles for many workers with permanent increases in telework Standardize options to improve purchasing power (i.e., discounts) Intention to transition to EVs provides perfect time to buy less vehicles 	M TBC potential savings based on agreed telework policy
Centralizing business functions	Central Administration	<ul style="list-style-type: none"> Consolidate business functions (e.g., payroll, AR/AP, accounting) into one agency to realize efficiency savings Consolidate all collection efforts statewide to ensure efficiencies 	M Millions of dollars in potential savings statewide
Clarify and codify DAS and OPM roles	Agency-wide	<ul style="list-style-type: none"> Conduct review of agency missions and roles due to perceived overlapping services and breadth of scope (e.g., hiring, policy, real estate, procurement) 	L Millions of dollars in potential savings from FTE synergies with clarified roles
Consolidate print & mail	Operations	<ul style="list-style-type: none"> Multiple agencies have their own print & mail centers; merge or outsource 	L <\$1m in potential savings
	Total		<ul style="list-style-type: none"> 100+ FTEs \$100m+ (including avoided CapEx)

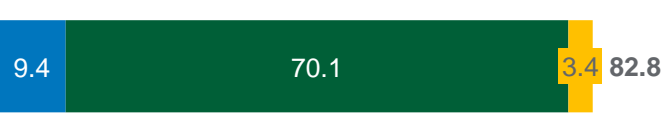




H Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)

Department of Aging and Disability Services

Department of Aging and Disability Services agency profile

Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Employment Services		Program/ personnel/ grants	\$0.8m	321	<ul style="list-style-type: none"> • Providing employment training and opportunity to people with disabilities/elders • Providing rehabilitation services for individuals injured while working
Independent Living Services		Program/ personnel/ grants	\$3.2m	47	<ul style="list-style-type: none"> • Providing services to facilitate independence for people with disabilities/elders (e.g. fall prevention, chronic disease management) • Determining disability for individuals
Educational Services		Program/ personnel	\$0.1m	43	<ul style="list-style-type: none"> • Providing information (online, call line, etc.) for elders regarding Medicare, payment management, etc. • Training teachers to work with children with blindness
Administration		Personnel	\$2.5m	30	<ul style="list-style-type: none"> • Planning statewide program implementation • Providing central support functions (e.g. HR, IT)
Accessibility Services		Program/ personnel/ grants	\$0.3m	7	<ul style="list-style-type: none"> • Providing assistive technology and related information • Training individuals with disabilities to drive • Providing specific communication support to individuals who are deaf/hard of hearing
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$27.4m state</div> <div style="border: 1px solid green; padding: 2px;">\$71.6m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$3.8m other</div> </div>		\$7.0m	459 ³	

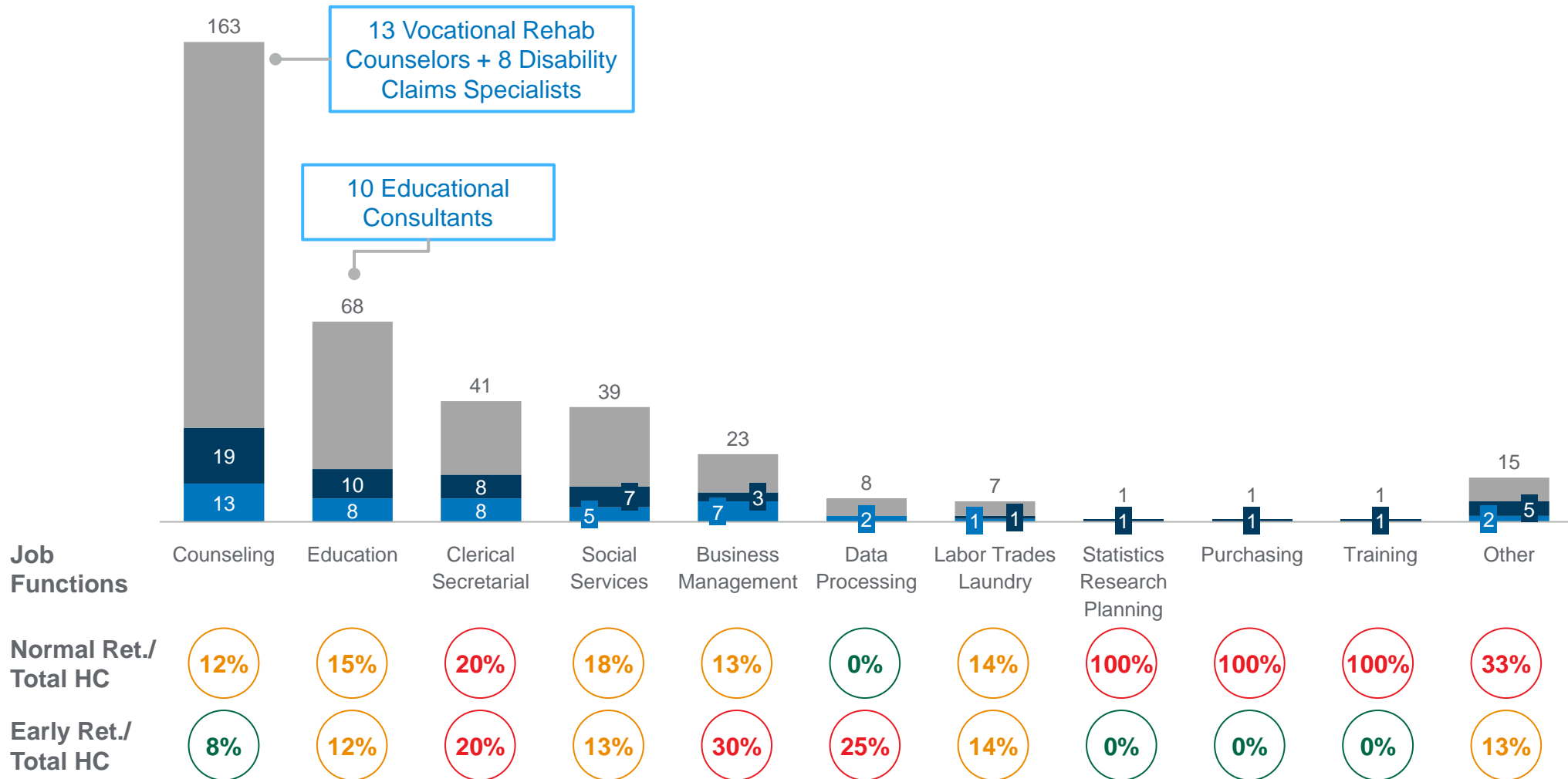
1. Personal services 2. Incl. General Fund and Federal Fund FTE 3. Incl. 11 FTE from Advocacy Services – sub-department listed with no budget.

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: FY2020-2021 Biennial Budget Program Addendum

ADS | Counseling and Education are most at risk of service loss

102
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Specialized nature of ADS roles creates service continuity risk due to 2022 retirement surge; additional concern for fiscal operation disruptions



Highly specialized roles are particularly challenging to backfill, heightening risk of service disruption



- Challenging to identify candidates for roles working with people with blindness, such as Educational Consultants and Orientation and Mobility Specialists
- Two employees in Driver Training Program are eligible for retirement – ADS has not yet had to recruit for these positions
- Relatively low number of employees in specialized functions may amplify impact of individual retirements



Clerical and secretarial retirements could disrupt day-to-day operations, particularly within fiscal staff

- Significant concern for disruption to fiscal operations due to retirements
- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)

Opportunities for ADS to streamline service provision and adopt common platforms across HHS agencies

Drivers	Observations	Challenges	Opportunities
	<p>Streamline service provision</p> <ul style="list-style-type: none"> • There is significant overlap between services offered by ADS and DDS / DSS • Multiple programs across agencies offer similar service types 	<ul style="list-style-type: none"> • Need for some degree of specialization based on different needs of resident groups • Potential political sensitivity • Different funding sources could complicate consolidation efforts 	<ul style="list-style-type: none"> • Consolidate/jointly administer employment support and independent living programs across ADS and DDS • Combine Elderly Nutrition Program with CTNAP in DSS
	<p>Establish common agency platforms</p> <ul style="list-style-type: none"> • Functions such as grant-making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies 	<ul style="list-style-type: none"> • Creating common platforms requires rigorous data sharing agreements between agencies • Technical and governance complexity • Need for agency-specific insight in certain processes 	<ul style="list-style-type: none"> • Establish central grant hub for HHS agencies • Utilize ImpaCT for eligibility determination • Centralize program monitoring and evaluation for HHS agencies

ADS | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; ADS-specific savings depend on extent of centralization, further analysis pending
Consolidate employment support programs for people with disabilities within DDS Employment Opportunities and Day Services	Employment Services	<ul style="list-style-type: none"> Both DDS and ADS offer wide-ranging vocational support to people with disabilities, including skills training, employer advocacy, long-term support, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	M Potential overall savings of \$2-5m+
Consolidate Independent Living Program, Individual Home Supports, and Congregate Housing Services Program within ADS	Independent Living Services	<ul style="list-style-type: none"> Both DDS and ADS offer a range of supportive housing services, including skills training for independent living, housekeeping, transportation, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	M Potential overall savings of \$1-3m+
Utilize ImpaCT for ADS eligibility determination	All HHS agencies	<ul style="list-style-type: none"> ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs 	M ADS-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Implement statewide background check system for hiring	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies <ul style="list-style-type: none"> - DCF has second-highest number of dedicated positions among HHS agencies behind DSS Centralization could improve impartiality and sharpen focus on low-performing programs 	M ADS-specific savings depend on extent of centralization

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

ADS | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
<p>Combine state-funded Elderly Nutrition Program and CTNAP within DSS</p>	<p>Independent Living Services</p>	<ul style="list-style-type: none"> • Both ADS and DSS operate state-funded meal-distribution programs • Combining these programs could improve policy coordination, simplify resident experiences, and reduce costs 	<p>L</p>

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Agriculture | Agency profile

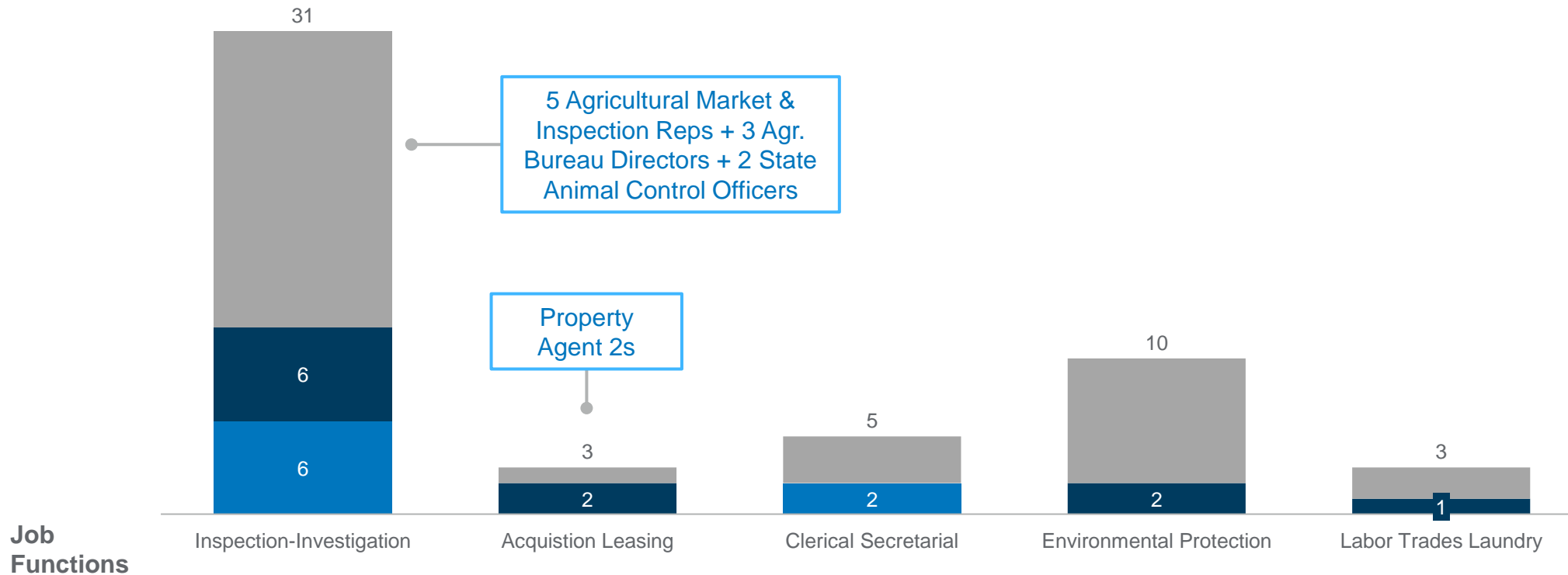


Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Management Services	<p>7.1 0.4 0.0 7.5</p>	Program / personnel	\$0.7m	7	<ul style="list-style-type: none"> Promote the regulation, protection and development of the state's agricultural product and resources Provides policy direction, management controls and support services for the agency.
Bureau of Regulation & Inspection	<p>5.6 0.9 0.0 6.5</p>	Program / personnel / grants	\$2.1m	33	<ul style="list-style-type: none"> Ensure public health & safety, health of food producing animals, and health & welfare of all domestic animals. To ensure agricultural commodities composition and quality to prevent economic loss to livestock and poultry owners due to animal diseases or contamination. To ensure animal and pet foods meet their label claims.
Bureau of Aquaculture	<p>0.9 0.0 0.0 0.9</p>	Program / personnel	\$0.8m	12	<ul style="list-style-type: none"> To provide for the planned development and coordination of aquaculture as an agricultural business through programs that assure opportunities for the production of an abundant, safe and wholesome supply of farm raised aquatic plant and animal species.
Agriculture Development & Resource Preservation	<p>0.8 0.0 0.0 0.8</p>	Program / Personnel	\$0.5m	16	<ul style="list-style-type: none"> To develop and sustain the agricultural industry and preserve its resources. To provide a central location for farmers and wholesalers to sell and distribute food and other agricultural products.
Total	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">\$14.4m state</div> <div style="border: 1px solid black; padding: 2px;">\$1.3m federal</div> <div style="border: 1px solid black; padding: 2px;">\$2.1m other</div> </div>		\$4.0m	71³	

1. Personal services 2. Incl. STF, Private, Emissions Enterprise Fund and Federal Fund FTEs 3. Incl. 24 FTE from Federal Funds
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DOAG | Inspection-Investigation is most at risk of service loss

19
Total Eligible



Normal Ret./ Total HC

19%

67%

0%

22%

33%

Early Ret./ Total HC

19%

0%

40%

0%

0%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Agriculture | Operational opportunities (I/I)


Opportunity	Program impacted	Detail	Retirement or efficiency impact
Digitize processes	Agency-wide	<ul style="list-style-type: none"> Implementing digitization (e.g., cloud storage, OCR, RPAs, self-guided dashboards, etc.) to automate manual processes 	<p>L <\$1m in est. potential savings from attrition of 5-10 FTEs</p>
Increase shared services and centralized functions	Agency-wide	<ul style="list-style-type: none"> Leverage CT's best-in-state technologies/practices across additional agencies (e.g., DCP, DOB, etc.) to reduce expenses through cost-sharing (e.g., collections, scanning technology, chatbots, etc.) Target burdensome licensing and registration activities, applying a cross-agency IT solution Efficiency in creating digital e-management records platform across CT 	<p>L <\$1m in est. potential annual savings from shared services (5-15%)</p>
Digitize processes	Agency-wide	<ul style="list-style-type: none"> Implementing digitization (cloud storage, OCR, RPAs, self-guided dashboards, blockchain monitoring) to automate processes 	<p>L <\$1m in est. potential savings from attrition of 5-10 FTEs</p>
Total			<ul style="list-style-type: none"> ~5-10+ FTEs \$1-5m+

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Banking



Department of Banking | Agency profile

Program or department	Budget	Type	FTE budget ¹	FTE	Description
Financial Institutions Division	 7	Program	\$3.5m	35	<ul style="list-style-type: none"> Conduct examinations of banking organizations Ensure compliance of regulatory requirements Prepare reports of Examination for each institution Process applications for new charters and branches Investigate alleged violations of banking laws Refer potential criminal violators to enforcement agency
Management Services	 6	Admin	\$2.6m	20	<ul style="list-style-type: none"> Assist issues with banks, credit unions, investments, mortgage lending, consumer credit, foreclosure assistance, and rental security deposits Coordinate outreach and education, issues press releases and manages social media Responsible for accounting, budgeting, fiscal payroll, purchasing, and financial reporting functions
Securities and Business Investments	 5	Program	\$2.7m	29	<ul style="list-style-type: none"> Examine broker-dealer and investment adviser spots Investigate violations of securities and investment laws Address complaints and inquiries from investors Register firms, agents, and public offerings of securities and businesses opportunities Refer criminal violators to enforcement agency
Consumer Credit	 5	Program	\$2.6m	33	<ul style="list-style-type: none"> License, examine, and enforce mortgages, loans, money transmitting, sales financing, and debt adjusting Administer Truth-in-Lending, collection practices and retail installment sales financing laws Ensure compliance of financing laws and regulations Consumer education and outreach events
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">\$0m state</div> <div style="border: 1px solid black; padding: 2px;">\$0m federal</div> <div style="border: 1px solid black; padding: 2px;">\$23m other²</div> </div>		\$11.4m	117	

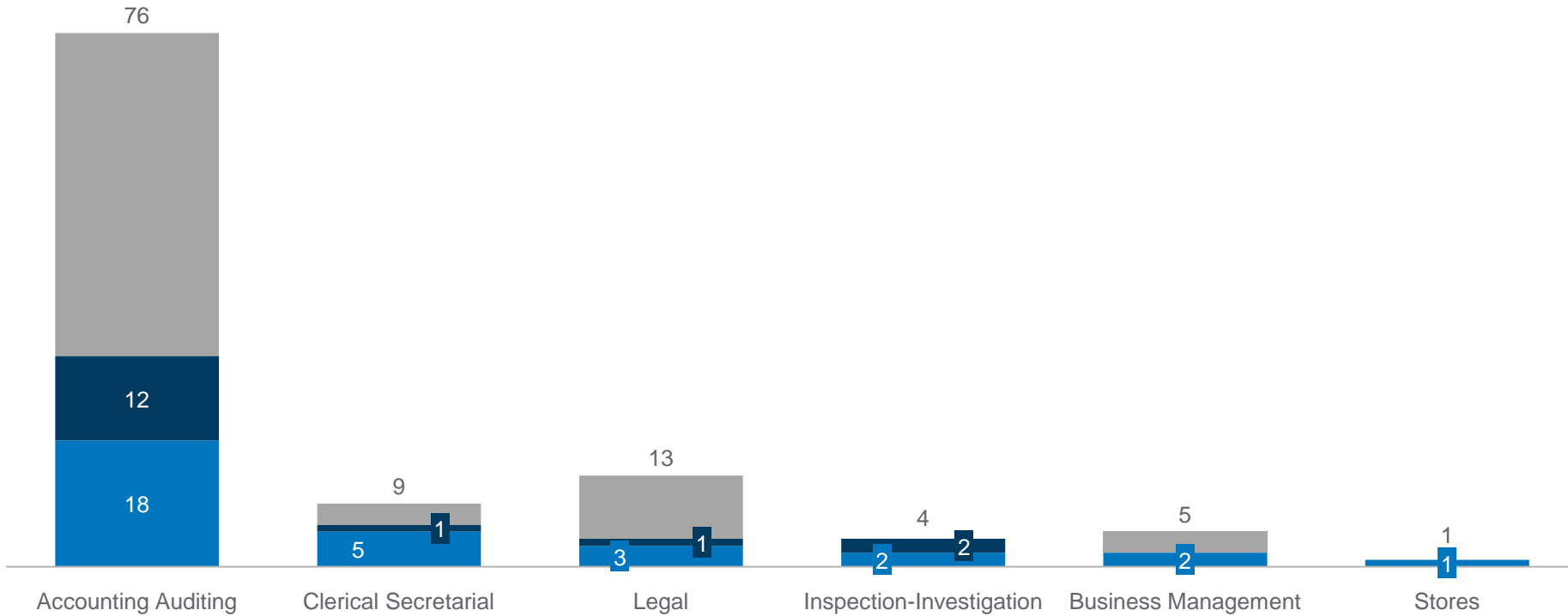
1. Personal services; 2. "Other" meaning the banking fund, both banking and insurance are funded by industry
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DoB | Large number of auditors eligible for retirement

47

Total Eligible



Normal Ret./
Total HC

15%

11%

8%

50%

0%

0%

Early Ret./
Total HC

23%

56%

23%

50%

50%

100%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis

DoB | Primary retirement surge risks



Retirement of senior leaders leads to loss of institutional knowledge for complex investigations

- E.g., auditing and financial activities
- Requires financial clerical staff that are at high retirement risk



Lack of resourcing for training means that examiners do not know how to use DoB systems

- Examiner staff do not have IT skills necessary to operate digitized systems when turnover happens
- Industry is changing dramatically demanding employees that are IT savvy



Highly trained inspectors facing significant retirement risk

- E.g., 100% of inspectors at risk for retirement
- Need to re-fill positions especially within Financial Institutions Division



Inadequate staffing level increasing risk of department acceleration loss

- Difficult to maintain adequate agency staffing levels to meet statutory and regulatory program requirements demanding more cross-training



Department of Banking | Identified opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Recognize other states' licenses	Cross-agency	<ul style="list-style-type: none"> Increase acceptance of out of state licenses to minimize banking applications to do business in Connecticut 	M Decreases number of audits required for multi-state banks, decreasing number of auditors needed
Migrate to Case Point from Concordance	Cross-agency	<ul style="list-style-type: none"> Eliminate personnel processing time and ensure document accuracy in preparation of legal cases 	L Decreases document processing time, freeing up valuable time of limited legal staff to case management
Pilot State Examination Systems	Cross-agency	<ul style="list-style-type: none"> Provide solution for document management, scheduling, billing and processing through piloting of examination program and electronic module 	L More efficient examination system will decrease document processing time straining clerical staff facing retirement risk
Increase banking examination coordination	Cross-agency	<ul style="list-style-type: none"> Coordinate examinations with both state and federal regulators to minimize regulatory burden and cost 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Children and Families

Department of Children and Families | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Child Welfare Services		Program/ personnel/ grants	\$189.3m	2333	<ul style="list-style-type: none"> Managing Careline – reporting service for child abuse Overseeing foster care, adoption, and subsidized guardianship Providing independent-living support to adolescents Contracting private non-profits to provide home/community support services (e.g. crisis response, substance use screening)
Behavioral Health Services		Program/ personnel/ grants	\$51.5m	641	<ul style="list-style-type: none"> Providing in- and out-of-home psychiatric support and substance abuse treatment for children and families Operating children's psychiatric facility
Administration		Personnel	\$26.1m	364	<ul style="list-style-type: none"> Setting guidelines for overall service management Providing central support functions (e.g. HR, IT)
Prevention		Program/ personnel/ grants	n/a	n/a	<ul style="list-style-type: none"> Providing prevention services for child abuse via both direct provision and grants to community Running The Wilderness School program
Education		Program/ personnel/ grants	\$2.7m	26	<ul style="list-style-type: none"> Managing school district for children requiring education in DCF-operated facilities Coordinating public schooling for children under DCF care Providing virtual and post-secondary educational opportunities
Total	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">\$788.8m state</div> <div style="border: 1px solid black; padding: 2px;">\$11.2m federal</div> <div style="border: 1px solid black; padding: 2px;">\$25k other</div> </div>		\$269.6m	3364	

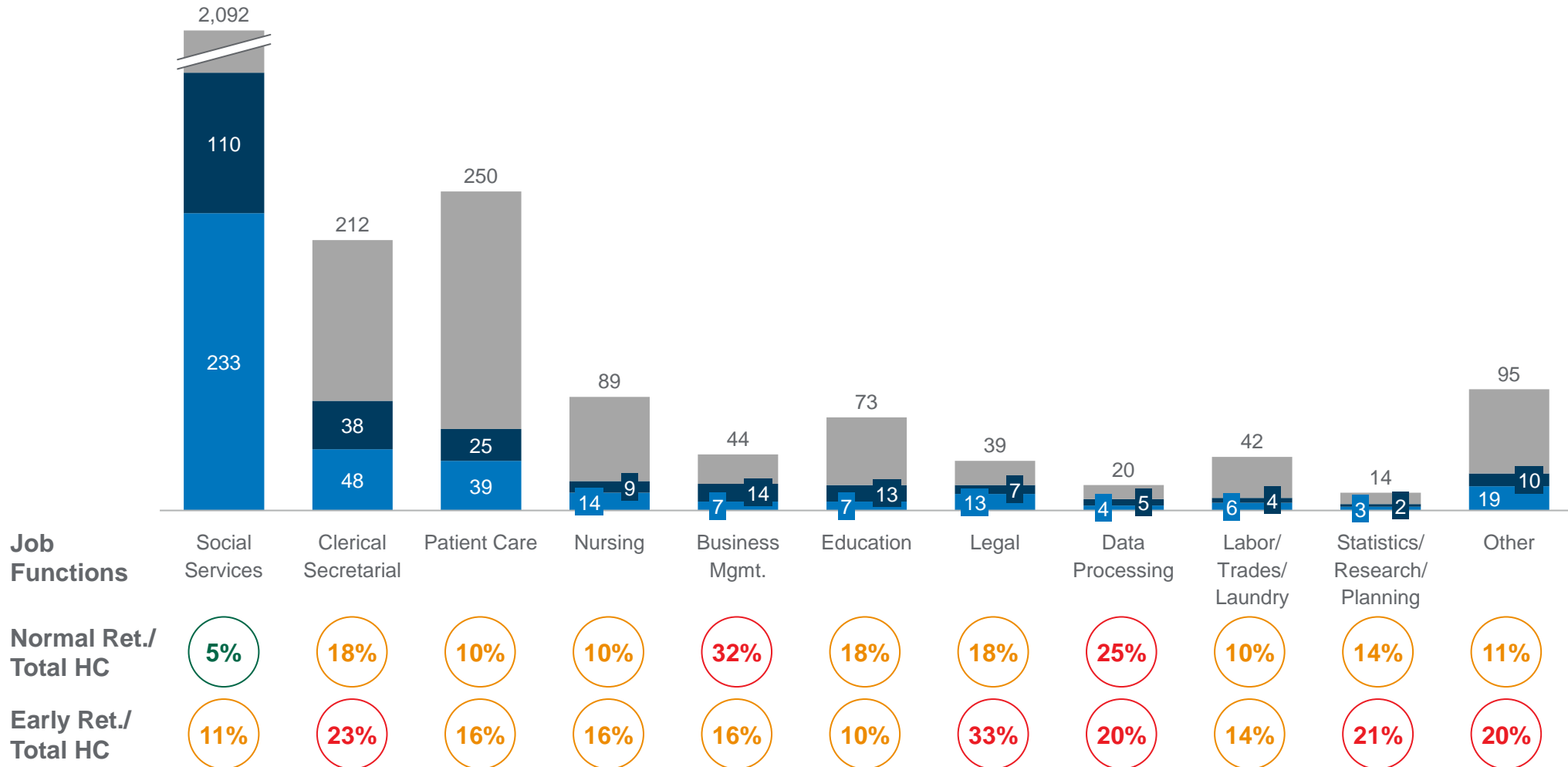
1. Personal services 2. Incl. General Fund and Federal Fund FTE
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DCF | Business Mgmt. and Clerical Secretarial are most at risk of service loss

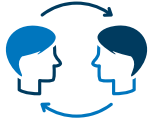
630

Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DCF | Primary retirement surge risk driven by need to comply with consent decree; potential for operational disruption and backfill challenges



Significant number of social workers and supervisors eligible for retirement; social services staffing levels mandated by consent decree

- Failure to fill positions could result in motion of contempt being filed against the state
- Backfill challenges anticipated due to lack of candidates with requisite field hours completed and high intensity of the work (see below)
- Significant hiring initiative from non-profit providers could disrupt provider operations



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Intense nature of client-facing positions (social workers and others) may complicate backfill efforts

- Positions involve high stress and liability
- Historically, state employees offered reemployment at DCF prefer other positions with same pay
- State compensation exceeds private sector for social workers, but for other positions such as psychiatrists the reverse is true



DCF | Opportunities to reduce overtime and adopt common platforms

Drivers

Observations

Challenges

Opportunities



Control overtime costs

- DCF's overtime expenditure (as share of total employee pay) is higher than peer states
- Manual cross-agency referral process, unnecessary investigations reduce case worker capacity

- Likely union resistance to overtime adjustments
- Rigorous data sharing agreements required between agencies for referrals

- Reduce overtime expenditure using DDS efforts as potential roadmap
- Automate cross-agency referral process



Streamline service provision across agencies

- DPH administers multiple programs supporting pregnant women, mothers, and children

- High political sensitivity around optics of care provision for young children and families
- Funding structure for federal programs could complicate program consolidation/joint administration

- Coordinate administration of DPH programs



Establish common agency platforms

- Functions such as grant-making/administration, eligibility determination, and program monitoring/evaluation are often manual and duplicated across HHS agencies

- Creating common platforms requires rigorous data sharing agreements between agencies
- Technical and governance complexity
- Need for agency-specific insight in certain processes

- Establish central grant hub for HHS agencies
- Expand use of ImpaCT for eligibility determination
- Centralize program monitoring and evaluation for HHS agencies



Evaluate sourcing for services

- Non-profit providers offer foster care services at lower cost per worker

- Privatization efforts in other states often compromised service quality
- Potential consent decree constraints
- Likely union resistance to privatization

- Limited opportunity due to quality concerns, constraints, and resistance



DCF | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; DCF-specific savings depend on extent of centralization, further analysis pending
Reduce overtime	Agency-wide	<ul style="list-style-type: none"> Training managers to better manage overtime could reduce cost while maintaining coverage Shifting to a 9-day work week could manage absenteeism currently used to game the system DDS efforts can serve as roadmap 	M \$1-2m in potential savings
Implement statewide background check system for hiring	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Expand use of ImpaCT for eligibility determination	All HHS agencies	<ul style="list-style-type: none"> ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs DCF and DSS collaborate closely on eligibility 	M DCF-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies <ul style="list-style-type: none"> DCF has second-highest number of dedicated positions among HHS agencies behind DSS Centralization could improve impartiality and sharpen focus on low-performing programs 	M DCF-specific savings depend on extent of centralization

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

Source: DCF input; CT DCF and provider costs; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum; BCG analysis



DCF | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Reduce incorrect reports of abuse	Child Welfare Services	<ul style="list-style-type: none"> Improving community training and resources to equip reporters (e.g. teachers) to better identify potentially abusive situations could reduce time/resources deployed to investigate "false alarms" and increase case worker capacity 	L
Automate cross-agency referral system	Behavioral Health Services & Child Welfare Services	<ul style="list-style-type: none"> Referrals from DCF to other agencies are currently a highly verbal process conducted by case workers Cross-agency systems would help case workers better understand opportunities for referrals and streamline process, creating additional capacity 	L
Coordinate administration of DPH's Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative in Medical Health and Wellbeing Services	Child Welfare Services	<ul style="list-style-type: none"> CYSHCN provides health, education, and recreation service coordination, payment for services, and family respite for income-eligible children under 21 at elevated risk for chronic physical, developmental, behavioral, or emotional conditions Housing CYSHCN in Medical Health and Wellbeing Services could improve coordination and resident outcomes while reducing administrative and program costs overall 	L
Consolidate administration of Save Haven Act for Newborns with DPH support programs for at-risk pregnant women and new mothers	Child Welfare Services	<ul style="list-style-type: none"> DPH administers multiple support programs for at-risk pregnant women and new mothers: <ul style="list-style-type: none"> Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides food, healthcare referrals, nutrition education, and breastfeeding support for low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk Healthy Choices for Women and Children Home provides visits, need assessments, education, and service referrals for pregnant/postpartum women residing in Waterbury who use or are at risk of using substances Consolidating administration of these programs with that of Save Haven Act for Newborns could improve coordination and resident outcomes while reducing administrative costs 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Consumer Protection



Department of Consumer Protection | Agency profile

Program or department	Budget	Type	FTE budget ¹	FTE	Description
Regulation of Consumer Related Industries		Program	\$6.0m	113	<ul style="list-style-type: none"> Regulating all persons and businesses of consumer related industries Conducts inspections and effectiveness checks Enforces consumer safety laws, responds to crisis during emergencies, and monitors divisions (e.g. food standards, drug control, liquor, gaming, casino, lottery)
Regulation of Trade Practice and Occupational/ Professional Licensing		Program	\$3.1m	42	<ul style="list-style-type: none"> Enforces licensing obligations for occupational and professional trades Protect consumers and businesses by preventing unfair and deceptive business practices Trade practices, recalls, fraud, occupational/professional licensing, and administer testing procedure
Agency Management Services		Admin	\$4.2m	94	<ul style="list-style-type: none"> Coordinate and administer policies and programs Identify priorities by anticipating marketplace problems and alert citizens to consumer news Consists of legal, license, administrative, accounting, and technical systems services
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">\$14m state</div> <div style="border: 1px solid black; padding: 2px;"><\$1m federal</div> <div style="border: 1px solid black; padding: 2px;">\$9m other</div> </div>		\$13.3	249	

1. Personal services

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

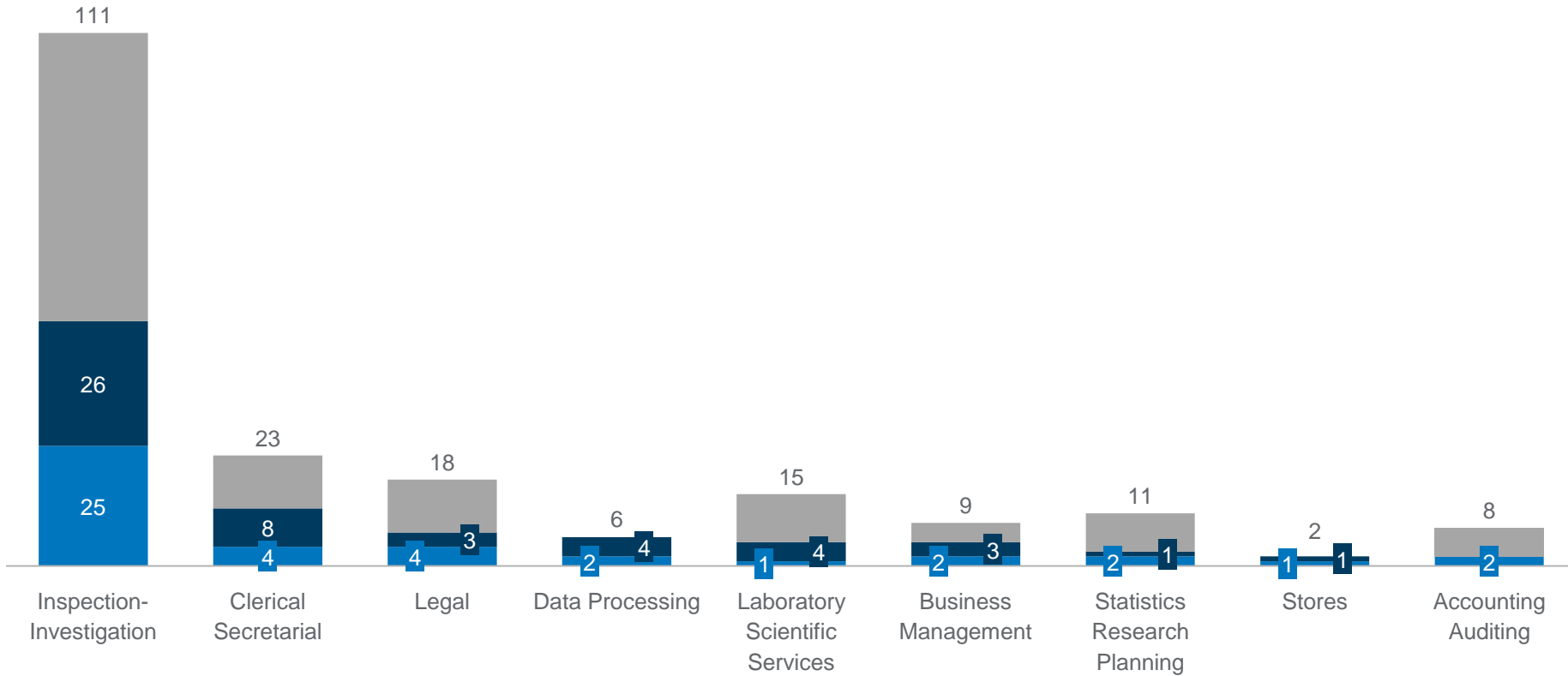
Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DCP | Large number of inspectors eligible for retirement

93

Total Eligible



Normal Ret./ Total HC

23%

38%

17%

67%

27%

33%

11%

50%

0%

Early Ret./ Total HC

22%

18%

22%

33%

7%

22%

22%

50%

25%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis

DCP | Primary retirement surge risks



Challenge in hiring managerial staff and maintaining existing managers

- E.g., unions and salary compression is a huge problem
- High retention of managerial positions bring risk that others leave the department frustrated de-stabilizing organizational functioning



Retirement of inspectors leads to loss of niche institutional knowledge for particular industries

- E.g., food and standards, liquor control, gaming investigations
- Skilled nature of the work makes getting refills more challenging staggering work



Highly technical data processing capability at risk due to retirements

- E.g., 100% of data processors at risk for retirement
- Need to re-evaluate job classifications as remaining skills not well matched to future technology needs



DCP | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand common professional credentialing platform	Cross-agency	<ul style="list-style-type: none"> Expand credentialing and enforcement resourcing to take on more activity. Credentialing duplication across the state which would be better housed at DCP 	M Reduces duplicative inspections, decreasing number of inspectors and dedicated time needed to activity
De-credential low risk professions	Cross-agency	<ul style="list-style-type: none"> Identify creative ways to minimize industry resistance for de-credentialing initiatives 	L Removing processing time for low-risk professions will free time credentialing time for inspectors
Strategically target inspection activity	Cross-agency	<ul style="list-style-type: none"> Target inspections based on likelihood of non-compliance pushing against legislative barriers 	L Targeting of inspections based on level of risk will minimize dedicated enforcement staff






H Major impact (>\$5m or addresses retirement cliff risk)


M Medium impact (\$1-5m)

L Low impact (<\$1m)

DCP inspection job titles for consolidation opportunity addressing service risk

~22% of inspection FTE at risk for retirement

Inspection types	# of people	# of job titles ¹	Potential to merge
 Liquor	• 8	• 3	<ul style="list-style-type: none"> • Opportunity to cross-train as inspections take place at similar location sites e.g. grocery store • Liquor control agents have variant job codes fluctuating based on level of expertise • Food inspectors span across weights and measures (fuel), unit/item pricing and non-alcoholic beverages
 Food	• 16	• 1	
 Gaming (Casinos)	• 10	• 1	<ul style="list-style-type: none"> • Involve same skill set to inspect varying types of games e.g. gaming regulation compliance, gaming regulation and drawing • Physical inspections at casinos are close in location and enforcement type to use smaller FTE pool (<15 miles apart)
 Gaming (Lottery)	• 10	• 2	
 Investigations	• 11	• 1	<ul style="list-style-type: none"> • Occupational trade inspectors of professional trades require additional level of expertise; as such, should remain siloed • Consistent job codes across inspectors



Potential cost savings opportunity of ~\$1m if inspections are consolidated across divisions. Other advantages include removal of duplicative inspections, utilization of knowledge sharing and minimizing of dedicated FTE. However, any changes to the job classifications would need to be bargained

¹ Classifications do not consider managerial or supervisor job codes
 Note: Inspection/investors make up the majority of DCP FTE and are most at risk for service loss
 Source: Department of Consumer Protection Org Chart, October 1, 2020; CT STARS database, BCG analysis

Department of Corrections



Corrections Department | Agency profile

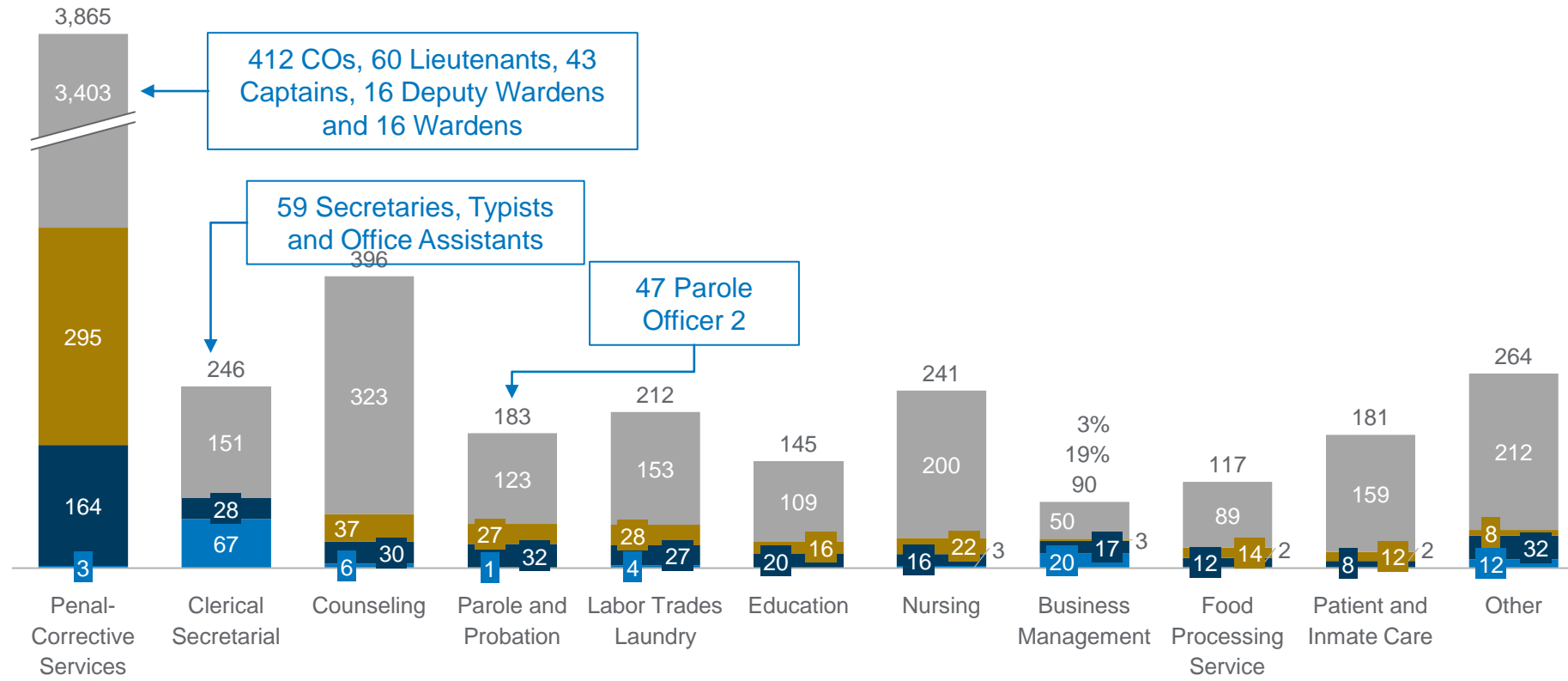
Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Custody	430.5 16.9 0.3 447.6	Personnel	\$342.8m	4,975	<ul style="list-style-type: none"> Operates and manages fourteen correctional institutions and centers Manages K-9 Unit and Correctional Transport Unit
Health and Addiction Services	91.3 0.0 91.3	Program	\$1.6m	593	<ul style="list-style-type: none"> Collaborates with UCHC to provide primary care, inpatient infirmary care, psychiatric services, dental services and medications
Parole and Community Services	50.1 0.0 50.1	Program	\$13.3m	155	<ul style="list-style-type: none"> Provides supervision and enforces conditions for offenders release. Includes units such as mental health, support services, DUI, and women's re-entry
Programs and Treatment Services	0.9 29.7 30.9 0.3	Program	\$29.1m	406	<ul style="list-style-type: none"> Administer educational and vocational opportunities, treatment programs, religious and volunteer activities, re-entry services and victim services
Consideration of Pardons and Parole	6.6 6.6	Program	\$6.6m	79	<ul style="list-style-type: none"> Structured parole board that grants release or authorizes the return to prisons of any parolee; grants certification of employability
Correctional Enterprises	6.5 6.5	Program	\$6.5m	35	<ul style="list-style-type: none"> Provides vocational education and occupational development skill that generates revenue from sales of products and services
Agency Management Services	6.1 6.2	Program	\$5.1m	54	<ul style="list-style-type: none"> Sets uniform policies, centralizes support functions and provides overall agency management services (e.g. affirmative action, legal services, fiscal services)
Staff Training & Development	2.3 2.3	Program	\$1.5m	20	<ul style="list-style-type: none"> Provides staff training and development programs (e.g. pre-service education, in-service training, firearms instruction, and train the trainer classes)
Total	\$616.5m state \$1.2m federal \$23.8m other		\$406.5m	6,317	

1. Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point
Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DOC | Penal-Corrective Services and Clerical Secretarial are most at risk of service loss

968
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Includes hazardous duty eligible employees.
Source: CT STARS database, BCG analysis



DOC | Opportunities identified for Department of Corrections (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Return corrections staffing to previous level	Custody	<ul style="list-style-type: none"> Accept CO retirement to return ratio of CO/inmates to pre-Covid levels 	H \$34m, addresses retirement risk for COs
Re-base healthcare costs	Health and Addiction Services	<ul style="list-style-type: none"> Review sourcing of health services (e.g., dental services, mental health services, primary care services) Change scheduling to reduce reliance on overtime without increasing FTE 	H Depends on future prison population
Decrease imprisoned population	Custody	<ul style="list-style-type: none"> Reform bail rules (e.g., lower or end use of cash bail) to reduce jail population Increase use of recidivism and diversion programs to reduce prison population in medium term 	H Depends on degree of reform
Lower facility costs with by reducing footprint	Custody	<ul style="list-style-type: none"> Consolidate correction facilities to achieve a facility occupancy rate of ~56% 	M \$3m, addresses retirement risk for maintenance staff
Demand response for utilities	Engineering	<ul style="list-style-type: none"> Utilize existing facility generators to participate and receive payment in demand response programs. 	L
Increase EAU staffing	EAU	<ul style="list-style-type: none"> Increase EAU staffing and personnel to provide timely and responsive interventions and peers support services. 	L
Better use trades reserve	EAU	<ul style="list-style-type: none"> Hire a reserve of tradespeople to draw from as critical staff retire in order to maintain essential services 	L
Improve training for peer counselors	Cross-agency	<ul style="list-style-type: none"> Enhance training opportunities for peer counselors specific to LE/correctional professionals, thereby improving efficacy of recidivism programs 	L
DAS-FMLA dedicated staff	Cross-agency	<ul style="list-style-type: none"> Assign one dedicated DAS - FMLA staff to work with EAU for continuity of care-minimize duplications and increase efficiencies 	L

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)







DOC | Opportunities identified for Department of Corrections (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand videoconferencing infrastructure	Custody Health and Addiction Services	<ul style="list-style-type: none"> Expand use of remote technology will reduce the need for inmate transportation and will decrease costs by reducing vehicle use and staff resources required 	L
Upgrade inmate record keeping	Custody	<ul style="list-style-type: none"> Upgrade system for maintaining inmate records to save time and cost by reducing FOI complaints 	L
Electronic invoicing	Cross-agency	<ul style="list-style-type: none"> Automate accounts payable function through electronic invoicing 	L
Direct Deposit	Health and Addiction Services	<ul style="list-style-type: none"> Require state employees to have direct deposit to receive pay and petty cash payments 	L
Payroll consolidation	Cross-agency	<ul style="list-style-type: none"> Centralize payroll functionality (for Department of Corrections and other agencies) into OSC or another agency 	L
Decrease imprisoned population	Custody	<ul style="list-style-type: none"> Reform bail rules (e.g., lower or end use of cash bail) to reduce jail population Increase use of recidivism and diversion programs to reduce prison population in medium term 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Four main cost drivers could lead to significant savings in Corrections

5,946 FTE, \$640m in annual costs

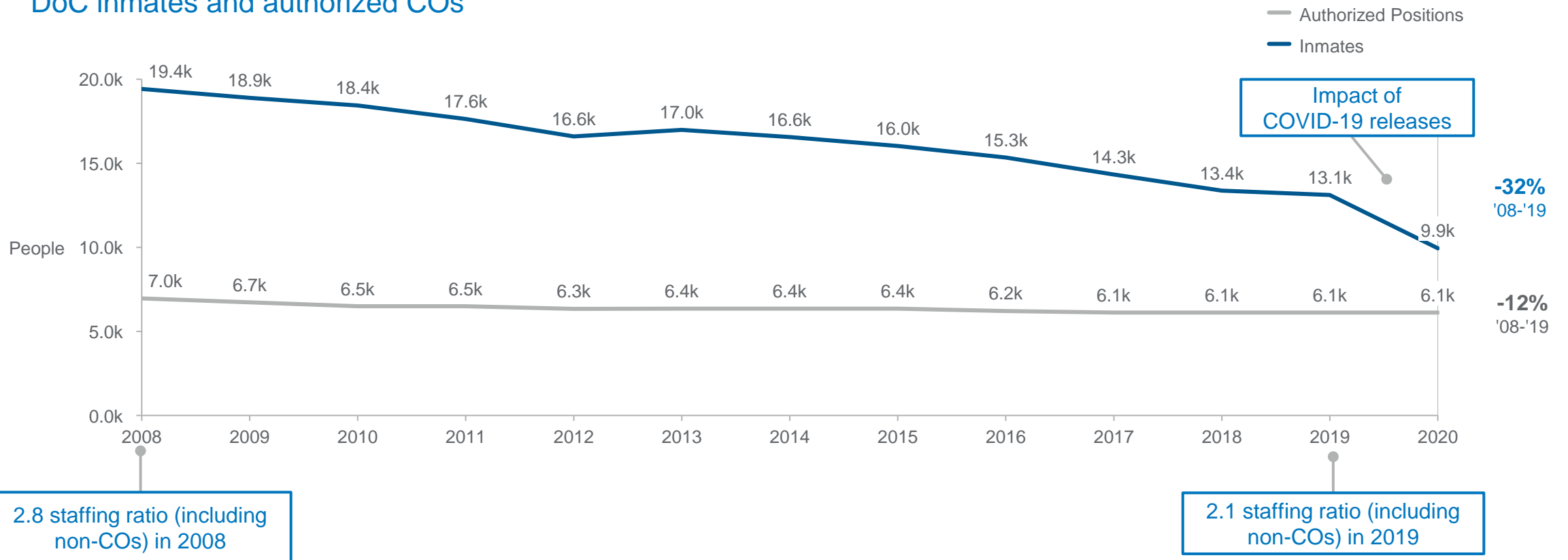
Cost Drivers	Observations	Potential opportunity	Challenges
 <p>Imprisoned population</p>	<ul style="list-style-type: none"> Imprisoned population per capita higher than neighbors (252/100k vs MA 145/100k) NY, NJ recently enacted bail reform One of four integrated jail/prison systems in US 	<ul style="list-style-type: none"> Change bail rules (e.g., end cash bail) Increase use of parole Reduce recidivism rate through prevention programs 	<ul style="list-style-type: none"> Political capital needed to engage in crime Rate of return varies; many show results immediately or in 1-2 years
 <p>Facility costs</p>	<ul style="list-style-type: none"> 14 facilities total 56% total occupancy rate¹ Oldest facility dates to 1820, facility costs range from \$4-16k/inmate 	<ul style="list-style-type: none"> Shut down three facilities, increasing occupancy rate Reduce facility upkeep and maintenance costs 	<ul style="list-style-type: none"> Political considerations Corrections facilities are often major employers in small communities
 <p>Staff costs</p>	<ul style="list-style-type: none"> Staffing ratio of 2.8 inmates/CO compared to 3.6 in pre-COVID and national average of 4.0 	<ul style="list-style-type: none"> Combine facility changes with moving staffing ratio toward national average 	<ul style="list-style-type: none"> High staffing ratios tied to employee safety Labour issues
 <p>Healthcare costs</p>	<ul style="list-style-type: none"> Healthcare costs slowly decreased from ~\$90m in 2014 to ~\$82m in 2019 Prison population decreased by 20% from 2014 – 2019 	<ul style="list-style-type: none"> Change prison healthcare model to contracted-provision or hybrid 	

1. Pre-COVID (2019)

Source: Connecticut 2020-2021 Biennial Budget Program Addendum

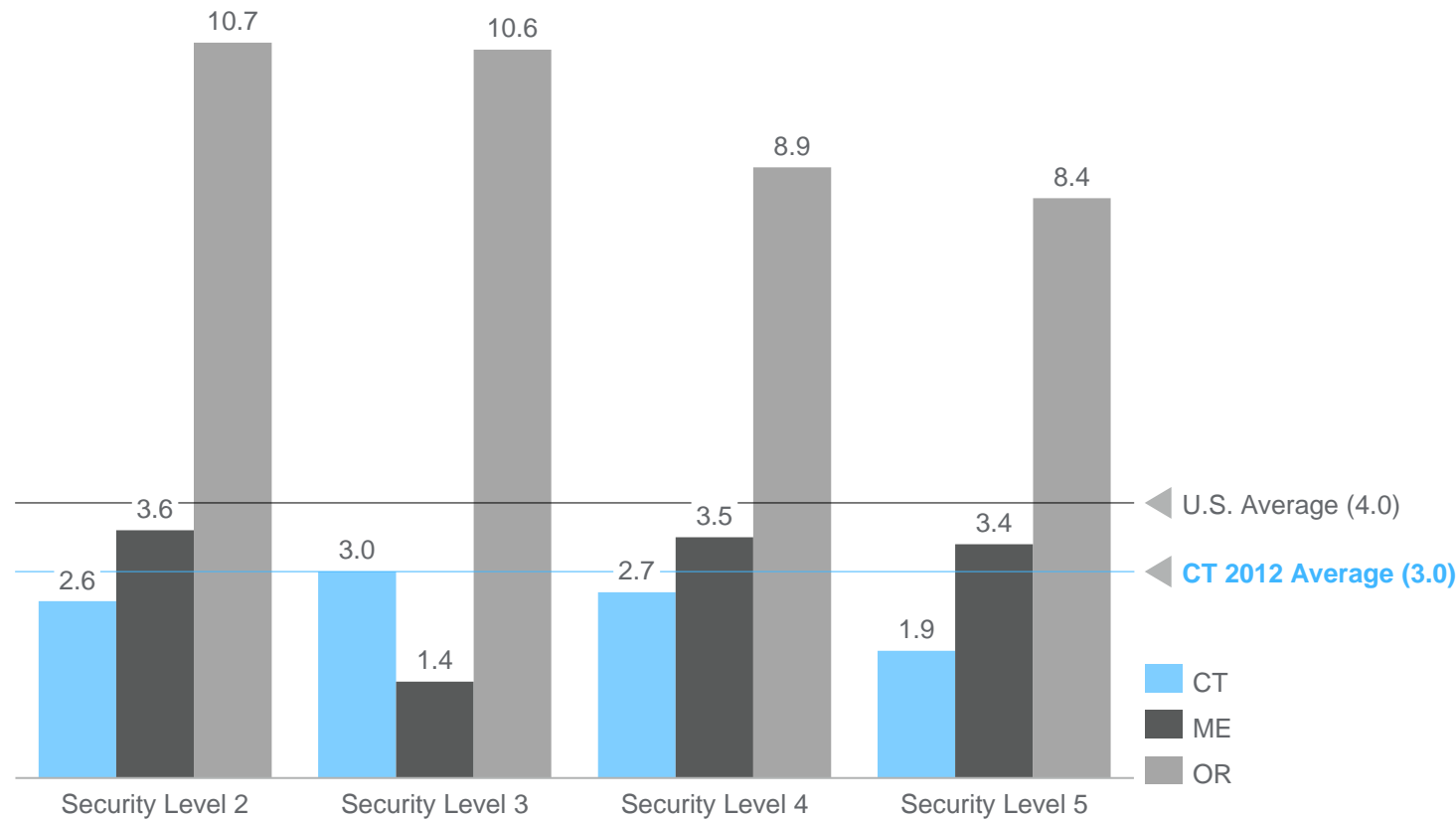
Prison population has declined over the past decade to less than 10,000 at the end of 2020

DoC inmates and authorized COs



Source: OPM, Corrections Sub-Committee Report facilities tab, BCG analysis 2) 2008 and 2019 staffing ratio taken from DOC website: authorized positions/incarcerated inmates.

Connecticut staffing ratio lower than peers; potential to return to previous staffing ratio (still lower than national average) through accepting CO retirements



Impact of increasing staffing ratio (inmates/CO)

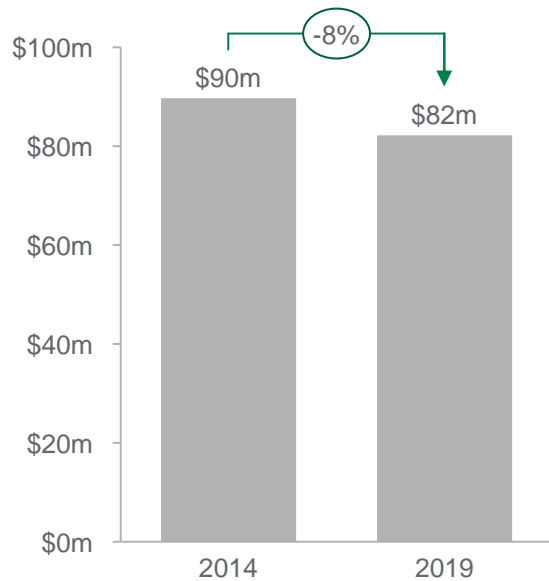
If CT returned to a staffing ratio of 3.0:1 (still less than US average of 4.0:1)

Number of COs 3,438 □ 2,873

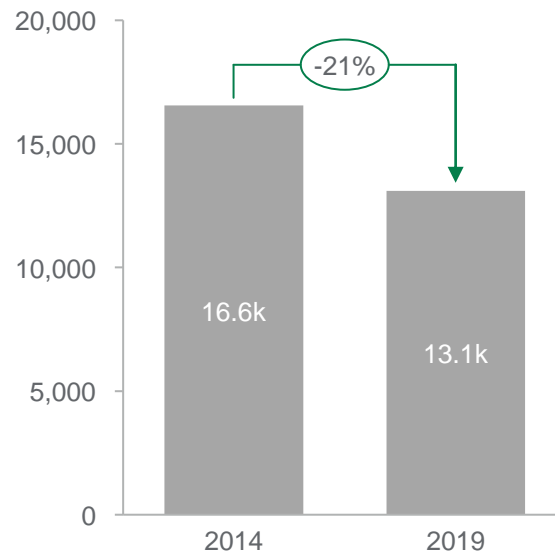
1) Staffing ratio: 2020 DOC filled staffing spreadsheet. Inmates/CO+Warden = Staffing ratio. 2) Cost savings = (Current Staffing – Proposed staffing) * average CO salary (\$64,000)
 Source: 1) 2019 Inmate Population taken from Subcommittee spreadsheet. All documents were provided by DOC budget analyst 10/7/2020. 2) 2008 & 2012 CO from <https://www.correctionalofficeredu.org/connecticut/>

Healthcare spending | Health costs declining slower than inmate population

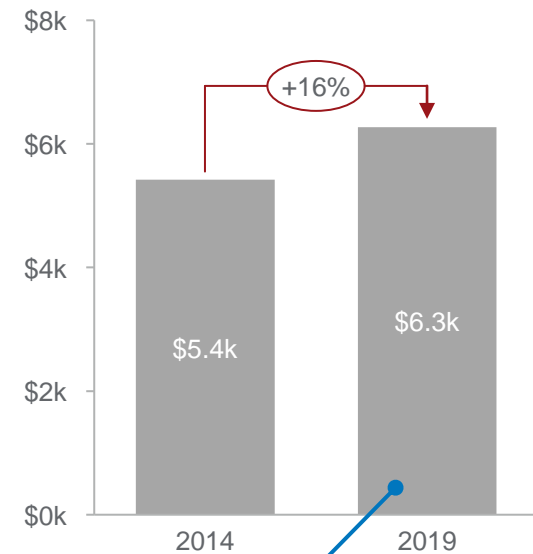
Prison healthcare costs have decreased by 8%...



...while inmate population has decreased by 21%...



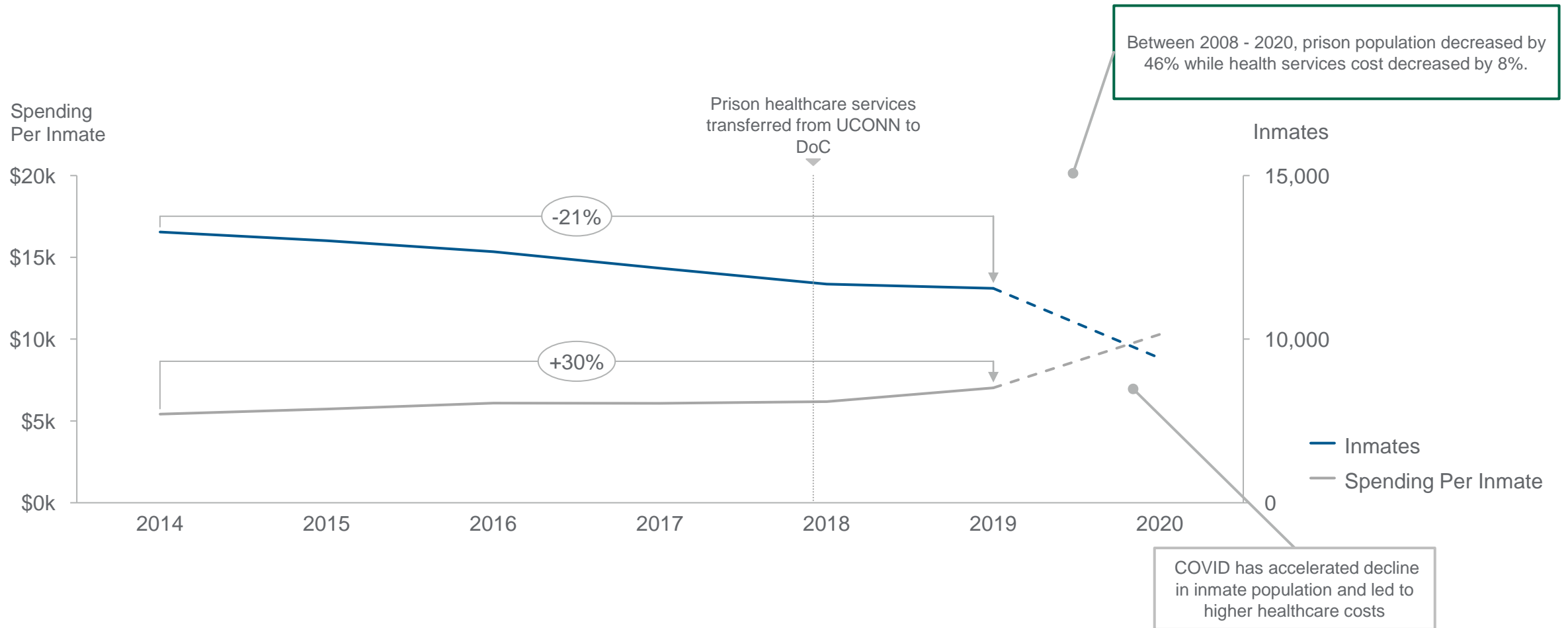
..resulting in 16% greater healthcare cost per inmate



Returning to \$5.4k/inmate yields \$5-10m savings. If inmate numbers continue decline, savings are greater

Source: <https://www.cga.ct.gov/2015/ACT/PA/2015PA-00244-R00HB-07061-PA.htm>; <https://nicic.gov/state-statistics/2015/connecticut>
Note: Cost savings calculated by $(6.3k - 5.4k) * \text{current prison population}$

Healthcare spending | These trends observed over past five years and potentially accelerated by COVID-19



Source: 1) Inmate population taken from CT DoC website <https://portal.ct.gov/DOC/Report/Number-of-Authorized-Positions>, 2) Health services budget taken from CT biennial budget for respective years.

Note: Spending per inmate (health services budget/ no. of inmates)

Department of Developmental Services

Department of Developmental Services | Agency profile



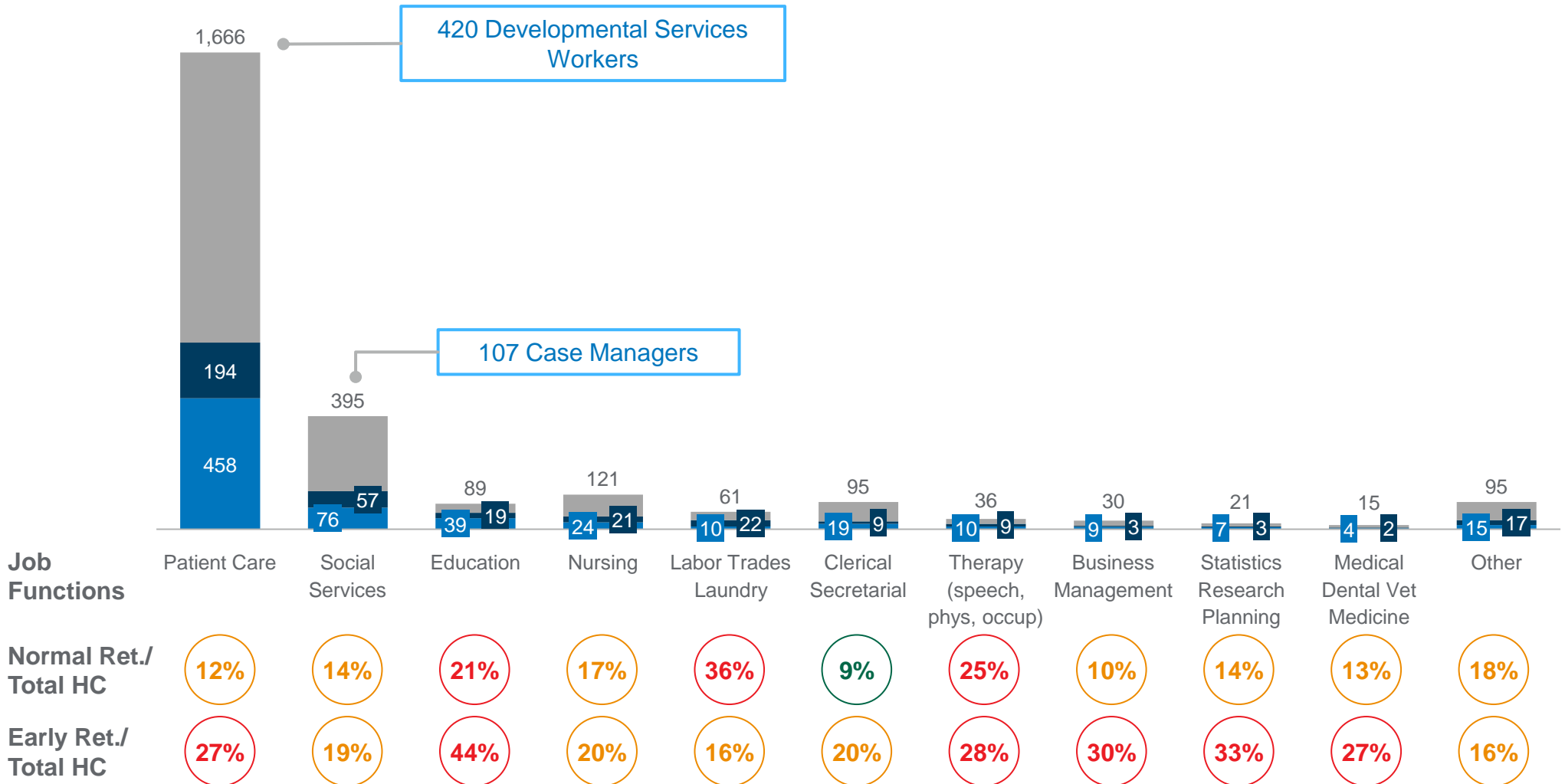
Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Employment and Day Supports	<p>284.4</p> <p>0.0</p>	Program/ personnel/ grants	\$5.1m	89	<ul style="list-style-type: none"> Assisting individuals with disability in seeking employment Facilitating day programs (group and individual) to provide skills training, community participation, and social interaction
Residential Supports	<p>177.1</p>	Program/ personnel/ grants	\$117.1m	2298	<ul style="list-style-type: none"> Licensing community and private family homes for residential support Providing training to individuals with disabilities on independent or group living (e.g. cleanliness, food prep. etc.) Operating Intermediate Care Facilities for individuals requiring more intensive care
Resource Supports	<p>57.1</p> <p>0.0</p> <p>57.1</p>	Program/ personnel/ grants	\$49.1m	979	<ul style="list-style-type: none"> Planning and coordinating services for individuals/families Providing support for families caring for individuals with intellectual disability (e.g. respite, in-home, grants, etc.)
Agency Management Services	<p>0.6</p> <p>1.8</p> <p>34.2</p> <p>36.6</p>	Personnel	\$28.9m	354	<ul style="list-style-type: none"> Planning and implementing overall system of services Training employees (public and private)
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$552.8m state</div> <div style="border: 1px solid green; padding: 2px;">\$0.6m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$1.8m other</div> </div>		\$200.2m	3720	

1. Personal services 2. Incl. General Fund and Federal Fund FTE
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: FY2020-2021 Biennial Budget Program Addendum

DDS | Patient Care and Social Services are most at risk of service loss



1,027
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021

DDS | COVID-related retirements and wide-ranging backfill challenges may exacerbate impact of 2022 retirement surge



COVID has accelerated departures of senior staff – retirements may continue to increase until 2022 deadline

- Some senior staff have already begun to leave due to pandemic-related concerns
- Overall, management workforce has declined significantly over multiple decades (30-40% decrease since 2002)



Clerical and secretarial retirements could disrupt day-to-day operations






- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



DDS experiences backfill challenges across a range of job functions

- Interest in management roles has declined, particularly from people who have been trained for the roles
- Higher private sector compensation complicates recruiting efforts for nurses and other clinical positions
- Recruiting for direct-care positions draws heavily on private providers, which often frustrates providers

DDS | Opportunities to evaluate sourcing, control overtime, streamline service provision, and pursue common platforms and digitization

Drivers	Observations	Challenges	Opportunities
 <p>Evaluate sourcing for services</p>	<ul style="list-style-type: none"> Majority of CT group homes are privately operated Non-profit providers operate group homes at lower cost than CT while maintaining service quality 	<ul style="list-style-type: none"> Conversion to non-profit operation could disrupt resident experience Potential union resistance CT need to remain provider of last resort 	<ul style="list-style-type: none"> Expand non-profit operation of group homes
 <p>Control overtime costs</p>	<ul style="list-style-type: none"> DDS' overtime expenditure (as share of total employee pay) is higher than peer states DDS has already had success in reducing overtime expenditure 	<ul style="list-style-type: none"> Likely union resistance to additional overtime adjustments More extreme efforts may be required to reduce costs beyond levels already achieved 	<ul style="list-style-type: none"> Pursue further reduction of overtime, expanding on current efforts
 <p>Streamline service provision</p>	<ul style="list-style-type: none"> There is significant overlap between services offered by DDS and ADS Multiple programs across agencies offer similar service types 	<ul style="list-style-type: none"> Need for some degree of specialization based on different needs of resident groups Potential political sensitivity 	<ul style="list-style-type: none"> Consolidate/jointly administer employment support and independent living programs across DDS and ADS
 <p>Establish common agency platforms</p>	<ul style="list-style-type: none"> Functions such as grant-making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies 	<ul style="list-style-type: none"> Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	<ul style="list-style-type: none"> Establish central grant hub for HHS agencies Utilize ImpaCT for eligibility determination Centralize program monitoring and evaluation for HHS agencies
 <p>Digitize/automate manual processes</p>	<ul style="list-style-type: none"> Several frequent processes at DDS require substantial manual effort and could be digitized/automated 	<ul style="list-style-type: none"> Initial investment likely required Technical complexity Potential updates needed to existing data sharing agreements 	<ul style="list-style-type: none"> Digitize Individual Service Plans and eligibility applications Automate payment tracking and Affirmative Action reporting Digitize contact information maintenance

DDS | Identified opportunities (1 of 3)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand use of non-profits for group homes	Agency-wide	<ul style="list-style-type: none"> Majority of CT group homes are privately operated Non-profit providers operate group homes at substantially lower costs while maintaining similar service quality Potential challenges include disruption to residents, union resistance, need for state to remain "provider of last resort", and revenue loss 	H Potential annual savings of \$8m+ and reduced need to backfill retired positions, depending on degree of privatization
Establish central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; DDS-specific savings depend on extent of centralization, further analysis pending
Reduce overtime	Agency-wide	<ul style="list-style-type: none"> DDS accounts for ~15% of statewide overtime spend Share as % of total pay is higher than peer states Ongoing efforts can be expanded to further reduce overtime 	M Potential savings of \$3-5m+
Consolidate employment support programs for people with disabilities within DDS Employment Opportunities and Day Services	Employment Opportunities and Day Services	<ul style="list-style-type: none"> Both DDS and ADS offer wide-ranging vocational support to people with disabilities, including skills training, employer advocacy, long-term support, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	M Potential overall savings of \$2-5m+
Consolidate Independent Living Program, Individual Home Supports, and Congregate Housing Services Program within ADS	Residential Supports	<ul style="list-style-type: none"> Both DDS and ADS offer a range of supportive housing services, including skills training for independent living, housekeeping, transportation, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	M Potential overall savings of \$1-3m+

H Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)

Source: DDS and OPM input; CT STARS data; CT Program Review and Investigations Committee study; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum; BCG analysis

DDS | Identified opportunities (2 of 3)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Utilize ImpaCT for DDS eligibility determination	All HHS agencies	<ul style="list-style-type: none"> ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs 	M DDS-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DDS-specific savings depend on extent of centralization
Implement statewide background check system for hiring	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Implement online portal for Individual Service Plan	Agency-wide	<ul style="list-style-type: none"> 12k+ Plans a year are developed in conjunction with service providers and with input from the individual and guardian, requiring signed approvals Efficiency benefit for staff as well as improved access and usability benefit for beneficiaries, families/guardians, and providers (if applicable) Providers would see a particular benefit in licensing checks that often cite missing documentation. 	L
Implement online service eligibility application	Agency-wide	<ul style="list-style-type: none"> Eligibility applications received in paper and scanned into FileBound scanning system (avg. 750/year) Applicants/families/guardians cannot access information or status Online centralized application with smart prompts could generate efficiencies for staff and improved access for residents for multiple agencies, and serve as short-term solution until ImpaCT able to expand support 	L

Major impact (>\$5m or addresses retirement cliff risk)
Medium impact (\$1-5m)
Low impact (<\$1m)

DDS | Identified opportunities (3 of 3)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Automate DDS payment/payment tracking system	Agency Management Services	<ul style="list-style-type: none"> Monthly payments are manually entered into accounts in CORE Automated payment and payment tracking system would reduce or eliminate manual process work for agency staff while allowing provider business owners to monitor and track as well as report on payments from state 	L
Digitize cross-agency contact information maintenance	Agency-wide	<ul style="list-style-type: none"> Case Managers review contact information annually Identity information could be managed across agencies/platforms and kept better up to date 	L
Automate Affirmative Action reporting	Agency Management Services	<ul style="list-style-type: none"> Creation of the Affirmative Action Plan requires extensive analysis of conditions in the employment market on annual basis Automation of Affirmative Action reporting across agencies could benefit agency staff and increase capacity within EEO offices to proactively work towards achieving goals 	L

Major impact (>\$5m or addresses retirement cliff risk)
Medium impact (\$1-5m)
Low impact (<\$1m)

Office of Early Childhood



Office of Early Childhood | Agency profile

Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Early Childhood Education Program	<p>240.7 114.8 0.5 356.0</p>	Program/ personnel/ grants	\$8.7m	141	<ul style="list-style-type: none"> Facilitating access to child care and early education via community funding Providing joint education to parents and young children in new/at-risk families Licensing and monitoring child day care programs, youth camps, etc.
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$240.7m state</div> <div style="border: 1px solid green; padding: 2px;">\$114.8m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$0.5m other</div> </div>		\$8.7m	141	

1. Personal services 2. Incl. General Fund and Federal Fund FTE

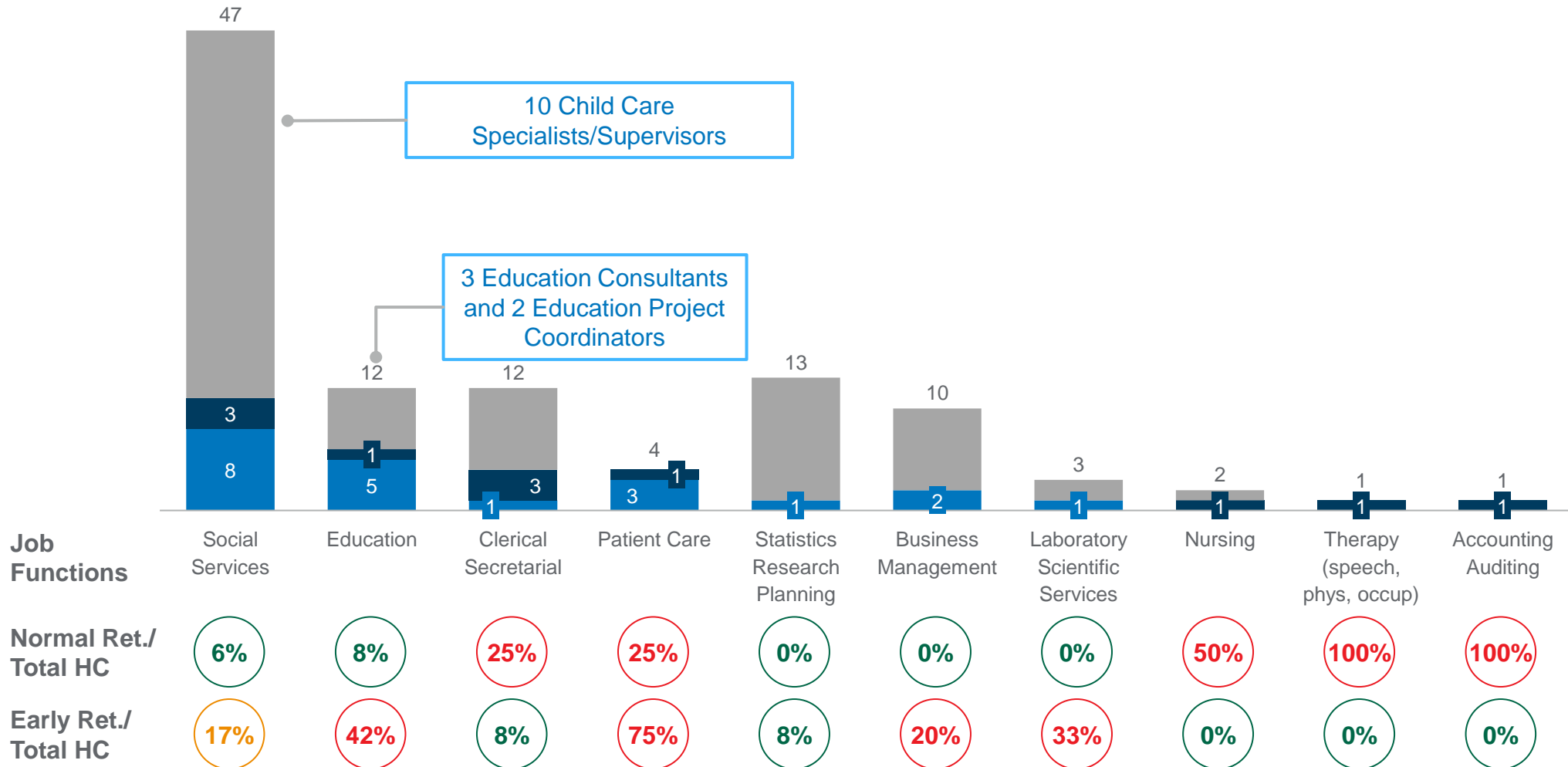
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: FY2020-2021 Biennial Budget Program Addendum

OEC | Social Services and Education are most at risk of service disruption



32
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021



OEC | 2022 retirement surge likely to lead to significant loss of institutional knowledge; coincides with anticipated increase in federal funding



OEC risks losing significant institutional knowledge due to retirements of senior staff such as:

- CCDF administrator (already retired, currently working 12 hours a week)
- Birth to Three program director
- Licensing division head
- Grants and contracting specialist



OEC is administratively lean, amplifying impact of individual retirements

- OEC utilizes staff from other HHS agencies such as DMHAS, as well as outside vendor United Way
- Grants and contracting specialist is currently responsible for ~900 contracts



Anticipated 2021 increase in federal funding likely to increase workload across OEC

- Total federal dollars for early childhood funding received by Connecticut could double
- Early childhood activities remain a key political focus



OEC | Opportunities to adopt common platforms and pursue further digitization

Drivers



Establish common agency platforms



Digitize/automate manual processes

Observations

- Functions such as grant-making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies
- OEC has successfully digitized/automated a number of manual processes, with additional initiatives in progress

Challenges

- Creating common platforms requires rigorous data sharing agreements between agencies
- Technical and governance complexity
- Need for agency-specific insight in certain processes
- Initial investment likely required
- Technical complexity

Opportunities

- Establish central grant hub for HHS agencies
- Utilize ImpaCT for eligibility determination
- Centralize program monitoring and evaluation for HHS agencies
- Add live fingerprint scans for background checks



OEC | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; OEC-specific savings depend on extent of centralization, further analysis pending
Implement statewide background check system for hiring	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Further realign early childhood activities into common agency	Multiple HHS agencies	<ul style="list-style-type: none"> Close collaboration between OEC and other human services agencies Further realignment of various functions could simplify and improve resident experiences, streamline provider interfaces, improve policy coordination, and generate administrative efficiencies 	M
Utilize ImpaCT for eligibility determination	All HHS agencies	<ul style="list-style-type: none"> DSS ImpaCT platform already partially supports eligibility determination for OEC and could be scaled up to support additional programs 	M OEC-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M OEC-specific savings depend on extent of centralization
Transition to quality-rating-based site regulatory system for childcare	All	<ul style="list-style-type: none"> Currently, 100% of programs visited at least once a year. Shifting to 25% of programs being visited every 3 years, 15% being visited every two years, and 60% being visited every year and reassigning staff accordingly could result in ~10% licensing staff savings 	M

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)




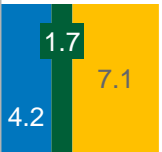
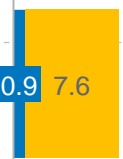

OEC | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Utilize Citizen One Stop for resident call support	All	<ul style="list-style-type: none"> Receiving resident calls estimated to result in ~30% reduction in call volume to United Way and simplify system for residents CCDF funds could be applied elsewhere as needed 	L
Utilize mobile inspections	All	<ul style="list-style-type: none"> Replace current paper forms and reduce travel time for licensors Potential for real-estate cost reduction due to licensors no longer needing office space to process paperwork 	L
Automate grant reporting activities	All	<ul style="list-style-type: none"> Majority of OEC budget is from federal grants – meeting requirements requires significant effort Providers often produce multiple reports for different programs OEC using Preschool Development Grant to develop program reporting software and automate data reports 	L
Add live fingerprint scans for background checks	Multiple HHS agencies	<ul style="list-style-type: none"> Reduce need to mail cards, re-process unusable submissions, etc. Could be incorporated into state-wide background check system 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Economic & Community Development

Department of Economic and Community Development | Agency profile

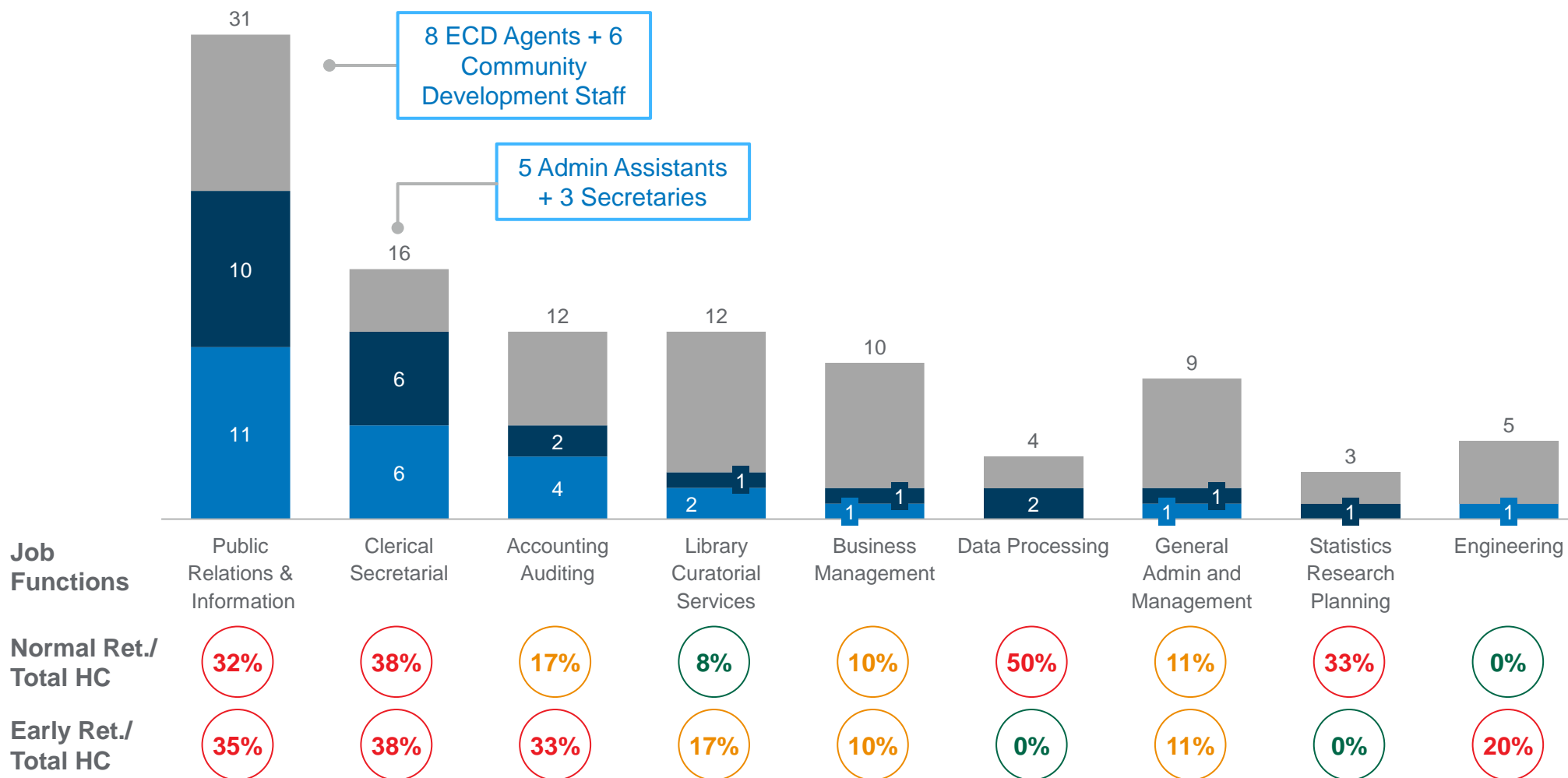
Program or department	Budget (\$M)	Type	FTE budget ¹	FTE ²	Description
Economic and Community Development			\$2.4M	35	<ul style="list-style-type: none"> The agency's economic development strategy aims to maximize economic opportunities through the creation and retention of jobs, workforce development, business expansion, recruitment and retention, export assistance and foreign investment and the development and implementation of comprehensive long-term economic development strategies.
Arts & Historic Preservation			\$1.4M	24	<ul style="list-style-type: none"> Office of the Arts (COA) is the lead agency for support of the creative economy across the state Providing a broad range of funding, arts education, and technical assistance programs to support arts organizations, artists, schools and creative industries Administers a broad range of federal and state programs that identify, register and protect the buildings, sites, structures, districts and objects that comprise Connecticut's cultural heritage
Tourism & Brand			\$0.8M	14	<ul style="list-style-type: none"> Responsible for branding and marketing CT for tourism and business development
Administration			\$2.8M	34	<ul style="list-style-type: none"> Provide direct and indirect support and/or managerial oversight to the operations of the department, including accounts payable/receivable, loan management, HR, communications, fiscal support, portfolio management, management information systems facilities management, compliance and monitoring services, audit functions, legal and legislative services
Total	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">\$17.1M state</div> <div style="border: 1px solid black; padding: 2px;">\$2.2M federal</div> <div style="border: 1px solid black; padding: 2px;">\$44.4M other</div> </div>		\$7.4M	107	

1. Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point; Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DECD | ECD Agents and Clerical Secretarial workers are most at risk of service disruption

50
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Economic & Community Dev. | Operational opportunities

Program or department	Budget	FTE	ID	Hypotheses	FTE impact	Budget impact
Economic & Community Development Program	\$51.8m	35		Ending Film & Digital Media Production Credits	<ul style="list-style-type: none"> In 2018, DECD awarded tax credits totaling \$128.8mm with income and sales tax return estimates of \$0.23 per dollar of credit¹ 	<ul style="list-style-type: none"> TBC \$157M in FY20 credits
Administration	\$3.3m	34		Digitize processes	<ul style="list-style-type: none"> Implementing digitization techniques (cloud storage, OCR, RPAs, self-guided dashboards, blockchain monitoring) to automate processes Integrate with DRS and DOL data to automate tracking of recipients and success/compliance (i.e., jobs created, minimum salaries, etc.) 	<ul style="list-style-type: none"> 5-10 FTEs < \$1m
Economic & Community Development Program	\$51.8m	35		Centralize grant making	<ul style="list-style-type: none"> Consolidate onto a single platform to increase efficiencies and mitigate overlap 	<ul style="list-style-type: none"> 10% = 5 FTEs < \$1M
Economic & Community Development Program	\$51.8m	35		Outsource activities to non-profits (Advance CT)	<ul style="list-style-type: none"> Mitigate backfilling needs (48% eligible for retirement) by outsourcing activities to non-profits, notably AdvanceCT ~50% of grants awarded to 8 recipients, 90% of grants awarded to 9% 719 of recipients 	<ul style="list-style-type: none"> TBC TBC
Economic & Community Development Program	\$51.8m	35		Tax incentives provided post-job creation	<ul style="list-style-type: none"> Rather than providing job upfront tax incentives, move to reimbursements of state income taxes paid post-creation 	<ul style="list-style-type: none"> N/A TBC
Tourism and Brand	\$8.6m	14		Right-size staff given usage of outside vendors	<ul style="list-style-type: none"> 14 FTEs on Tourism and Brand program while utilizing 2 agencies, all with flat increase in perception of State 	<ul style="list-style-type: none"> 3-4 FTEs < \$1m
Total					20+ FTEs	\$2m+

1. <https://www.thehour.com/business/article/Nearly-400M-in-the-hole-Connecticut-to-continue-12568313.php>

DECD | 48% of employees eligible for retirement, creating need to streamline

Program	Budget (m)	Cost/job created	State net revenue and ROI	Other outcomes
CT Aerospace Reinvestment Act (UTX/RTN)	\$400m authorized \$335m earned 2015-19	N/A (not measured) ⁴	N/A (not measured) ⁴	<ul style="list-style-type: none"> New HQ built New labs, infrastructure, R&D
Special Act (LMT)	\$220m awarded \$5.7m in 2019	1,126 new jobs \$27,000/job	\$6.4m in 2019 112% ROI	
Stranded Tax Credit/ Sales and Use Tax Offset	\$50m authorized \$6mm awarded ²	N/A	\$27.4 over 10 years ³ 55% ROI	
Urban & Industrial Site Reinvestment Tax Credit	\$950m authorized \$450m awarded since 2010	~34,000 new jobs \$13,000/job	\$284m since 2010 63% ROI	<ul style="list-style-type: none"> Broad array of industries benefitted
Film, TV and Digital Media Tax Credits	\$730m since 2010 \$157m awarded in 2019	3,500 jobs per year \$45,000/job	(\$680m) since 2010 (193%) ROI	<ul style="list-style-type: none"> Stimulated investment in education
Insurance Reinvestment Fund Tax Credit	\$170m credits issued since 2011	N/A (not focus)	\$20m since 2011 12% ROI	<ul style="list-style-type: none"> Broad array of industries benefitted
Property Tax Abatements (Enterprise Zones)	\$3m in 2019	N/A (not focus)	~\$10m per year 333% ROI	<ul style="list-style-type: none"> Investments in underdeveloped areas
Direct financial assistance	\$146m provided in 2019 \$1.4bn portfolio	6,000 jobs/year \$24,000/job	\$132m since 2010 9% ROI	<ul style="list-style-type: none"> \$6bn non-DECD funds (4.2x leverage)

Potential opportunities to improve outcomes

- Outsource programs/initiatives to non-profits (AdvanceCT) to avoid need to back-fill retirees on-balance sheet (48% eligible)
- Implement data sharing with DRS and DOL to automate grant recipient performance and compliance monitoring
- Ensure Abatement program does not present double-dipping with federal Opportunity Zones
- Validate value of Film, TV and Digital Media Tax Credit program, and potentially modify Insurance Reinvestment Act

1. Includes income and sales taxes 2. Program authorized to award \$50m, but only 1 application approved 3. Projected—does not have sufficient data 4. 17,000 total jobs in CT with \$1.9b total payroll
Source: 2019 DECD Annual Report

State Department of Education

Department of Education | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Basic School Program	2,037.2 2,039.6	Grant	\$1.5m	39	<ul style="list-style-type: none"> Supports local education agencies through grant programs (e.g., education cost sharing grant and nonpublic health services grant)
Equal Education Opportunity	599.2 305.3 904.5	Grant	\$3.4m	80	<ul style="list-style-type: none"> Distributes grants to local agencies for education enhancement programs (e.g., nutrition programs, young parents program, and bilingual education)
Special Education	132.7 141.1 273.7	Grant	\$132.1m	24	<ul style="list-style-type: none"> Provides state training and maintains oversight activities Distributes grants to support local education services
CT Tech High School System	12.1 154.5 169.6	Personnel & Program	\$131.8m	1,569	<ul style="list-style-type: none"> Manages and operates state school system that provides thirty-three career technical education programs
Vocational Training and Job Preparation	14.9 35.6 50.5	Grant	0.1m	9	<ul style="list-style-type: none"> Manages the School to Career program under CTEC
Teacher Preparation, Professional & Curriculum Dev	28.3 3.3 31.6	Program	\$1.1m	24	<ul style="list-style-type: none"> Streamlines education certifications for in-state and out-of-state candidates Recruits, evaluates, and mentors CT instructors
Agency Management Services	2.8 17.5 20.3	Program	\$10.8m	248	<ul style="list-style-type: none"> Provides operational services and administrative services for Office of Early Childhood and Office of Higher Education
Total	0.0 \$2988.3m state \$498.6m federal \$3.0m other		\$280.7m	1,993	

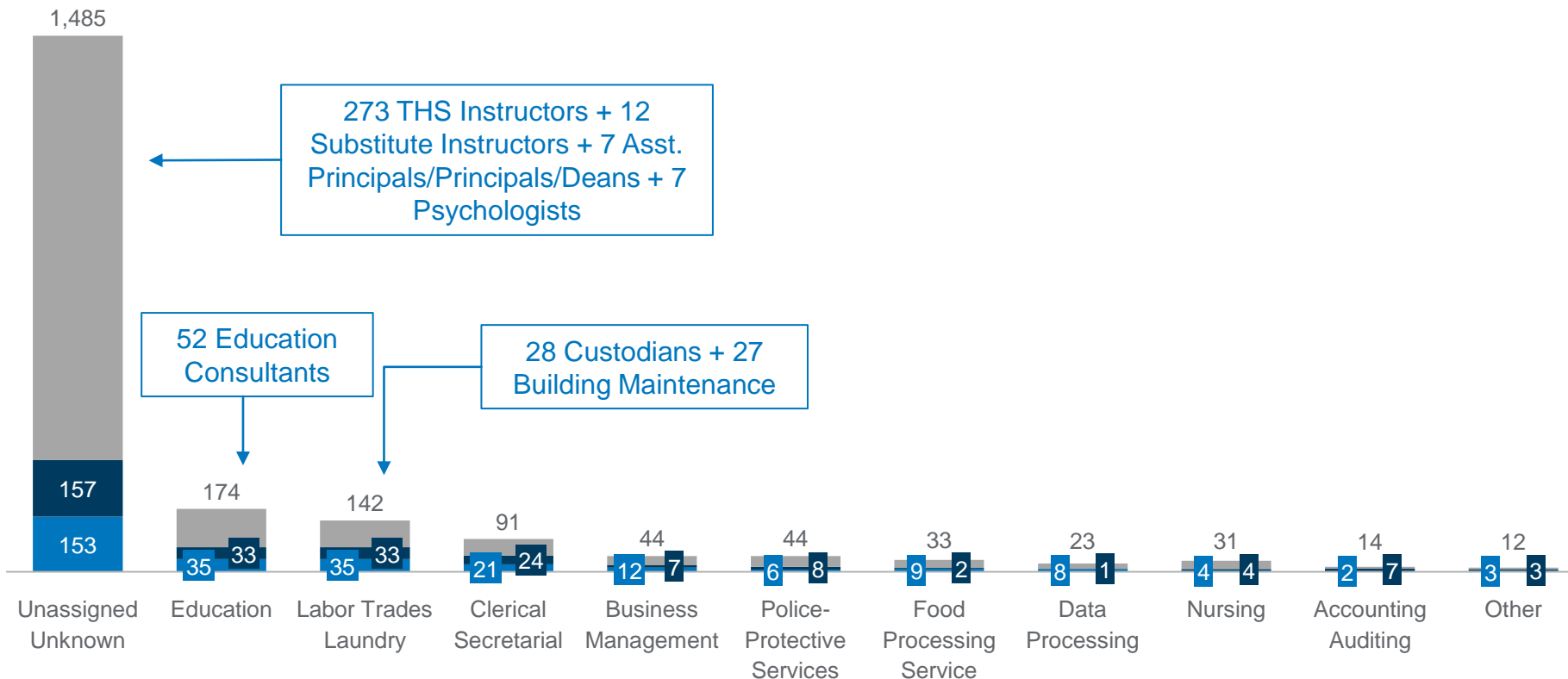
1. Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum



SDE | Initial view is THS instructors, education consultants and building maintenance/custodian workers are most at risk of service loss

567
Total Eligible



	Unassigned Unknown	Education	Labor Trades Laundry	Clerical Secretarial	Business Management	Police-Protective Services	Food Processing Service	Data Processing	Nursing	Accounting Auditing	Other
Normal Ret./ Total HC	11%	19%	23%	26%	16%	18%	6%	4%	13%	50%	25%
Early Ret./ Total HC	10%	20%	25%	23%	27%	14%	27%	35%	13%	14%	25%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database, BCG analysis

Grants are the bulk of SDE's budget, but most staff and retirements are in CTEC

SDE area	Function	Cost (\$m)	FTE	FTE retirement eligible
CTEC	Administrative	30	126	12 (10%)
	General education	110	1,025	277 (25%)
	Special education	10	74	
	Other support ¹	25	360	118 (33%)
SDE central	Grants ²	3,219	143	
	Other programs ³	83	33	161 ⁶ (38%)
	Administration ⁴	20	248	
Total		\$3,497m⁵	2,009⁵	568 (28%)

1. Includes functions such as guidance counselors, nurses, social workers 2. Basic School Program , Equal Education Opportunity and Special Education 3. Non-CTEC vocational training, teacher preparation 4. Agency management services 5. Number does not tie to programmatic budget (difference of \$7m and 16 FTE) due to use of CTEC actuals 6. Includes professions 'Education', 'Clerical', 'Business management', 'Data processing', 'Accounting' and 'Other'

Note: Includes federal and state funding

Source: Connecticut 2020-2021 Biennial Budget Program Addendum, STARS, CTEC system

SDE Primary Risks



CTEC instructors are state employees; limited opportunity to decrease CTEC staffing and share non-vocational instructors with municipalities



CTEC central office is lean; limited capacity to centralize CTEC administrative services for each school



SDE manages back office support for other departments (e.g., OHE and OEC); limited capacity for current administrators






Grant distribution and reporting is highly time consuming due to a lack of streamlined process; limited opportunity to decrease reporting due to policy requirements



CTEC management is highly time consuming keeping central admin from primary SDE responsibilities (e.g., grant disbursement and management); make CTEC and independent department (currently underway)

Greatest opportunity from matching benchmark class sizes and centralizing administrative functions

Drivers	Observations	Potential opportunity	Challenges
 <p>High school instructors</p>	<ul style="list-style-type: none"> Student/teacher ratios currently at 11 students per instructor, lower than CT average With retirement surge, student/teacher ratios will reach 12.4 (more in line with CT districts) 	<ul style="list-style-type: none"> Allow CTEC instructor retirements without replacing educators Manage capacity issues resulting from retirements by sharing staff across CTEC schools and sharing non-vocational staff (e.g., English) with municipalities 	<ul style="list-style-type: none"> Limited ability to reduce teacher numbers and maintain program viability CTEC employees are state employees, making coordination with municipalities difficult
 <p>Administrative costs</p>	<ul style="list-style-type: none"> Administrators represents 11% of CTEC school staffing, compared to <5% of similarly sized districts in CT 	<ul style="list-style-type: none"> Centralize administrative services as a district rather than in individual schools 	<ul style="list-style-type: none"> Central office already lean; will require organization re-structure to increase central office capacity
 <p>Program rationalization <i>(covered previously)</i></p>	<ul style="list-style-type: none"> Most programs at scale (>100 students total or >20 students at an individual site) 	<ul style="list-style-type: none"> At a school level, rationalize classes with student enrollment <20 At a program level, rationalize programs with student enrollment <100 Limited opportunity (<\$1m in savings) 	<ul style="list-style-type: none"> Program consolidation creates political complexities regarding access to education

SDE | Opportunities identified for Education (1 of 2)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Accept CTEC instructor retirements	CTEC	<ul style="list-style-type: none"> Existing student teacher ratios greater than CT districts; allow CTEC instructor retirements without replacing educators 	H \$10-15m in savings; addresses retirement risk of CTEC instructors
Centralize CTEC administrative services	CTEC	<ul style="list-style-type: none"> Centralize administrative services as a district rather than in individual schools to save on cost of back office support functions 	H \$5-10m in savings; addresses retirement risk of CTEC support staff
Streamline “purple sheet” document review process	Agency Management	<ul style="list-style-type: none"> Administrative staff process large numbers of documents; high retirement rate expected 	M
Continue automation of certification processes	Agency Management	<ul style="list-style-type: none"> Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	M
Standardize contracts and streamline online grant approval process	Agency Management	<ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	L
Rationalize programs	CTEC	<ul style="list-style-type: none"> Rationalize programs with <100 students and classes with <20 students 	L <\$1m in savings
Auto-refill CTEC positions	CTEC	<ul style="list-style-type: none"> Acquire OPM approval for auto-refilling specific CTEC positions (e.g., coaches, nurses, kitchen staff) 	L
Decrease telework paperwork	Cross-agency	<ul style="list-style-type: none"> Decrease the telework paperwork consists of multiple pages that are required to be filed in individual personnel files. 	L

Major impact (>\$5m or addresses retirement cliff risk)
Medium impact (\$1-5m)
Low impact (<\$1m)

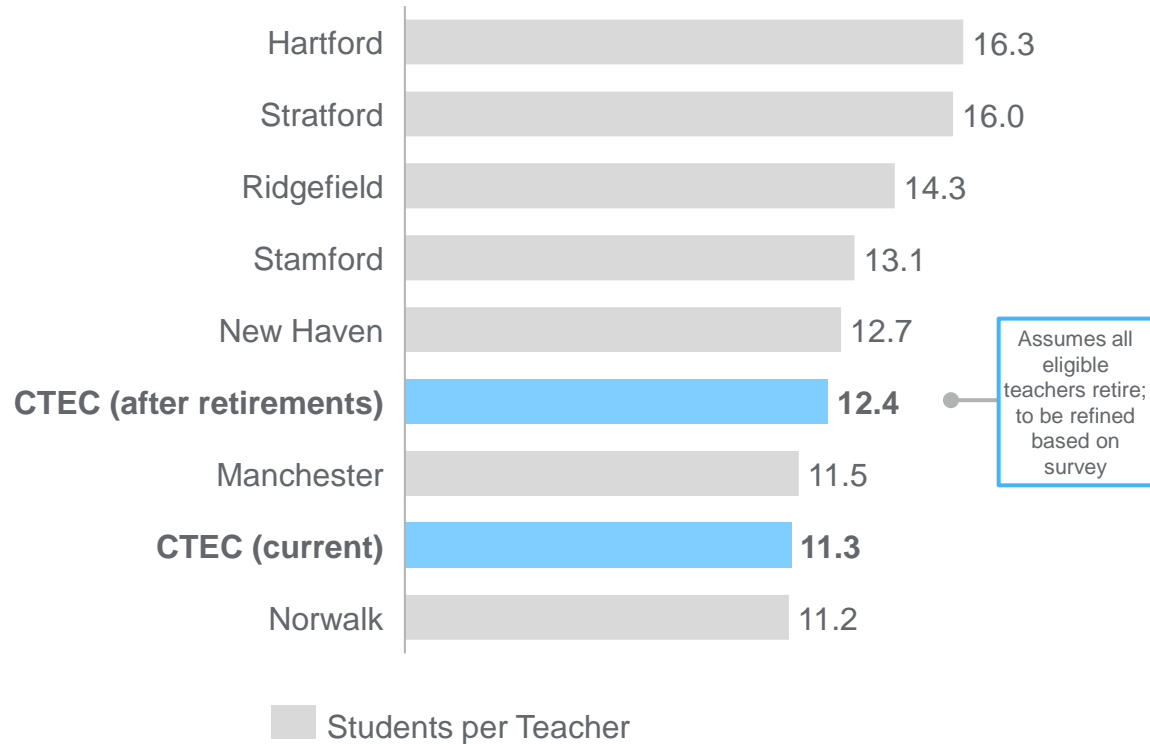
SDE | Opportunities identified for Education (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Automate Teacher Negotiation Act (TNA) supervision	Agency Management	<ul style="list-style-type: none"> Increases capacity of Educational Consultants, potentially reducing need for backfill 	L
Digitize HR forms and integrate with CORE	Agency Management	<ul style="list-style-type: none"> Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	L
Streamline awards scoring and program monitoring	Agency Management	<ul style="list-style-type: none"> Increases capacity of Educational Consultants, potentially reducing need for backfill 	L
Automate Alliance District data monitoring	Agency Management	<ul style="list-style-type: none"> Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill capacity 	L

H	Major impact (>\$5m or addresses retirement cliff risk)
M	Medium impact (\$1-5m)
L	Low impact (<\$1m)

CTEC is well positioned to accept instructor retirements; after retirements student/teacher ratios would be more in line with peers

Student/teacher ratios for Connecticut districts



To accept instructor retirements without rehiring CTEC should consider sharing instructors

Opportunity

Share instructors with municipalities in same geography

Share instructors among similar programs

Considerations

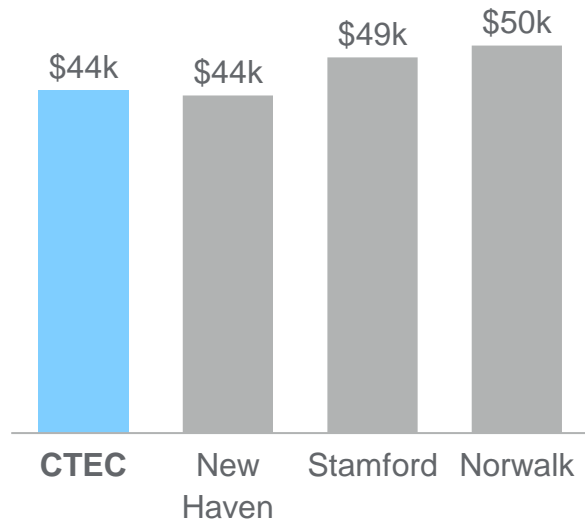
Financial arrangements with municipalities would be complex; CTEC teachers are state employees

Program offerings vary by location; have faced challenges with inducing teachers to travel to nearby schools

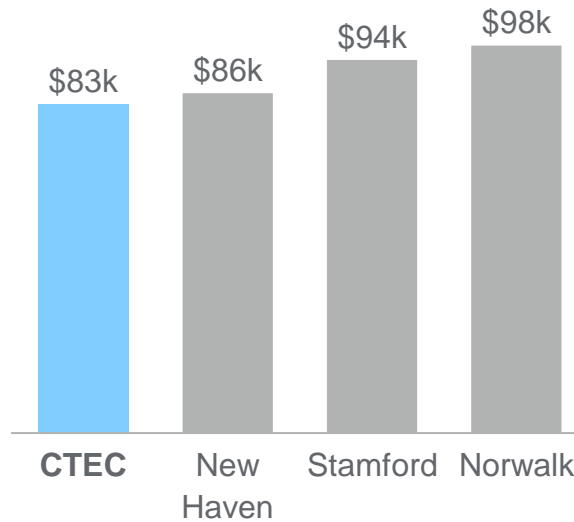
Note: Savings calculated by using personnel cost only. $((0.05) * (1585)) - 126 = 46$; $46 * \text{average personnel cost } (\$90k)$; $889 * 90k = \$12m$
 Source: 1) <http://edsight.ct.gov/SASPortal/main.do> 2) FY20ExpensesSchoolProgramEnrolStaff110420 provided by Maura Kjam

CTEC annual salary for instructors is largely in line with other CT districts

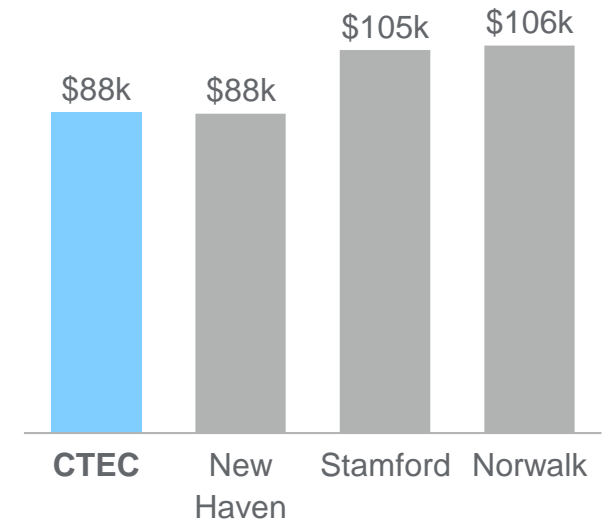
**New hire –
Bachelor's degree**



**New hire –
Master's degree**



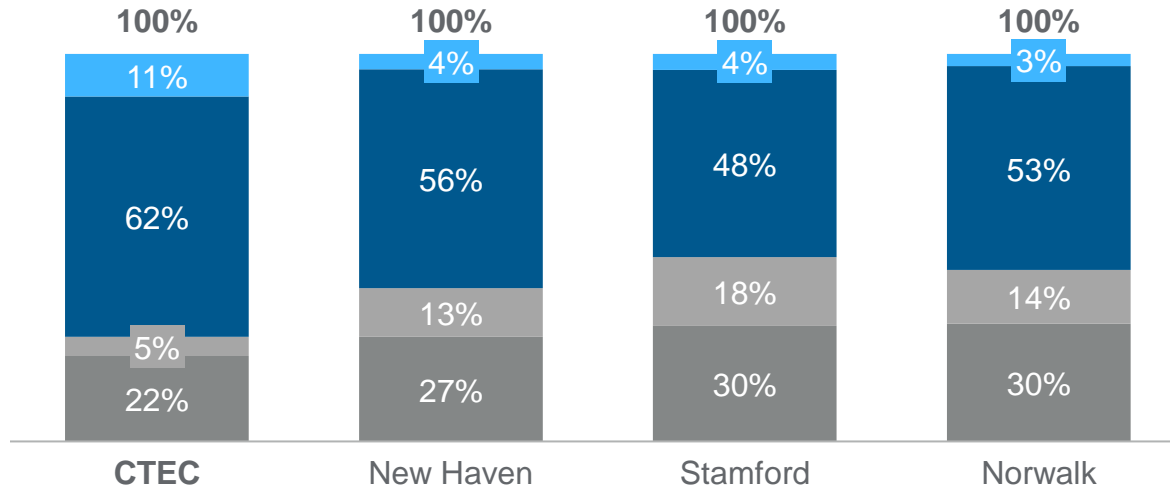
**Six years experience –
Master's degree**



Note: CTEC salaries are straight average across all CTEC regions
Source: <https://www.teachercontracts.conncan.org/questions/salary>

CTEC spends more on overhead than other CT districts due to decentralization

FTE breakdown by Connecticut school district



Enrollment	11.6k	21.2k	16.1k	11.5k
Schools/ Programs	20	60	25	21

■ Administrative
 ■ General Education
 ■ Special Education
 ■ Other Support

Other CT districts centralize back office support functions at a district level

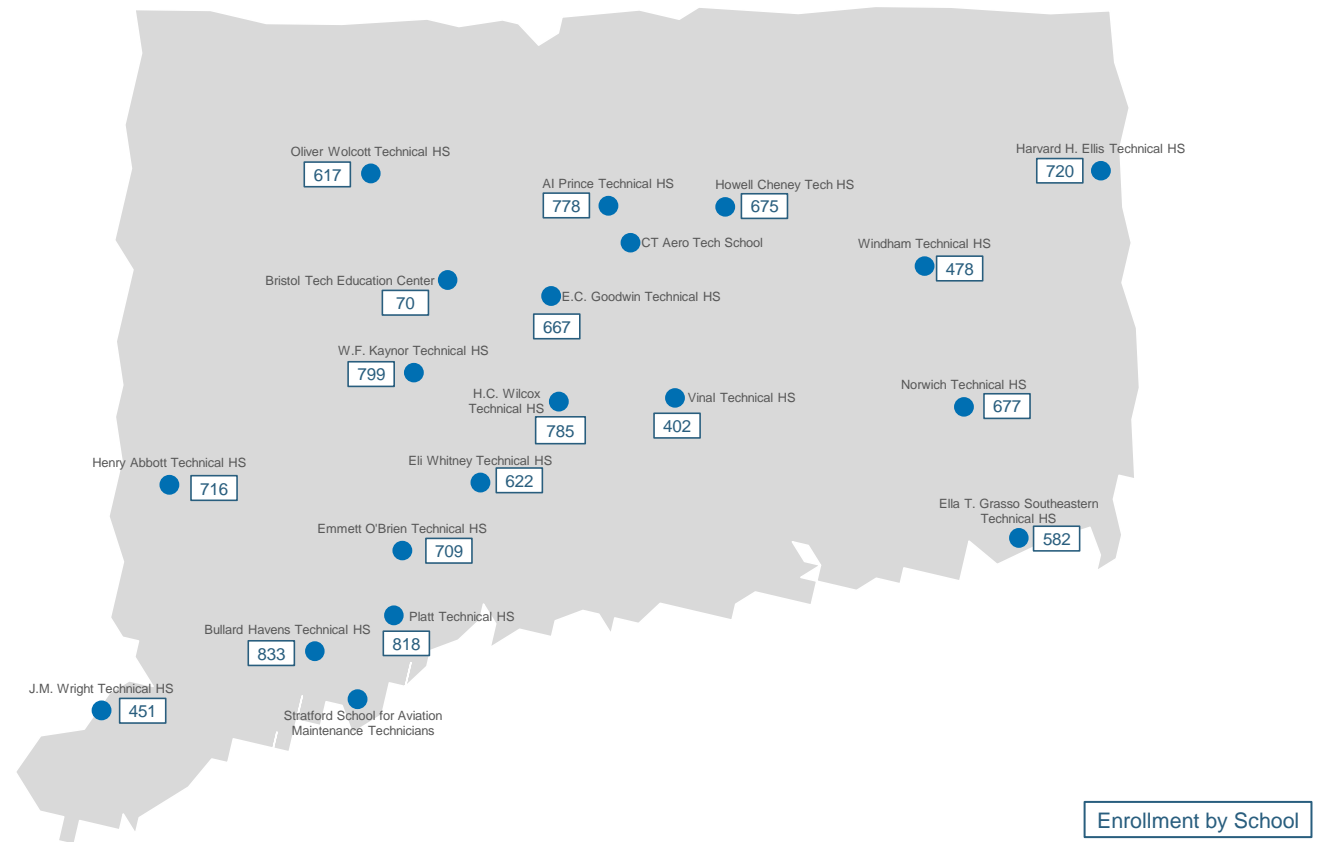
Opportunity for CTEC to treat state school system as a single district; creates opportunity to centralize back office support functions (e.g. rationalize business officers and legal services)

Savings from reducing administrative personnel to 5% in line with other Connecticut districts could be **\$5-10m**

Note: Savings calculated by using personnel cost only. $((0.05) * (1585)) - 126 = 46$; $46 * \text{average personnel cost } (\$90k) = \$4.1m$
 Source: 1) <http://edsight.ct.gov/SASPortal/main.do> 2) FY20ExpensesSchoolProgramEnrolStaff110420 provided by Maura Kjar

Backup | State provides vocational education to 11,000 students

CTEC Overview 2020	
Schools	20
Programs offered	30
Students enrolled	11,606
Staff (FT + PT)	1,585
Total Operating Expense	\$19.0m
Total Personnel Expense	\$122.3m



CTEC | 10 programs with less than 20 students, \$0.9m in total costs

Programs	EC																		Grand Total	
	Bristol	Bullard	Cheney	Grasso	Goodwin	Eli Whitney	Ellis	H Abbott	JM Wright	Kaynor	Norwich	O'Brien	Platt	Prince	Vinal	Wilcox	Windham	Wolcott		Aviation
Architectural Technologies		51											45				14			180
Auto Collision Repair/Refinish				62						65			58	62	15	47		54		419
Automotive Technology	34	66	67	50	54	56	71	56	53	56	64	61	49	58	38	64	59	63		1019
Aviation Maint Technician																			129	129
Bio Science & Environment Tech				53									52							105
Bio-Technology										61										61
Carpentry		74	63		66	57	69	64	61	64	56	69	67	58	38	66	46	38		956
Criminal Justice & Protect Srv		35													56					91
Culinary Arts	16	76	53	43	71	55	55	57	38	87	52	63	73	67	9	69	62	58		1004
Diesel & Heavy Equip. Repair			65												14					79
Digital Media			51						60											111
Electrical		66	59	63	60	63	72	69	60	68	68	88	69	39	46	60	60	60		1070
Electronics					5		53			54			24			43		43		222
Graphics Technology		49				52		69			42			62		50		38		362
Hairdressing & Barbering		72		64	70	62	67	65		69	46	65	63	67	39	66		52		867
Health Technology		69				66		74	65	76	67	74		34		71	60	56		712
Hospitality & Cust Service Mgt				5					33											38
HVAC	33		69		68			64			66	59	66		53	64	56			598
Information Systems Technology		69	62	67	48	22			37	66		63	66	57	38	65	58			718
Library/Media Services				21																21
Manufacturing Technology	30		67		76	53	69	68		81		85	75	46	45	64	63	62		884
Masonry		82					68							63						213
Mechatronics	14				29								57							100
Plant Operation & Maintenance		56	54	56	56	65		67		47		64	42					37		544
Plumbing		68		63	64	62	70	63	44	66	64	18	64	68		56		56		826
Pre-Elec Eng/Appl Electronics										55										55
Sound Production													45							45
Veterinary Science															11					11
Welding & Metal Fabrication	21		65	35																121
Grand Total	148	833	675	582	667	622	720	716	451	799	677	709	818	778	402	785	478	617	129	11606

Limited opportunity to rationalize small programs into larger neighbors

Example: combining school offerings with <20 students in close proximity

Schools	Potential program integrations	Estimated savings (OE + PE, \$k)
Vinal	Move auto collision repair from Vinal to Wilcox	\$146
	Move culinary arts from Vinal to Wilcox	\$145
Bristol	Move culinary arts from Bristol to Goodwin	\$179
Windham	Move architectural technologies from Windham to Ellis	\$165
Goodwin	Move electronics from Goodwin to Wilcox	\$62
Bristol	Move Mechatronics from Bristol to Goodwin	TBC
O'Brien	Move Plumbing from O'Brien to Platt	\$110



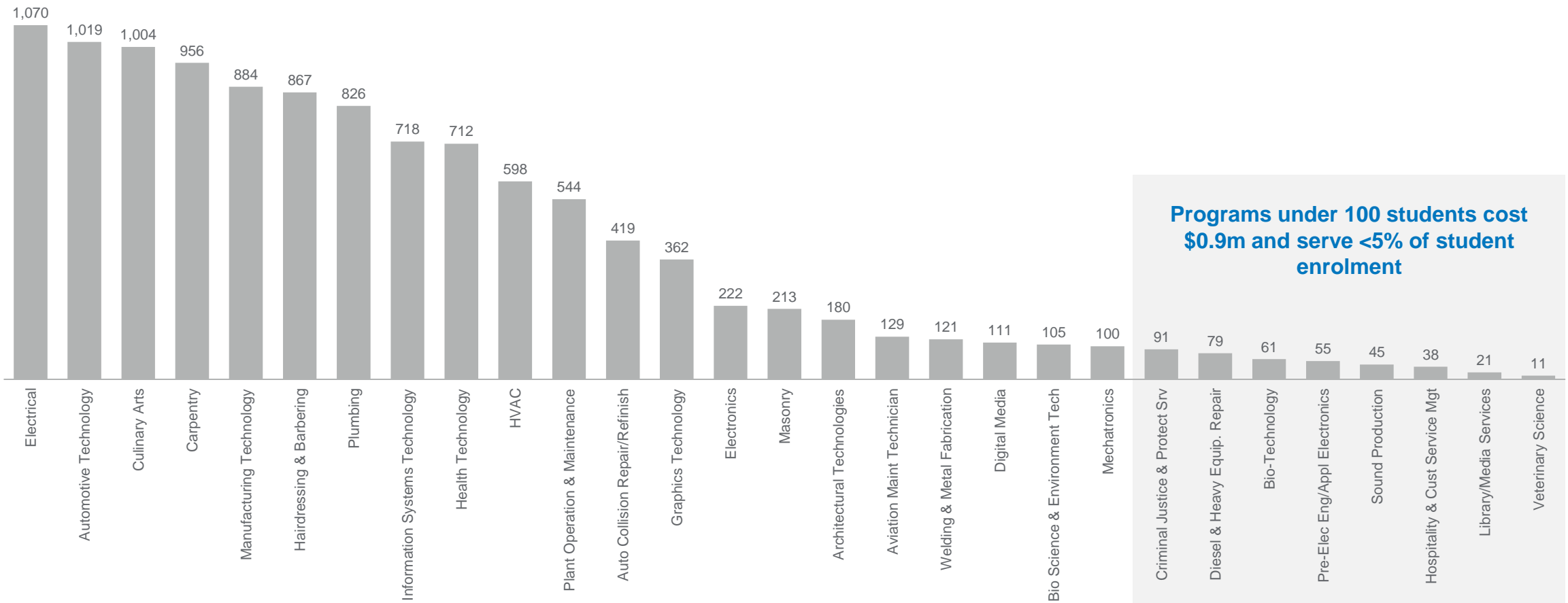
Savings from consolidating low-enrollment programs likely less than \$1m

Source: FY20ExpensesSchoolProgramEnrolStaff110420 sent by Maura Kjar.

Note: Program cost is sum of operating and personnel expense. Estimated savings is sum of total program costs for low enrollment programs.

Backup | Most programs at scale; 'long tail' does not drive significant cost

Students enrolled/program



Source: FY20ExpensesSchoolProgramEnrolStaff110420 sent by Maura Kjar.

Note: Program cost is sum of operating and personnel expense. Estimated savings is sum of total program costs for low enrollment programs (<100 student enrollment).

Most programs at scale

Program	Enrollment	Operating Expense (\$k)	Personnel Expense (\$k)	Total Program Cost
Veterinary Science	11	TBC	TBC	TBC
Library/Media Services	21	\$0.5	\$95.2	\$95.8
Hospitality & Cust Service Mgt	38	\$2.2	\$234.7	\$236.9
Sound Production	45	\$3.2	\$170.8	\$174.0
Pre-Elec Eng/Appl Electronics	55	\$3.5	\$182.3	\$185.8
Bio-Technology	61	\$5.7	\$93.9	\$99.6
Diesel & Heavy Equip. Repair	79	\$17.2	TBC	\$17.2
Criminal Justice & Protect Srv	91	\$33.5	\$155.9	\$189.4
Mechatronics	100	TBC	TBC	TBC
Bio Science & Environment Tech	105	\$6.0	\$245.0	\$251.0
Digital Media	111	\$18.8	\$159.3	\$178.0
Welding & Metal Fabrication	121	\$35.7	\$216.1	\$251.7
Aviation Maint Technician	129	\$60.5	\$444.5	\$504.9
Architectural Technologies	180	\$21.2	\$633.4	\$654.4
Masonry	213	\$16.9	\$534.3	\$551.2
Electronics	222	\$36.8	\$916.3	\$953.1
Graphics Technology	362	\$50.0	\$1,196.4	\$1,246.4
Auto Collision Repair/Refinish	419	\$48.2	\$1,340.3	\$1,388.5
Plant Operation & Maintenance	544	\$6,323.1	\$3,904.5	\$10,228.0
HVAC	598	\$101.0	\$1,466.8	\$1,567.8
Health Technology	712	\$130.5	\$2,136.6	\$2,267.0
Information Systems Technology	718	\$82.9	\$1,641.3	\$1,724.2
Plumbing	826	\$109.2	\$1,875.6	\$1,984.8
Hairdressing & Barbering	867	\$115.5	\$2,287.0	\$2,402.5
Manufacturing Technology	884	\$91.7	\$2,273.6	\$2,365.3
Carpentry	956	\$232.4	\$2,499.3	\$2,731.7
Culinary Arts	1004	\$154.9	\$3,220.3	\$3,375.2
Automotive Technology	1019	\$121.6	\$2,812.6	\$2,934.2
Electrical	1070	\$163.2	\$2,543.5	\$2,706.7
Total	11,606	\$8,067.2	\$34,113.1	\$ 42,180.2

Programs under 100 students cost \$0.9m and serve <5% of student enrolment

Source: FY20ExpensesSchoolProgramEnrolStaff110420 sent by Maura Kjar.

Note: Program cost is sum of operating and personnel expense. Estimated savings is sum of total program costs for low enrollment programs (<100 student enrollment).

Department of Emergency Services and Public Protection

Department of Emergency Services and Public Protection | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Police Services	148.4 2.4 4.9 155.8	Personnel	\$123.8m	1,479	<ul style="list-style-type: none"> Delivers law enforcement services to eighty towns, conducts investigations, and provides safety for CT highways through maintaining orderly flow of traffic
Statewide Emergency Telecommunications	0.1 1.2 33.2 34.5	Program & Personnel	\$33.2m	27	<ul style="list-style-type: none"> Oversees emergency telecommunications, enhanced 9-1-1 system training and certifies dispatchers
Administrative and Management Services	0.6 18.9 5.4 24.9	Program	\$6.7m	118	<ul style="list-style-type: none"> Provides coordination of department through victim services, fiscal services and grant administration, IT, human resources, and internal affairs
Emergency Management/Homeland Security	1.1 1.7 14.7 17.5	Program & Personnel	\$0.9m	46	<ul style="list-style-type: none"> Provides operational all-hazards planning, community preparedness, grants planning and management, and interoperable communications
Division of Scientific Services	3.2 10.5 13.7	Program & Personnel	\$8.6m	101	<ul style="list-style-type: none"> Provide investigative leads through the examination of evidence and analysis, and expert testimony to aid in arrests, convictions, and exculpations
Fire Prevention and Control	0.4 2.6 5.3	Program	\$1.3m	19	<ul style="list-style-type: none"> Provides training, certification, consulting services, and statewide mutual aid coordination to fire and emergency services
Police Officer Standards and Training	0.3 1.4 1.7	Program	\$1.3m	20	<ul style="list-style-type: none"> Establishes standards and provides training and education for police officers to acquire and maintain state certification
Total	\$184.1m state \$24.0m federal \$45.2m other		\$175.8m	1,810	

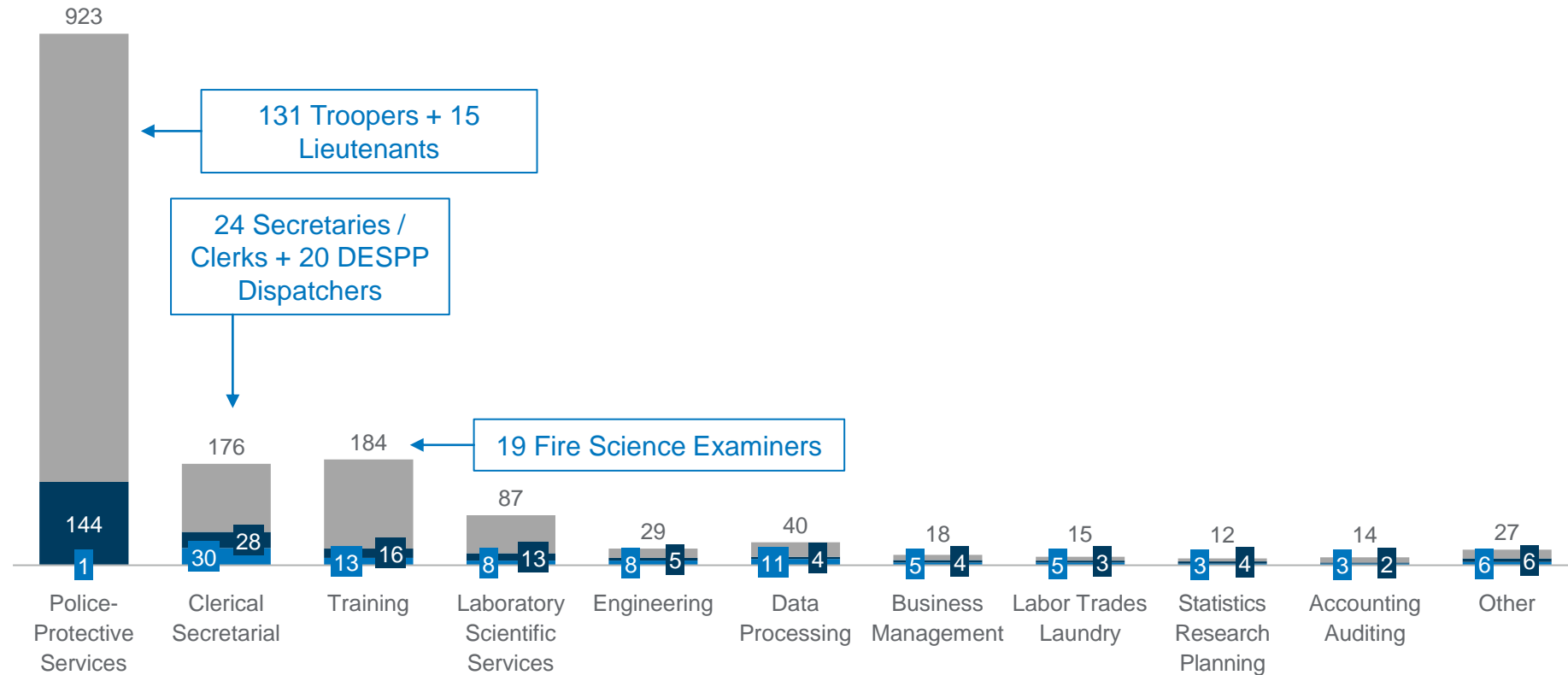
1. Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DESPP | Initial view is Police-Protective Services and Clerical Secretarial are most at risk of service loss

322
Total Eligible



Normal Ret./ Total HC



Early Ret./ Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database, BCG analysis



DESPP | Opportunities identified for Emergency Services and Public Protection (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Lower CSP trooper target	State Police	<ul style="list-style-type: none"> Decrease non-enforcement activities for state troopers and reach staffing target of 1,100 CSP 	H Currently understaffed; maintaining CSP staffing of 1,100 instead of target goal of 1,200 could result in cost avoidance of \$8-14m
Increase cadet graduations	State Police	<ul style="list-style-type: none"> Increase the number of cadets graduating from police academy to maintain trooper staffing levels 	H Need academy classes in order to reach staffing of 1,100
Reform police responsibilities	State Police	<ul style="list-style-type: none"> Civilianize police roles and responsibilities that can be conducted by non-sworn-in personnel to increase state trooper capacity 	H Enabler for the above; increases utilization of CSP capacity
Divest dilapidated CSP barracks	State Police	<ul style="list-style-type: none"> Consolidate and divest trooper barracks that are in poor condition to save on opex and capex 	M
Decrease CSP overtime	State Police	<ul style="list-style-type: none"> Reduce CSP overtime by increasing trooper numbers and capacity 	M
Co-locate state laboratories	Forensics	<ul style="list-style-type: none"> Co-locate state laboratories from different departments (e.g. DPH and DESPP) to save on opex and capex 	M
Leverage the Deferred Retirement Option Plan	State Police	<ul style="list-style-type: none"> Utilize the Deferred Retirement Option Plan (DROP) to maintain CSP staffing while decreasing retirement costs 	M

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)



DESPP | Opportunities identified for Emergency Services and Public Protection (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Transfer weigh station duties to DMV	State Police	<ul style="list-style-type: none"> Both DMV and CSP work in conjunction to manage weigh stations; make DMV solely responsible for weigh station duties 	L
Privatize fingerprinting services	State Police	<ul style="list-style-type: none"> CSP manages fingerprinting services; privatize services to increase trooper capacity 	L
Increase electronic payment methods	Cross-agency	<ul style="list-style-type: none"> Increase use of electronic payment methods to streamline back office support and improve customer experience 	L
Privatize highway duty jobs	State Police	<ul style="list-style-type: none"> Limited trooper capacity to provide time for private duty road jobs; privatize construction related jobs to increase trooper capacity 	L
Privatize MMA/boxing management	State Police	<ul style="list-style-type: none"> Limited trooper capacity to manage MMA/boxing events in the state; privatize management to increase trooper capacity 	L
Centralize gasoline usage for state fleet	Cross-agency	<ul style="list-style-type: none"> DESPP and DOT track gasoline usage for fleet; have police vehicles use DOT gasoline to save money on tracking and reporting 	L
Streamline payments for gun permits	State Police	<ul style="list-style-type: none"> Gun permits do not accept credit cards for purchases; integrate digital payment systems to improve customer experience and decrease fiscal duties 	L
Automate certification applications and renewals	State Police Standards and Training	<ul style="list-style-type: none"> Certification applications and renewals are currently a manual process; automate processes to increase staff capacity and improve customer experience 	L
Automate basic training reports	State Police Standards and Training	<ul style="list-style-type: none"> Profile forms entry are currently a manual process; automate to increase staff capacity and standardize reporting among recruits 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

DESPP | Primary retirement surge risks



State troopers currently perform administrative and non-police duties; limited capacity for troopers to perform enforcement related services



Decrease of troopers over the past years; challenges in increasing trooper level due to increased cadet dropouts, academy class sizes, and academy structure



Police barracks are dated and require large capex investment to renovate or maintain facilities for use



Investment needed to digitization and streamline department functions (e.g., electronic payments)

Retirements offer the opportunity to define a new target CSP staffing level

Drivers

Observations

Ideas for discussion

Challenges



Set target staffing level

- Currently 923 troopers, down from 1,100 three years ago; CSP staffing target 1,200 (to be confirmed)
- Projected to further decline by ~100 due to retirement surge
- Police levels lower than in peer states, especially after retirements

- Reach staffing levels based on peer benchmarks; understand where more police are needed to ensure public safety and impact of lower numbers
- Review drivers of OT, including non-protective work, and address through operational and labor negotiations where possible

- Existing CSP capacity is limited due to non-enforcement and administrative responsibilities given to CSP (e.g., data entry, boxing regulation)
- Currently face high levels of OT (20% of total comp), which could be a sign of under-staffing



Increase cadet graduations from academy

- Trooper levels require advance planning due to academy structure; 80-100 new troopers after nine-month program

- Increase target academy class size if required to achieve higher staffing level

- Length of training program means personnel levels 'locked in' in advance
- Cadet drop-outs increase uncertainty in future trooper numbers



Reduce admin and non-police duties given to CSP

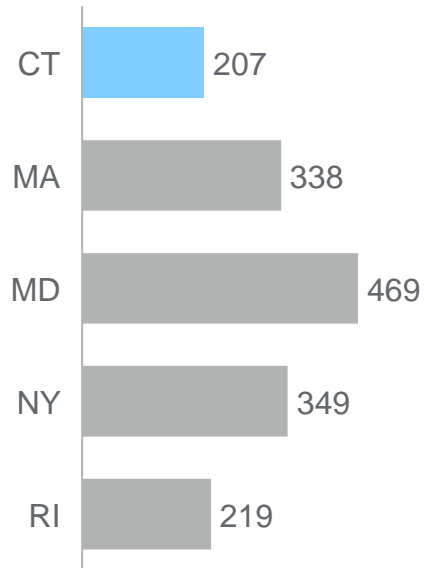
- CSP enforce state laws (e.g., on freeways) and provide essential policing services in rural areas
- Role largely defined by statute but has expanded over time (e.g., sport event enforcement)

- Reduce OT pressure on CSP by potentially civilianizing administrative tasks, e.g., clerical work, weigh stations
- Explore civilianizing non-enforcement police activity, e.g., responding to mental health crises
- Explore potentially transferring some responsibilities to counties and municipalities

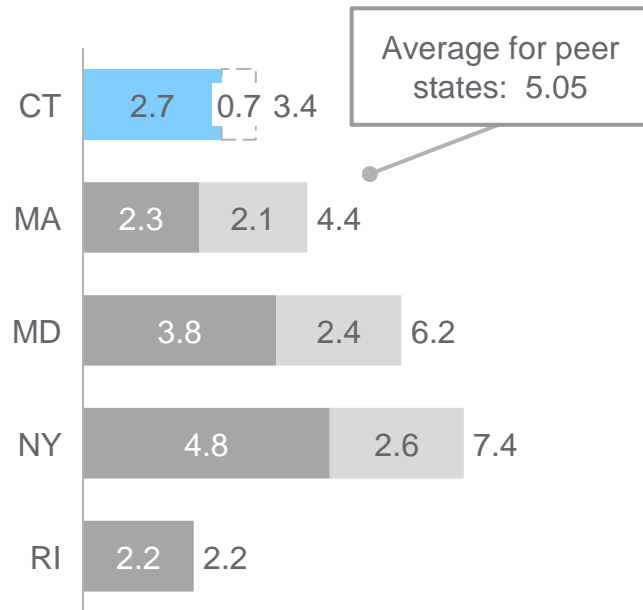
- Alternative policing is political and requires coordination among response providers (e.g. social workers, mental health workers)

Top-down benchmarking suggests that police numbers are low compared to peers

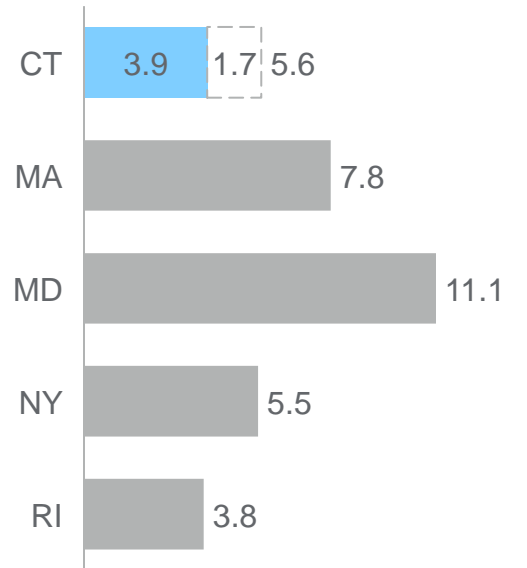
CT has a low crime rate relative to their peers



Trooper level is low compared to peers



Troopers / 100 highway mi is low compared to peers



■ Crime Rate Per 100k

■ State police per 10k residents

■ County Officers per 10k residents

□ State Police if staffing goal is reached (1,200)

■ Troopers per 100 highway mi

□ With Staffing Goal (1,200)



- Matching peer benchmarks would require ~1200 troopers
- Department is able to address trooper capacity challenges by achieving a CSP target of 1,100

Analysis assumes maintaining current senior leadership of Lieutenants and Captains
 Source: <http://www.ipsr.ku.edu/ksdata/ksah/trans/15trans3x.pdf>

Drawing on other alternative workforces for some responses could potentially reduce pressure on state police and help manage staff levels

State Police responsibilities	Potential alternative worker	Rationale	Current share of police time based on Rice study ¹
Non-emergency 9-11 calls pertaining to mental health	Mental health workers	Eliminates crisis intervention training for police	9%
Non-emergency 9-11 calls unrelated to mental health	Social workers	Targeted response based on civilian need (e.g. homelessness, drug abuse)	
Reporting on non-injury, non-DUI accidents	Private company (e.g. On Scene Services)	Routine task; does not require sworn in personnel	30%
Patrolling rural regions	Private organizations or neighborhood watch groups	Sworn officers may not be required for non-violent calls in rural areas	15%
Managing highway weight stations	DMV	DMV currently supports DESPP in this function and they have the tools necessary	
Code enforcement (e.g. cite handicapped parking violators)	Civilian police service officer	Routine task; does not require sworn in personnel	
Investigation support (e.g. online searches for case info)	Civilian police service officer	Does not require sworn in personnel	4%
Missing persons (e.g. phone banks and command centers)	Civilian police service officer	Does not require sworn in personnel	
Sex offender registries	Civilian police service officer	Highly administrative; does not require sworn in personnel	

Responses to some incidents may require multiple types of staff (e.g. social worker and police)

Opportunity to increase CSP capacity by **25%-30%** through alternative policing models

Potential to further increase CSP capacity by civilianizing administration functions



Team	Activity which could be civilianized	Description
Office of Field Operations	Traffic Services Unit	Safety inspections, collision analysis and reconstruction service
	Research, Development, and Planning Section	Updating and expanding policies and procedures, and automating how the agency collects, analyzes, and disseminates data
Office of Administrative Services ~50 FTE	Infrastructure Planning and Management Unit,	Key physical infrastructure projects are managed to improve the more than fifty facilities throughout the agency
	Fleet Administrative Unit	Oversees the maintenance and continued development of more than 1,900 vehicle assets
	Finger Printing	Oversees finger printing services
Misc. ~20 FTE	Administrative Services	Provides administrative support to agency office for duties including but not limited to analysis, accounting, etc.



Civilianizing admin functions could free up to **70 troopers** and lead to savings of ~\$1m¹

Savings = FTE count from Office of Administrative Services org chart (+20 to factor misc. administrative services) = 70FTE. (70*87.0k) – (70*75.0k) = \$1.5m to \$1.7m)

Backup | Police cost more than civilians, civilianization leads to savings

Category	Job title	Avg. Annual Rate (\$k)	Category Avg. Annual Rate (\$k) ¹
Police (protective services)	State Police (NP-1)	\$87	\$87
	State Police Lts & Captains (NP-9)	\$135	
	Protective Services (NP-5)	\$77	
Social worker	Clinical social worker	\$83	\$88
	Clinical social worker Associate	\$94	
Mental health worker	Mental Health Assistant 1	\$54	\$57
	Mental Health Assistant 2	\$64	
	Mental Health Associate	\$77	
Administrative	Administrative Clerical (NP-3)	\$61	\$75
	Admin and Residual (P-5)	\$90	
	Managerial	\$107	
	Exempt/Elected/Appointed	154.3	
	Confidential	81.2	

Note: 1) Annual rate is a weighted average

Department of Energy and Environmental Protection



Department of Energy and Environmental Protection | Agency profile

Program or department	Budget	Type	FTE budget ¹	FTE	Description
Environmental Quality		Program	\$3.9m	318	<ul style="list-style-type: none"> Regulate air quality, radiation and water resources Inspect industrial sites to identify health risks Issue permits, perform engineering evaluations, collect emissions fees to enforce air pollution laws Emergency response service to protect from spillage of hazardous substances, materials, or wastes
Environmental Conservation		Program	\$7.5m	143	<ul style="list-style-type: none"> Training for municipal fire departments to help manage health of state-owned forest lands Conduct scientific investigations and assessments to protect fish, wildlife and forest habitats Police enforcement of agency owned lands and facilities Administer boating certification and safety education
Energy		Program	\$10.3m	88	<ul style="list-style-type: none"> Review investments in state-wide infrastructure Oversight on consumer utilization of energy resources and tracking emission reduction targets Regulate utilities, ensure compliance, audit utility functions, enforce safety, and offer competitive service
Administration		Admin	\$8.9m	83	<ul style="list-style-type: none"> Policy direction and executive management of agency Conduct public hearings on permit applications and enforcement actions and prepare legal conclusions
Total			\$30.6	972	

\$55m state

\$41m federal

\$70m other

1. Personal services

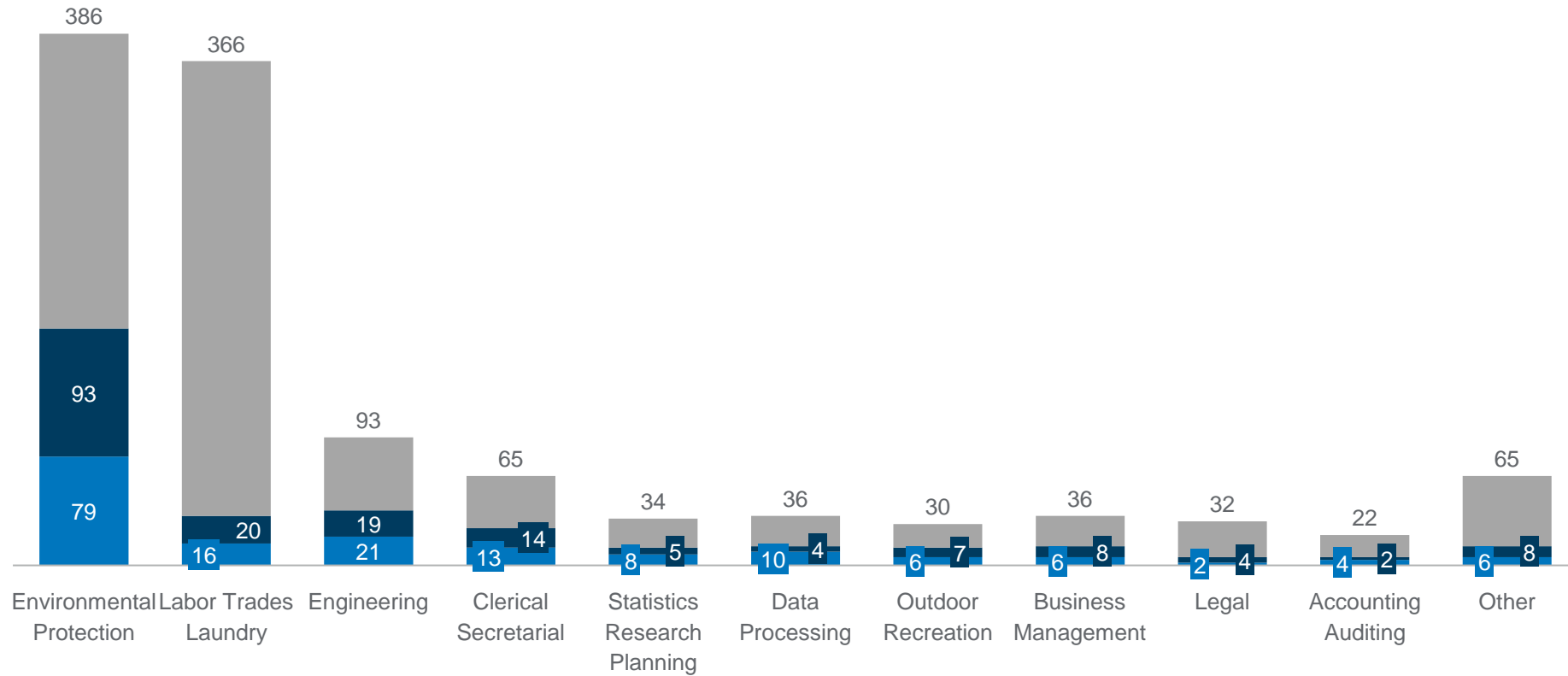
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DEEP | Large number of Environmental Protection FTE eligible for retirement

353
Total Eligible



Normal Ret./ Total HC	24%	5%	20%	22%	15%	11%	23%	22%	13%	9%	12%
Early Ret./ Total HC	20%	4%	23%	22%	24%	28%	20%	17%	6%	18%	9%

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis

DEEP | Primary retirement surge risks



Increasing turnover for younger employees increases need to fill new positions

- High attrition rates for new hires stay <5 years and leave for private sector opportunities offering better incentives
- As a result, succession planning is a major pain-point preventing development of lean process efficiencies



Highly technical engineering teams' facing retirement risk

- E.g. 46% of the data processing teams' eligible for retirement
- Specialized field engineers supporting environmental protection efforts risking continuity of service



Gap of resources presents a public safety impact across programs

- Environmental quality branch facing largest retirement risk ~44%
- Concentrations of retirements interrupting service continuity with impact to public for protection against hazardous environmental issues



Energy and Environmental Protection | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Combine asset maintenance functions	Environmental Conservation	<ul style="list-style-type: none"> Opportunity for increased cross-agency coordination of maintenance of land assets 	M Decreases need for asset maintenance staff, addressing retirement risk for environmental protection
Cross-functional inspection platform	Cross-agency	<ul style="list-style-type: none"> Increase cross-training and consolidate inspections across cluster, including a technology-enabled platform flagging inspection status 	M Reduces duplicative inspections, decreasing number of inspectors and dedicated time needed to activity
Increase use of public/private partnerships	Environmental Conservation	<ul style="list-style-type: none"> Increase adoption of partnerships as well as outsourcing additional services for land asset maintenance 	M
Generalize environmental permitting requirements	Cross-agency	<ul style="list-style-type: none"> Move permits from customized to general and utilization of third-party services by growing legal team to write regulations, compliance, and implement action 	M
Reprioritize DEEP service activities	Cross-agency	<ul style="list-style-type: none"> Prioritize regulatory actions over enforcement for more efficient service continuity 	M
Enhance customer usability for PURA interface	Energy	<ul style="list-style-type: none"> Improve customer interface of PURA systems and others to simplify processes and minimize reliance on service support staff 	L Reduces customer experience reducing reliance on clerical support staff

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Office of Higher Education



Office of Higher Education | Agency profile

Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Coordination of Higher Education	33.7	Personnel	\$3.4m	33	<ul style="list-style-type: none"> Support policy formulation, development and control of the budget, personnel, payroll, federal grant and cooperative agreements and records management
Scholarships & Fellowships	3.4	Grant	\$0m	0	<ul style="list-style-type: none"> Maintains thirty-four sites throughout the state Prepare specifications for contracts with outside vendors for minor repair projects;
Total	<div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 5px;"> \$37.1m state \$0m federal \$0m other </div>		\$3.4m	33	

1. Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum



Higher Education | Opportunities identified for Higher Education

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Streamline online grant approval process	Agency Management	<ul style="list-style-type: none"> Performed by administrative staff; high retirement rate expected 	L
Improve access database	Agency Management	<ul style="list-style-type: none"> Existing database does not provide functions required by administrative staff; improve database to increase staff capacity 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Housing

Department of Housing | Agency profile

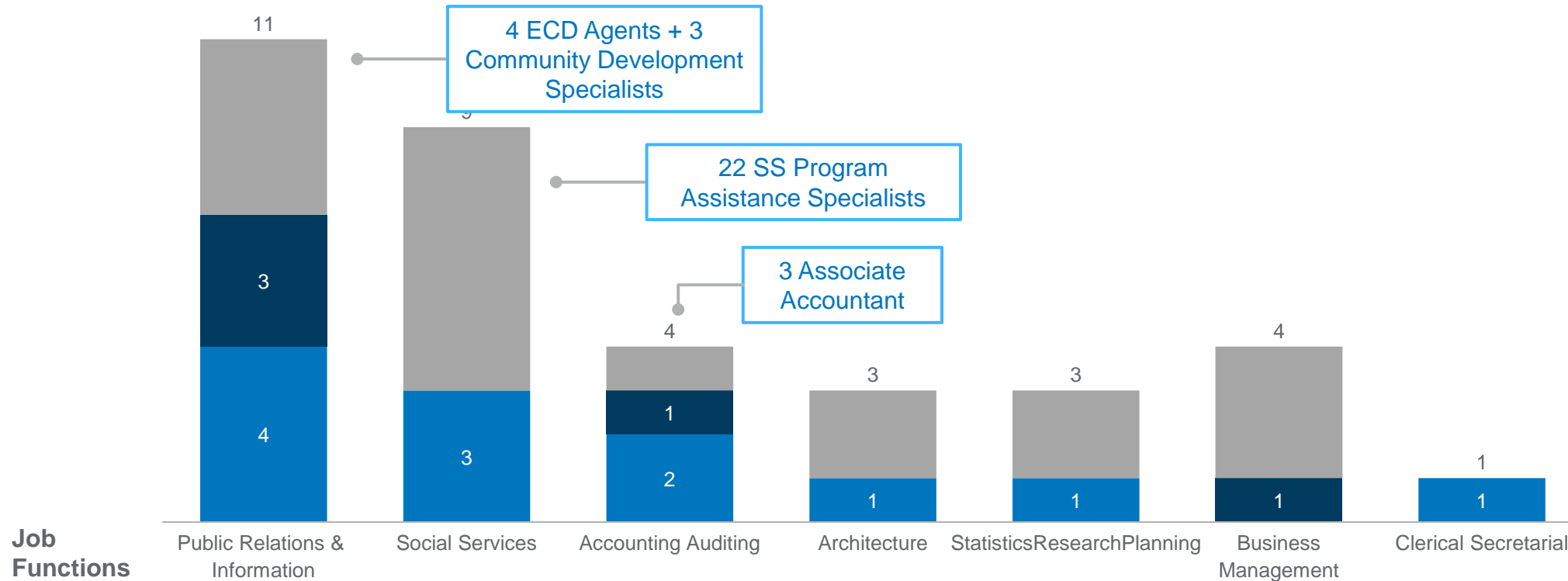


Program or department	Budget (\$M)	Type	FTE budget ¹	FTE ²	Description
Housing/Community Development Program	99.6	Grants / programs	\$1.3M	44	<ul style="list-style-type: none"> Aim to reduce homelessness of individuals and families and promote independent living by increasing housing stability; finance the creation and preservation of quality, affordable housing to meet the needs of all individuals and families Finance community development projects to strengthen communities statewide; and develop and implement strategic and policy planning related to housing and community development. Rental Assistance Program (RAP) and Section 8 Federal Housing Choice Voucher programs direct rental subsidies to property owners on behalf of renters
	156.2				
	0.4				
	256.2				
Department of Housing	0.2	Program	\$0.6M	8	<ul style="list-style-type: none"> To establish policies and issue directives and guidance on administration and housing procedural matters To communicate housing information to the public; and to enable efficient implementation of housing programs and policies through the delivery of essential support services in management, policy and planning
	1.0				
	0.8				
Total	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid blue; padding: 2px;">\$100.4M state</div> <div style="border: 1px solid green; padding: 2px;">\$156.4M federal</div> <div style="border: 1px solid orange; padding: 2px;">\$0.4M other</div> </div>		\$1.9M	52	

1. Personal services 2. Incl. General Fund and Federal Fund FTE
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DOH | Development Agents and Specialists, Program Specialists & Accounting / Auditing are most at risk of service loss

17
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DOH | Primary retirement surge risks



Economic and Community Development Agents represent largest risk from retirement surge

- DOH leadership believes staff is already strained, so additional losses for development personnel likely to exacerbate constraints on daily operations



Clerical and secretarial staff retirements could result in significant backlogs given prevalence of manual processes

- Digitizing documents, e-Signatures, robotic process automation, etc. can help mitigate impact

Department of Housing | Operational opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Centralize grant making and implement performance KPIs	Housing/Community Development Program	<ul style="list-style-type: none"> Consolidate onto a single platform to increase efficiencies and mitigate overlapping programs/services Incorporate additional metrics/KPIs (e.g., share of HHs cost-burdened, housing units created, affordable units created, etc.) to monitor performance and ROI of grants based on agency's mission Integrate back-end data with DECD, DRS, DOL and social services agencies' data to automate tracking of eligibility, success and compliance – unique IT architecture of HUD requires careful initial development 	<p>M <\$1m in potential savings from attrition of 5-10 FTEs (savings may overlap with those from digitization efforts)</p>
Digitize processes	Housing/Community Dev. Program	<ul style="list-style-type: none"> Implementing digitization (cloud storage, OCR, RPAs, self-guided dashboards, blockchain monitoring) to automate processes 	<p>L <\$1m in est. potential savings from attrition of 5-10 FTEs</p>
Outsource additional responsibilities to non-profits, CHFA	Agency-wide	<ul style="list-style-type: none"> Coordinate with non-profits, community advocates and quasi-public organizations to shift tasks away from DOH While CHFA may be capacity-constrained, State should incentivize additional outsourcing of compliance technology to CHFA where possible 	<p>L <\$1m in est. potential savings</p>
Total			<ul style="list-style-type: none"> ~5-10+ FTEs \$1-5m+

H Major impact (>\$5m or addresses retirement cliff risk)



M Medium impact (\$1-5m)

L Low impact (<\$1m)

Insurance Department



Insurance Department | Agency profile

Program or department	Budget	Type	FTE budget ¹	FTE	Description
Agency Management Services		Admin	\$8.5m	96	<ul style="list-style-type: none"> Develop and oversee agency policy and management Administrative and operational duties Service program areas include business, legal, personnel, and communications/public relations units
Examinations		Program	\$6.1m	55	<ul style="list-style-type: none"> Analyze, license, and monitor domiciled insurers Review applications of insurers that desire to be admitted or licensed to do business in CT On-site financial examinations of insurance entities Produces a managed care report card licenses utilization review companies Ensure fair and non-discriminatory insurance rates Special units to review and enforce regulations include Property and Casualty, Consumer Affairs, Market Conduct, Fraud and Investigations, Licensing, and Captive Financial Analysis and Examination
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$0m state</div> <div style="border: 1px solid green; padding: 2px;">\$0m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$30m other²</div> </div>		\$14.6m	151	

1. Personal services

2. "Other" meaning the insurance fund, both banking and insurance are funded by industry

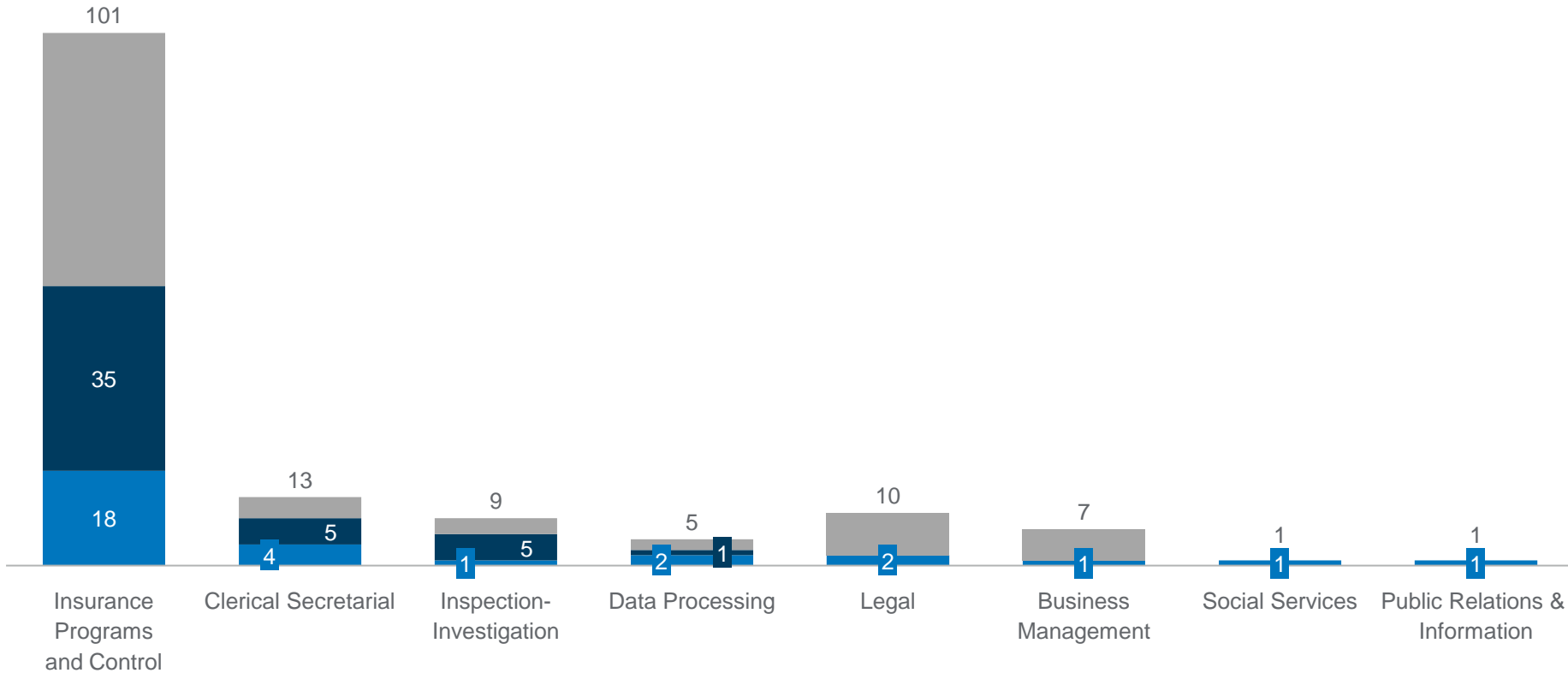
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum



ID | Large number of Insurance Programs FTE eligible for retirement

74
Total Eligible



Normal Ret./
Total HC



Early Ret./
Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis



ID | Primary retirement surge risks



Retirement of insurance program staff leads to loss of institutional knowledge for complex insurance processing activities

- Requires insurance program processing staff, potentially having to utilize external regulators weakening quality control and cost



Highly trained social services/PR teams face significant retirement risk

- E.g., 100% of both teams are eligible for retirement



Technical data processing teams face retirement risk and are challenging to replace

- E.g., 60% of the data processing teams' eligible for retirement
- Regulation of insurance industry demands highly technical staff to process complicated filings








Insurance Department | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Insurance to join e-licensing platform	Examinations	<ul style="list-style-type: none"> Opportunity to join established CT e-licensing platform to streamline licensing services 	M Streamlines licensing process, decreasing number of regulators needed to support
Recognize other state's insurance licenses	Examinations	<ul style="list-style-type: none"> Increase acceptance of out of state licenses to minimize insurer applications to do business in Connecticut 	M Decreases number of audits required for multi-state banks, decreasing number of auditors needed
Prioritize insurance regulatory activity based on likelihood of noncompliance	Examinations	<ul style="list-style-type: none"> Targeted regulatory risk assessment approach; de-regulate business climate exp. recognizing out of state licenses 	M Decreases regulatory processes, freeing up time of at-risk staff like auditors to focus on high-priority activities

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Labor

Department of Labor | Agency profile

Program or department	Budget	Type	FTE budget ¹	FTE	Description
Agency Management Services		Admin	\$2.4m	66	<ul style="list-style-type: none"> Management of activities and policy Includes various units; communications, employee and organizational development, HR, facilities/business management, IT, and performance/accountability
Job Readiness and Employment Services		Program	\$263k	152	<ul style="list-style-type: none"> Provide job placement and financial support services American Job Centers to provide career support Programs to preserve jobs, help people with disabilities, migrant and seasonal farm works, and alien labor hiring
Unemployment Insurance		Program	\$44m	258	<ul style="list-style-type: none"> Program providing unemployment insurance Administer two federally-funded UI benefits including disaster and trade adjustment assistance Tax Division, Employer Status, Tax Accounting, Delinquent Accounts, Audit, and Fraud Units
Regulation		Program	\$6.2m	93	<ul style="list-style-type: none"> Regulation of wage and workplace standards, occupational safety and health, maintaining the collective bargaining relationship, and workforce job training and skill development Routine audits, investigates complaints, and enforces laws
Labor Market Information		Capital/science	\$95k	16	<ul style="list-style-type: none"> Analyze data on workforce issues and trends Lead producer of information and statistics on economy, workforce, occupations, and careers
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$69m state</div> <div style="border: 1px solid green; padding: 2px;"><\$1m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$78m other</div> </div>		\$52.9m	585	

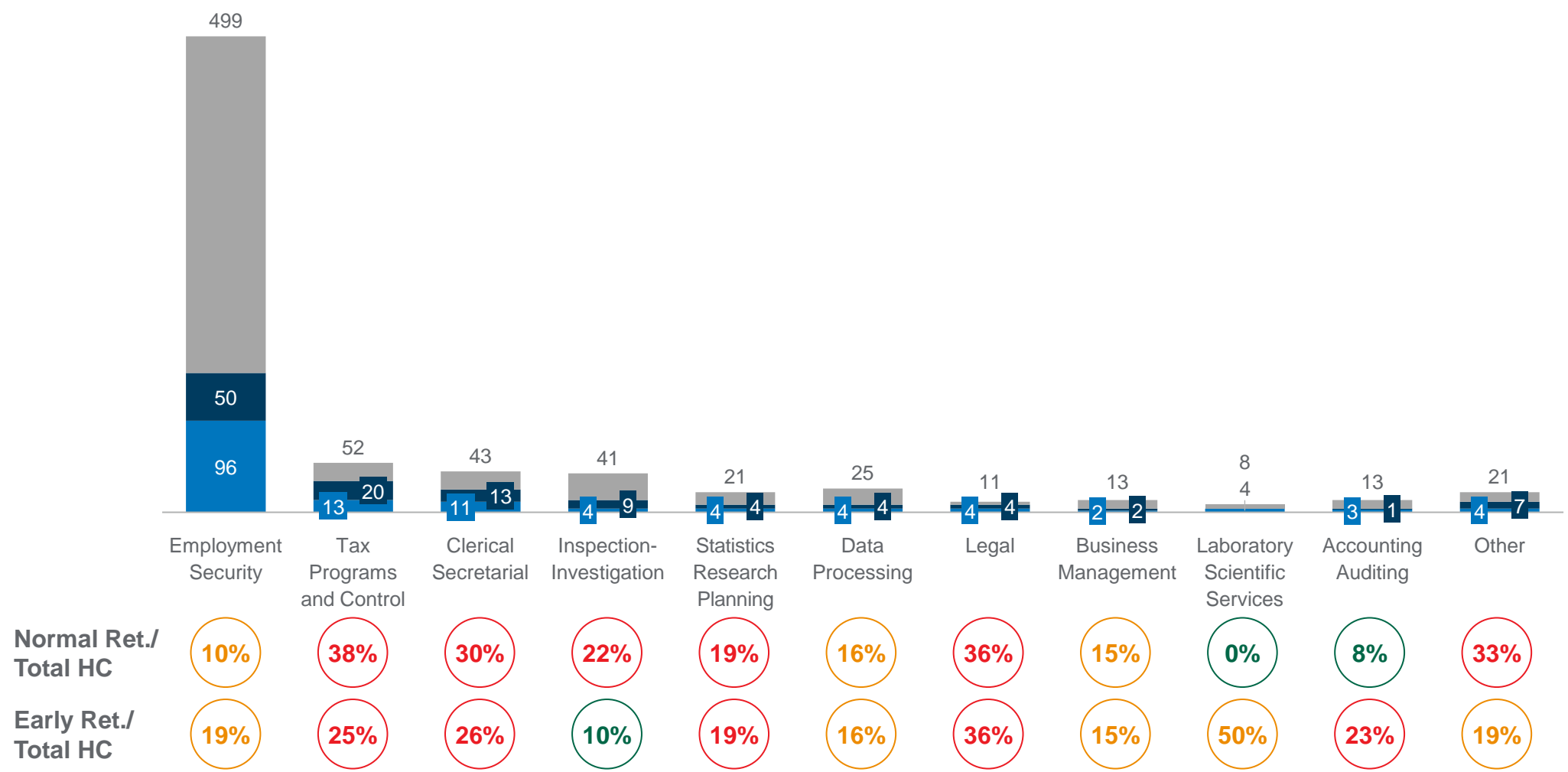
1. Personal services

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DoL | Large number of employment security FTE eligible for retirement

264
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis

DoL | Primary retirement surge risks



Increasing backlogs delaying distribution of customer UI benefits due to historic demands and requirements of new policy

- Delayed resolutions and distribution of unemployment insurance
- COVID-19 further straining effort shifting critical resource infrastructure



Challenge continuing IT modernization amidst urgent priorities

- UI Modernization efforts halted as critical IT personnel shifted
- Industry dramatically changing in terms of technological needs, potential to fall behind and lose attractiveness as regulators



Highly manual tax and clerical processing teams face retirement risk

- E.g., 63% of tax programs teams; 61% of clerical/secretarial teams at risk for retirement
- Highly manual clerical processes need digital solutions to avoid service continuity break



Organizational downsizing mixed with high managerial retention creating instability

- Decreased personnel by 40% mixed with additional managerial risk reporting unfair pay and burn out
- High retention risk that others leave the department frustrated de-stabilizing organizational functioning

DoL | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Complete Unemployment Insurance (UI) modernization	Unemployment Insurance	<ul style="list-style-type: none"> DOL priority efficiency project to modernize initiatives of the UI system, increasing accessibility of tax and benefits system 	H Decreasing UI processing time, decreasing number of employment security staff needed
Automate licensing reviews	Cross-agency	<ul style="list-style-type: none"> Decrease FTE headcount through automation of licensing reviews across regulatory cluster 	M Streamlines licensing process, decreasing number of regulators needed to support
Prioritize labor regulatory activity based on likelihood of noncompliance	Cross-agency	<ul style="list-style-type: none"> Targeted regulatory risk assessment approach; de-regulate business climate exp. recognizing out of state licenses 	M Decreases regulatory processes, freeing up time of at-risk staff like auditors to focus on high-priority activities
Integrate labor and social service client information	Job Readiness and Employment Services	<ul style="list-style-type: none"> Better integrate Social Service Agencies and DOL through consolidated client information system and similar data fields 	L More efficient customer facing system will decrease processing time, decreasing time burden on employment security staff
Consolidate workforce registry systems	Job Readiness and Employment Services	<ul style="list-style-type: none"> Combine workforce development services into a single platform readily accessible to any citizen utilizing government service 	L Single digital platform will streamline processes, cutting down time inefficiencies for at risk employment security personnel
Invest in employment data system improvement	Labor Market Information	<ul style="list-style-type: none"> Establish single database of employment information tracking statistics and trends across programs as a data integration hub 	L
Refine targeting of workforce training programs	Job Readiness and Employment Services	<ul style="list-style-type: none"> Identify overlap in training services across programs to realize cost reduction opportunities (Skill-Up CT, ETC, etc.) 	L

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

Department of Mental Health and Addiction Services

Department of Mental Health and Addiction Services | Agency profile



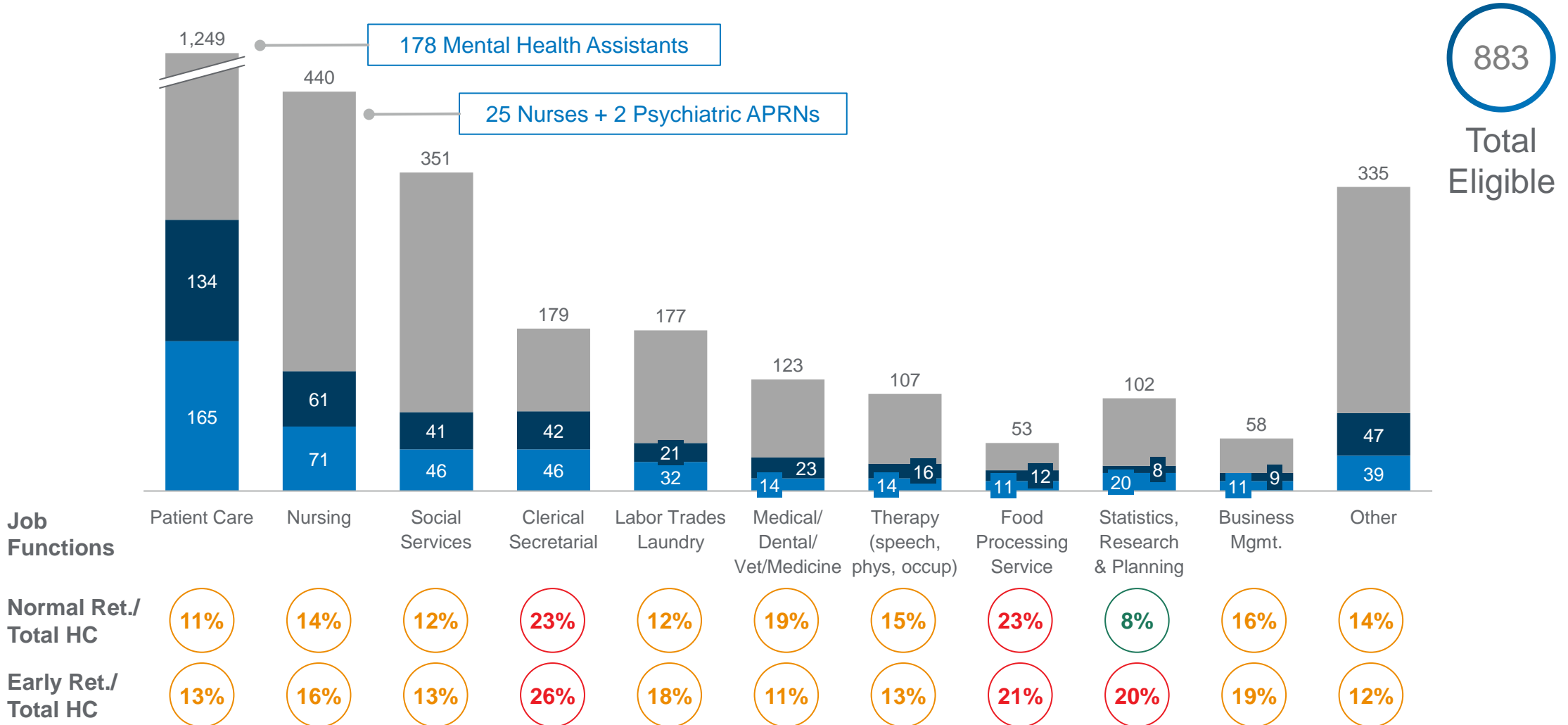
Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Community Support Services	<p>212.3 39.8 253.0</p>	Program/ personnel/ grants	\$15.2m	296	<ul style="list-style-type: none"> • Providing employment and interpersonal support to individuals with mental health/addiction • Assisting courts in diagnosing individuals
Inpatient Services	<p>151.6 0.9 152.5</p>	Program/ personnel/ grants	\$103.1m	2057	<ul style="list-style-type: none"> • Operating mental health treatment facilities • Performing court-ordered evaluations of adults with forensic involvement
Outpatient Services	<p>133.8 6.0 142.5</p>	Program/ personnel/ grants	\$44.0m	816	<ul style="list-style-type: none"> • Providing outpatient treatment services via medication, therapy visits, behavioral health homes, etc. • Providing specific services to people with deafness/ABI
Residential, Crisis, and Respite Services	<p>88.7 7.8 101.2</p>	Program/ personnel/ grants	\$10.8m	105	<ul style="list-style-type: none"> • Providing treatment and ongoing living support services • Providing rapid crisis response services to prevent hospitalizations
Advocacy, Education, Research and Prevention	<p>13.9 9.3 26.8</p>	Program/ personnel/ grants	\$2.9m	69	<ul style="list-style-type: none"> • Providing education/training to providers and community • Collaborating with and funding advocacy groups to ensure continued effective services to individuals
Agency Management Services	<p>22.1 0.6 22.7</p>	Personnel	\$17.9m	304	<ul style="list-style-type: none"> • Planning statewide program implementation • Providing central support functions (e.g. HR, IT) • Evaluating grantees and programs
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">\$617.8m state</div> <div style="border: 1px solid black; padding: 2px;">\$68.1m federal</div> <div style="border: 1px solid black; padding: 2px;">\$12.8m other</div> </div>		\$194.0m	3647	

1. Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: FY2020-2021 Biennial Budget Program Addendum

DMHAS | Patient Care and Nursing are most at risk of service disruption



Normal Ret./ Total HC



Early Ret./ Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DMHAS | High retirement eligibility of nurses and mental health assistants creates risk to service continuity; additional potential for operational disruption



Significant number of nurses and mental health assistants eligible for retirement

- Failure to backfill could result in significant service disruption to residents, as well as increased overtime expenditure
- Backfill challenges anticipated due to advanced training required and high intensity of the work (see below)
- Large-scale hiring initiative from non-profit providers could disrupt provider operations
- Potential backfill alternatives include expanding non-profit operation of LMHAs



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)








Intense nature of resident-facing positions may complicate backfill efforts

- Positions involve high stress and liability
- Private-sector compensation higher for nurses and other clinical positions



DMHAS | Opportunities to evaluate sourcing, implement an EHR, control overtime, and pursue common platforms and digitization

Drivers	Observations	Challenges	Opportunities
 <p>Evaluate sourcing for services</p>	<ul style="list-style-type: none"> State-operated LMHAs serve ~14k clients a year Non-profit providers operate LMHAs at lower cost while maintaining service quality 	<ul style="list-style-type: none"> Conversion to non-profit operation could disrupt resident experience Potential union resistance CT need to remain provider of last resort 	<ul style="list-style-type: none"> Expand non-profit operation of LMHAs
 <p>Implement an Electronic Health Record (EHR)</p>	<ul style="list-style-type: none"> Chart management, medication administration, inventory control, and more are not standardized across DMHAS-operated facilities DMHAS has initiated conversations with DAS re. implementing an EHR 	<ul style="list-style-type: none"> Significant initial investment required High level of technological, operational, and administrative complexity involved in implementation 	<ul style="list-style-type: none"> Implement an EHR
 <p>Control overtime costs</p>	<ul style="list-style-type: none"> DMHAS' overtime expenditure (as share of total employee pay) is higher than peer states 	<ul style="list-style-type: none"> Likely union resistance to overtime adjustments 	<ul style="list-style-type: none"> Reduce overtime expenditure using DDS efforts as potential roadmap
 <p>Establish common agency platforms</p>	<ul style="list-style-type: none"> Functions such as grant-making/administration, eligibility determination, program monitoring/evaluation and background checks are often manual and duplicated across HHS agencies 	<ul style="list-style-type: none"> Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	<ul style="list-style-type: none"> Establish central grant hub for HHS agencies Utilize ImpaCT for eligibility determination Centralize program monitoring and evaluation for HHS agencies
 <p>Digitize/automate manual processes</p>	<ul style="list-style-type: none"> Several frequent processes at DMHAS require substantial manual effort and could be digitized/automated 	<ul style="list-style-type: none"> Initial investment likely required Technical complexity Potential updates needed to existing data sharing agreements 	<ul style="list-style-type: none"> Automate facility shift staffing Centralize/automate Affirmative Action reporting Digitize cross-agency data-sharing



DMHAS | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand non-profit operation of LMHAs	Agency-wide	<ul style="list-style-type: none"> State-operated LMHAs serve ~14k clients per year Non-profit providers operate LMHAs at substantially lower costs while maintaining similar service quality Potential challenges include disruption to residents, union resistance, need for state to remain "provider of last resort", and revenue loss 	H Potential annual savings of \$50-75m+ and reduced need to backfill retired positions, depending on degree of privatization
Implement Electronic Health Record (EHR)	Inpatient Services	<ul style="list-style-type: none"> Electronic health record would streamline chart management, medication administration, inventory control, and activities at DMHAS facilities and reduce central IT workload Increased staff efficiency would result in improved patient outcomes Improved intake, billing, and reporting processes would reduce lost revenue 	H Potential annual savings of \$15-20m+ and 50-60k+ employee hours, reducing need to backfill retiring facility workers
Central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; DMHAS-specific savings depend on extent of centralization, further analysis pending
Reduce overtime	Agency-wide	<ul style="list-style-type: none"> DMHAS accounts for ~22% of statewide overtime spend Share as % of total pay is higher than peer states Optimizing shift schedule could reduce cost while maintaining coverage DDS efforts can serve as roadmap 	M Potential savings of \$4-5m+
Utilize ImpaCT for eligibility determination	All HHS agencies	<ul style="list-style-type: none"> ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs 	M DMHAS-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

Source: DMHAS and OPM input; CT STARS data; CT and provider cost data; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum; BCG analysis



DMHAS | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DMHAS-specific savings depend on extent of centralization
Implement statewide background check system for hiring	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Automate DMHAS shift staffing via KRONOS	Inpatient Services	<ul style="list-style-type: none"> Implementing KRONOS would increase facility worker capacity by reducing manual effort currently required to organize staffing Lean HR resources limit ability to implement KRONOS Would require seed money and/or resource allocation 	L
Centralize and automate Affirmative Action reporting	Agency Management Services	<ul style="list-style-type: none"> Affirmative Action reporting currently requires year-round staff and generates thousands of hard-copy pages Centralization and automation would reduce manual effort 	L
Digitize data-sharing across agencies	Agency-wide	<ul style="list-style-type: none"> Cross-agency data sharing is a major component of Behavioral Health Homes, Targeted Case Management; Medicaid initiatives of CHESS, 500 Familiar Faces, and the 1115 waiver DMHAS works with two Administrative Services Organizations: Advanced Behavioral Health and Beacon Health Options 	L

Major impact (>\$5m or addresses retirement cliff risk)
Medium impact (\$1-5m)
Low impact (<\$1m)

Source: DMHAS and OPM input; CT and provider cost data; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum; BCG analysis

Military Department



Military Department | Agency profile

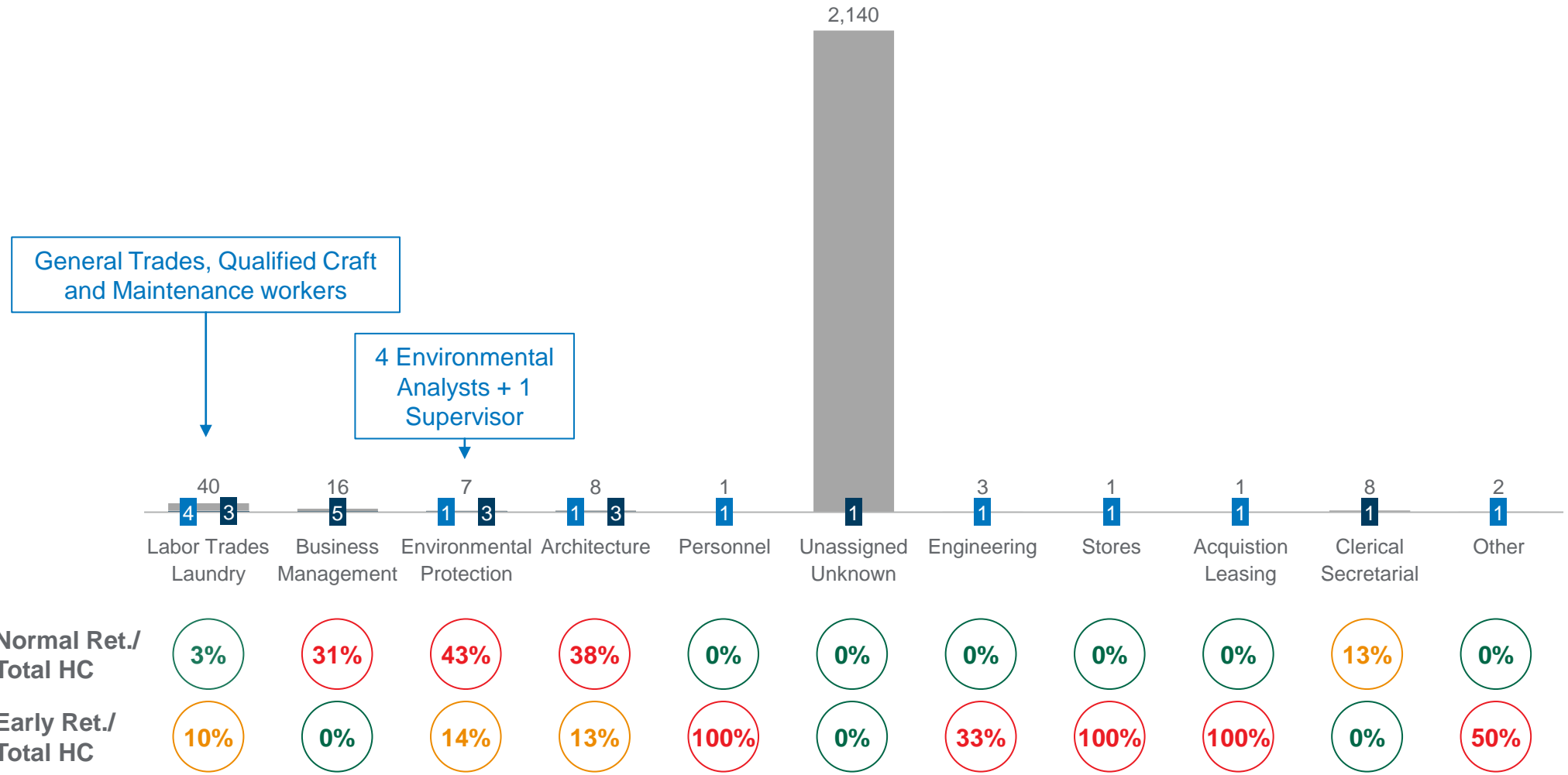
Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Facilities Management		Personnel	\$1.1m	95	<ul style="list-style-type: none"> Support policy formulation, development and control of budget, personnel, payroll, federal grant, and cooperative agreements and record management
Management Services		Program	\$1.7m	24	<ul style="list-style-type: none"> Maintains thirty-four sites throughout the state Prepares specifications for contracts with outside vendors for minor repair projects
Operation of Militia Units		Program	\$0.01m	2	<ul style="list-style-type: none"> Responds to emergency situations and responds to state civil emergencies or natural disasters
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$5.5m state</div> <div style="border: 1px solid green; padding: 2px;">\$22.1m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$0.6m other</div> </div>		\$2.8m	121	

1. Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum



Military Department | Initial view is Labor Trades Laundry and Business Management & Environmental Protection are most at risk of service loss

26
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database, BCG analysis



Military Department | Opportunities identified for Military

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Consolidate National Guard facilities	Facilities Management	<ul style="list-style-type: none"> Consolidate facilities used by National Guards with other state departments (e.g. state police) 	M
Centralize facility management	Facilities Management	<ul style="list-style-type: none"> State facilities are managed by respective departments; centralize and privatize facilities management to increase state staff capacity 	L
Consolidate military and veteran services	Management Services	<ul style="list-style-type: none"> Reorganize state provided programs and services for military and veterans under one agency 	L
Rationalize state vehicles and equipment	Management Services	<ul style="list-style-type: none"> Decrease state's vehicle fleet and increase use of GSA, MTOE, and CTA equipment 	L
Centralize consumable purchases	Cross-agency	<ul style="list-style-type: none"> Centralize consumable purchases (e.g. office supplies) to save on costs 	L
Centralize HR/LR	Management Services	<ul style="list-style-type: none"> Centralize HR/LR to standardize processes and increase department staff capacity 	L
Firefighter conversion	Operation of Militia Units	<ul style="list-style-type: none"> ANG Firefighter conversion to Title 5. Federal initiative; convert federally reimbursed state employees to federal T5 employees 	L

H	Major impact (>\$5m or addresses retirement cliff risk)
M	Medium impact (\$1-5m)
L	Low impact (<\$1m)

Department of Motor Vehicles

Department of Motor Vehicles | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Customer Service	<p>32.4</p>	Program / personnel	\$28.4m	473	<ul style="list-style-type: none"> • Delivery of in-person customer services including issuance of vehicle registrations, driving tests, operator licenses, titles, vessel registrations for DEEP, etc. • Collects sales & use taxes on vehicles bought out of CT • DMV's Copy Records - Telephone Center
Support Services	<p>19.7</p>	Program / personnel / grants	\$10.9m	108	<ul style="list-style-type: none"> • Providing fiscal and logistical support to all operations • Support mail and in-person transactions • Enhance effectiveness through IT accessibility/sharing • Provide maintenance and upkeep of buildings / grounds
Regulation of Motor Vehicles & Their Use	<p>11.4 2.5 0.5 14.4</p>	Program / personnel	\$8.1m	139	<ul style="list-style-type: none"> • Establishes standards, audits license credentials & files while maintaining driver violation records • Manages registration renewals received via mail / web • Works with Handicapped Driver Training program • Inspects and licenses commercial driver schools, motor vehicle dealers, repairers and junkyards
Auto Emissions Inspections	<p>0.0 6.4 0.9 7.3</p>	Program / Personnel	\$0.9m	79	<ul style="list-style-type: none"> • Monitor vehicle emission inspection operations in compliance with state and federal standards
Management Services	<p>3.6</p>	Program / personnel	\$3.3m	37	<ul style="list-style-type: none"> • Provides executive oversight and formulates policy • Upkeep of both interior and grounds of DMV HQ and state-owned branch offices • Houses Corporate and PR, Affirmative Action & Legal
Total	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">\$67.9m STF</div> <div style="border: 1px solid black; padding: 2px;">\$2.5m federal</div> <div style="border: 1px solid black; padding: 2px;">\$6.9m other</div> </div>		\$51.7m	836 ³	

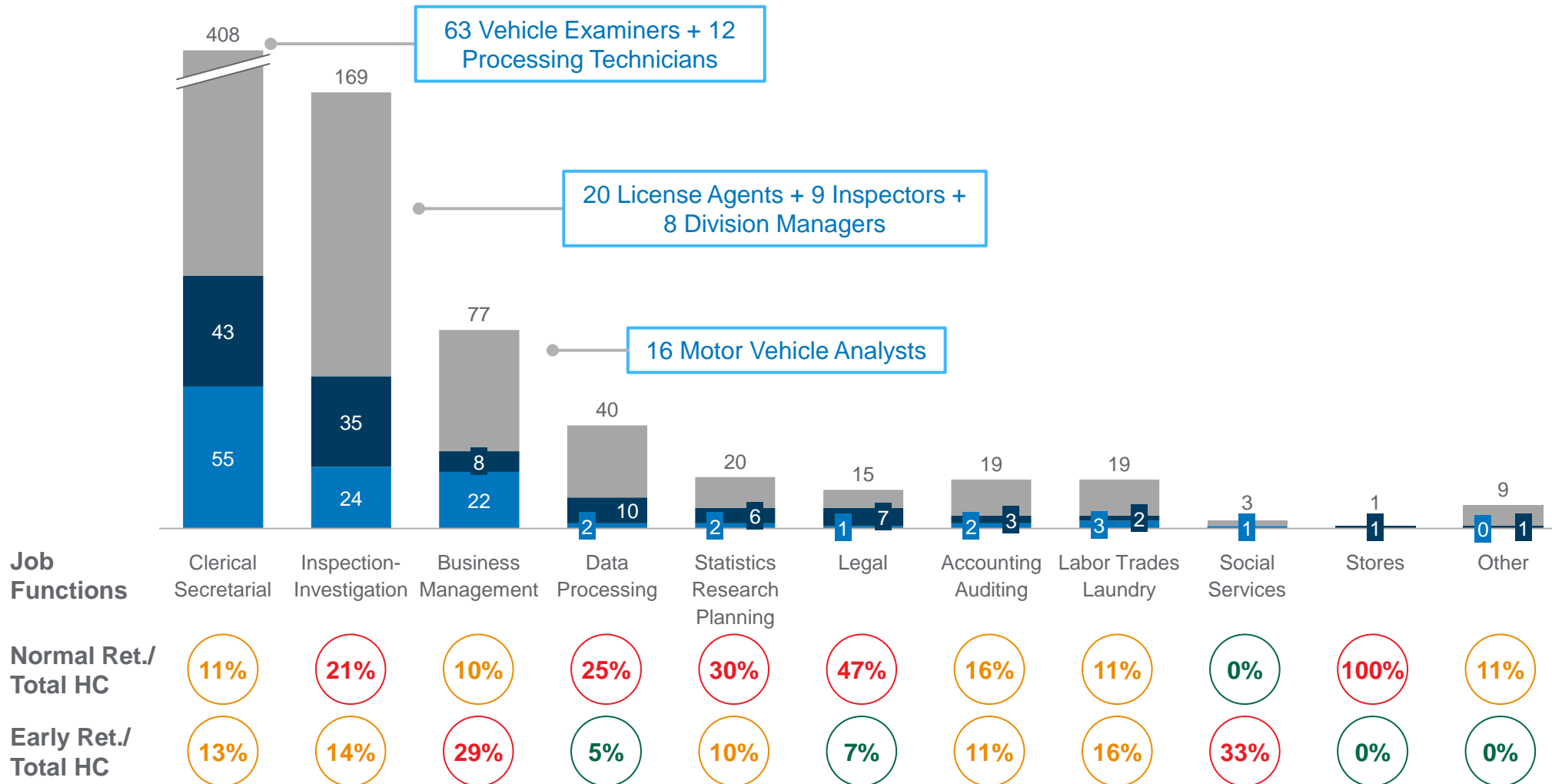
1. Personal services 2. Incl. STF, Private, Emissions Enterprise Fund and Federal Fund FTEs 3. Incl. 24 FTE from Federal Funds
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DMV | Initial view is vehicle examiners, processing technicians and inspectors are most at-risk workers



228

Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



Significant share of customer-facing workforce eligible for retirement

- Potential to cause reversal in recent wait-time declines as residents return to branches with backlog of transactions while REAL ID deadline simultaneously nears



Back-office workers also at risk of high retirements, producing building backlogs

- In addition to disgruntled residents, backlogs also have potential for real-world consequences and significant PR backlash

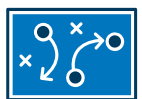


Significant lack of IT resources has led agency to being a digital laggard today, while further retirements present further risks and loss of experience – urgent need to begin addressing today

- While attrition represents opportunity to bring in new talent, approved DMV job classifications are not necessarily relevant for future agency needsation with DOT



Backlogs could result in significant delays to cash inflows at time when STF is expected to become insolvent within 2-3 years



Managerial level losses represent further risk to already strained project management capabilities




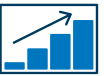

- Managers often involved in everything from high level strategic decisions to proofreading letters to residents

DMV must overcome several structural challenges before it can begin its transformation towards a best-in-class motor vehicle agency



	Talent management	Labor constraints	Legislative constraints	Organizational structure
Current obstacles	<ul style="list-style-type: none"> Existing workforce lacks capabilities to handle modernized/digital efforts (i.e., no IT architects) Ability to fill new roles hindered by outdated job classifications, complex hiring process and non-competitive pay 	<ul style="list-style-type: none"> Hurdles to staff taking on new roles not explicitly allowed for in labor contracts (e.g., holding check-in tablets) Lack of performance management system may result in productivity limits 	<ul style="list-style-type: none"> Restrictions on what transactions can be handled by partners Resistance to use of self-service tools (e.g., kiosks) Statutes mandate significant scope of responsibilities (e.g., mandating tax lists for all towns, not completing transactions if property taxes are owed, etc.) 	<ul style="list-style-type: none"> Current sense that command-and-control model results in siloed work force and sub-optimal cross-trained employees
Recommendations	<ul style="list-style-type: none"> Update job classifications for future-ready DMV, enabling agencies to hire new job types that broadly fit into approved programs 	<ul style="list-style-type: none"> Grade-up job titles to provide managers with more flexibility on deployment of workforce to meet evolving needs Negotiate as needed to implement performance management program 	<ul style="list-style-type: none"> Work with legislators to update and codify DMV responsibilities Enable agency to onboard new partners and expand variety of permitted transactions 	<ul style="list-style-type: none"> Evaluate benefits of moving to matrix org structure

Opportunity to DMV to digitize transactions and back-office processes

Drivers	Observations	Challenges	Potential opportunity
 <p>DMV center operations</p>	<ul style="list-style-type: none"> Limited performance data available for DMV sites Limited productivity incentives 	<ul style="list-style-type: none"> Resistance to implementation of performance management Labor skills and restrictions impede necessary changes 	<ul style="list-style-type: none"> Track and incentivize retail employee productivity Modernize job classes Further triage customers in-line
 <p>Transaction channel</p>	<ul style="list-style-type: none"> CT offers residents fewer services online than other states 	<ul style="list-style-type: none"> May require statutory changes to allow partners to handle additional activities Insufficient internal project management capabilities 	<ul style="list-style-type: none"> Increase transactions completed online or through partners Decrease yearly hours by 70k+ <p>Potential \$10-15m savings combined with above</p>
 <p>Back-office processes</p>	<ul style="list-style-type: none"> Current DMV system highly manual Operating across two IT systems 	<ul style="list-style-type: none"> Partially addressed by current DMV IT modernization project, but long timelines and insufficient resources Necessary IT jobs not approved 	<ul style="list-style-type: none"> Target 25% digital intake Use OCR/NLU and upload docs to single storage location Pull data from other agencies <p>Potential savings of \$2-4m</p>
 <p>Optimize Existing Fees</p>	<ul style="list-style-type: none"> Other states indexing fees to CPI to offset gas tax declines 	<ul style="list-style-type: none"> Requires legislative action May require rebates for low-income residents 	<ul style="list-style-type: none"> Legislate periodic fee-increases indexed to CPI <p>Potential revenue uplift of \$2-8m</p>
 <p>New revenue sources</p>	<ul style="list-style-type: none"> CT does not require safety inspections 28 of 50 states now have EV/hybrid vehicle fees¹ 	<ul style="list-style-type: none"> Requires political capital – eased by implementation in other environmentally friendly states (e.g., CA, HI, OR, WA) 	<ul style="list-style-type: none"> Require safety inspections, performed by dealerships Assess fee for fuel-efficient vehicles to offset gas tax² <p>Potential revenue of \$2-5m</p>

1. National Conference of State Legislatures, EV Club of Connecticut

Department of Motor Vehicles | Operational opportunities (I/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
DMV Center Operations	Agency-wide	<ul style="list-style-type: none"> Modernize and expand job classes permitted within DMV to refresh workforce based on future DMV needs (i.e., similar jobs required to those in place at DRS, DOT) Work to broaden job classification work to ensure existing workforce can continue servicing residents with new tools and technology 	H See below
Shift transaction channel mix online and to third-party partners	Customer services	<ul style="list-style-type: none"> Accelerate shift of transactions from in-store to online and do-it-yourself with user-friendly web interface, fees/incentives/convenience for doing online, optimizing web-design, installing kiosks on state-owned properties, etc. Further develop pre-visit documentation upload capabilities and optimize appointment scheduling along with upfront payment collection Seek statutory approval to shift more transactions to third-party partners Develop more project management capabilities to manage digitization initiatives and ensure projects are properly executed 	H \$10-15m in potential annual savings combined with above opportunity <ul style="list-style-type: none"> Inc. est. potential savings of \$5-15m from ~100 FTEs reductions by bringing FTEs/capita in-line with benchmark state DMVs
Automate / digitize documentation & repetitive processes	Agency-wide	<ul style="list-style-type: none"> Implement chatbots/voicebots to answer questions and reduce call-volume – seek software cost-sharing with other resident-facing agencies Use Robotic Process Automation and Optical Character Recognition to accelerate tasks, move all documentation into digital/cloud storage, and increase FTE capacity (target 25% minimum digital intake) 	M \$2-4m in potential annual savings by reducing FTE hours

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

Department of Motor Vehicles | Operational opportunities (II/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Index fees to inflation	Agency-wide	<ul style="list-style-type: none"> Several states now index fees to inflation by statute (CA, NC) 	<p>M \$2-8m+ per year from indexing fees to inflation</p>
New revenue sources	Agency-wide	<ul style="list-style-type: none"> Require safety inspections, performed by dealerships Assess fee for fuel-efficient vehicles to offset gas tax (28 of 50 states now implement EV fees of \$50-250) Monetize opt-in resident database 	<p>M \$2-5m+ in potential revenue per year from safety inspections and EV fees today, with upside if EV adoption meets DEEP targets</p>
Total			<ul style="list-style-type: none"> 100+ FTEs \$20-\$40m+

H Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)

Office of Policy and Management

Office of Policy and Management | Agency profile



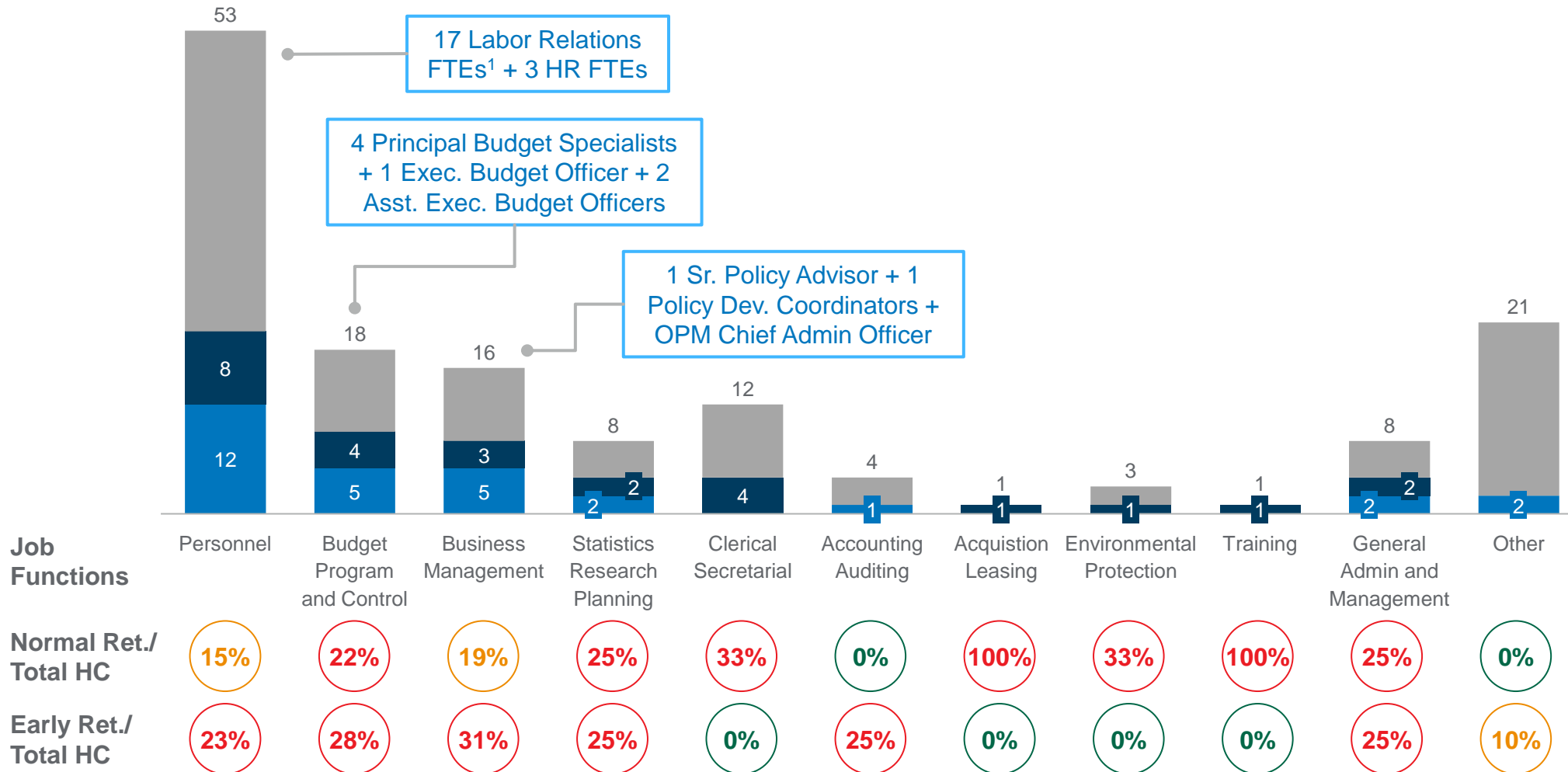
Program or department	Budget (\$M)	Type	FTE budget ¹	FTE ²	Description
Intergovernmental Policy	301.6	Grants / program	\$1.2M	14	<ul style="list-style-type: none"> To initiate and support state policy development with regard to municipalities and regional councils of governments (COGs) Administer state tax relief programs and formula grant programs that benefit municipalities, firms & individuals Certify assessors and revaluation companies and their personnel; collect, analyze, and publish municipal data; and coordinate statewide planning to insure the effective use of state resources
	50.0				
Policy Development, Coordination and Implementation	13.6		\$7.5M	91	<ul style="list-style-type: none"> To assist the Governor, Secretary and state agencies in making policy decisions and in effectively deploying current and future financial and other resources by planning, formulating, coordinating, implementing and evaluating programs and policies that address state needs
Office of the Secretary and Administrative Support	0.0		\$2.2M	27	<ul style="list-style-type: none"> As chief financial and policy advisor to the Governor, Secretary assists and advises the Governor on policy and financial issues and advocates for implementation Attain OPM's objectives by directing and coordinating its programs and providing operational support services Directs development and implementation of CT's biennial operating and capital budget Responsible for long-range planning and use of state-owned or leased property
	2.3	2.3			
Total	\$316.9M state	\$4.5M federal	\$50.7M other³	\$10.9M	132

1. Personal services 2. Incl. General Fund and Federal Fund FTE 3. Includes ~\$50M from Mashantucket Pequot and Mohegan Fund



OPM | Initial view is labor relations staff, budget specialists and senior leadership are most at risk of service loss

55
Total Eligible



1. Includes 12 Agency Labor Relations Specialists

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility; Source: CT STARS database as of 1/5/2021 460

Department of Public Health

Department of Public Health | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Public Health Initiatives		Program/ grants/ personnel	\$3.9m	215	<ul style="list-style-type: none"> Monitoring for various diseases (e.g., TB) Subsidizing immunization development and distribution Subsidizing education programs
Operational and Support Services		Personnel	\$5.0m	110	<ul style="list-style-type: none"> Administering DPH grants Managing central functions and planning (e.g. HR, IT) Interfacing with local health departments
Healthcare Quality and Safety		Program/ personnel	\$10.9m	186	<ul style="list-style-type: none"> Regulating, licensing health care professionals, providers, facilities Planning, administering emergency medical services
Laboratory Services		Program/ personnel	\$4.8m	110	<ul style="list-style-type: none"> Testing for infectious diseases, toxins, pathogens, etc. Monitoring public implications of test results and data Monitoring nuclear industry
Regulatory Services		Program/ personnel	\$5.9m	114	<ul style="list-style-type: none"> Environmental testing and monitoring (e.g. lead, drinking water) Training, licensing, and/or certifying inspectors
Health Statistics and Surveillance		Program/ personnel	\$1.5m	46	<ul style="list-style-type: none"> Collecting, analyzing, disseminating public health data Maintaining vital records (e.g. births, deaths) Administering health surveys
Commissioner's Programs		Personnel	\$2.6m	37	<ul style="list-style-type: none"> Coordinating programs across agency Presiding over public-health-related legal hearings Monitoring at-risk populations to ensure program equity
Total	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">\$58.6m state</div> <div style="border: 1px solid black; padding: 2px;">\$136.6m federal</div> <div style="border: 1px solid black; padding: 2px;">\$89.0m other</div> </div>		\$34.6m	818	

1. Personal services 2. Incl. General Fund and Federal Fund FTE

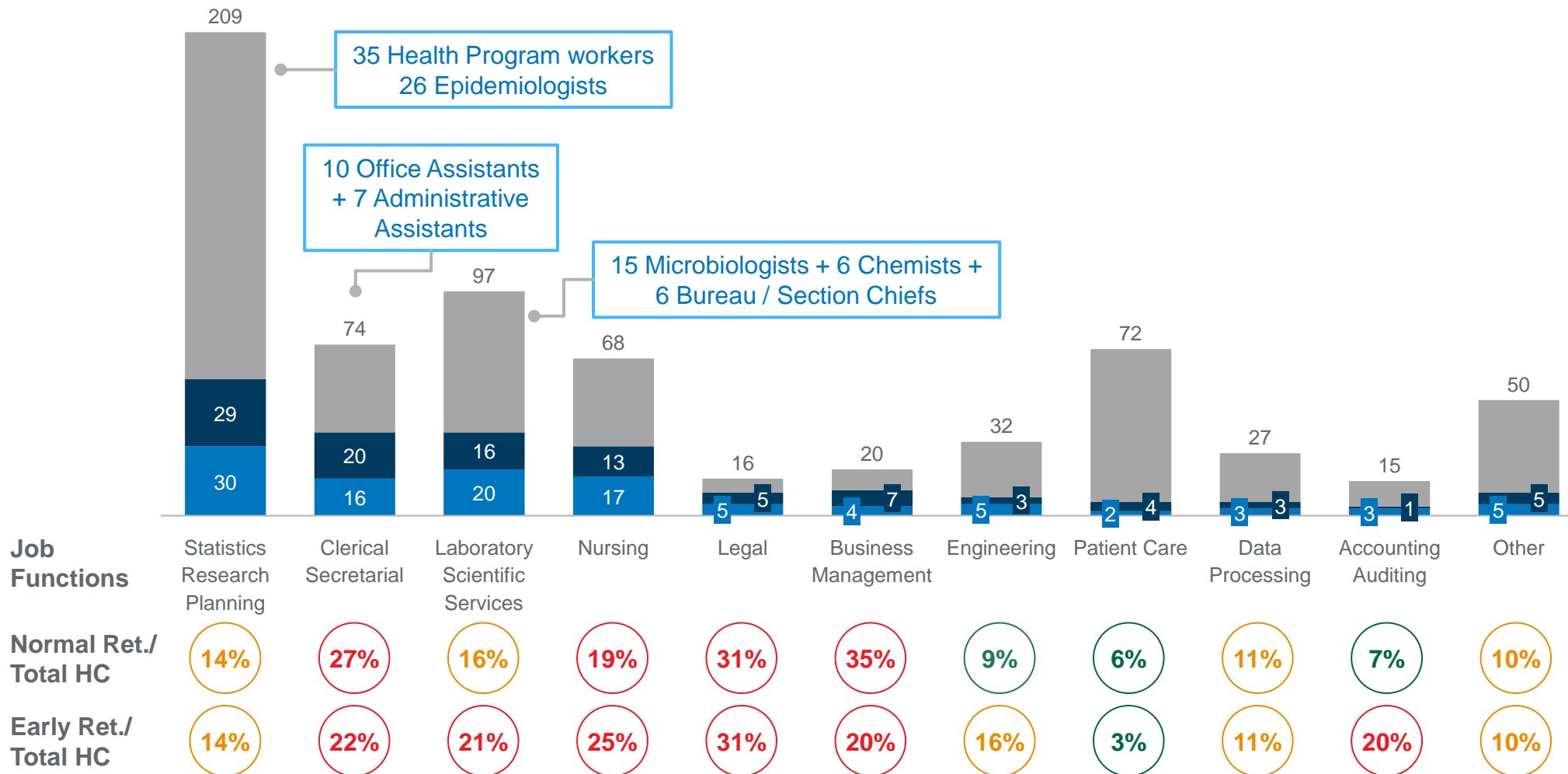
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: FY2020-2021 Biennial Budget Program Addendum



DPH | Statistics Research Planning and Clerical Secretarial are most at risk of service disruption

216
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DPH | COVID may exacerbate impact of 2022 retirement surge and complicate backfill efforts



Intense working environment due to COVID may accelerate/increase retirements and complicate backfill efforts

- Strain on DPH staff has increased dramatically
- Job openings likely to be less appealing to candidates in current climate
- Compensation is not competitive relative to private sector for many positions, e.g. clinical



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Responsibilities for DPH clerical/secretarial staff often more similar to executive assistants or paralegals
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Staff lack of familiarity with new systems may complicate efforts to backfill internally

- Heavy reliance on outdated operational procedures, Cobalt, faxing, etc. may make assuming new roles challenging for certain staff



DPH | Opportunities to streamline service provision and adopt common platforms across HHS agencies

Drivers

Observations

Challenges

Opportunities



Streamline service provision

- There is significant overlap between services offered by DPH and DCF / DSS
- Multiple programs across agencies offer similar service types

- Need for some degree of specialization based on different needs of resident groups
- Potential political sensitivity
- Different funding sources could complicate consolidation efforts

- Consolidate administration of WIC, Healthy Choices for Women and Children with DCF Save Haven Act for Newborns
- Coordinate administration of Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative in DCF's Medical Health and Wellbeing Services
- Streamline adolescent pregnancy prevention programs in collaboration with DSS



Establish common agency platforms

- Functions such as grant-making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies

- Creating common platforms requires rigorous data sharing agreements between agencies
- Technical and governance complexity
- Need for agency-specific insight in certain processes

- Establish central grant hub for HHS agencies
- Utilize ImpaCT for eligibility determination
- Centralize program monitoring and evaluation for HHS agencies



DPH | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; DPH-specific savings depend on extent of centralization, further analysis pending
Utilize ImpaCT for DPH eligibility determination	All HHS agencies	<ul style="list-style-type: none"> ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs 	M DPH-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DPH-specific savings depend on extent of centralization
Implement statewide background check system for hiring	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Coordinate administration of Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative in DCF's Medical Health and Wellbeing Services	Public Health Initiatives	<ul style="list-style-type: none"> Housing CYSHCN in DCF's Medical Health and Wellbeing Services could improve coordination and resident outcomes while reducing administrative and program costs overall 	L

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)



DPH | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Consolidate administration of DCF's Save Haven Act for Newborns with DPH support programs for at-risk pregnant women and new mothers	Public Health Initiatives	<ul style="list-style-type: none"> DPH administers multiple support programs for at-risk pregnant women and new mothers: <ul style="list-style-type: none"> Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides food, healthcare referrals, nutrition education, and breastfeeding support for low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk Healthy Choices for Women and Children provides visits, need assessments, education, and service referrals for pregnant/postpartum women residing in Waterbury who use or are at risk of using substances Consolidating administration of these programs with that of DCF's Save Haven Act for Newborns could improve coordination and resident outcomes while reducing administrative costs 	L
De-duplicate educational programming in PREP and Teen Pregnancy Prevention Initiative and jointly administer within DSS	Public Health Initiatives	<ul style="list-style-type: none"> Both DPH's Personal Responsibility Education Program (PREP) and DSS' Teen Pregnancy Prevention Initiative are intended to prevent adolescent pregnancy and contain educational components De-duplicating the educational components and jointly administering the programs within DSS could improve policy coordination, simplify resident experiences, and reduce administrative costs 	L

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Revenue Services

Department of Revenue Services | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Audit & Compliance	25.4	Program / personnel	\$24.9m	255	<ul style="list-style-type: none"> Conducts examinations for ~40 state taxes Audits residents and out-of-state taxpayers to determine extent of CT tax obligations Directs agency, interagency and interstate compliance programs that include reciprocal agreements with the federal government, various other states, several CT agencies and private organizations
Management	20.4 + 2.7 = 23.1	Program / personnel	\$17.1m	168	<ul style="list-style-type: none"> Sets department policy and direction while providing support services, legal and research assistance within the agency and to legislators, Gov.'s office & the public Includes Appellate and Criminal Investigation divisions for reviewing protests and criminal enforcement Shared services including HR, payroll, and IT
Operations	14.6	Program / personnel	\$10.6m	183	<ul style="list-style-type: none"> Collecting, processing & depositing state tax revenues Develops and maintains fraud prevention programs, reviewing accuracy of tax returns entered into agency's integrated tax admin system Promotes voluntary tax compliance and taxpayer education and assistance, including fielding calls Manages 4 walk-in centers for live assistance
Collection & Enforcement	3.2	Personnel / program	\$3.1m	61	<ul style="list-style-type: none"> Ensure collection of overdue state taxes by contacting residents prior to escalating cases and referring for enforcement
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">\$63.5m state</div> <div style="border: 1px solid black; padding: 2px;">\$0m federal</div> <div style="border: 1px solid black; padding: 2px;">\$2.7m other</div> </div>		\$55.7m	667	

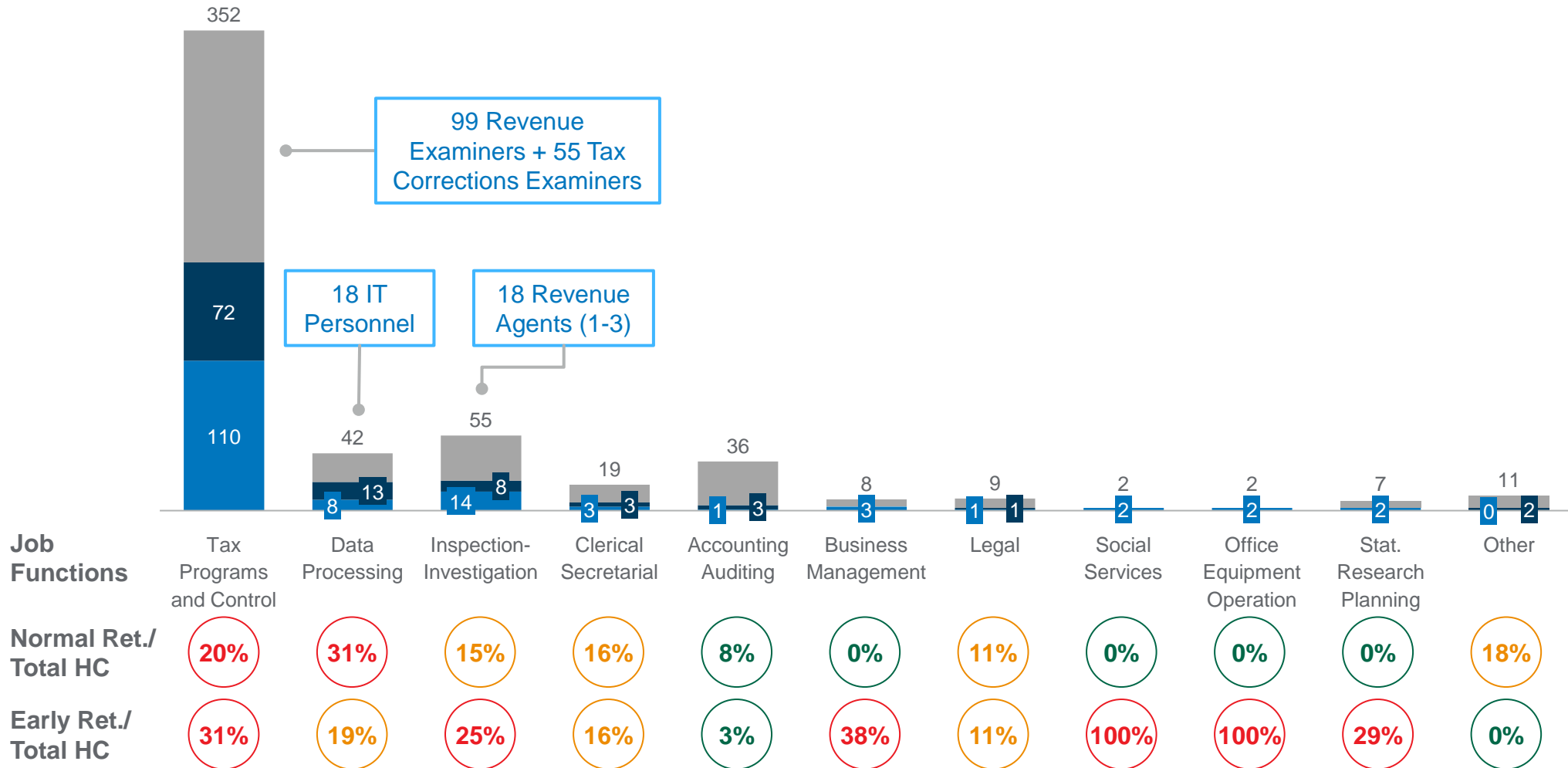
1. Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DRS | Revenue and Tax Examiners, IT personnel and Revenue Agents are most at risk of service loss

248
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021

DRS | Primary retirement surge risks



Revenue and tax examiners represent largest risk from retirement surge

- DRS already implementing cross-training to ensure workers can cover gaps in each position
- Expectation of being able to reduce Tax Examiner FTEs by 25% from not backfilling retirees



Most experienced auditors difficult to replace given complex filings require years of experience to successfully navigate

- Agency documenting processes, conducting succession planning workshops, etc.









COVID-induced closure of walk-in centers did not result in additional filing issues or calls for assistance

- Opportunity to reduce live tax prep assistance personnel and call-center representatives through use of online tutorials/webinars, chatbots, voicebots, etc.



IT modernization initiative already underway with significant progress expected before retirement surge, but loss of IT personnel presents risk to continuity and progress

Biggest recurring DRS opportunities are completing modernization program and optimizing tax compliance

Drivers	Observations	Challenges	Potential opportunity
 <p>Increase tax compliance</p>	<ul style="list-style-type: none"> Estimated CT tax gap of \$1bn+ Gap driven by 40-50% of filers 	<ul style="list-style-type: none"> Requires significant resources (e.g., personnel, time, capital) Requires assessment of internal capabilities vs. best practices 	<ul style="list-style-type: none"> Invest in data-driven analytics to identify fraud & underpayments Disincentivize underreporting <p>Potential uplift of \$100-200m+</p>
 <p>Complete filing / IT digitization program</p>	<ul style="list-style-type: none"> DRS in midst of multi-year IT modernization program 	<ul style="list-style-type: none"> IT modernization programs often encounter significant hurdles and roadblocks Requires strong project management 	<ul style="list-style-type: none"> Accelerate re-design of do-it-yourself tax portal Incentivize e-Filing and electronic payments/refunds <p>Potential uplift of \$95m p.a.</p>
 <p>Block DMV transactions</p>	<ul style="list-style-type: none"> Several states prohibit residents from completing DMV transactions if DQ taxes exist Similar process in place for municipal property tax payments 	<ul style="list-style-type: none"> Must avoid unnecessary burden Requires data integration, but DMV already a digital laggard Likely to encounter pushback for scope-expansion 	<ul style="list-style-type: none"> Block residents from scheduling/completing DMV transactions if taxes are owed Provide temporary license/IDs to mitigate impact <p>Potential uplift of \$150m (recurring benefits likely to reduce over time)</p>
 <p>Block vendor payments</p>	<ul style="list-style-type: none"> Many vendors statewide owe the State back-taxes 	<ul style="list-style-type: none"> May encounter political and business community pushback 	<ul style="list-style-type: none"> Pay vendors once debt is cured <p>Potential uplift of \$50m+ (recurring benefits likely to reduce over time)</p>
 <p>Uncollectable debt</p>	<ul style="list-style-type: none"> DRS has \$700m in debt considered uncollectable 	<ul style="list-style-type: none"> Uncertain capital market appetite for long-term delinquent state tax debts 	<ul style="list-style-type: none"> Securitize and market debt in tranches <p>Potential non-recurring uplift of \$100m+</p>
 <p>Tax corrections examiners attrition</p>	<ul style="list-style-type: none"> 46% of revenue and tax corrections examiners eligible for retirement Cross-training and succession planning plans in place 	<ul style="list-style-type: none"> May encounter labor pushback 	<ul style="list-style-type: none"> Avoid backfilling 25% of examiners as digital filings reduce upfront errors Cross-train revenue & tax examiners <p>Potential savings of \$2-6m</p>



Department of Revenue Services | Operational opportunities (I/II)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Increase tax compliance	Agency-wide	<ul style="list-style-type: none"> Re-design of state tax filing processes to increase overall tax compliance Systematically engage stakeholders (e.g., preparers, accountants, etc.) to streamline filing process and reduce unintended fraud Increase usage of data analytics and AI to identify advertent and inadvertent fraud while targeting highest expected value filings for further audits, and targeting suspicious tax preparers Automation of audits for simple filings Ensure proper mechanisms in place to incentivize residents to cure prior delinquencies/taxes owed (e.g., blocked DMV transactions such as in MA, NY, RI; increased fines and shame lists; blocked business licenses) Optimized communication with filers to drive awareness of back taxes owed 	<p>H \$100-200m+ in potential annual savings based on preliminary analysis, industry benchmarks, and CT's estimated \$1.1bn+ tax gap (inc. 40-50% of filers)</p> <ul style="list-style-type: none"> Savings may require ramp-up period before full-run rate achieved
Digitize filing and payments	Agency-wide	<ul style="list-style-type: none"> Continue progress and accelerate (where possible) re-design of do-it-yourself tax portal for residents and businesses Incentivize e-Filing and electronic payments/refunds 	<p>H \$95m+ per year in estimated revenue uplift upon full implementation</p>
Blocked DMV transactions	Collection and Enforcement	<ul style="list-style-type: none"> Inhibit delinquent tax payers from completing DMV transactions until back-payments are cured –utilize temporary transactions vs. complete blocks (e.g., done already in several states, include NY, ME, CA) 	<p>H \$150m+ potential opportunity, though uplift may decline over time with behavioral changes</p>
Vendor payments	Collection and Enforcement	<ul style="list-style-type: none"> Blocking payments to various state vendors/contractors who also have outstanding tax payments owed to DRS 	<p>H \$50-60m (upside of \$90-100m)</p>
Cross-train Revenue and Tax Examiners to reduce FTE needs	Audit and Compliance	<ul style="list-style-type: none"> Cross-training for multiple jobs enables remaining employees to fulfill duties of either position Expand knowledge sharing initiative to auditors to ensure complex audit capabilities are capably handled by remaining staff post-retirement surge 	<p>H ~\$4-6m in potential savings from 50-70 FTEs (25% of Revenue and Tax Examiners)</p> <ul style="list-style-type: none"> 24 FTEs and \$2m in Tax Corrections Examiners only

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)




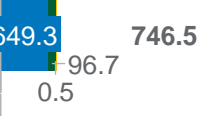

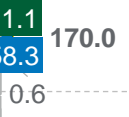

Department of Revenue Services | Operational opportunities (II/II)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Sell "uncollectable" debt	Collection and enforcement	<ul style="list-style-type: none"> State has \$700m in outstanding payments currently considered "uncollectable", which can be securitized and sold as receivables 	H TBC non-recurring uplift based on capital markets environment
Increase shared services and centralized functions	Management	<ul style="list-style-type: none"> Elimination of redundant support functions (e.g., hearings, call center, etc.) Leverage DRS's best-in-state technologies/practices across additional agencies to reduce expenses through cost-sharing (e.g., collections, scanning technology, chatbots, etc.) Merge DOL and DRS data and filings 	M 5-15% savings shared services = \$2M+
Close four walk-in centers	Operations	<ul style="list-style-type: none"> Enhanced online support functionality to reduce need for in-person interactions (i.e., webinars, chatbots, live virtual help sessions) 	M \$1-5m potential opex and (indirect) lease savings plus ~10 FTEs (50+ across centers)
"Skunk works" team	Agency-wide	<ul style="list-style-type: none"> Create a team of skilled personnel with experience in data analytics and strategy to develop forecasting models, develop new algorithms to reduce workforce processes and increase revenue generation, model cost-benefit analyses on new ideas, etc. 	M \$1-5m in potential upside to be refined with additional analysis
Single-line audits for sales and business tax	Audit and compliance	<ul style="list-style-type: none"> DRS can conduct single-line audits on individuals but not on businesses, leading to delays in initiating audits for fear of missing bigger value issues 	L TBC
Consolidate print & mail operations	Operations	<ul style="list-style-type: none"> Multiple agencies have their own print & mail centers (DRS largest); merge or outsource 	L <\$1m in potential savings
Transferring non-related activities to other agencies		<ul style="list-style-type: none"> Transfer responsibility for plastic bottle and bag fees to DEEP Transfer licensing of tax preparers to DCP 	L Minimal (<2 FTEs across various activities)
Total			<ul style="list-style-type: none"> 60-80 FTEs \$350-400m+

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

Department of Social Services

Department of Social Services | Agency profile

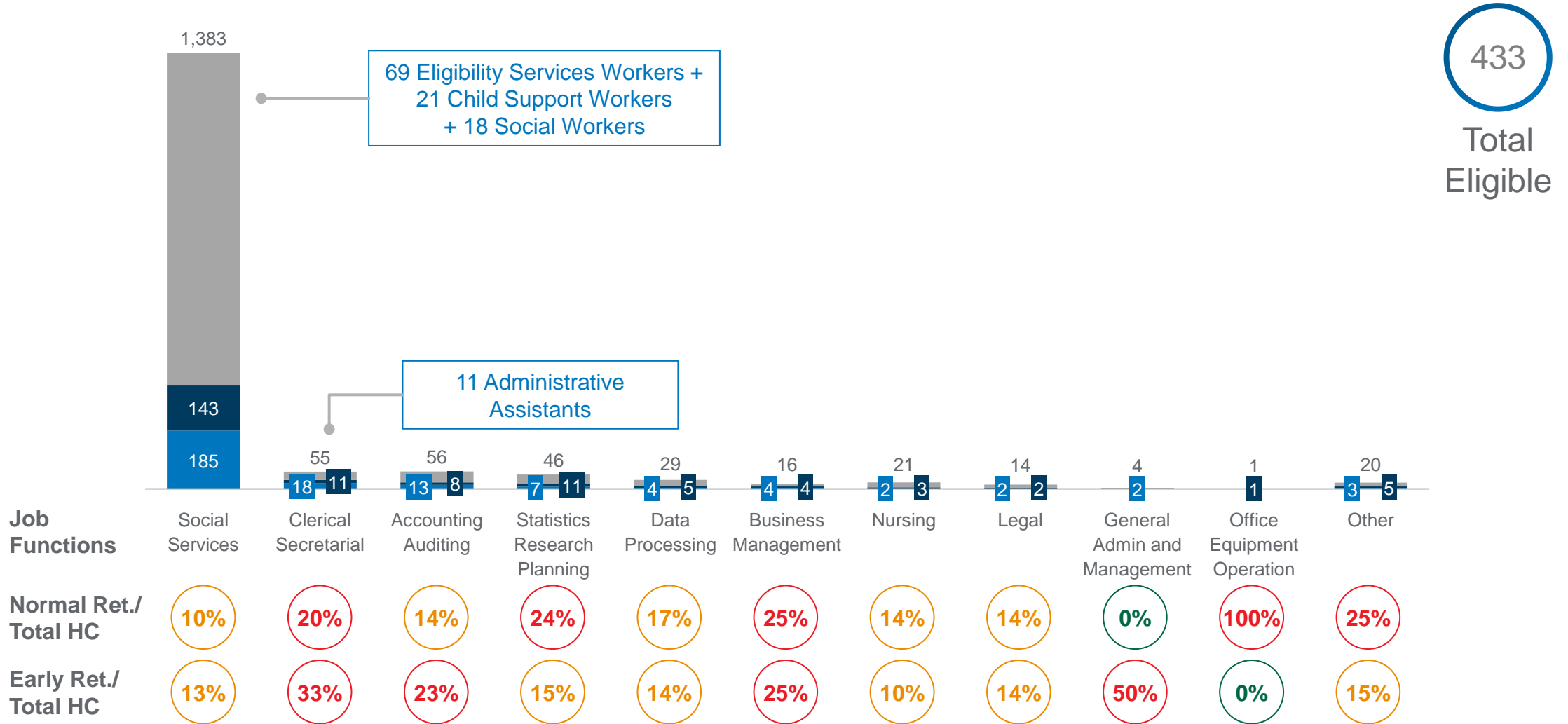
Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Health Services	 <p>2,679.3 732.3 4,253.8 7,665.5 0.1</p>	Program/ personnel	\$14.8m	173	<ul style="list-style-type: none"> Administering health coverage (Medicaid, Medicare, waivers) Supporting providers to enhance care capabilities (e.g. via Electronic Health Records, tele-/after-hours care) Providing informational services to individuals
Support and Safety Services	 <p>649.3 96.7 746.5 0.5</p>	Program/ personnel/ grants	\$8.7m	125	<ul style="list-style-type: none"> Monitoring client outcomes to identify service gaps Investigating reported elder abuse Providing shelter/support services for victims of domestic violence Providing in-home support for adults with disabilities Providing additional specific services (heat assistance, estate, teenage pregnancy initiative, etc.)
Income Support Services	 <p>194.4 1.2 195.6</p>	Program/ personnel/ grants	\$9.7m	142	<ul style="list-style-type: none"> Providing cash grants to families, elders, people with disabilities in need Administering state Child Support program
Administrative and Field Services	 <p>11.1 158.3 170.0 0.6</p>	Personnel	\$96.9m	1563	<ul style="list-style-type: none"> Providing central support functions (e.g. HR, IT) Administering and monitoring agency programs
Food and Nutritional Services	 <p>8.9 3.7 12.6</p>	Program/ personnel/ grants	\$1.3m	20	<ul style="list-style-type: none"> Distributing commodity foods Providing administrative funds for shelters, pantries, etc. Coordinating and administering federal food support programs (e.g. CSFP, SNAP)
Total	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid blue; padding: 2px;">\$2.7b state (DSS)</div> <div style="border: 1px solid green; padding: 2px;">\$4.4b federal</div> <div style="border: 1px solid orange; padding: 2px;">\$1.1m other</div> </div> <div style="margin-top: 5px; border: 1px solid blue; padding: 2px; display: inline-block;">\$732.3m state (other agencies)</div>		\$131.4m	2023	

1. Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: FY2020-2021 Biennial Budget Program Addendum

DSS | Social Services and Clerical Secretarial functions are most at risk of service disruption



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021

DSS | Risk of institutional knowledge loss due to widespread 2022 retirement eligibility among leadership; day-to-day ops may also be disrupted



Majority of DSS leadership is eligible for retirement, creating risk for significant loss of institutional knowledge

- Logical successors not always present
- Ambitious reform efforts for HUSKY program likely to require substantial leadership



Clerical and secretarial retirements could disrupt day-to-day operations

- DSS traditionally lean on clerks and secretaries – eligibility workers take on extra work as a result
- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)






Intense nature of resident-facing positions (social workers and others) may complicate backfill efforts

- Positions involve high stress and liability

High-level estimates
 Does not include all identified opportunities or any one-time opportunities
 Does not include Medicaid-related opportunities

DSS | Opportunities to adopt common platforms, streamline service provision, and pursue further digitization

Drivers	Observations	Challenges	Opportunities
 <p data-bbox="305 456 484 628">Establish common agency platforms</p>	<ul data-bbox="535 456 1121 756" style="list-style-type: none"> • Functions such as grant-making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies 	<ul data-bbox="1172 456 1758 756" style="list-style-type: none"> • Creating common platforms requires rigorous data sharing agreements between agencies • Technical and governance complexity • Need for agency-specific insight in certain processes 	<ul data-bbox="1809 456 2395 671" style="list-style-type: none"> • Establish central grant hub for HHS agencies • Centralize program monitoring and evaluation for HHS agencies
 <p data-bbox="305 799 484 913">Streamline service provision</p>	<ul data-bbox="535 799 1121 913" style="list-style-type: none"> • There is significant overlap in services provided between DSS and other agency programs 	<ul data-bbox="1172 799 1758 913" style="list-style-type: none"> • Different funding sources could complicate consolidation efforts • Potential political sensitivity 	<ul data-bbox="1809 799 2395 871" style="list-style-type: none"> • Further realign early childhood activities into a common agency
 <p data-bbox="305 971 484 1142">Digitize/automate manual processes</p>	<ul data-bbox="535 971 1121 1142" style="list-style-type: none"> • A number of frequent processes at DSS are heavily manual and require significant administrative effort 	<ul data-bbox="1172 971 1758 1228" style="list-style-type: none"> • Technical and governance complexity • Initial investment likely required • Personal interactions important to many DSS services, e.g. eligibility 	<ul data-bbox="1809 971 2395 1270" style="list-style-type: none"> • Streamline Affirmative Action data processing • Convert case visit documentation system to Salesforce platform • Further automate call centers and eligibility processes

DSS | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	<ul style="list-style-type: none"> Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	H Potential savings of \$20-50m state-wide; DSS-specific savings depend on extent of centralization, further analysis pending
Centralize program monitoring and evaluation	All HHS agencies	<ul style="list-style-type: none"> Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DSS-specific savings depend on extent of centralization
Implement statewide background check system for DSS hires	All HHS agencies	<ul style="list-style-type: none"> A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Reduce incorrect reports of abuse to DSS	Support and Safety Services	<ul style="list-style-type: none"> Improving community training and resources and screening processes to reduce time/resources deployed to investigate "false alarms" for elder abuse, domestic violence, etc. would increase staff capacity and reduce administrative costs 	L
Reduce overtime	Agency-wide	<ul style="list-style-type: none"> Optimizing shift schedule could reduce cost while maintaining coverage DDS efforts can serve as roadmap 	L

H Major impact (>\$5m or addresses retirement cliff risk)
M Medium impact (\$1-5m)
L Low impact (<\$1m)

DSS | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Consolidate administration of federally-funded nutritional assistance programs	Food and Nutritional Services	<ul style="list-style-type: none"> Consolidating administration of SNAP, CSFP, and TEFAP could improve policy coordination and ultimate outcomes, simplify resident experiences, and reduce administrative costs 	L
De-duplicate educational programming in PREP and Teen Pregnancy Prevention Initiative and jointly administer within DSS	Support and Safety Services	<ul style="list-style-type: none"> Both DPH's Personal Responsibility Education Program (PREP) and DSS' Teen Pregnancy Prevention Initiative are intended to prevent adolescent pregnancy and contain educational components De-duplicating the educational components and jointly administering the programs within DSS could improve policy coordination, simplify resident experiences, and reduce administrative costs 	L
Streamline Affirmative Action data download from CoreCT	Administrative and Field Services	<ul style="list-style-type: none"> Current data extracts are not consistently compatible with state requirements and Tableau usage, generating additional manual effort 	L
Convert case visit documentation system to Salesforce	Agency-wide	<ul style="list-style-type: none"> <i>Pending further input</i> 	L
Further automate DSS call centers	Agency-wide	<ul style="list-style-type: none"> <i>Pending further input</i> 	L
Further automate eligibility document approval process	Agency-wide	<ul style="list-style-type: none"> <i>Pending further input</i> 	L

Major impact (>\$5m or addresses retirement cliff risk)
Medium impact (\$1-5m)
Low impact (<\$1m)

Teachers' Retirement Board

Teachers' Retirement Board | Agency profile



Program or department	Budget (\$M)	Type	FTE budget ¹	FTE ²	Description
Funding of System	1,240.3	Grants / programs	\$0	0	<ul style="list-style-type: none"> Administers retirement and health benefit plans for career public school teachers and eligible dependents Pensions funded by member contributions, state contributions and investment income FY ending June 30, 2018 saw pension benefits of \$1.9 billion vs. \$325 million in active member contributions
Management Services	2.1	Program	\$1.6M	27	<ul style="list-style-type: none"> Delegates daily management and administration of the retirement system to the administrator Activities include accounting for receivables and payables, account reconciliation, application procession for various types of benefits, determination and initiation of eligibility, etc. As of June 30, 2018, there were 50,692 active members, 37,260 retired members, 301 disabled members and 16,442 inactive members
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$1,242.4M state</div> <div style="border: 1px solid green; padding: 2px;">\$0.0M federal</div> <div style="border: 1px solid orange; padding: 2px;">\$0.0M other</div> </div>		\$1.6M	27	

1. Personal services 2. Incl. General Fund and Federal Fund FTE
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
 Source: Connecticut 2020-2021 Biennial Budget Program Addendum



Teachers' Retirement Board | Operational opportunities

Program or department	Budget	FTE	ID	Hypotheses	FTE impact	Budget impact
Funding of System	N/A	0		Increase cost-sharing from municipalities <ul style="list-style-type: none"> State is responsible for pension obligations for teachers hired by municipalities 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> TBC
Funding of System	N/A	0		Incentivize retirees to remain on Municipal Retiree Health Insurance <ul style="list-style-type: none"> State reimbursed \$110 per month for retirees who remain on municipalities' health plans 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> TBC
Agency-wide	\$1.6m	27		Consolidate operations <ul style="list-style-type: none"> Consolidate operations with State treasurer or State Comptroller's Office given substantial overlap 	<ul style="list-style-type: none"> TBC 	<ul style="list-style-type: none"> TBC
Agency-wide	\$1.6m	27		IT integration with CORE-CT <ul style="list-style-type: none"> Risk from having one IT employee writing code for a bespoke platform 	<ul style="list-style-type: none"> 1 	<ul style="list-style-type: none"> Low
Total					Low	TBC

Department of Transportation

Department of Transportation | Agency profile



Program or department	Budget (\$m)	Type	FTE budget ¹	FTE ²	Description
Public Transportation	<p>465.5 257.1 143.9 866.5</p>	Program / personnel / grants	\$6.9m	108	<ul style="list-style-type: none"> Responsible for service (NHL operated by Metro-North and NYMTA, SHLE by Amtrak), bus & ADA services Oversight for taxi and livery operations
Highway & Bridge Eng., ROW, Construction	<p>28.6 475.0 78.5 582.1</p>	Program / personnel	\$28.1m	995	<ul style="list-style-type: none"> Assuring integrity, safety & protection of capital investment made in highway system Conduct studies on problem areas, asset management Oversees all aspects of construction contracts
Highway & Bridge Maintenance	<p>2.5 108.6 0.6 111.6</p>	Program / personnel	\$84.2m	1,714	<ul style="list-style-type: none"> Maintain & repair highways and necessary equipment and policy development Drainage maintenance and reshaping of waterways
Management	<p>43.2</p>	Program / personnel	\$36.8m	430	<ul style="list-style-type: none"> Leadership and shared services (HR, IT, purchasing)
Snow & Ice	<p>38.7</p>	Program	\$22.9m	N/A	<ul style="list-style-type: none"> Application of salt, plowing across roads/lots/sidewalks Equipment maintenance & repair for storms Contractors include weather advisory & add'l trucks
Transport. Policy & Management	<p>29.0 7.6 0.2 36.7</p>	Program / personnel / grants	\$4.5m	117	<ul style="list-style-type: none"> Develops policies & procedures to meet fed. guidelines Managing state and federal legislative affairs Collects and processes traffic/safety data Involved in grant planning and compliance
Transport Administration	<p>0.0 24.1 24.1</p>	Program / Personnel	\$2.2m	35	<ul style="list-style-type: none"> Oversees private operators of service plazas DOT building maintenance and repairs Pay-As-You-Go funding for non-bondable projects
Ferries / Ports	<p>0.6</p>	Program / personnel	\$0.2m	2	<ul style="list-style-type: none"> Marketing & coordinating development of CT's ports and maritime economy (coordinates with DECD)
Total	<p>\$717.7 STF \$778.6m federal \$235.7m other</p>		\$185.2m	3,412	

1. Personal services 2. Incl. STF, Private, Special Non-Appropriated and Federal Fund FTEs

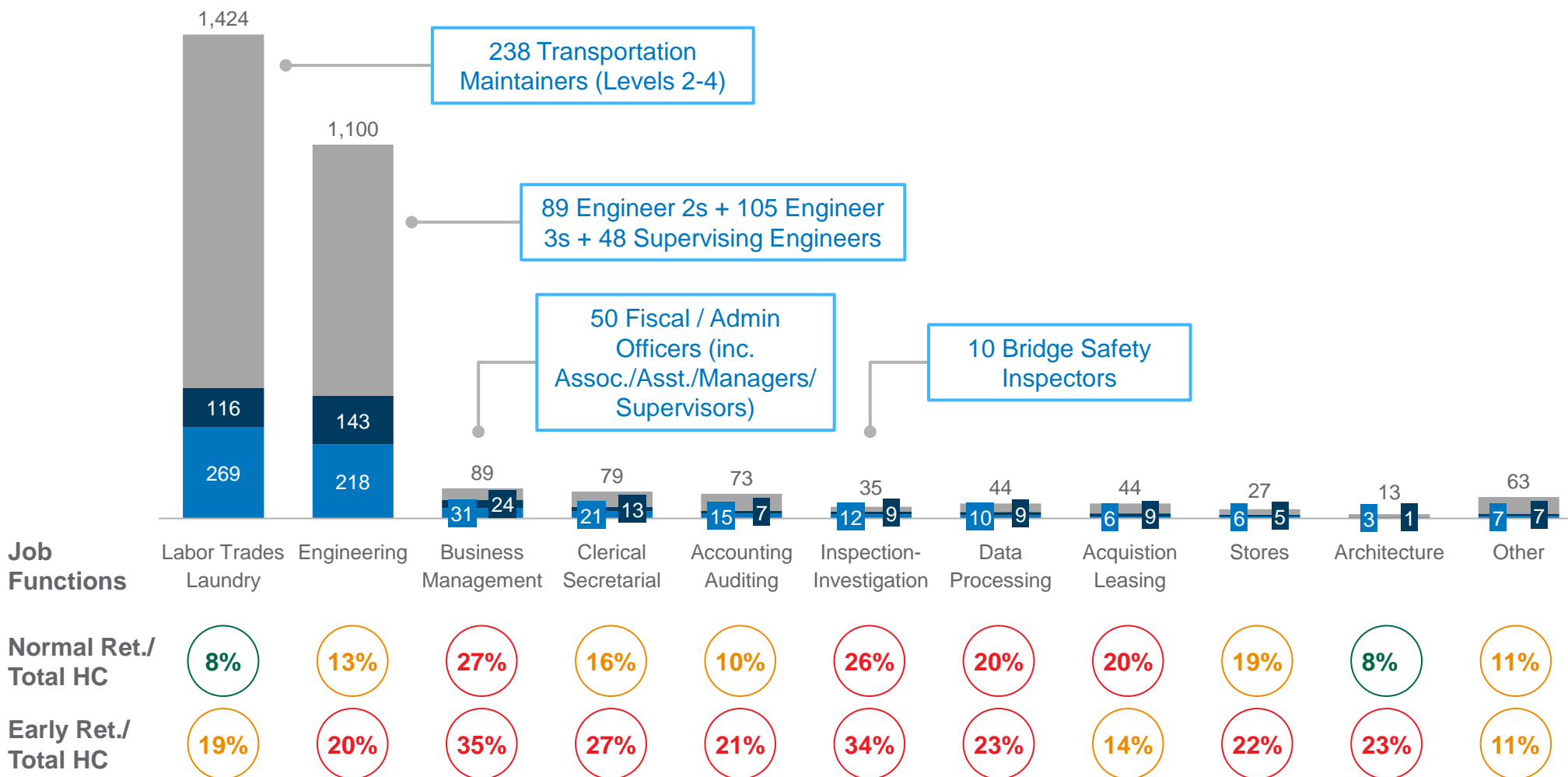
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point. Figures exclude capital budget;

Source: Connecticut 2020-2021 Biennial Budget Program Addendum



DOT | Transportation Engineers, Fiscal/Admin Officers and Bridge Safety Inspectors are most at risk of service loss

941
Total Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.
Source: CT STARS database as of 1/5/2021

DOT | Primary retirement surge risks



Retirement of high-skilled and difficult to attract/retain engineers

- E.g., Engineer 3s, Principal and Supervising Engineers
- Requires job-specific degrees and years of experience, difficult to compete with private sector



Significant number of transportation maintainers eligible for retirement, creating risk to improving or even maintaining the condition of CT roads that remain below targets

- Backfilling alternatives include outsourcing & creating new job classifications with reduced requirements



Deploying new tools, technologies and materials requires investment as well as skillsets not currently in place within DOT

- Requires adapting job classifications to modernized needs
- E.g., drones for bridge inspections and surveying, durable roads, road sensors, etc.



Significant risk of lost institutional knowledge throughout the organizational structure, including management (57% eligible) and clerical workers (44%)








Limited ability to outsource work based on existing labor rules

- I.e., arduous process required in order to outsource work currently done only in-house



Biggest DoT opportunities are modernizing tools and right-sizing capacity

Drivers	Observations	Challenges	Potential opportunity
 <p>Transit capacity</p>	<ul style="list-style-type: none"> Commuter rail ridership remains 70-90% < pre-COVID, while bus remains down 25% 	<ul style="list-style-type: none"> Likely to encounter political pushback (softened with resident input & by similar peer actions) 	<ul style="list-style-type: none"> Reduce service on low-rider lines Use shuttles for high-subsidy rail
 <p>Organization structure</p>	<ul style="list-style-type: none"> Transportation maintainers and engineers among top 10 jobs eligible for retirement Appetite for implementing regional-based outsourcing 	<ul style="list-style-type: none"> Requires full buy-in from agency leadership Potential labor resistance Statutory and labor hurdles to outsourcing work (4e-16) 	<ul style="list-style-type: none"> Re-classify and update job titles Outsource more existing work Right-size job mix, spans/layers
 <p>Rail, bus and material contracting</p>	<ul style="list-style-type: none"> Low recovery rates vs. comps High light rail operating costs adj. for passenger miles Bus operations not coordinated across operators and systems Budget not performance based 	<ul style="list-style-type: none"> Fixed-route bus litigation, ARSA contract negotiation loss hinder appetite for re-bidding Sec. 13b-80 (bus certificates) Best value provider may face "outsider" arguments 	<ul style="list-style-type: none"> Re-bid transit operation contracts Pass legislation to allow competitive bids for bus services Benchmark procurement of materials to best-in-class
 <p>New inspection, maintenance and bridge tools</p>	<ul style="list-style-type: none"> Many bridge inspectors and maintainers retirement-eligible States expanding usage of drones for DOT use-cases Drawbridges staffed 24/7/365 	<ul style="list-style-type: none"> Requires investment in new capabilities (i.e., OPM approval) and new jobs that meet future needs (i.e., AVs, UAS) Capital to automate drawbridges 	<ul style="list-style-type: none"> Build a leaner, tech-driven agency to avoid full back-filling Invest in drones and sensors Use more durable materials^{2,3}
 <p>Revenues (existing and new)</p>	<ul style="list-style-type: none"> Broad range of opportunities new & existing revenue sources Better monetize rest areas 	<ul style="list-style-type: none"> Political backlash likely on fares and rest area privatization & may require FHA clearance 13b-14b hinders studies of fees 	<ul style="list-style-type: none"> Monetize ROW (e.g., solar) Encourage retained revenue Require minimum recovery rates Outsource rest area mgmt.

1. Based on 5-20% of Maintainer personnel 2. Center for Intelligent Infrastructure 3. "Potholes are the latest problem to be felled by sensors & algorithms" Economist



Department of Transportation | Operational opportunities (I/III)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Reduce rail and bus service levels	Public Transport	<ul style="list-style-type: none"> Reduce New Haven Line service by 37% capacity Reduce SLE operations with fewer runs and/or cars, or consider replacing stops with shuttle bus services Consolidate, eliminate and amend express bus service levels Soften pushback and optimize planning via direct resident input 	<p>H \$45m+: \$35m potential annual savings from ~37% service level reduction on New Haven Line, \$5m+ potential savings from 50% SLE service level cut (vs. budgeted operations) and \$3m+ from express bus service efficiencies.</p>
Organizational structure review	Agency-wide	<ul style="list-style-type: none"> Re-classify and update job titles, including more flexibility to meet needs of modernized agency and align jobs-skills matching (e.g., not requiring CDL for all Maintainer 1s, creating TSE Admin title) Outsource more existing work (i.e., KPI-based contracts covering regions) Right-size job mix, spans/layers Partner with DOC/non-profits to expand opportunities for inmate population for low-skill work (e.g., ROW clearance) to reduce recidivism (e.g., CA) 	<p>H \$5-35m+: 5-20% outsourcing of Maintainer jobs, regional outsourcing, etc. (~980 Maintainers + ~800 Maintainer Managers/Supervisors)</p> <ul style="list-style-type: none"> - Additional analysis needed to refine savings estimates, including current in-house/outsource maintenance spend mix
Bid out public transit service operations	Public Transport	<ul style="list-style-type: none"> Modify statute 13b-80 to clarify bus operators do not require a certificate Package several rail lines and bid out in competitive process given low operating ratio on Shore Line East and high Amtrak costs Open re-negotiations on Metro-North and Amtrak deals to reduce operational costs and drive contractor efficiencies Consider divesting physical assets / rolling stock if outsourcing operations 	<p>H \$10-25m+: 5-10% estimated reduction in \$250m+ annual train subsidies; potential savings by leveraging TASI vs. Amtrak costs on Hartford Line for re-negotiations or competitive RFP:</p> <ul style="list-style-type: none"> - SLE + Harford subsidy = \$60M p.a. - Bus subsidy = \$125M p.a. at MTN% ratio
Replace rail service with more cost-effective shuttles	Public Transport	<ul style="list-style-type: none"> Replace commuter rail services with low farebox recovery rates with more cost-effective bus/shuttle services 	<p>H \$10-15m+ in operating subsidy savings assuming full service levels maintained</p>
Inspection and maintenance tools, advanced materials	Agency-wide	<ul style="list-style-type: none"> Roll-out usage of Ultra High-Performance Concrete and explore additional more durable materials (e.g., self-healing concrete) Build a leaner, tech-driven agency to avoid full back-filling Expand usage of drones (beyond DESPP, e.g., inspection and surveyance) and sensors (early detection of roads to fix while in good/fair status) 	<p>H \$5-10m+ potential savings from using drones to conduct bridge inspections and advanced (more durable) materials to reduce maintenance needs</p>

H Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)



Department of Transportation | Operational opportunities (II/III)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Monetization opportunities	Agency-wide	<ul style="list-style-type: none"> Optimize advertising and sponsorship across transit, including naming rights (e.g., onboard, at stations / on platforms, mobile apps, etc.) Monetize ROW, rest areas and real estate (e.g., solar PVs, cell towers, sponsorships, etc.) and audit of existing agreements for full collections Enable agency to convert Blue Sign advertising to recurring revenue leases Encourage retained revenue activities (i.e., scrap metal programs) Evaluate minimum fare recovery rates set by statute Outsource rest area mgmt. Repeal Sec. 13b-14b to allow DOT to study cost-benefit analysis of new fees 	H \$5m+ p.a. from solar panel installations operated by private contractors, \$5-10m in potential advertising optimization, \$1-5m from wireless leasing program, <\$1-2m from fully outsourcing rest areas (30 FTEs)
Remote drawbridge operations	Agency-wide	<ul style="list-style-type: none"> Move to remote operation of drawbridges vs. current model of 24/7/365 in-person staffing 	M \$3m+ in potential annual savings for 25 FTEs (required upfront investment to be refined by DOT)
Mainstream ADA paratransit and increase use of third-party TNC services	Paratransit	<ul style="list-style-type: none"> Better outreach and education to direct certain segments to free bus services Increase use of third-party TNCs to provide select trips Unify state paratransit systems Evaluate ways to ensure better quality of service does not lead to abuse of ridership by those who do not require paratransit services 	M ~\$1-2m savings per year - MBTA saw average per trip cost fall from \$46 to \$13, offset by substantial increase in volume of trips. Capping subsidies produced net 6% savings
Reduce restraints on PPP opportunities and maximize federal funding	Highway & Bridge Maint.	<ul style="list-style-type: none"> Amend Statute Sec. 13b-14b to allow DOT to study the cost-benefit of usage-based fees, which may be partially funded by federal grants (e.g., Surface Transportation System Funding Alternatives [STSFA]) Amend statutes to allow usage of lease operations for availability payments Optimize federal funding with dedicated staff focused on identifying grants and exploring all viable options for eligibility (e.g., TIF, CPAQ, TIFIA, etc.) 	M Several million dollars received by various states for RUC studies (e.g., WA, DE, OR, NH), though current legislative restrictions have prohibited DOT from studying potential benefits

H Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)



Department of Transportation | Operational opportunities (III/III)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Transit District consolidation	Agency-wide	<ul style="list-style-type: none"> Shared reservation and dispatching systems: more efficient trip planning and improved purchasing power with vendors Strategic partnerships – leveraging economies of scale, improve ability to attract and retain transit managers, avoid duplicative CapEx 	L \$0.8m in potential annual savings
MPO Consolidation	Agency-wide	<ul style="list-style-type: none"> Consolidation to either 3 or a single MPO allow for possible integration of the COG Coordination and STIP units into one cohesive unit Intermodal team would be potentially freed from their current support services to the MPO studies and could be redirected toward supporting true intermodal planning needs within the Department. Aligns well with anticipated retirements in both units in 2022 and would better allow us to repurpose position refills into other identified planning needs 	L \$0.7m in expense savings per year
Reduce staff fleet size by 15%	Admin / Management	<ul style="list-style-type: none"> Cut DOT fleet by at least 15% (19 vehicles) Post-pandemic, evaluate opportunity to further reduce light-duty fleet once teleworking policy stabilizes for long-term usage analysis 	L <\$1m per year in annual savings
Offload Welcome Center		<ul style="list-style-type: none"> Welcome Center is underutilized and not core to DOT mission 	L < \$1m potential salary savings
	Total		<ul style="list-style-type: none"> 195-225+ FTEs \$95-\$145m+

H **Major impact** (>\$5m or addresses retirement cliff risk)
M **Medium impact** (\$1-5m)
L **Low impact** (<\$1m)

Department of Veterans Affairs

Department of Veterans Affairs | Agency profile



Program or department	Budget	Type	FTE budget ¹	FTE	Description
Office of Advocacy & Assistance	1	Program	\$935k	18	<ul style="list-style-type: none"> Operate five regional offices to provide advice and representation to the state's veterans Publish informational brochures explaining complex federal and state laws that govern health care Cemetery and Memorial Service unit
Office of the Commissioner	10 (blue), 1 (green), 1 (yellow) = 12	Admin	\$7.2m	123	<ul style="list-style-type: none"> Develop agency policy and provide admin support Planning services and ensures regulatory compliance and development of new initiatives to better help Outreach to Veterans and community agencies
Veterans Health Care Services	11 (blue), 1 (yellow) = 12	Program	\$10.6m	162	<ul style="list-style-type: none"> Operate a Healthcare Center offering healthcare, social, and rehabilitative services Chronic Disease Hospital with long term nursing facility including 125 beds 24-hour healthcare to veteran patients with chronic conditions and a special care unit
Residential and Rehabilitative Services	1 (blue), 2 (yellow) = 3	Program	\$1.1m	14	<ul style="list-style-type: none"> Run Veterans Residential Services Facility Temporary housing, medical care, recreational services, education and vocational training, and employment search assistance Social Work Department, Vocational Program, and Patriot's Landing Program tackling homelessness
Total	<div style="display: flex; gap: 10px;"> <div style="border: 1px solid blue; padding: 2px;">\$23m state</div> <div style="border: 1px solid green; padding: 2px;">\$1m federal</div> <div style="border: 1px solid orange; padding: 2px;">\$4m other</div> </div>		\$28m	317	

1. Personal services

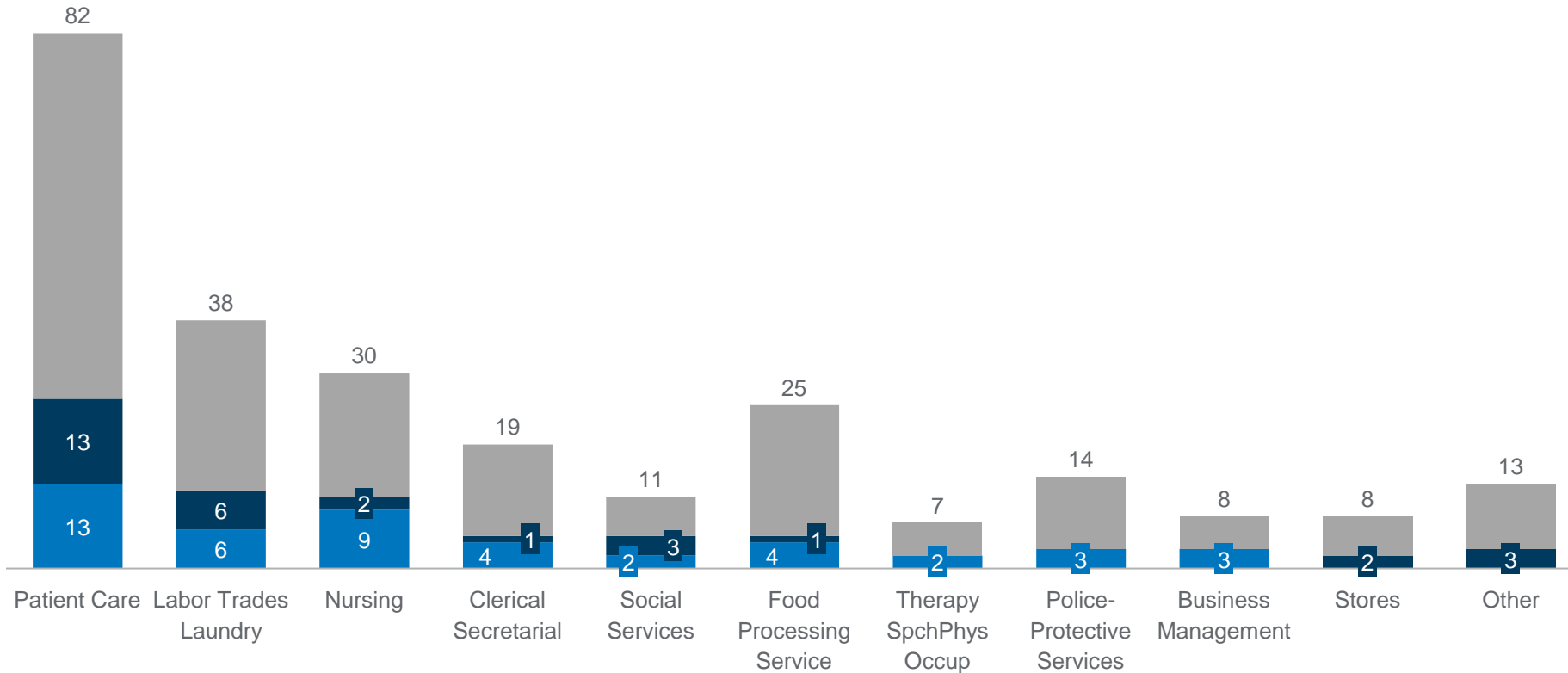
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DVA | Large number of medical staff eligible for retirement



79
Total Eligible



Normal Ret./ Total HC



Early Ret./ Total HC



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database, BCG analysis

DVA | Primary retirement surge risks



Retirement of skilled healthcare workers leads to loss of institutional knowledge

- 50% of personnel dedicated to a skilled healthcare facility position eligible for retirement
- Positions are tough to re-fill due to level of expertise threatening service continuity for veterans



Difficult-to-recruit social services capabilities facing retirement risk

- E.g., 50% of the social services staff eligible for retirement
- Potential loss of service continuity



COVID-19 creates persistent challenges for care delivery and potential employee burnout

- Loss of medical professional such as nurses presents unique risk
- Potential to increase reliance on supplemental pool staff with chance of contracting virus, cascading damages of overtime and expenses



Lack of technology support to achieve operational objectives

- Risk of clerical staff retiring
- Do not have an electronic payment platform necessary to sustain continuity with lack of manual processing support



Department of Veterans Affairs | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Contract out convalescent care operations	Cross-agency	<ul style="list-style-type: none"> Engage a nursing provider to operate veterans convalescent care operations, following model in other states 	H Potential savings of \$4-5m based on benchmarks from other states, but would incur meaningful transition cost
Implementation of digital health services	Cross-agency	<ul style="list-style-type: none"> Improve registrations and claims filings to improve service to veterans and cut down time and resources needed to process submissions 	M Decreases number of manual filing processes required for veterans' access to benefits, decreasing number of clerical staff needed
Increase census of nursing homes	Veterans Health Care Services	<ul style="list-style-type: none"> Ensure right staffing and types of care to best aid veteran patients and improve overall service quality 	L

H Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)

Appendix

Full list of recommendations by agency

Identified opportunities by agency (1 of 10)

Agency	✓ Opportunity	Description
ADS	<input type="checkbox"/> Consolidate ILP, HIS and CHSP within ADS	Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs
Cross-agency	<input type="checkbox"/> Develop common grant platform	Digitize and streamline grant-making processes across agencies via a common platform in order to reduce administrative costs, increase agency employee capacity, and simplify provider interfaces
	<input type="checkbox"/> Streamline human service programs/functions	Consolidate or jointly administer programs housed in separate agencies that are providing similar services and/or directed towards common resident groups to simplify resident experience and reduce administrative costs
	<input type="checkbox"/> Improve manager value proposition and retention	Make becoming a manager in state workforce more attractive in order to better compete with private sector and encourage upward mobility
	<input type="checkbox"/> Manage overtime/absences	Reduce 1.5x overtime expenses by optimizing staffing and scheduling as well as reducing avoidable absenteeism
	<input type="checkbox"/> Manage workers comp expense	Reduce workers' compensation expenses by bringing benefits in-line with peer states, mitigating fraud, increasing safety and incentivizing return-to-work programs
	<input type="checkbox"/> Consolidate employment support administration	Consolidating the administration, procurement and oversight functions for employment supports and reducing overhead on contracted services
DAS	<input type="checkbox"/> Digitize performance management	HR documents, records, and workflows to be automated via People-Doc (HR software) subscription
	<input type="checkbox"/> Digitize account/lien notices	Relevant documentation is sent via certified mail or fax due to email security concerns, resulting in only ~20% of potential liens being processed
	<input type="checkbox"/> Digitize invoice processing and Purchasing Card receipts	Invoice and P-card receipt processing currently requires heavy manual entry from associates, accountants, and supervisors
	<input type="checkbox"/> Automate Probate Application processing	Probate Applications are received by mail and processed by Technicians—required to be processed within 30 days of mailing date
	<input type="checkbox"/> Automate Workers' Compensation calculations and audits	Remove manual processes in calculating WC payments
	<input type="checkbox"/> Streamline payroll review of completeness	Majority of payroll process already digitized—exception is chasing down employees who haven't submitted timesheets
	<input type="checkbox"/> Automate check processing	Checks currently received via mail and entered in multiple systems, often being "touched" 4 or more times

Identified opportunities by agency (2 of 10)

Agency	✓ Opportunity	Description
DAS/cross agency	<input type="checkbox"/> Common payment platform	Digitize document management via a common platform across agencies and standardize payment processes state-wide (e.g., acceptance of credit cards)
	<input type="checkbox"/> Common document management platform	Collection of initiatives to roll out common document management/signature collection software across agencies
	<input type="checkbox"/> Automate Affirmative Action reporting	Automating data pull from personnel systems to accelerate the creation of agency-level AA reports
	<input type="checkbox"/> Centralize business management (incl. AR/AP)	Centralize various business management functions from across agencies into DAS, including AR/AP processing
	<input type="checkbox"/> Streamline hiring process	Reduce time needed to obtain hiring approvals, identify top clients, interview candidates and onboarding new hires
	<input type="checkbox"/> Increase office co-location	Share office space between multiple departments to save on office costs
	<input type="checkbox"/> Consolidate specialized assets	Manage non-office real estate (e.g., barracks, garages, laboratories) in a cross-government
DCF	<input type="checkbox"/> Contract facility maintenance	Share facility maintenance operations across all state buildings
	<input type="checkbox"/> Reduce incorrect reports of abuse	Improving community training and resources to equip reporters (e.g. teachers) to better identify potentially abusive situations could reduce time/resources deployed to investigate "false alarms" and increase case worker capacity
DCP	<input type="checkbox"/> Automate cross-agency referral system	Cross-agency systems would help case workers better understand opportunities for referrals and streamline process, creating additional capacity
	<input type="checkbox"/> Expand common professional credentialing platform	Expand credentialing and enforcement resourcing to take on more activity. Credentialing duplication across the state which would be better housed at DCP
	<input type="checkbox"/> De-credential low-risk professions	Identify creative ways to minimize industry resistance for de-credentialing initiatives
DDS	<input type="checkbox"/> Strategically target inspection activity	Target inspections based on likelihood of non-compliance pushing against legislative barriers
	<input type="checkbox"/> Expand non-profits for group homes	Outsource operation of DDS-run group homes to lower-cost non-profit providers
	<input type="checkbox"/> Implement state-wide background check system for DDS hiring	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
	<input type="checkbox"/> Implement online portal for Individual Service Plan	12k+ Plans a year are developed in conjunction with service providers and with input from the individual and guardian, requiring signed approvals
	<input type="checkbox"/> Implement online service eligibility application	Eligibility applications received in paper and scanned into FileBound scanning system (avg. 750/year)

Identified opportunities by agency (3 of 10)

Agency	✓ Opportunity	Description
DDS	<input type="checkbox"/> Automate DDS payment/payment tracking system	Automated payment and payment tracking system would reduce or eliminate manual process work for agency staff while allowing provider business owners to monitor and track as well as report on payments from state
	<input type="checkbox"/> Digitize cross-agency contact information maintenance	Case Managers review contact information annually
DECD	<input type="checkbox"/> Cut low-ROI film/tax programs	Eliminate tax credit programs with low return on investment
	<input type="checkbox"/> Expand DECD contracting to AdvanceCT	Mitigate backfilling needs (48% eligible for retirement) by outsourcing activities to non-profits, notably AdvanceCT
	<input type="checkbox"/> Right-size tourism staff	14 FTEs on Tourism and Brand program while utilizing 2 external agencies indicates potential to downsize slightly
DEEP	<input type="checkbox"/> Combine asset maintenance functions	Opportunity for increased cross-agency coordination of maintenance of land assets
	<input type="checkbox"/> Migrate pesticide licensing to ELMS eLicensing system	8-month project expected to go live by EoY 2020 for 7k licenses/year
	<input type="checkbox"/> Enhance and expand e-permitting via EZ File	E-permitting would automate quality control for customers as well, saving effort for both state and customers and improving customer experience by reducing need for re-work on improperly filled-out forms
	<input type="checkbox"/> Further automate/digitize municipal grant process	50 projects currently under management; existing contract with DocuSign to streamline signature process
	<input type="checkbox"/> Cross-functional inspection platform	Increase cross-training and consolidate inspections across cluster, including a technology-enabled platform flagging inspection status
	<input type="checkbox"/> Increase use of public/private partnerships	Increase adoption of partnerships as well as outsourcing additional services for land asset maintenance
	<input type="checkbox"/> Generalize environmental permitting requirements	Move permits from customized to general and utilization of third-party services by growing legal team to write regulations, compliance, and implement action
	<input type="checkbox"/> Reprioritize DEEP service activities	Prioritize regulatory actions over enforcement for more efficient service continuity
	<input type="checkbox"/> Enhance customer usability for PURA interface	Improve customer interface of PURA systems and others to simplify processes and minimize reliance on service support staff
	<input type="checkbox"/> Digitize site case management	Implement Release Based approach to site remediation (activities that occur after a spill or other incident)
	<input type="checkbox"/> DEEP paper record digitization	Digitization of materials in progress—hazardous waste manifests already online, spill reports in progress (1.3M pages)
<input type="checkbox"/> Digitization/scanning of incoming DEEP mail	Would need to be compatible with general records digitization initiative to ensure proper sorting of incoming documents	

Identified opportunities by agency (4 of 10)

Agency	✓ Opportunity	Description
DESPP	<input type="checkbox"/> Lower CSP trooper target, civilianize admin	Decrease non-enforcement activities for state troopers and reach staffing target of 1,100 CSP
	<input type="checkbox"/> Deferred retirement option plan for state police	Leverage the Deferred Retirement Option Plan (DROP) to maintain CSP staffing while decreasing retirement costs
	<input type="checkbox"/> Streamline case reporting and review for Div Sci Svcs	Includes redaction and review of case discovery material, sample status queries, paperwork reconciliation, etc.
	<input type="checkbox"/> Implement grant management system at DEMHS	DEMHS oversees typically oversees 140 subgrants with number recently doubling due to supplemental funding, in addition to other programs
	<input type="checkbox"/> Digitize DESPP quality control activities	Includes inventory monitoring, reagent quality control, process review required by accreditation, instrument/equipment maintenance
	<input type="checkbox"/> Digitize officer and instructor certification processes and documents	Includes initial certification for new officers, recertification, cross-state certification
	<input type="checkbox"/> Automate basic training data entry, maintenance and planning/logistics	Significant manual data entry, with oversight required for 6 satellite academies
	<input type="checkbox"/> Fully digitize CLESP-related data for accreditation	Data storage inconsistent across agencies—some are digitized, others require hand searches of files
	<input type="checkbox"/> Transfer weight station duties to DMV	Both DMV and CSP work in conjunction to manage weigh stations; shift weigh station duties to managed solely by DMV
	<input type="checkbox"/> Privatize fingerprinting services	CSP manages fingerprinting services; privatize services to increase trooper capacity
	<input type="checkbox"/> Increase electronic payment acceptance for DESPP	Increase use of electronic payment methods to streamline back office support and improve customer experience
	<input type="checkbox"/> Eliminate MMA/boxing management	Limited trooper capacity to manage MMA/boxing events in the state; privatize management to increase trooper capacity
	<input type="checkbox"/> Centralize gasoline management for state fleet	DESPP and DOT track gasoline usage for fleet; have trooper vehicles use DOT gasoline to save money on tracking and reporting
	<input type="checkbox"/> Streamline payments for gun permits	Gun permits do not accept credit cards for purchases; integrate digital payment systems to improve customer experience and decrease fiscal duties
	<input type="checkbox"/> Automate certification applications and renewals	Certification applications and renewals are currently a manual process; automate processes to increase staff capacity and improve customer experience
<input type="checkbox"/> Automate basic training reports	Profile form entries are currently a manual process; automate to increase staff capacity and standardize reporting among recruits	

Identified opportunities by agency (5 of 10)

Agency	✓ Opportunity	Description
DMHAS	<input type="checkbox"/> Digitize DMHAS patient record	Implement an Electronic Health Record (EHR) to streamline and standardize data capture and operational processes across DMHAS-operated facilities, increasing employee capacity and reducing administrative and operational costs
	<input type="checkbox"/> Expand non-profits for LMHAS	Outsource operation of DMHAS-run LMHAS to lower-cost non-profit providers
	<input type="checkbox"/> Implement state-wide background check system for DMHAS hiring	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
	<input type="checkbox"/> Automate DMHAS shift staffing via KRONOS	Implementing KRONOS would increase facility worker capacity by reducing manual effort currently required to organize staffing
DMV	<input type="checkbox"/> Digitize DMV transactions	Enhance ability for customers to pre-upload documents, reducing failed transactions, cutting transaction times and accelerating back-office digitization efforts
	<input type="checkbox"/> Clear DMV backlog	Completing lodged transactions to realize revenue and meet resident needs
	<input type="checkbox"/> Automate/digitize DMV documentation	Implement chatbots/voicebots to answer questions and reduce call-volume—seek software cost-sharing with other resident-facing agencies
	<input type="checkbox"/> Automate Ignition Interlock Device (IID) removal authorization	Automated notice to customer and IID vendor that IID requirement is complete would free analysts to do other work
	<input type="checkbox"/> Automate Divers History Requests	Typically requires multiple examiners
	<input type="checkbox"/> Fully digitize registration renewals	~85% of renewals conducted through mail-in lockbox system or online—remaining 15 % will visit branch
	<input type="checkbox"/> Digitize billing process	Billing process currently manual and includes: sending invoice letters to customers, manual QuickBooks tracking, processing flags/restrictions on customer accounts, collection enforcement actions, and cashiering payments
	<input type="checkbox"/> Automate DMV call centre resident support where feasible	~45 calls received daily
	<input type="checkbox"/> Fully automate customer refund request processing	Requests received from customers, branches, and contact centre (email)
	<input type="checkbox"/> Digitize title duplications	Process currently requires manual intervention
	<input type="checkbox"/> Registration duplications	DMV's online system can already service this transaction
	<input type="checkbox"/> Streamline Medical Reporting schedule	Single process with single notice would replace 3 separate processes (establishing due date, notifying driver, and suspending for non-compliance)
	<input type="checkbox"/> Implement portal for medical professionals to complete DMV medical reports	Online form would force medical professionals to complete and answer all required sections/questions, eliminating incomplete/unreadable forms that need to be handled multiple times

Identified opportunities by agency (6 of 10)

Agency	✓ Opportunity	Description
DMV	<input type="checkbox"/> Index DMV fees to inflation	Several states now index fees to inflation by statute (CA, NC)
	<input type="checkbox"/> Digitize boat registration renewals	DMV has previously worked on a venture with CT Dealers and Marine Trade Assoc to allow renewals online using Dealer Online System
	<input type="checkbox"/> Implement Web Pay for Passenger Insurance Compliance	Currently must be done on other systems
	<input type="checkbox"/> Boat cancellations	Multiple employees may be required depending on season
	<input type="checkbox"/> New DMV revenue sources	Require safety inspections, performed by dealerships, assess fee for fuel-efficient vehicles to offset gas tax (28 of 50 states now implement EV fees of \$50-250), monetize opt-in resident database
	<input type="checkbox"/> Further digitize new auto registrations	Online dealers already perform ~30% of new registrations; DMV recently deployed Out of State Dealer Registration and Pre Registration portals
	<input type="checkbox"/> Further digitize registration cancellation	DMV already allows online cancellation if plate has not expired; seeking to fully digitize
	<input type="checkbox"/> Automate DMV check payment processing for services	In-person staff currently required to receive checks by mail, apply payments to customer accounts, and prepare bank deposits
	<input type="checkbox"/> Complete digitization of Drivers' License renewals	Currently being digitized via Salesforce project
	<input type="checkbox"/> Digitize Driver's License duplicates	DMV seeking to digitize via Salesforce project as well—duplicates currently processed in-person
DoAG	<input type="checkbox"/> Digitize DMV address updates	Current process requires manual intervention
	<input type="checkbox"/> Dog license requirement	Digital registration platform would streamline manual processes and create a new revenue stream for the state
DoB	<input type="checkbox"/> Recognize other states' licenses	Increase acceptance of out of state licenses to minimize banking applications to do business in Connecticut
	<input type="checkbox"/> Migrate to Case Point from Concordance	Eliminate personnel processing time and ensure document accuracy in preparation of legal cases
	<input type="checkbox"/> Pilot State Examination Systems	Provide solution for document management, scheduling, billing and processing through piloting of examination program and electronic module
DoC	<input type="checkbox"/> Increase banking examination coordination	Coordinate examinations with both state and federal regulators to minimize regulatory burden and cost
	<input type="checkbox"/> Return corrections staffing to previous level	Accept CO retirement to return ratio of CO/inmates to pre-Covid levels
	<input type="checkbox"/> Match prison footprint to population	Divest prisons with high operating costs to match facility footprint to existing prison population
	<input type="checkbox"/> Demand response for utilities	Utilize existing facility generators to participate and receive payment in demand response programs.
	<input type="checkbox"/> Increase EAU staffing	Increase EAU staffing and personnel to provide timely and responsive interventions and peers support services.

Identified opportunities by agency (7 of 10)

Agency	✓ Opportunity	Description
DoC	<input type="checkbox"/> Better use trades reserve	Hire a reserve of tradespeople to draw from as critical staff retire in order to maintain essential services
	<input type="checkbox"/> Improve training for peer counsellors	Enhance training opportunities for peer counsellors specific to LE/correctional professionals, thereby improving efficacy of recidivism programs
	<input type="checkbox"/> Expand videoconferencing infrastructure	Expand use of remote technology will reduce the need for inmate transportation and will decrease costs by reducing vehicle use and staff resources required
	<input type="checkbox"/> Upgrade inmate recordkeeping	Upgrade system for maintaining inmate records to save time and cost by reducing FOI complaints
	<input type="checkbox"/> Electronic invoicing for DoC	Automate accounts payable function through electronic invoicing
	<input type="checkbox"/> Direct deposit for DoC	Require state employees to have direct deposit to receive pay and petty cash payments
DoH	<input type="checkbox"/> Contract non-profits/CHFA for further responsibilities	Coordinate with non-profits, community advocates and quasi-public organizations to shift tasks away from DOH; while CHFA may be capacity-constrained, State should incentivize additional outsourcing of compliance technology to CHFA where possible
DoL	<input type="checkbox"/> Complete unemployment modernization	Finalize deployment of new UI platform, allowed for smaller long-term staffing level
	<input type="checkbox"/> Automate licensing reviews	Decrease FTE headcount through automation of licensing reviews across regulatory cluster
	<input type="checkbox"/> Prioritize labour regulatory activity based on likelihood of noncompliance	Targeted regulatory risk assessment approach; de-regulate business climate exp. recognizing out of state licenses
	<input type="checkbox"/> Integrate labour and social service client information	Better integrate Social Service Agencies and DOL through consolidated client information system and similar data fields
	<input type="checkbox"/> Consolidate workforce registry systems	Combine workforce development services into a single platform readily accessible to any citizen utilizing government service
	<input type="checkbox"/> Invest in employment data system improvement	Establish single database of employment information tracking statistics and trends across programs as a data integration hub
	<input type="checkbox"/> Refine targeting of workforce training programs	Identify overlap in training services across programs to realize cost reduction opportunities (Skill-Up CT, ETC, etc.)
	<input type="checkbox"/> Modernize initial labour claims processing	Customer service representatives currently review claims for completeness and transfer from Salesforce Standard Claim Queue to TICS (Telephone Initial Claims System) and IBM (processing, payment, etc.)
	<input type="checkbox"/> Implement DocuSign for UI Reemployment Services and Eligibility Assessment	Would reduce time spent on intake processes and allow for more efficient direct service provision
DoT	<input type="checkbox"/> New tools for transport inspections and projects	Modernize DOT equipment to help extend durability of infrastructure, reduce costs and prioritize highest priority projects

Identified opportunities by agency (8 of 10)

Agency	✓ Opportunity	Description
DoT	<input type="checkbox"/> Bid out public transit service operations	Competitively bid rail contracts to reduce costs and improve performance
	<input type="checkbox"/> Review transport structure and maintenance contracting	Outsource maintenance work to vendors based on geographic regions to reduce costs
	<input type="checkbox"/> Align rail/bus service to resident needs	Reduce transit service levels in-line with declines in ridership and replace rail with shuttles where more cost-effective
	<input type="checkbox"/> New non-service transportation revenues	Tap new recurring and non-recurring revenue sources to increase cash flows while simultaneously achieving broader policy goals
	<input type="checkbox"/> 10% reduction in garage footprint	Sell off 10% of existing footprint (currently have at least 25 garages totaling 294k sq. ft.)
	<input type="checkbox"/> Reduce staff fleet size by 25%	Cut DOT fleet from 100-125 staff vehicles with no standardization (\$11M+ cost p.a.)
	<input type="checkbox"/> Reduce restraints on PPP opportunities and max fed funding	Leads operations for Availability Payments to reduce near-term capital
	<input type="checkbox"/> Eliminate Welcome Center	Welcome Center is underutilized and not core to DoT mission
	<input type="checkbox"/> Consolidate MPOs	Consolidate MPOs to realize cost savings and planning efficiencies
	DPH	<input type="checkbox"/> Implement state-wide background check system for hiring
DRS	<input type="checkbox"/> Complete tax digitization program	Improve ability of residents to conduct full lifecycle of tax filings online (e.g., virtual assistance, complete filings, submit payments)
	<input type="checkbox"/> Improve tax compliance	Increase revenue from existing tax base by improving audit and collections, as well as reducing fraudulent behaviour
	<input type="checkbox"/> Cross-train Revenue and Tax Examiners to reduce FTE needs	Expand knowledge sharing initiative to auditors to ensure complex audit capabilities are capably handled by remaining staff post-retirement surge
	<input type="checkbox"/> Close four walk-in centres	Enhanced online support functionality to reduce need for in-person interactions (i.e., webinars, chatbots, live virtual help sessions)
	<input type="checkbox"/> Consolidate print and mail operations	Multiple agencies have their own print and mail centres (DRS largest); merge or outsource
	<input type="checkbox"/> Transfer non-related tax activities to other agencies	Transfer responsibility for plastic bottle and bag fees to DEEP; transfer licensing of tax preparers to DCP
DSS	<input type="checkbox"/> Near-term changes to Medicaid eligibility and benefits	Set of opportunities identified by DSS/OPM to realize savings for FY23 budget
	<input type="checkbox"/> Longer-term transition of Medicaid to value-based payments	TBC following end-to-end review of Medicaid payments

Identified opportunities by agency (9 of 10)

Agency	✓ Opportunity	Description
DSS	<input type="checkbox"/> Implement state-wide background check for DSS hires	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
	<input type="checkbox"/> Reduce incorrect reports of abuse to DSS	Improve community training and resources and screening processes to reduce time/resources deployed to investigate “false alarms” for elder abuse, domestic violence, etc. would increase staff capacity and reduce administrative costs
	<input type="checkbox"/> Convert case visit documentation system to Salesforce	DSS currently utilizes an internal, homegrown case visit system; conversion to a cloud-based Salesforce platform could streamline processes for social workers and improve data accessibility
	<input type="checkbox"/> Further automate DSS call centres	DSS could expand use of client chat and voice functions for call centers to properly route clients, particularly during high-volume times, and further implement bots to process document changes.
	<input type="checkbox"/> Further automate eligibility document approvals	When eligibility documents are scanned into ImpaCT, approval is still required by an eligibility worker—this process could be consolidated to automate approval at the time of scan or otherwise coded such that certain documents not requiring further review (e.g., simple address updates) are automatically approved.
DVA	<input type="checkbox"/> Contract veterans convalescent care operations	Privatize operations of veterans’ convalescent care facility to reduce costs while maintaining service quality
	<input type="checkbox"/> Digitize DVA registrations and claims filings	Improve registrations and claims filings to improve service to veterans and cut down time and resources needed to process submissions
	<input type="checkbox"/> Increase census of nursing homes	Ensure right staffing and types of care to best aid veteran patients and improve overall service quality
ID	<input type="checkbox"/> Insurance joins e-licensing platform	Opportunity to join established CT e-licensing platform to streamline licensing services
	<input type="checkbox"/> Recognize other state’s insurance licenses	Increase acceptance of out of state licenses to minimize insurer applications to do business in Connecticut
	<input type="checkbox"/> Further prioritize insurance regulatory activity based on likelihood of noncompliance	Targeted regulatory risk assessment approach; de-regulate business climate exp. Recognizing out of state licenses
Military	<input type="checkbox"/> Consolidate National Guard facilities	Consolidate facilities used by National Guards with other state departments (e.g., state police)
	<input type="checkbox"/> Centralize facility management	State facilities are managed by respective departments; centralize and privatize facilities management to increase state staff capacity
	<input type="checkbox"/> Rationalize state vehicles and equipment	Decrease state’s vehicle fleet and increase use of GSA, MTOE, and CTA equipment
	<input type="checkbox"/> Centralize consumable purchase	Centralize consumable purchases (e.g. office supplies) to save on costs
	<input type="checkbox"/> Firefighter conversion	ANG Firefighter conversion to Title 5. Federal initiative; convert federally reimbursed state employees to federal T5 employees

Identified opportunities by agency (10 of 10)

Agency	✓ Opportunity	Description
OEC	<input type="checkbox"/> Transition to quality-rating-based regulatory system for childcare	Shifting to 25% of programs being visited every 3 years, 15% being visited every two years, and 60% being visited every year and reassigning staff accordingly could result in ~10% licensing staff savings
	<input type="checkbox"/> Utilize Citizen One Stop for resident call support	Receiving resident calls estimated to result in ~30% reduction in call volume to United Way and simplify system for residents
	<input type="checkbox"/> Utilize mobile inspections	Replace current paper forms and reduce travel time for licensors
	<input type="checkbox"/> Add live fingerprint scans for background checks	Fingerprint recording is currently a highly manual process; reduce need to mail cards, re-process unusable submissions, etc.
OHE	<input type="checkbox"/> Streamline online grant approval process	Performed by administrative staff; high retirement rate expected
	<input type="checkbox"/> Improve Access database	Existing database does not provide functions required by administrative staff; improve database to increase staff capacity
OPM	<input type="checkbox"/> Automate grant reporting	Grant reporting performed by several divisions within OPM; centralizing could create standard forms and reduce administrative effort
OSC	<input type="checkbox"/> Centralize payroll processes	Centralize payroll functions from agencies to OSC
SDE	<input type="checkbox"/> Optimize CTEC admin and teacher levels	Accept CTEC teacher retirements and centralize CTEC admin for each state school
	<input type="checkbox"/> Streamline "purple sheet" document review process	Administrative staff process large numbers of documents; high retirement rate expected
	<input type="checkbox"/> Continue automation of certification process	Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill
	<input type="checkbox"/> Standardize contracts and streamline online grant approval	Performed by administrative staff; high retirement rate expected
	<input type="checkbox"/> Auto-refill CTEC positions	Acquire OPM approval for auto-refilling specific CTEC positions (e.g., coaches, nurses, kitchen staff)
	<input type="checkbox"/> Decrease telework paperwork	Decrease the telework paperwork consists of multiple pages that are required to be filed in individual personnel files.
	<input type="checkbox"/> Automate Teacher Negotiation Act (TNA) supervision	Increases capacity of Educational Consultants, potentially reducing need for backfill
	<input type="checkbox"/> Digitize HR forms and integrate with CORE	Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill
	<input type="checkbox"/> Streamline awards scoring and program monitoring	Increases capacity of Educational Consultants, potentially reducing need for backfill
	<input type="checkbox"/> Automate Alliance District data monitoring	Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill capacity

Connecticut

A stylized graphic of the Connecticut state flag is positioned behind the word 'Connecticut'. It features a white star above a shield with three horizontal stripes, all in white against the blue background.