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

BCG

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

[1]Cliff Retirements adding Efficiency, Accountability, Technology and Equity to State government

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 under-served 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.

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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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

An incentive program in 2009 encouraged employees to retire at higher rates

Regular retirement / full benefits

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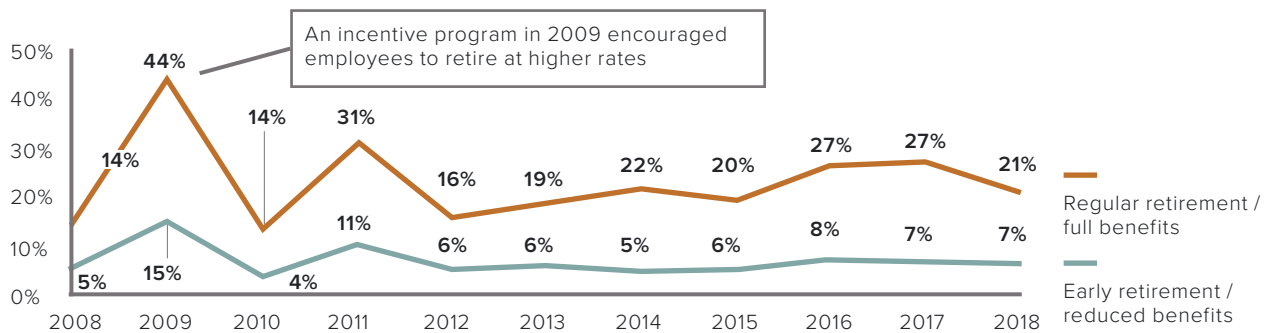
Leading up to 2022, the turnover rate may increase because a greater than usual number of employees will be retirement-eligible. Moreover, more retirement-eligible employees are expected to choose to retire.

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

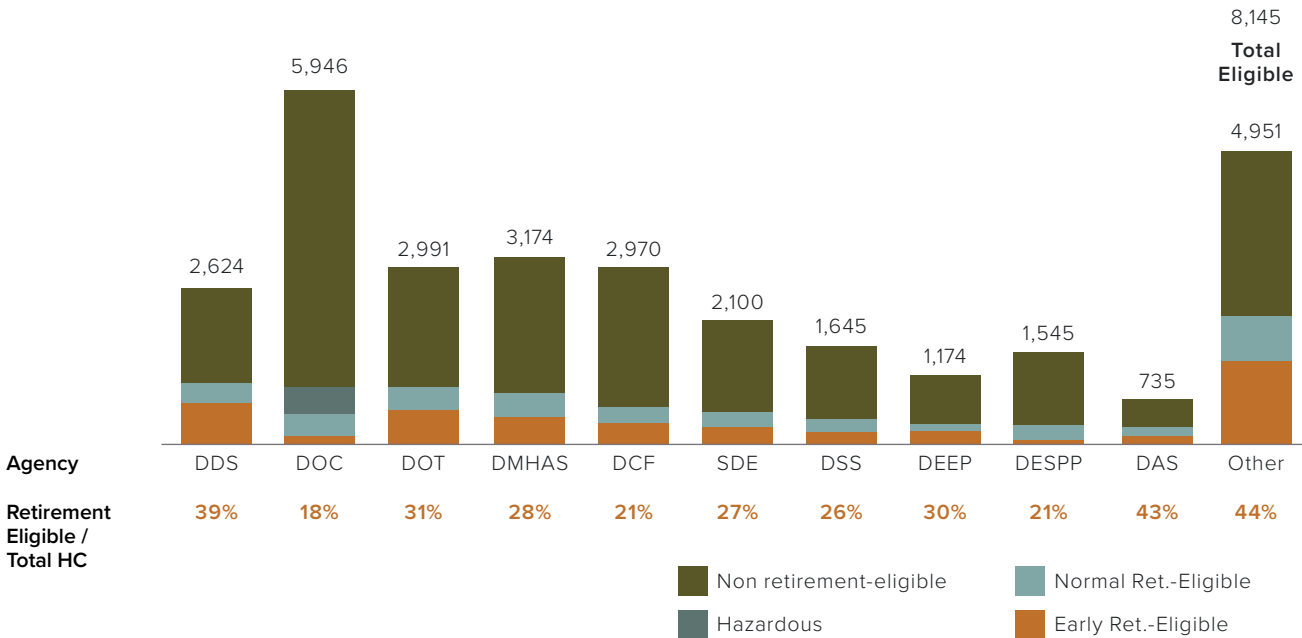More employees are retirement-eligible because the average age (currently 47) of the State's workforce is rising. The lengthy tenure of current state government employees means that 8,145 state employees, or about 27% of the workforce, are expected to be retirement-eligible in the next 2 years (by July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

Agency	DDS	DOC	DOT	DMHAS	DCF	SDE	DSS	DEEP	DESPP	DAS	Other
	2,624	5,946	2,991	3,174	2,970	2,100	1,645	1,174	1,545	735	4,951
Retirement Eligible / Total HC	39%	18%	31%	28%	21%	27%	26%	30%	21%	43%	44%

8,145 Total Eligible

Legend:
- Non retirement-eligible
- Hazardous
- Normal Ret.-Eligible
- Early Ret.-Eligible

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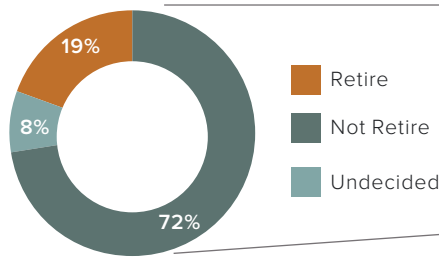Source: CT STARS database as of 1/5/2021

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).
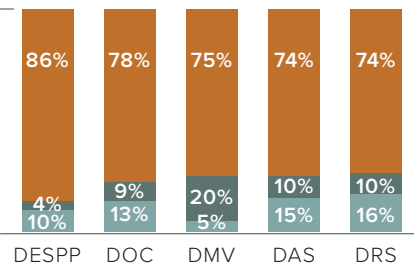
Several agencies saw significantly higher rates of retirement intention, including those in high-stress work environments (e.g., Department of Emergency Services and Public Protection [DESPP], Department of Corrections [DOC]) and those with significant resident-facing interactions (DMV, Department of 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 eligible[1]

Five agencies with the highest retirement intention[2]

- **Retire**
- **Not Retire**
- **Undecided**

	DESPP	DOC	DMV	DAS	DRS
Retire	86%	78%	75%	74%	74%
Not Retire	4%	9%	20%	10%	10%
Undecided	10%	13%	5%	15%	16%

50% Uptake among Early Retirement eligible

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

50% 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 benedifts 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
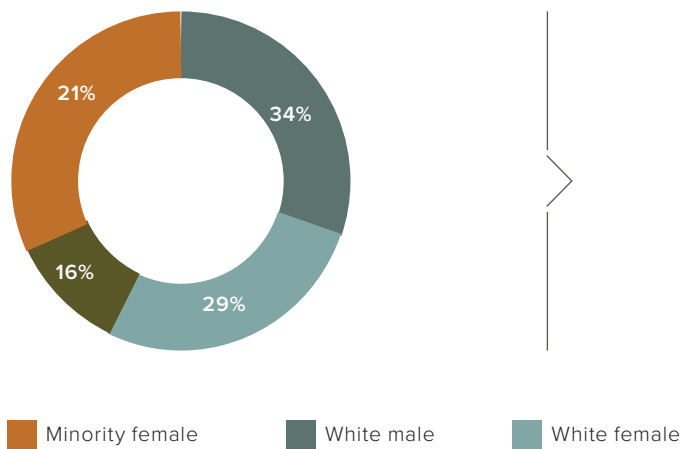
Potential representation by gender and ethnicity following retirement surge

- Minority female
- White male
- White female
- Minority male
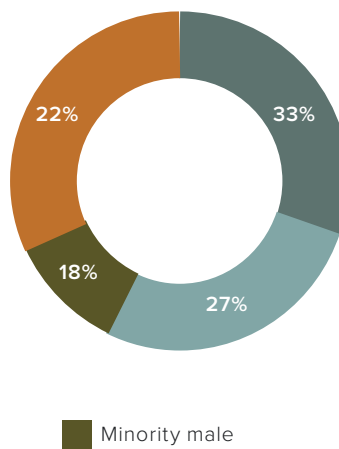
If all eligible employees were to retire in 2022, the overall classification of the State's workforce would be marginally affected: the future workforce would be 31% white males, 27% white females, 22% minority females, and 18% minority males. Although the impact is minimal, the State will potentially 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

Agency	White male	White female	Minority male	Minority female	White male	White female	Minority male	Minority female
Early Childhood	8%	59%	4%	29%	12%	52%	4%	32%
Children and Family	13%	36%	13%	38%	12%	35%	13%	40%
Social Services	14%	32%	13%	41%	13%	31%	13%	43%
Aging & Disability Srv	16%	53%	7%	25%	14%	56%	5%	24%
Developmental Services	16%	40%	14%	29%	14%	36%	17%	34%
Public Health	18%	46%	11%	24%	18%	47%	13%	22%
Mental Health /Addiction Srv	19%	32%	18%	32%	16%	30%	19%	33%
Veterans Affairs	21%	36%	12%	31%	22%	36%	12%	29%
Economic and Community Dev	24%	44%	9%	23%	26%	50%	4%	20%
Motor Vehicles	26%	29%	13%	32%	22%	26%	16%	36%
Labor	26%	31%	13%	30%	23%	27%	16%	34%
Policy and Management	30%	35%	11%	23%	28%	34%	14%	24%
Banking	31%	41%	11%	18%	30%	41%	10%	19%
Consumer Protection	31%	34%	9%	26%	28%	34%	11%	28%
Revenue Services	32%	31%	13%	24%	28%	31%	15%	26%
Admin Services	35%	36%	9%	21%	33%	34%	12%	22%
Agricultural Exp Station	36%	41%	16%	8%	27%	43%	19%	11%
Insurance	38%	29%	12%	20%	29%	30%	15%	26%
Education	40%	41%	8%	11%	40%	42%	8%	10%
Correction	41%	16%	28%	15%	41%	15%	29%	15%
Energy & Envir Prot	51%	34%	6%	9%	50%	35%	6%	8%
Military	58%	20%	15%	7%	56%	20%	17%	7%
Transportation	63%	13%	20%	5%	63%	11%	20%	5%
Emergency Svc Pub Protect	69%	18%	9%	5%	70%	16%	9%	4%

Legend: Minority female · White male · White female · Minority male

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).
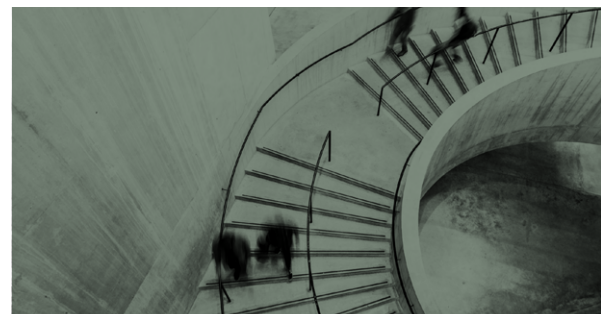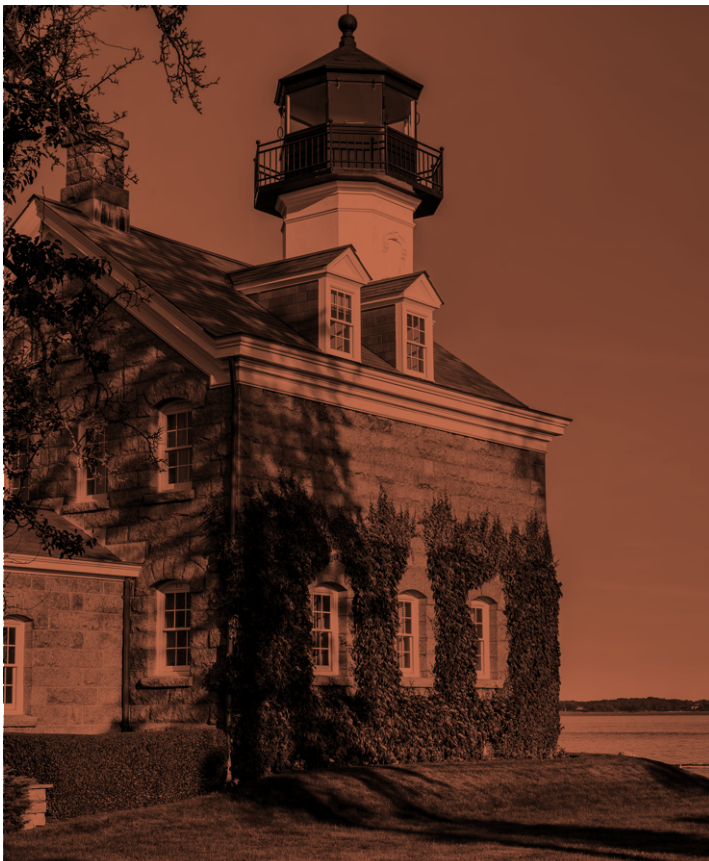
Challenges and Opportunities for Connecticut

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%)	• Minimum client/staff ratios required by DCF consent decree • Increased workload as a result of COVID	• Engage non-profits to provide state services
Secretaries, clerks, and administrators	All	506 (43%)	• Changes in skills required due to new technology	• 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%)	• Challenging work environment • Background check and training requirements	• 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%)	• Competition from the private sector for workers	• Use non-profits to deliver some elements of State healthcare or consultation services
Transportation engineers	CTDOT	279 (35%)	• Competition from the private sector for workers, particularly those with experience	• 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%)	• Specific vocational training required for some positions; teachers can only teach subjects for which they are qualified	• Increase class sizes to allow same number of students to be taught by fewer teachers
Transportation maintainers	CTDOT	240 (25%)	• Workforce shortages in some areas	• 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%)	• Challenging work environment	• Use non-profits to deliver some elements of state mental health services
Eligibility services workers	DSS, DCF, ADS	171 (18%)	• Changes in skills required for role due to new technology	• Implement cross-training across functions • Drive increased data-sharing across agencies
State Police troopers	DESPP	128 (14%)	• Background checks • Lengthy academy training required for new troopers	• Civilianize CSP administrative functions to lessen burden on troopers • Set police academy sizes to meet target trooper numbers

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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 civilizing 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**
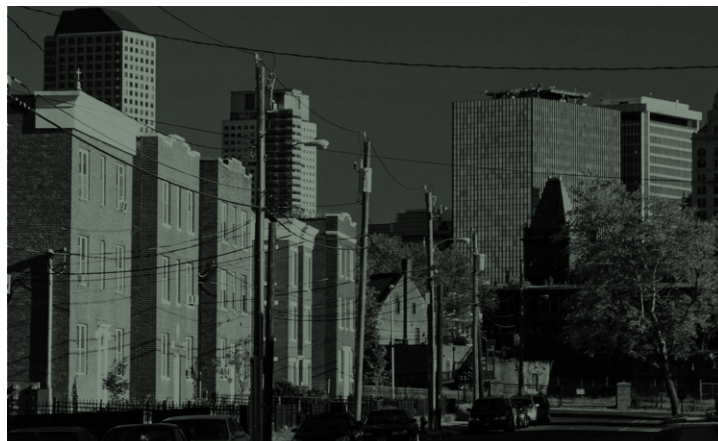
Streamline the Hiring Process

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

	Vacancy	Initial Clearance & Approvals			Candidate Identification		Selection	Clearance & Approvals		Offer, Background Checks and Onboarding		
Timeframe	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	1 week	Varies	Varies
Average Duration	4 weeks	1 week	4 weeks	1 week	1 week		6 weeks	4 weeks	4 weeks	2 days	4 weeks	4 weeks

TOTAL: 33+ weeks
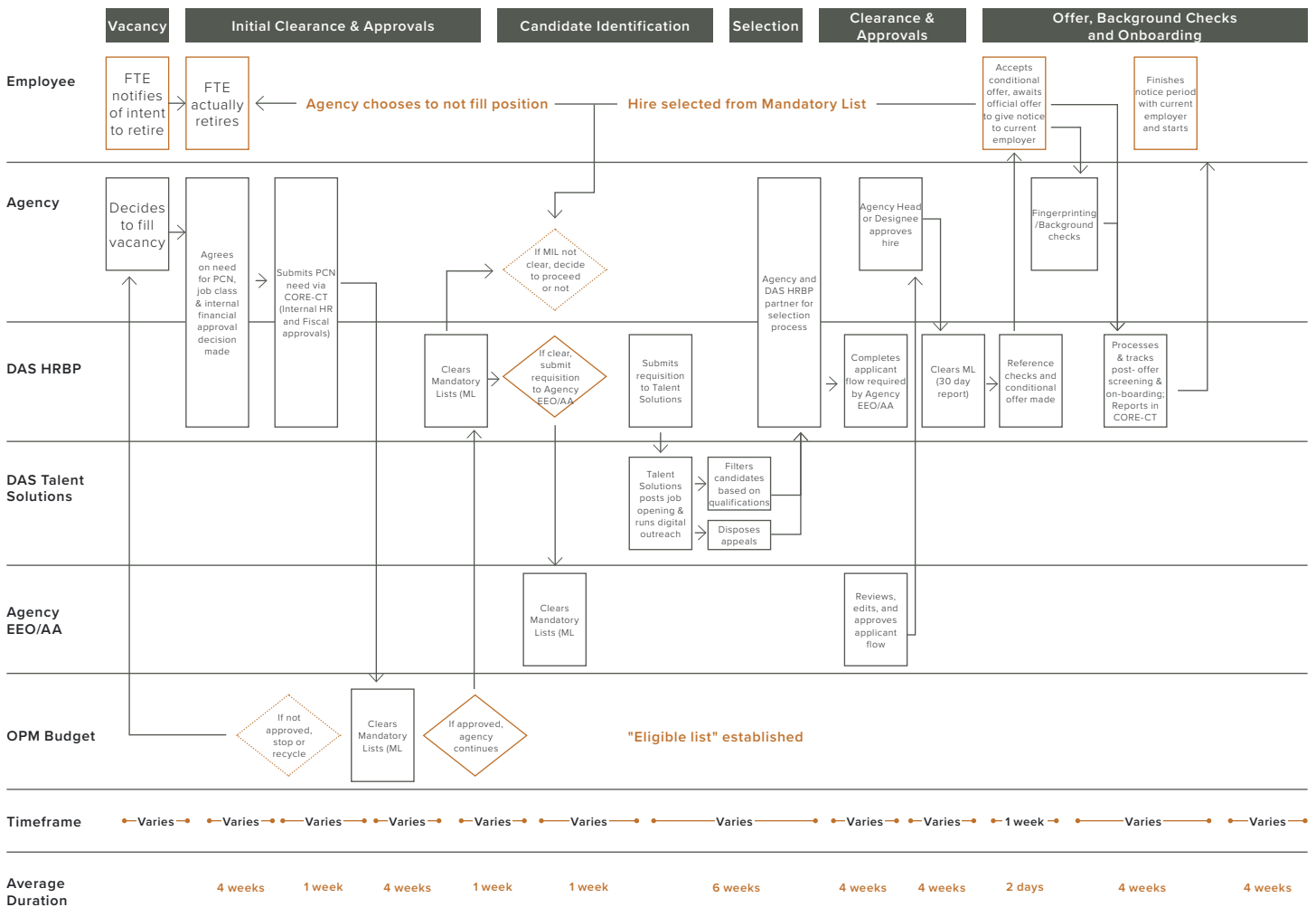
The length of the hiring process creates multiple challenges, including:

- 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 is 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.
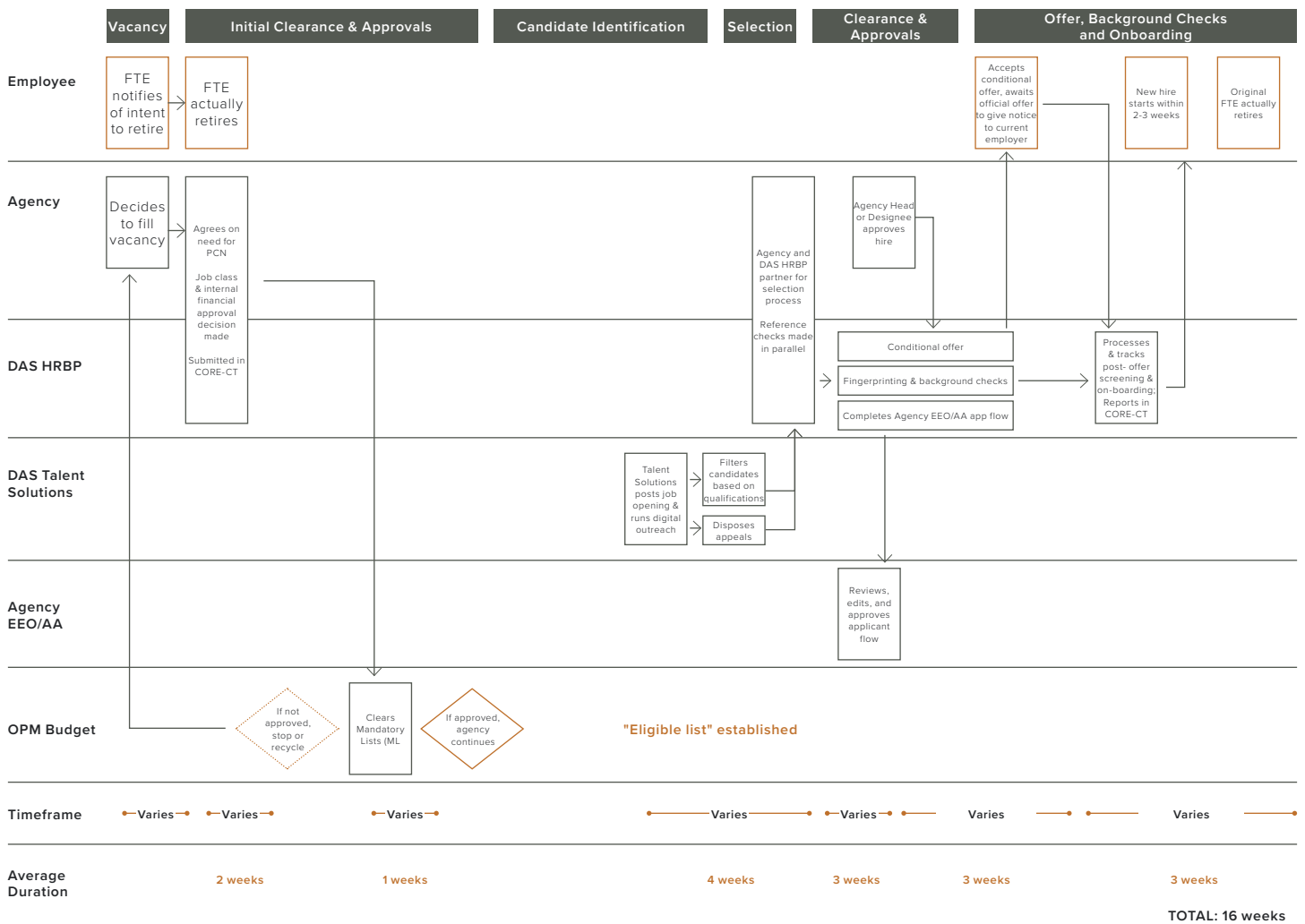
- Institute more stringent deterrents to retiring/ quitting on short-notice or at inconvenient times: While those who leave their jobs suddenly or at inappropriate times will receive a negative mark on their state employment file, nothing precludes agencies from re-hiring those employees. Likewise, employees 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

	Vacancy	Initial Clearance & Approvals	Candidate Identification	Selection	Clearance & Approvals	Offer, Background Checks and Onboarding
Employee	FTE notifies of intent to retire → FTE actually retires					Accepts conditional offer, awaits official offer to give notice to current employer → New hire starts within 2-3 weeks → Original FTE actually retires
Agency	Decides to fill vacancy	Agrees on need for PCN / Job class & internal financial approval decision made / Submitted in CORE-CT		Agency and DAS HRBP partner for selection process	Agency Head or Designee approves hire	
DAS HRBP				Reference checks made in parallel	Conditional offer / Fingerprinting & background checks / Completes Agency EEO/AA app flow	Processes & tracks post-offer screening & on-boarding; Reports in CORE-CT
DAS Talent Solutions			Talent Solutions posts job opening & runs digital outreach / Filters candidates based on qualifications / Disposes appeals			
Agency EEO/AA					Reviews, edits, and approves applicant flow	
OPM Budget		If not approved, stop or recycle / Clears Mandatory Lists (ML / If approved, agency continues	"Eligible list" established			
Timeframe	Varies / Varies	Varies		Varies	Varies	Varies	Varies
Average Duration	2 weeks	1 weeks		4 weeks	3 weeks	3 weeks	3 weeks

TOTAL: 16 weeks

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

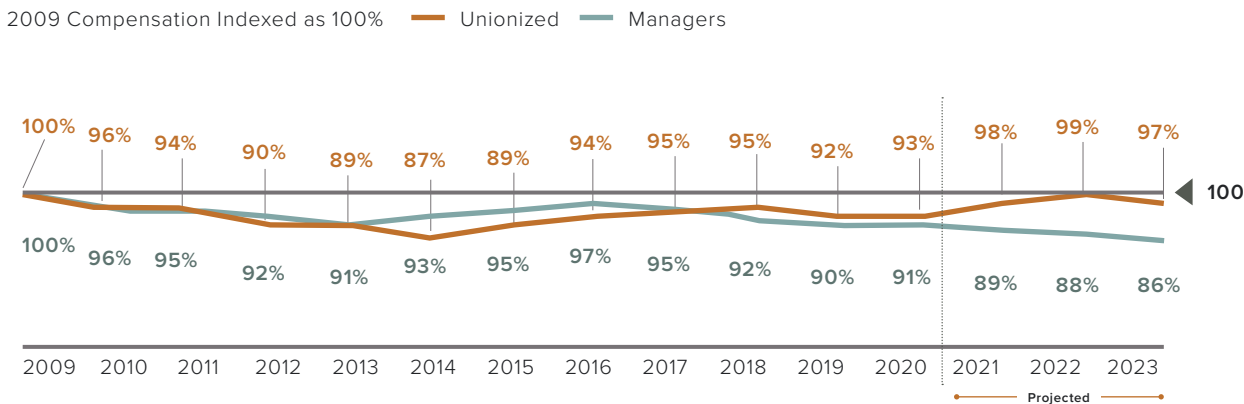| Effective base pay reductions	Reduced earning potential	More hours and stress	Less job security	Lack of ancillary benefits
Many managers have seen comp outpaced by inflation, while some earn less in base pay than bargaining level employees	Lack of overtime means loss of significant earnings upside	Increased hours and accountability without commensurate rewards	Lack of bargaining agreements means no protection from layoffs	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)

2009 Compensation Indexed as 100% ── Unionized ── Managers

Unionized (orange): 100% 96% 94% 90% 89% 87% 89% 94% 95% 95% 92% 93% 98% 99% 97%

Managers (green): 100% 96% 95% 92% 91% 93% 95% 97% 95% 92% 90% 91% 89% 88% 86%

100

Years: 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Projected

| 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 opportunties exist to improve managers' retention beyond pay alone

	Rationale	Possible actions	Additional considerations
Rewards	• Non-monetary rewards can remain with employees and remind them of their accomplishments and the recognition it earned	• 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)	• Regulatory limits on non-cash rewards
Recognition	• 69% of employees would work harder if they felt their efforts were better appreciated • 31% lower voluntary turnover at companies effective at driving employee engagement[1]	• 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	• Important to set attainable goals and acknowledge employees often
Intangibles	• 69% of employees would work harder if they felt their efforts were better appreciated • 31% lower voluntary turnover at companies effective at driving employee engagement[1]	• 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	• 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

| | Corrections
CT OT Spend = $80mm | Mental Health
CT OT Spend = $56mm | Developmental Services
CT OT Spend = $39mm | Emergency and
Public Protection
CT OT Spend = $29mm |

OT / Total Pay

Corrections	Mental Health	Developmental Services	Emergency and Public Protection
CT 18.0%	CT 19.4%	CT 20.9%	CT 19.5%
MA 11.1%	MA 8.5%	MA 5.3%	MA 16.0%
NY 9.9%	NY 10.7%	NY 12.8%	NY 8.3%

Est. Savings: **$7-9m** **$6-8m** **$4-8m** **$1-4m**
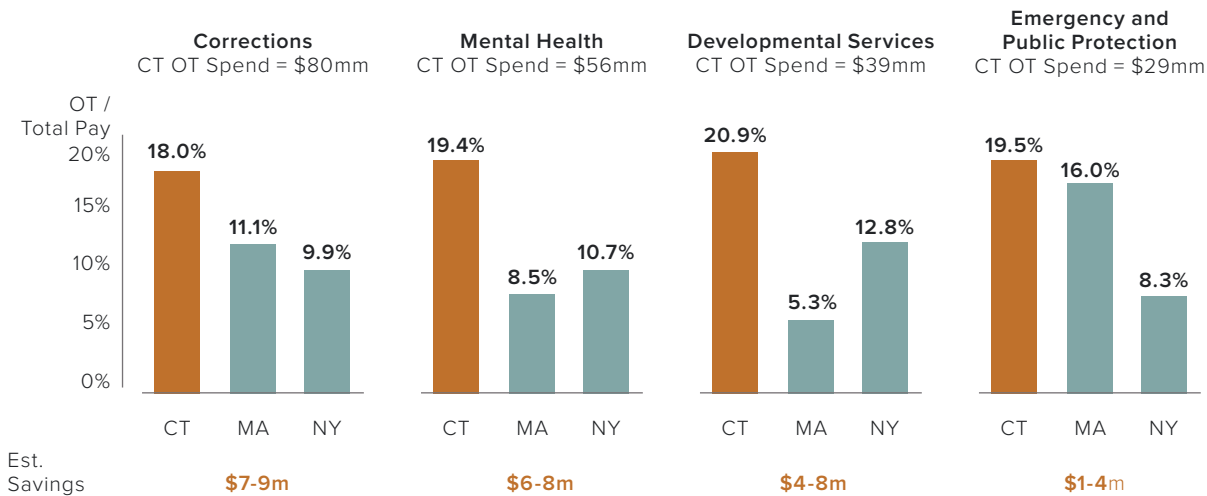
Not all OT is equal, nor is it all costly. First, OT costs can be straight-pay (standard wage rates), time-and-a-half (1.5x wages), double OT (2x wages) and, on rare occasions, more than double OT. In addition, OT is a valuable tool in handling unpredictable spikes in labor demand, where the alternative 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

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

FY20 W.C.
Expense ($m)

Total spending by disability type

Permanent Partial	$19m
Permanent Total	$3m
Temporary Partial	$17m
Temporary Total	$54m

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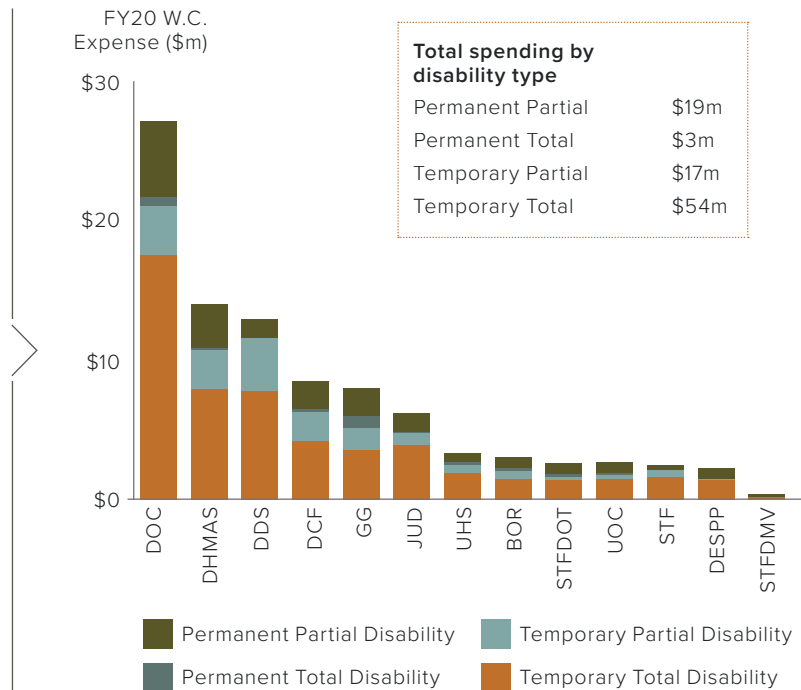
Given these more statutorily generous benefits, it is understandable that Connecticut has a higher frequency of claims than peer states that have similar weather, demographics, and nature of work. There are several changes the State can implement to reduce workers' compensation costs, including:

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

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

~$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
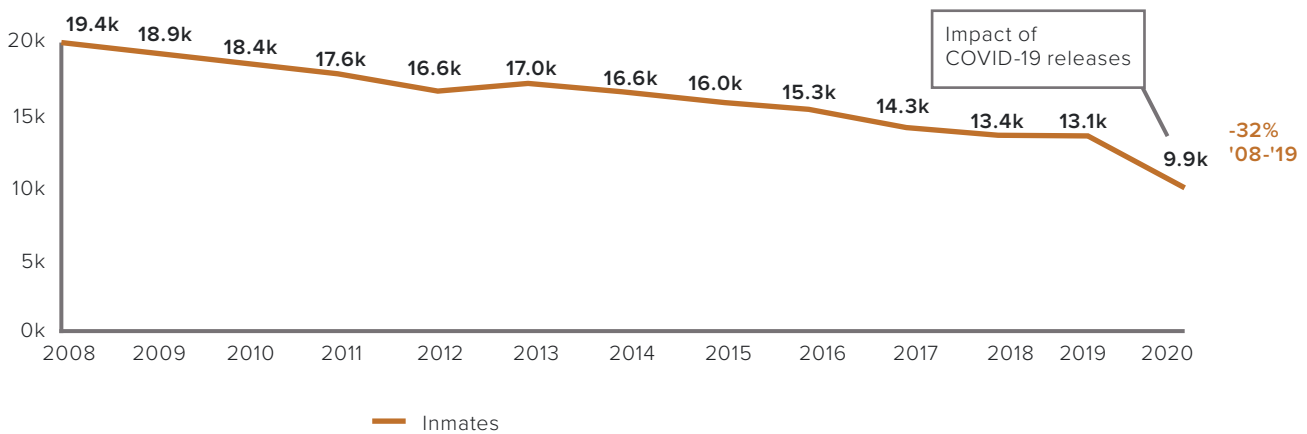
The agency has an inmate-to-correctional officer (CO) staffing ratio of 2.8 as of 2020 – it should be noted that this is not the same figure as the 2.8 cited in the exhibit above, which indicates the 2008 ratio of inmates to all staff, including those that are not correctional officers. The 2020 ratio 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

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 tropers 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

District	Students per Teacher
Hartford	16.3
Stratford	16.0
Ridgefield	14.3
Stamford	13.1
New Haven	12.7
CTEC (after retirements)	12.4
Manchester	11.5
CTEC (current)	11.3
Norwalk	11.2

Assumes all eligible teachers retire; to be refined based on survey
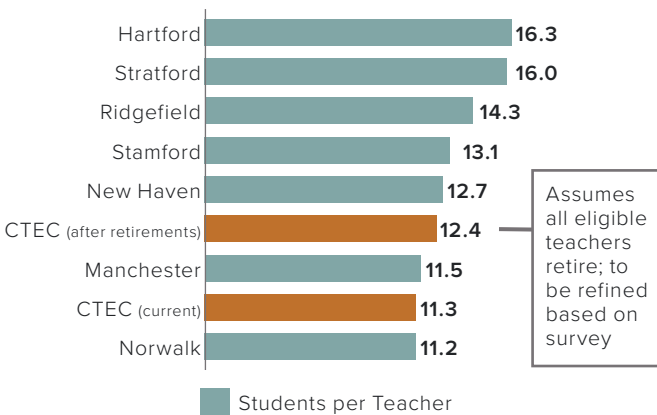
To accept instructor retirements without rehiring CTEC should consider sharing instructors

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

	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 abuse issues	People with illnesses (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	DMHAS	DDS	DSS, DPH, ADS	DSS, DDS, ADS, DCF	DMHAS, DDS	DMHAS	DMHAS	DMHAS		DPH
Interpersonal assistance (counseling, community involvement, etc.)	$2.0b	DCF, OEC, ADS, DPH	DSS, DMHAS, DDS, OEC, DPH, ADS	ADS	DMHAS	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	DMHAS	DMHAS	DPH, DMHAS	DCF, DSS	DCF, DPH, OEC, DSS, ADS
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, ADS, OEC, DPH	DCF, ADS, OEC, DPH	DCF, DPH, DSS, ADS	DSS, DPH, ADS	DSS, DDS, ADS, DPH	DCF, DPH, ADS	DCF, DPH, ADS	DCF, ADS	DCF, ADS	DSS, DCF, ADS, DPH, DDS, OEC
Licensing, credentialing, and documentation	$35m		DCF		DSS, ADS					DCF, DSS, DPH	DDS, DPH, DCF, DSS

Legend: ● DSS ● DMHAS ● DCF ● DPH ● DDS ● ADS ● OEC

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

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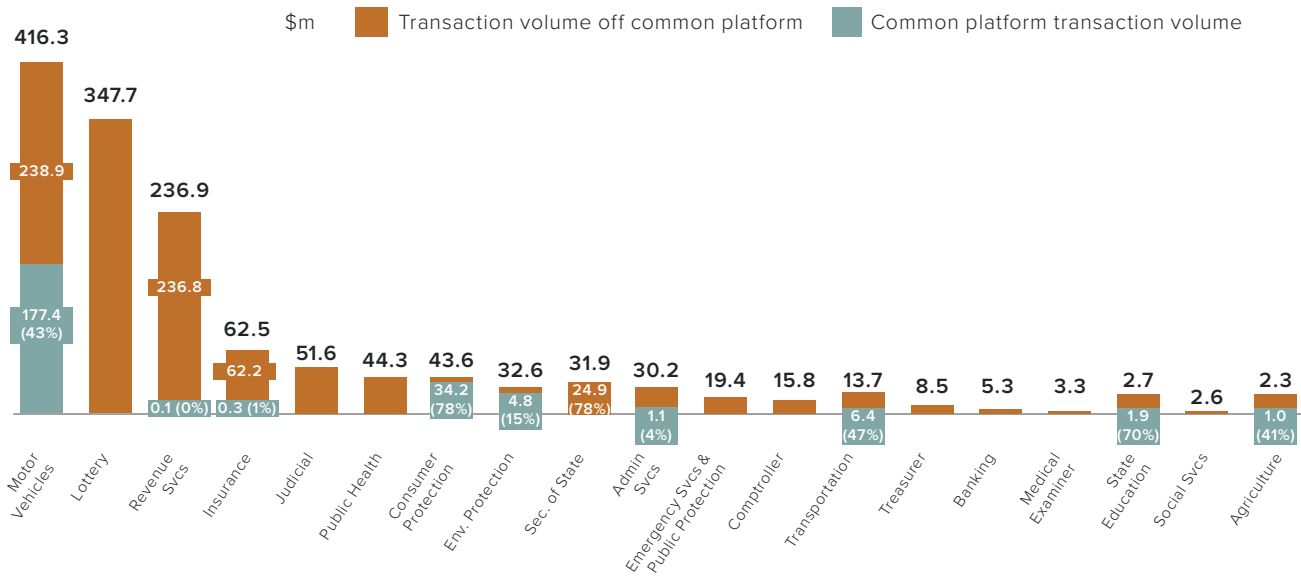
- **Lower fees and charges:** A higher volume of transactions processed via a central platform would improve scale and allow the State to negotiate better rates, including through potentially to re-bidding the contract. The State could also maximize use of lower-cost vendors.

- **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

$m ▮ Transaction volume off common platform ▮ Common platform transaction volume

Agency	Off common platform	Common platform
Motor Vehicles	238.9	177.4 (43%) — Total 416.3
Lottery		347.7
Revenue Svcs	236.8	0.1 (0%) — Total 236.9
Insurance	62.2	0.3 (1%) — Total 62.5
Judicial		51.6
Public Health		44.3
Consumer Protection		34.2 (78%) — Total 43.6
Env. Protection		4.8 (15%) — Total 32.6
Sec. of State		24.9 (78%) — Total 31.9
Admin Svcs		1.1 (4%) — Total 30.2
Emergency Svcs & Public Protection		19.4
Comptroller		15.8
Transportation		6.4 (47%) — Total 13.7
Treasurer		8.5
Banking		5.3
Medical Examiner		3.3
State Education		1.9 (70%) — Total 2.7
Social Svcs		2.6
Agriculture		1.0 (41%) — Total 2.3

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 storge 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 statues.

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 state[1]

	CT	MA	NJ	NY	CA
DMV FTE per 10k residents	2.3	1.1	3.1	1.2	2.5
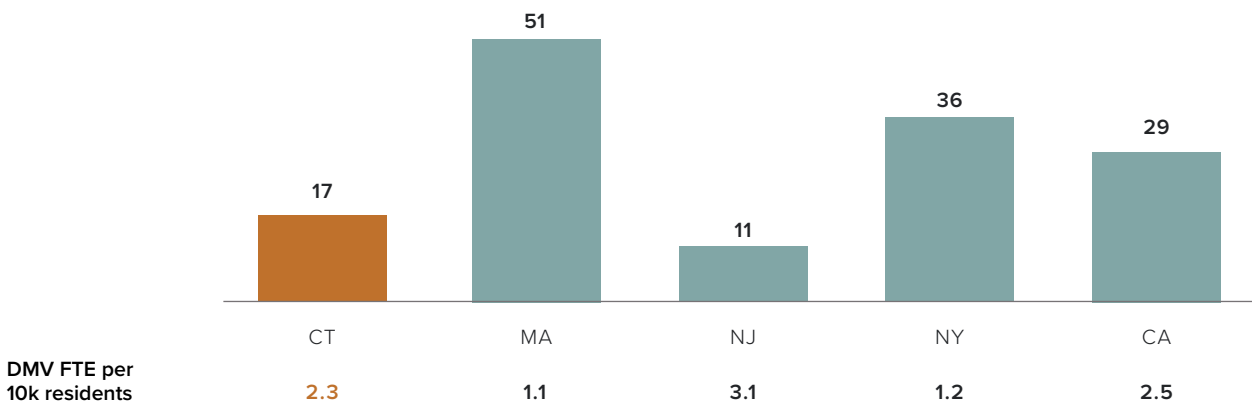
Digitizing and prioritizing transactions and back-office processes will address the expected surge in retirements and modernize processes that are still conducted manually. Based on potential FTE savings seen in benchmark states as well as analysis of time spent across manual transactions, digitizing 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 pursing 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:

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

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	**Digital document reading and storage**	**Back-office automation**	**Performance management**
Self-service tools to be optimized (appointment scheduling) and expanded (e.g., chatbots / voicebots)	Utilize software that can upload, read and action documents	Expanded use of automation to manage repetitive processes	Implement real-time performance management dashboards
Self-uploading of documents with AI for validation	Use e-Signature software to mitigate need for "wet signatures", print & mail operations	Integration with other state agencies for single resident view (e.g., integrating DRS, DMV, DOL, etc.)	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 realizes 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)

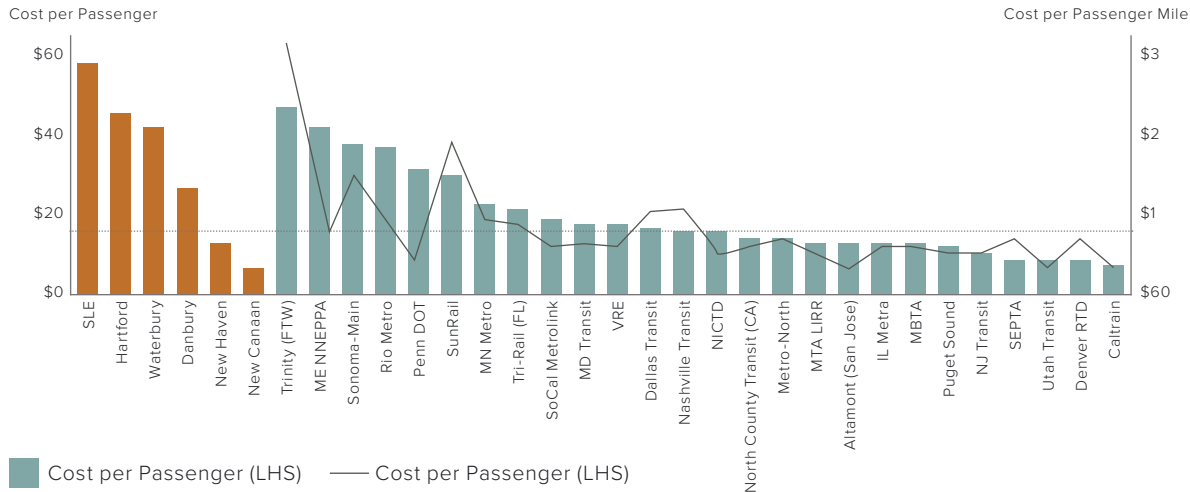$257mm+ in annual subsidies for rail operations[1]

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 2. 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

Cost per Passenger

Cost per Passenger Mile

Legend: Cost per Passenger (LHS) ▬ Cost per Passenger (LHS)

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

Source: Federal Transit Administration—National Transit Database [2019]

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 service 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%+	**~38%**	**$2.9M**	**$2.9M**	**$35M**
Decline in ridership	Change in service levels	System wide monthly savings	CT's share of monthly savings	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

Cost per Passenger

Only Trinity (TX) has higher cost per passenger mile than SLE

Metro-North includes several CT lines[1]

Cost per Passenger Mile

Legend: Cost per Passenger (RHS) — Cost per Passenger (RHS)
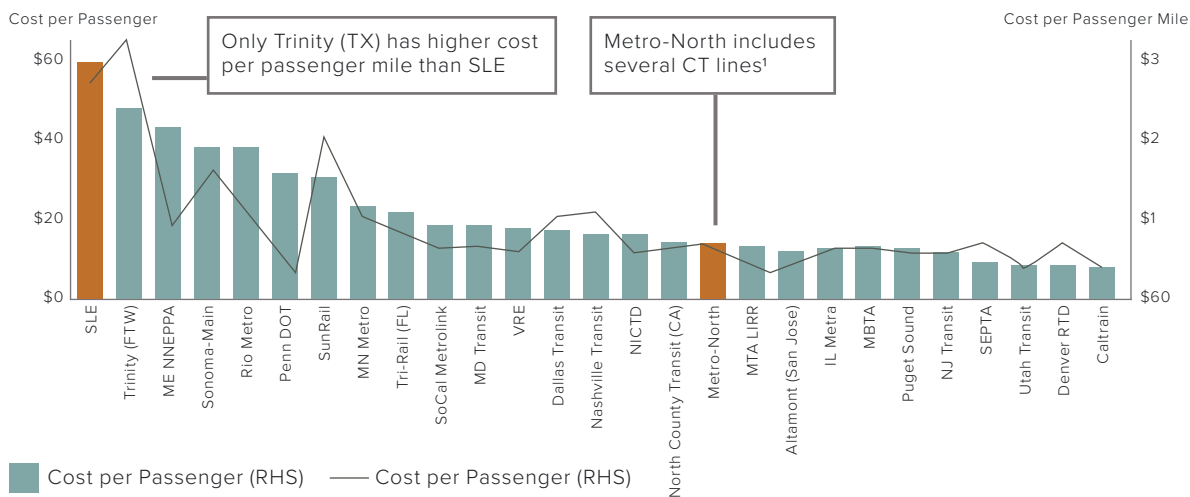
[1].The New Haven Line, New Canaan Branch, Danbury Branch, & Waterbury Branch are incorporated into the listed Metro-North costs. New Haven's proportional size
Note: Hartford Line excluded from NTD (not categorized as commuter rail); Metro-North data contains several CT lines as well as NY
Source: Federal Transit Administartion - 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-notices 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-effectiveP3 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

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Personnel	Data Processing	Business Management	Clerical Secretarial	Inspection-Investigation	Other
(Total)	203	138	69	73	40	212
Ret. Eligible / Total HC	41%	48%	52%	41%	60%	38%
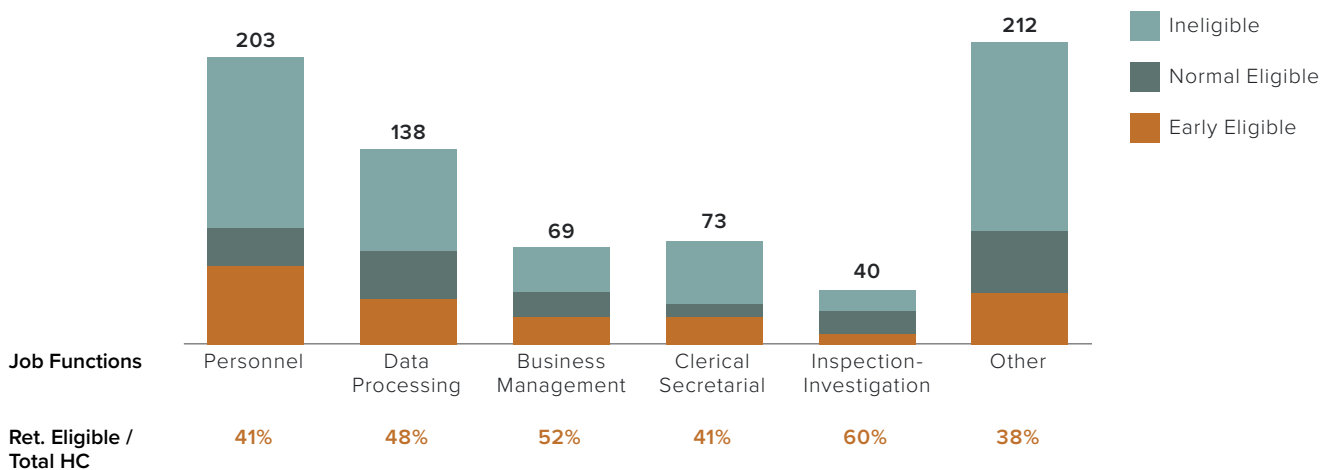
Source: CT STARS database as of 1/5/2021

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

Job Functions	Counseling	Education	Clerical Secretarial	Social Services	Business Management	Other
	163	69	41	39	23	33
Ret. Eligible / Total HC	20%	26%	39%	31%	43%	38%

Legend: Ineligible, Normal Eligible, Early Eligible
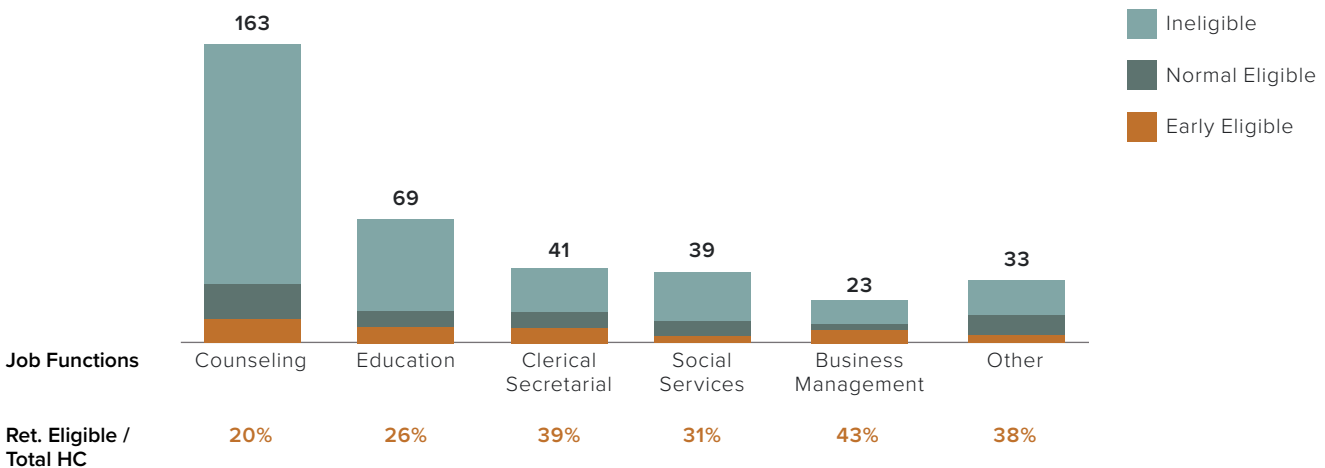
Source: CT STARS database as of 1/5/2021

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.
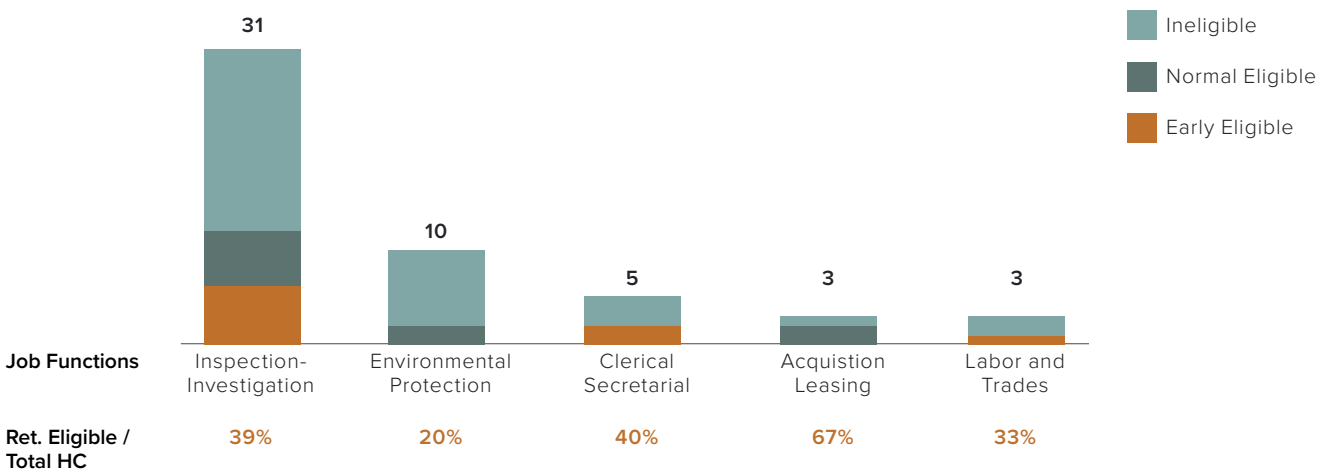
Department of Agriculture (DOAG)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Inspection-Investigation	Environmental Protection	Clerical Secretarial	Acquistion Leasing	Labor and Trades
(Total)	31	10	5	3	3
Ret. Eligible / Total HC	39%	20%	40%	67%	33%

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.
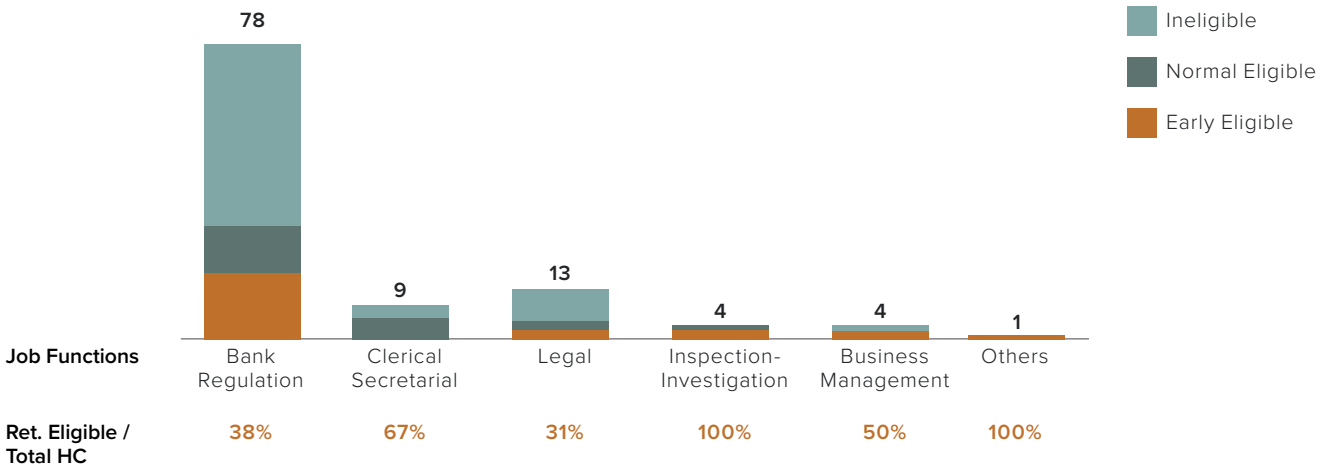
Department of Banking (DOB)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Bank Regulation	Clerical Secretarial	Legal	Inspection-Investigation	Business Management	Others
Total	78	9	13	4	4	1
Ret. Eligible / Total HC	38%	67%	31%	100%	50%	100%

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.

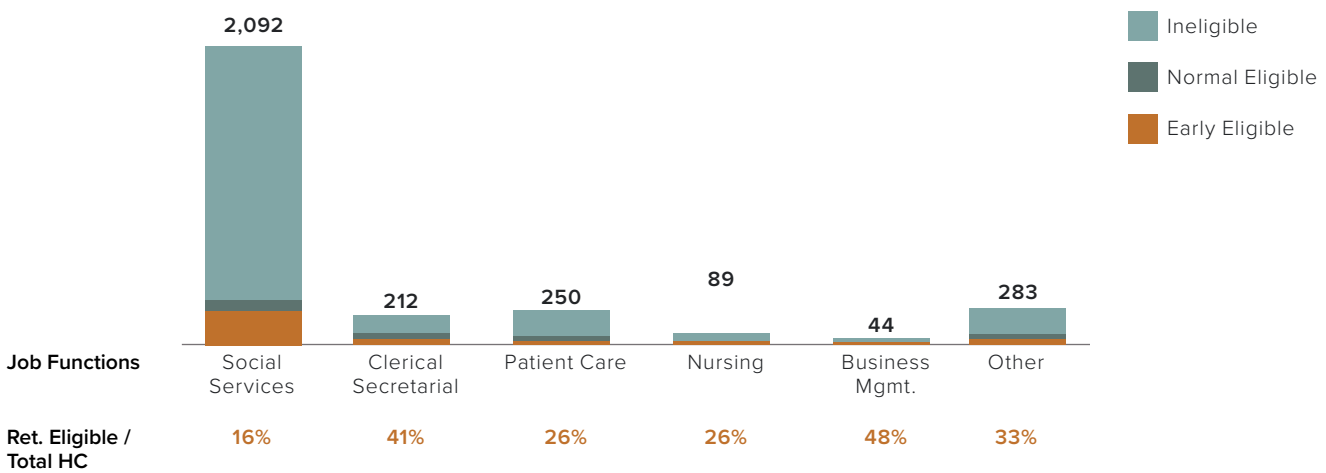As of January 2021, 630 (21%) of DCF's 2,970 employees were retirement-eligible in 2022.

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Social Services	Clerical Secretarial	Patient Care	Nursing	Business Mgmt.	Other
Total	2,092	212	250	89	44	283
Ret. Eligible / Total HC	16%	41%	26%	26%	48%	33%

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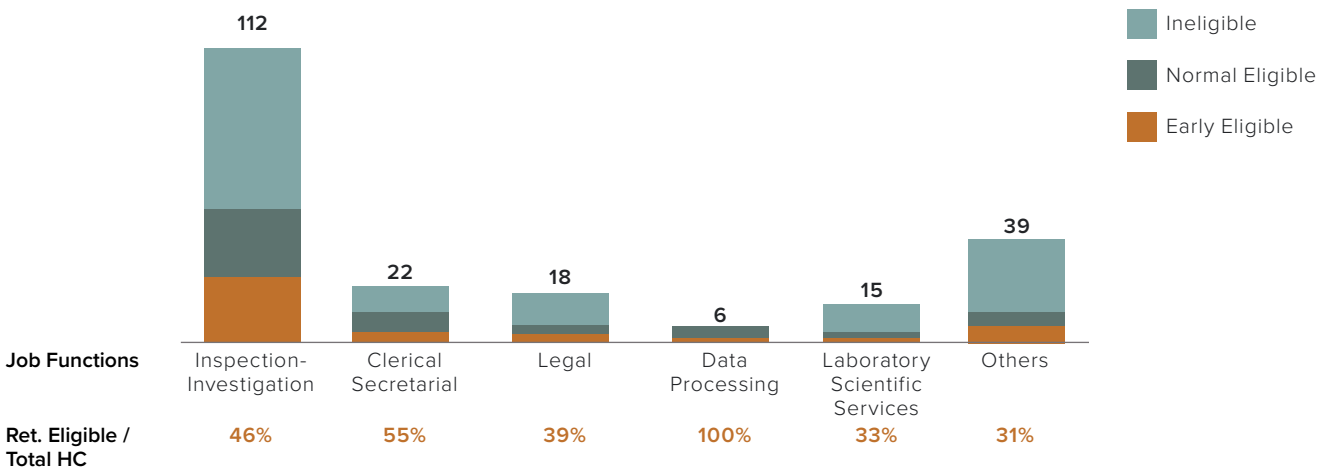
Source: CT STARS database as of 1/5/2021

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Inspection-Investigation	Clerical Secretarial	Legal	Data Processing	Laboratory Scientific Services	Others
(Total)	112	22	18	6	15	39
Ret. Eligible / Total HC	46%	55%	39%	100%	33%	31%

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

	Ineligible
	Hazard Eligible
	Normal Eligible
	Early Eligible

Job Functions	Penal-Corrective Services	Clerical Secretarial	Counseling	Parole and Probation	Labor and Trades	Other
	3.865	246	396	183	212	1,044
Ret. Eligible / Total HC	24%	39%	18%	33%	28%	21%
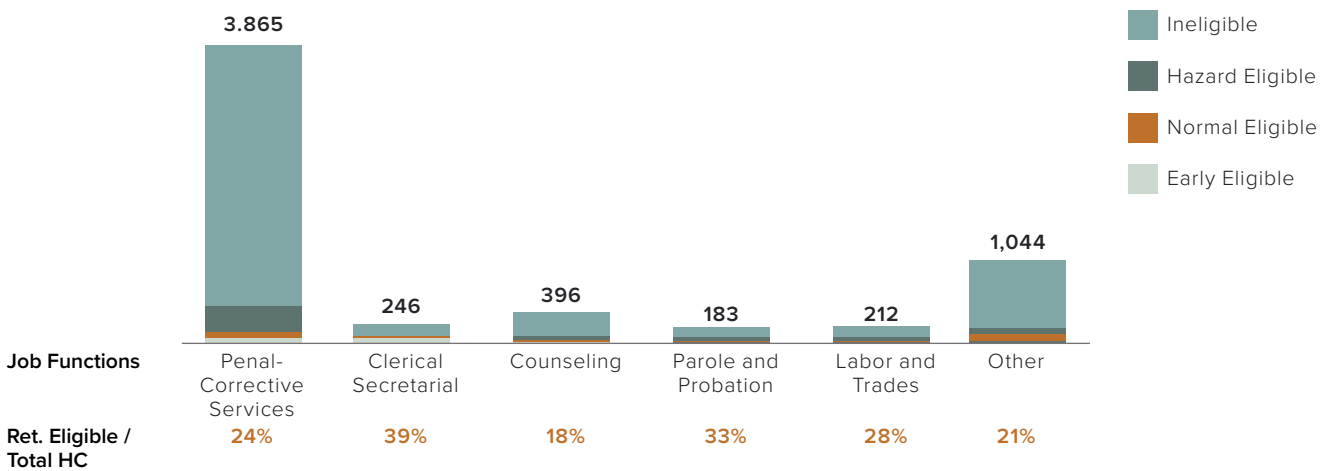
Connecticut has a higher imprisonment rate than neighboring states. In Massachusetts, 145 out of 100,000 residents are imprisoned, compared to Connecticut's 252 out of 100,000. Despite the higher imprisonment rate, the State has significantly decreased its prison population over the years, with COVID-19 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,

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.
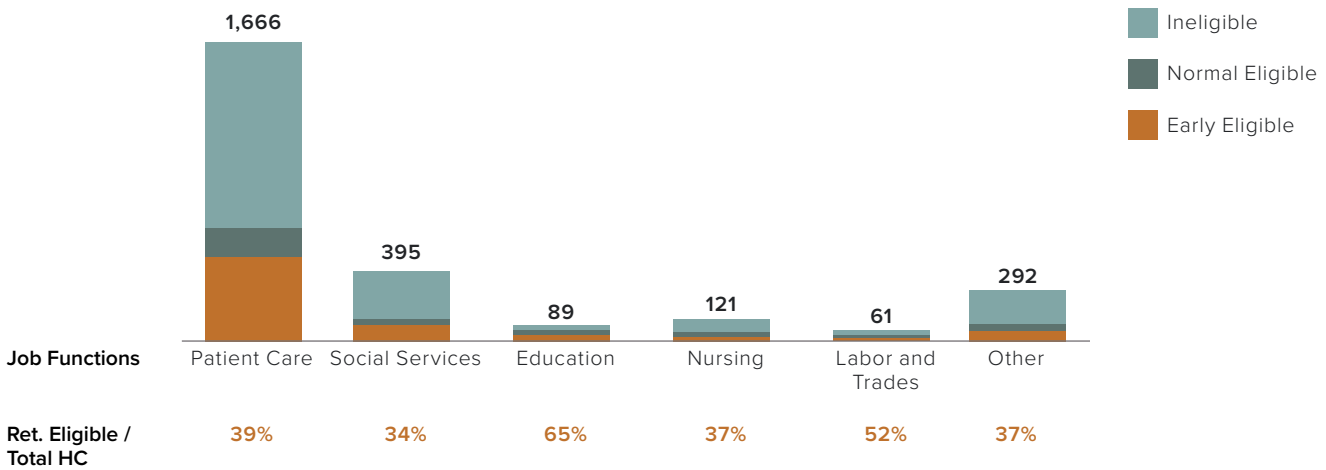
Department of Developmental Services (DDS)

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

Legend
Ineligible
Normal Eligible
Early Eligible

Job Functions	Patient Care	Social Services	Education	Nursing	Labor and Trades	Other
Total	1,666	395	89	121	61	292
Ret. Eligible / Total HC	39%	34%	65%	37%	52%	37%

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 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.
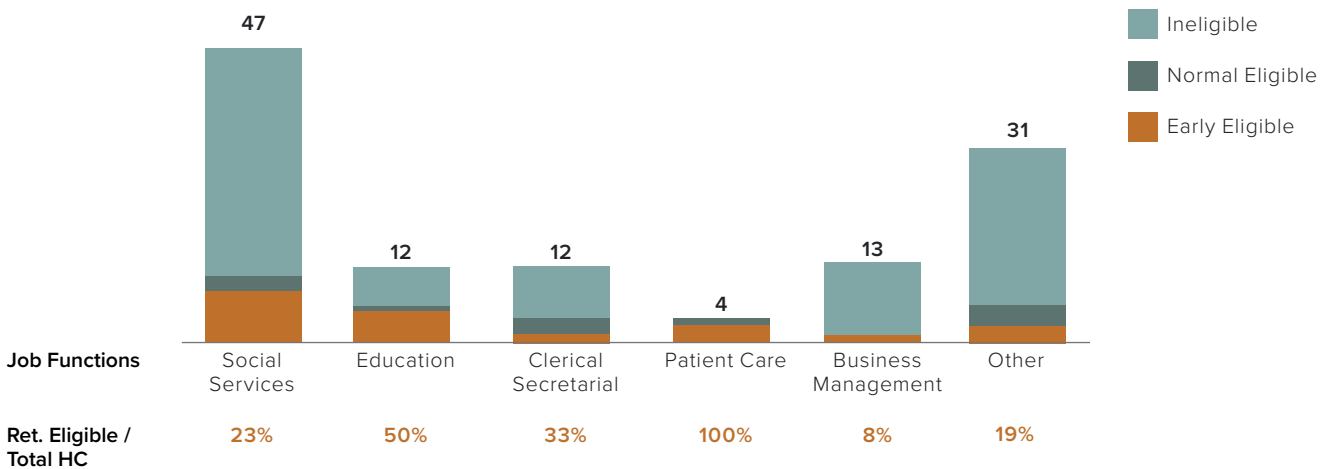
Office of Early Childhood (OEC)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Social Services	Education	Clerical Secretarial	Patient Care	Business Management	Other
(Total)	47	12	12	4	13	31
Ret. Eligible / Total HC	23%	50%	33%	100%	8%	19%

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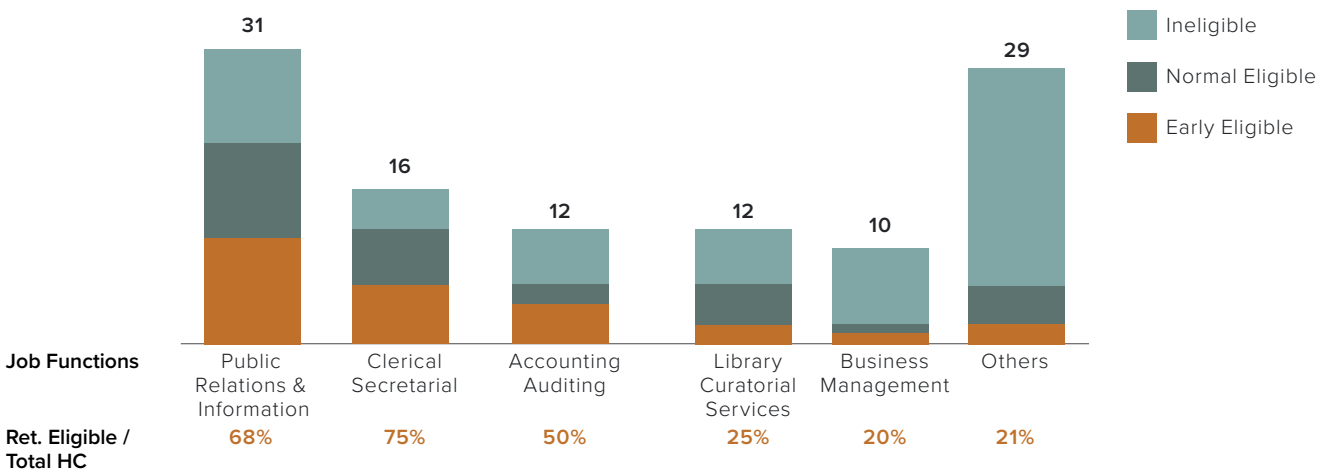 agencies. In addition, OEC can continue to digitize manual day-to-day processes – for example, by using mobile inspections for day cares and youth camps. These opportunities can reduce administrative effort and allow OEC to focus staff capacity on day-to-day resident support, while generating cost savings.

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

Job Functions	Public Relations & Information	Clerical Secretarial	Accounting Auditing	Library Curatorial Services	Business Management	Others
Ret. Eligible / Total HC	68%	75%	50%	25%	20%	21%

Legend: Ineligible, Normal Eligible, Early Eligible

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.
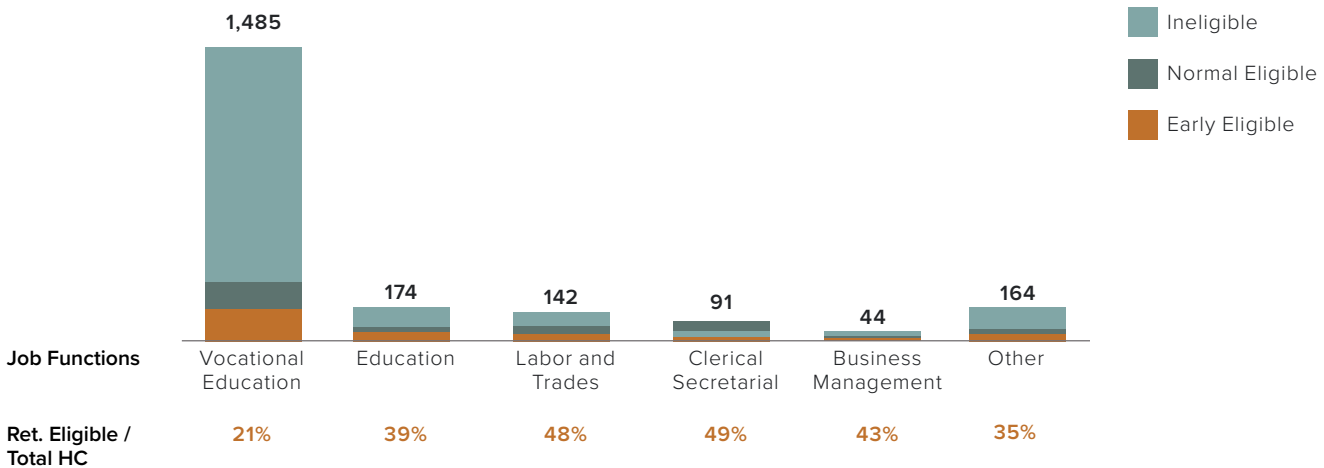
State Department of Education (SDE)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Vocational Education	Education	Labor and Trades	Clerical Secretarial	Business Management	Other
Total	1,485	174	142	91	44	164
Ret. Eligible / Total HC	21%	39%	48%	49%	43%	35%

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 in 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.

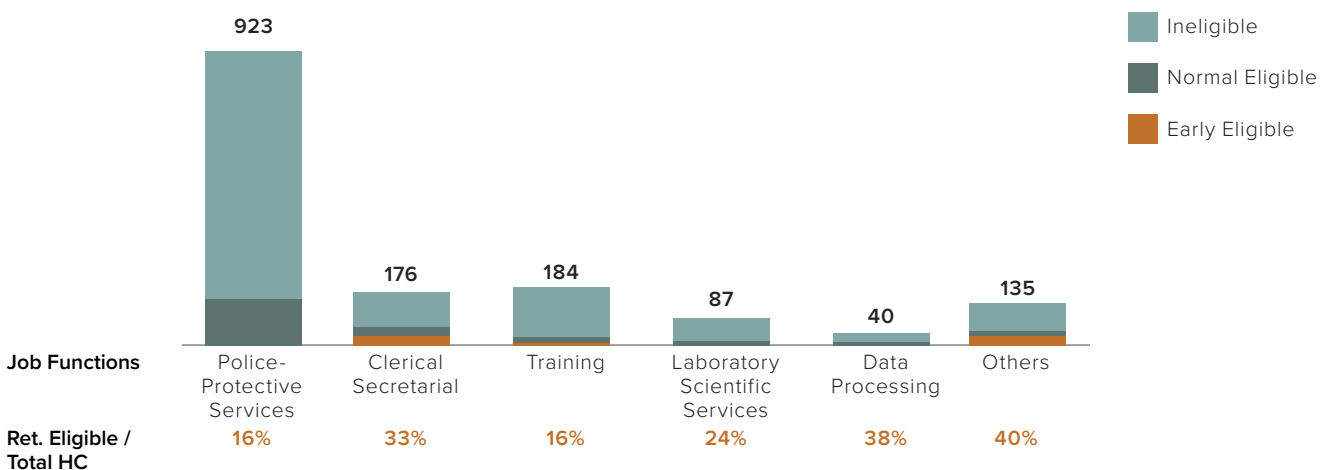# Department of Emergency Services and Public Protection (DESPP)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Police-Protective Services	Clerical Secretarial	Training	Laboratory Scientific Services	Data Processing	Others
Total	923	176	184	87	40	135
Ret. Eligible / Total HC	16%	33%	16%	24%	38%	40%

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 civilizing 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.
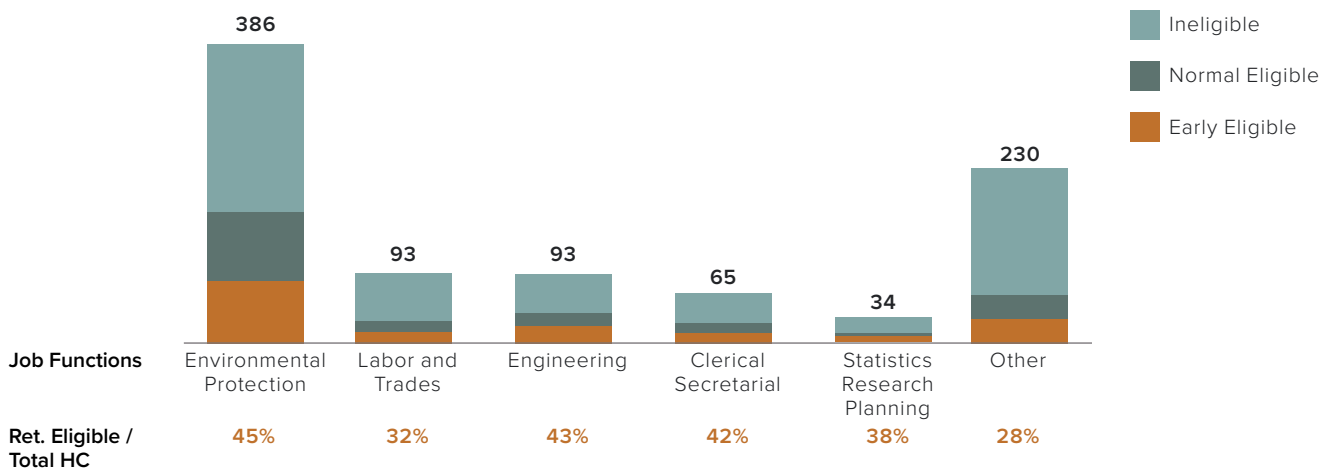
Environmental conservation involves providing outdoor recreational opportunities and managing the State's natural resources, including fish, wildlife, and forests, though regulation, management, research, and education. Energy activities include developing policy and management programs that promote energy efficiency, develop energy infrastructure and alterative 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.

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Environmental Protection	Labor and Trades	Engineering	Clerical Secretarial	Statistics Research Planning	Other
(Total)	386	93	93	65	34	230
Ret. Eligible / Total HC	45%	32%	43%	42%	38%	28%

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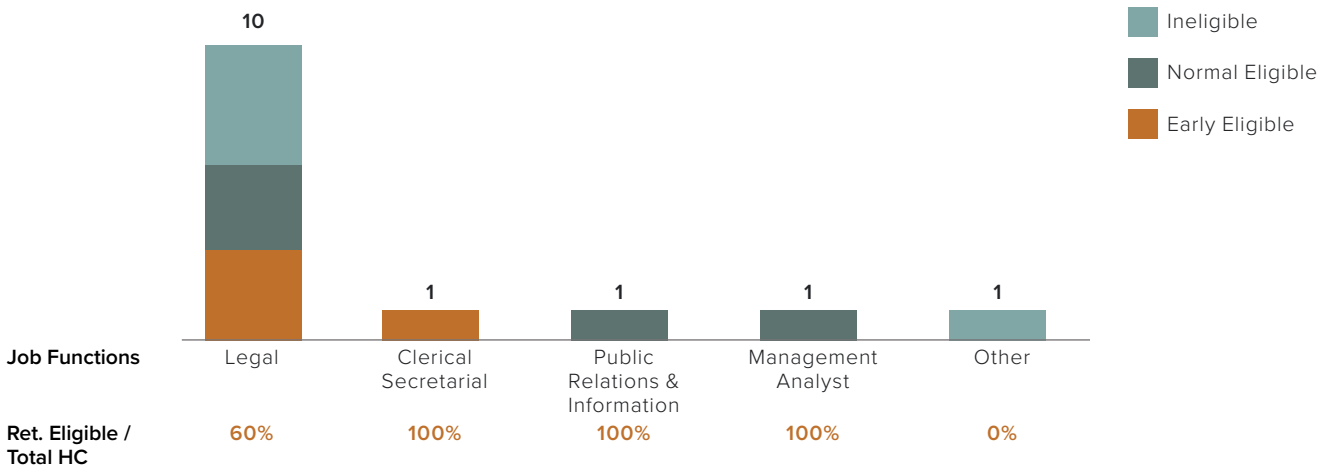
Third, DEEP also faces challenges in retaining younger employees: the agency has seen an increase in attrition among employees with fewer than five years of work experience, as they are attracted to higher-paying jobs in the private sector that offer less restrictive career paths. This situation further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

Ineligible
Normal Eligible
Early Eligible

	10	1	1	1	1
Job Functions	Legal	Clerical Secretarial	Public Relations & Information	Management Analyst	Other
Ret. Eligible / Total HC	60%	100%	100%	100%	0%

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.
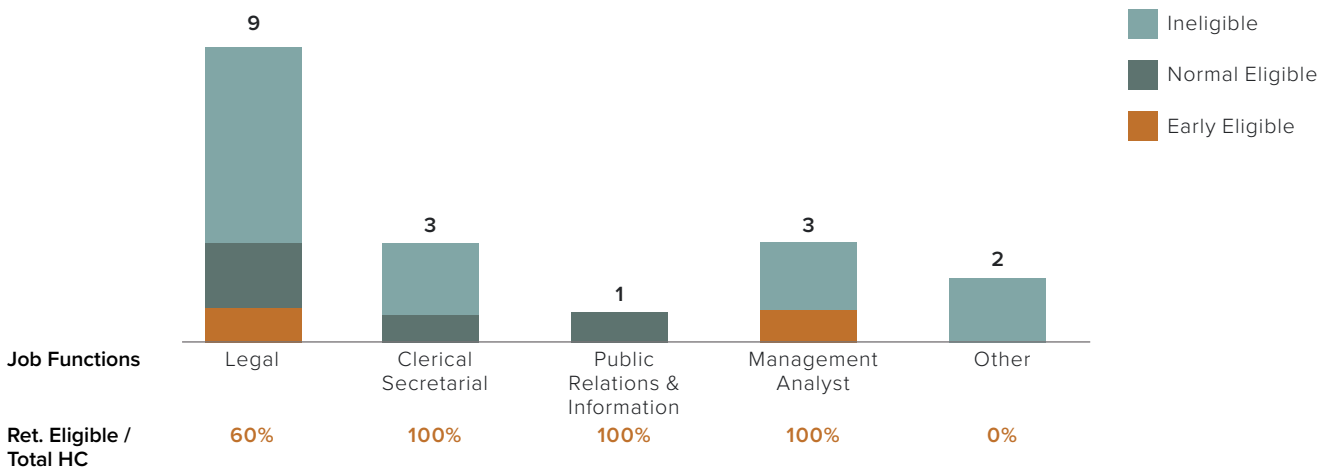
Office of Government Accountability (OGA)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Legal	Clerical Secretarial	Public Relations & Information	Management Analyst	Other
(count)	9	3	1	3	2
Ret. Eligible / Total HC	60%	100%	100%	100%	0%

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, f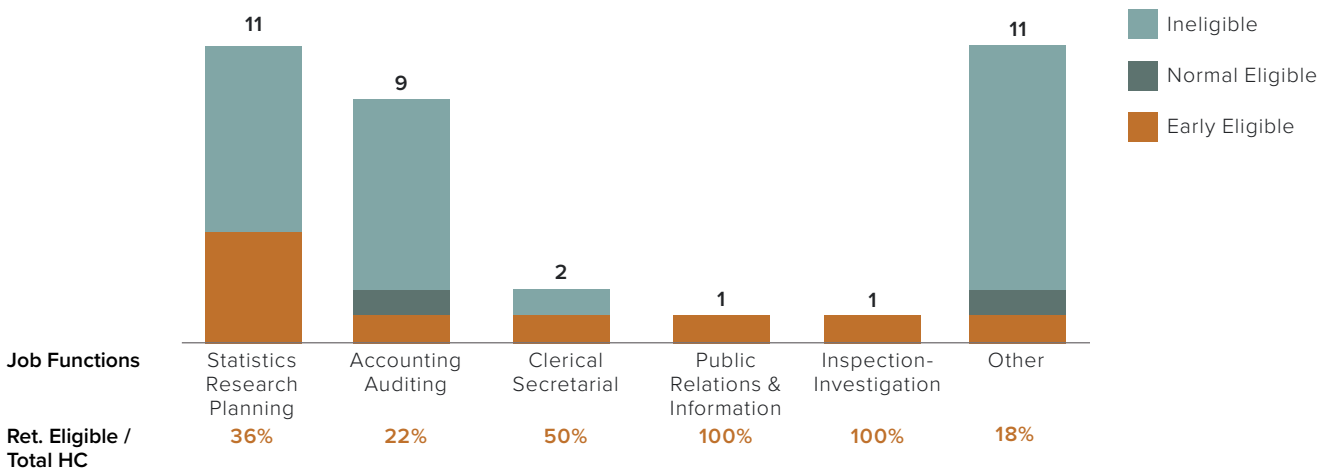unded via the Insurance Fund. Furthermore, the 2022 retirement surge is not expected to greatly impact OHA, with only a couple of employees eligible for 2022 retirement. As a result, there are minimal opportunities to improve efficiency at OHA, but it will continue to play a crucial role as Connecticut 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

Job Functions	Statistics Research Planning	Accounting Auditing	Clerical Secretarial	Public Relations & Information	Inspection-Investigation	Other
Ret. Eligible / Total HC	36%	22%	50%	100%	100%	18%

Legend: Ineligible, Normal Eligible, Early Eligible

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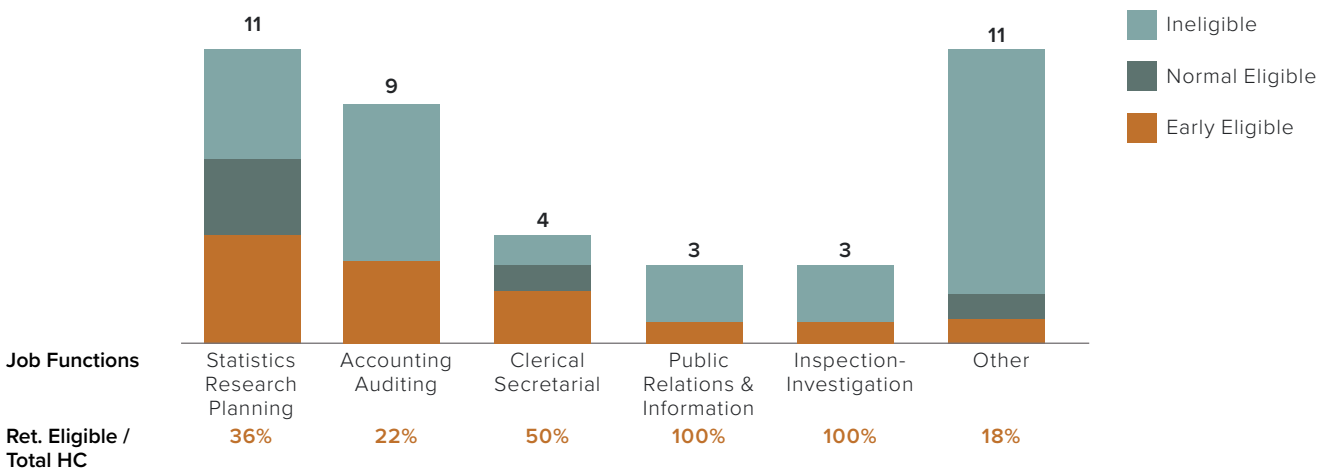cticut continues to respond to COVID-19, it will be crucial for OHS to be closely involved and coordinate reform efforts across agencies and with Medicare and commercial payers to ensure continued improved health outcomes for Connecticut residents.

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

Job Functions	Statistics Research Planning	Accounting Auditing	Clerical Secretarial	Public Relations & Information	Inspection-Investigation	Other
Ret. Eligible / Total HC	36%	22%	50%	100%	100%	18%

Legend: Ineligible, Normal Eligible, Early Eligible

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.
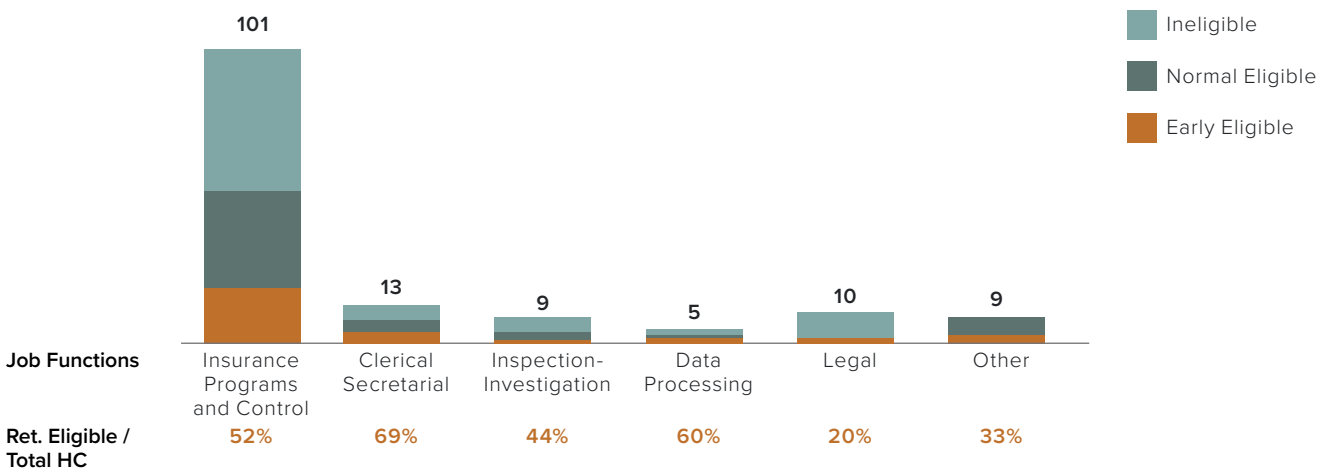
Insurance Department (ID)

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Insurance Programs and Control	Clerical Secretarial	Inspection-Investigation	Data Processing	Legal	Other
Total	101	13	9	5	10	9
Ret. Eligible / Total HC	52%	69%	44%	60%	20%	33%

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.
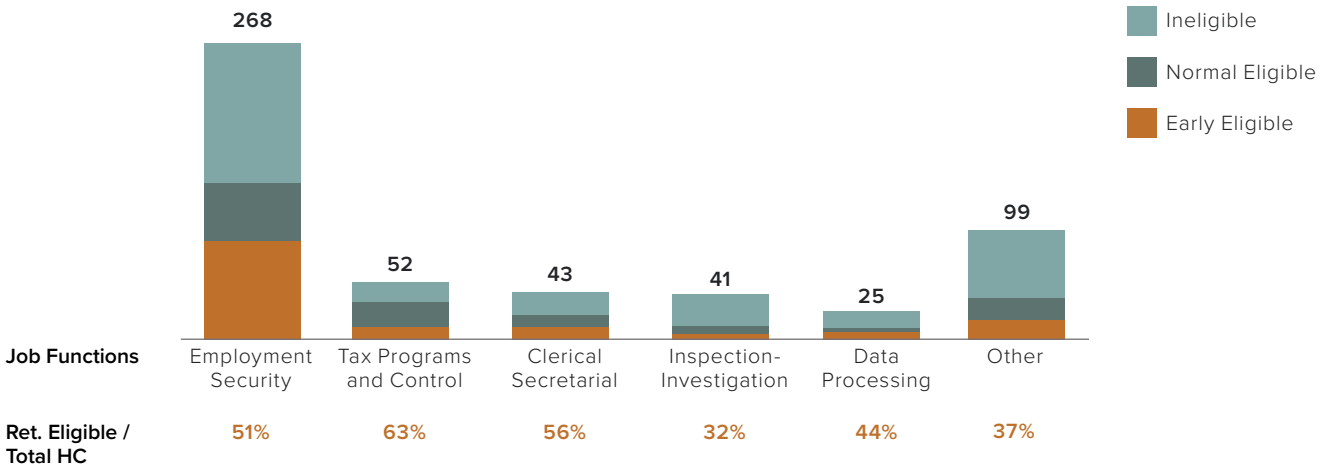
Department of Labor (CTDOL)

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

	Ineligible
	Normal Eligible
	Early Eligible

Job Functions	Employment Security	Tax Programs and Control	Clerical Secretarial	Inspection-Investigation	Data Processing	Other
	268	52	43	41	25	99
Ret. Eligible / Total HC	51%	63%	56%	32%	44%	37%

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.
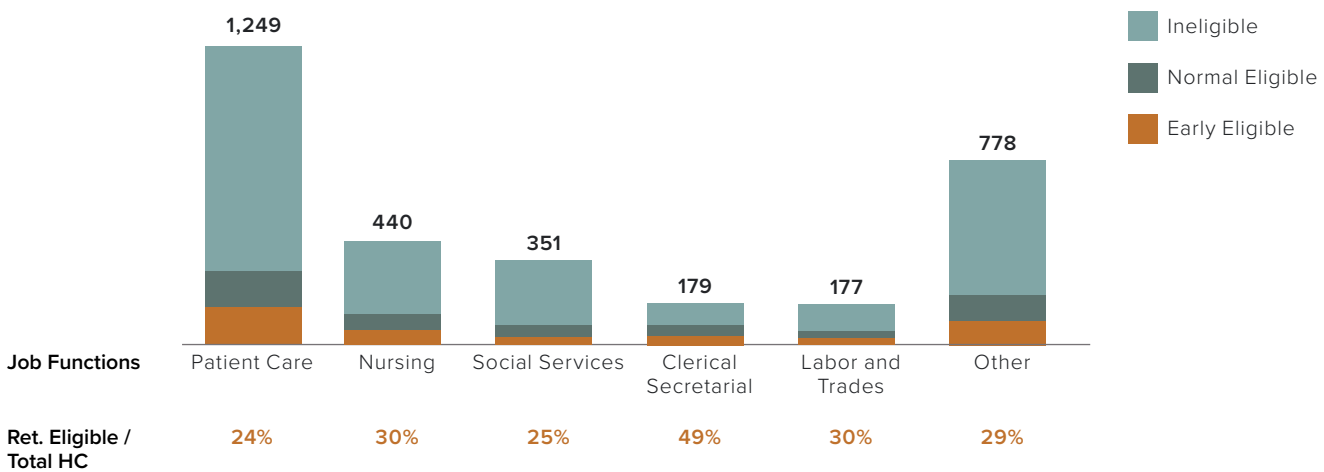
Department of Mental Health and Addiction Services (DMHAS)

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 | 28% of agency personnel eligible for retirement

Job Functions	Patient Care	Nursing	Social Services	Clerical Secretarial	Labor and Trades	Other
	1,249	440	351	179	177	778
Ret. Eligible / Total HC	24%	30%	25%	49%	30%	29%

Legend: Ineligible, Normal Eligible, Early Eligible

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.
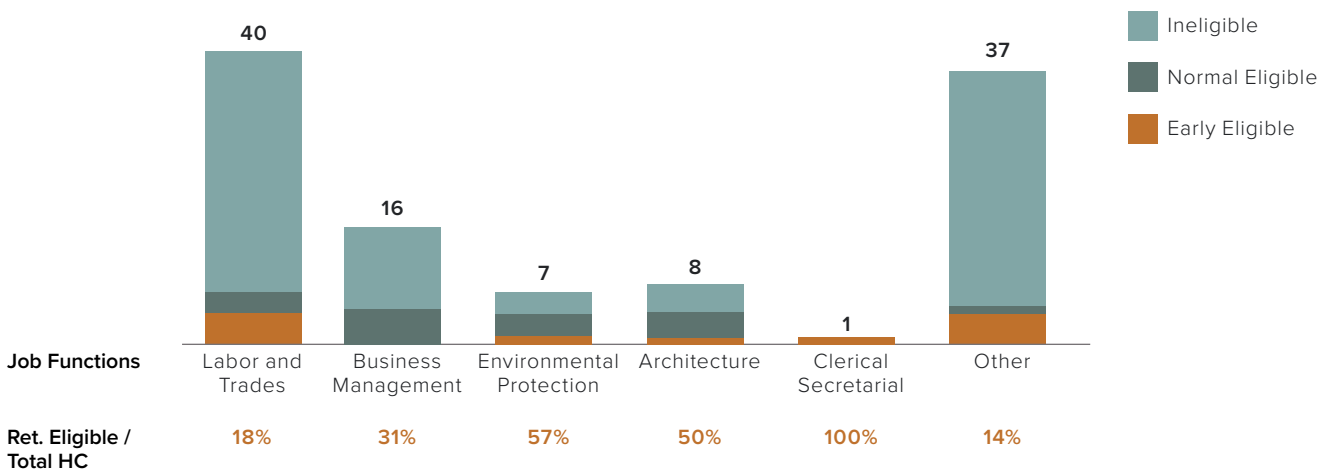
Military Department (MD)

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

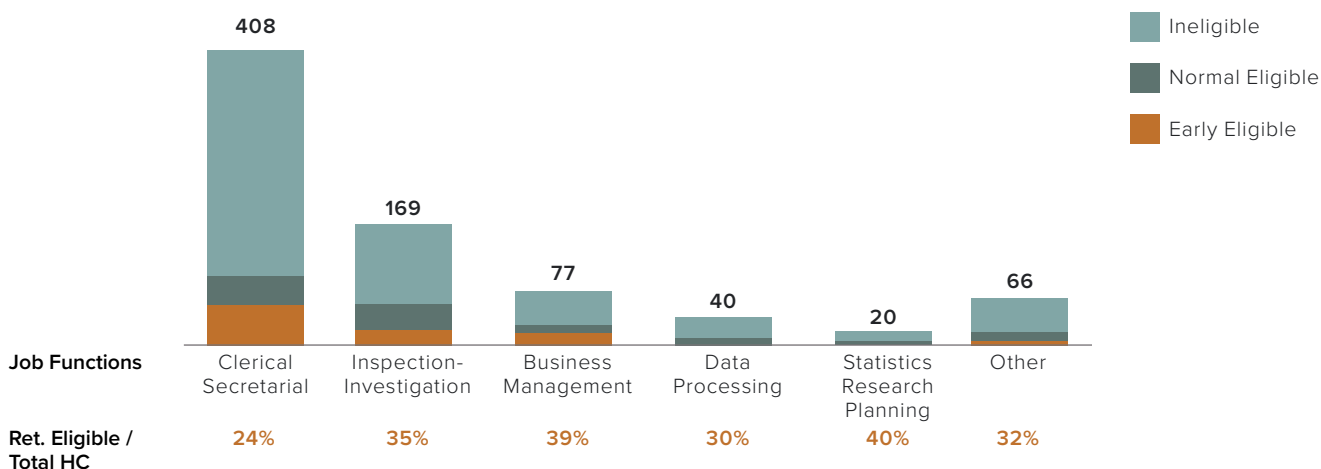| Job Functions	Labor and Trades	Business Management	Environmental Protection	Architecture	Clerical Secretarial	Other
	40	16	7	8	1	37
Ret. Eligible / Total HC	18%	31%	57%	50%	100%	14%

Legend: Ineligible, Normal Eligible, Early Eligible

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Clerical Secretarial	Inspection-Investigation	Business Management	Data Processing	Statistics Research Planning	Other
Total	408	169	77	40	20	66
Ret. Eligible / Total HC	24%	35%	39%	30%	40%	32%

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.

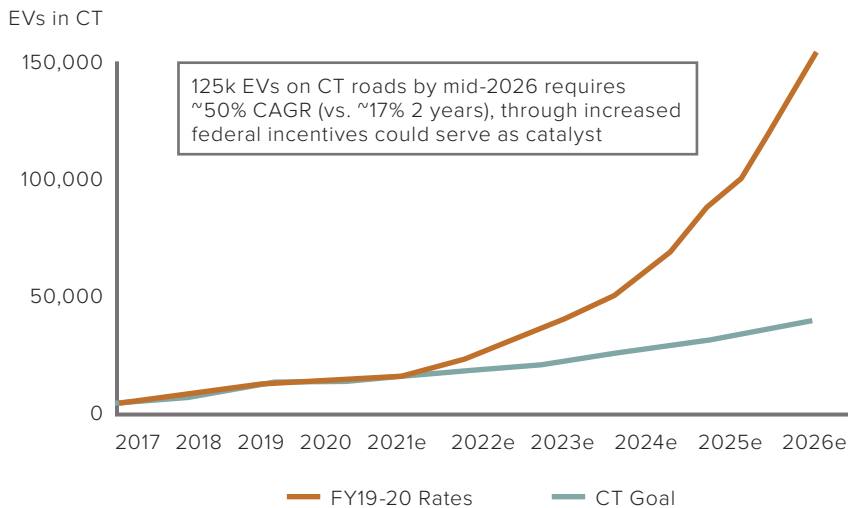**Introduce performance management systems.** Another critical initiative is to implement performance-management tools such as real-time dashboards or a system of incentivizing positive customer service scores and completed transactions. These tools have improved productivity in other states' DMV agencies 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

EVs in CT

125k EVs on CT roads by mid-2026 requires ~50% CAGR (vs. ~17% 2 years), through increased federal incentives could serve as catalyst

150,000

100,000

50,000

0

2017 2018 2019 2020 2021e 2022e 2023e 2024e 2025e 2026e

— FY19-20 Rates — CT Goal

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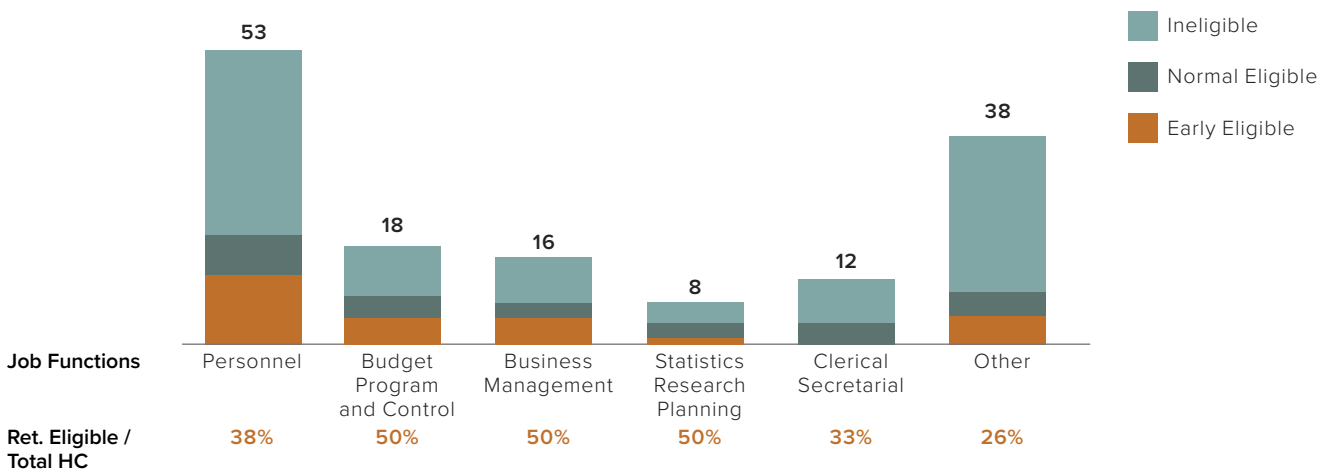
OPM's FY20 budget was $370m, which was largely funded out of the State's General Fund. As of January 2021, 55 of OPM's 145 positions are held by employees who are eligible for retirement by July 1, 2022. Particularly concerning for an agency

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Personnel	Budget Program and Control	Business Management	Statistics Research Planning	Clerical Secretarial	Other
Total	53	18	16	8	12	38
Ret. Eligible / Total HC	38%	50%	50%	50%	33%	26%

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.

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

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.

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.
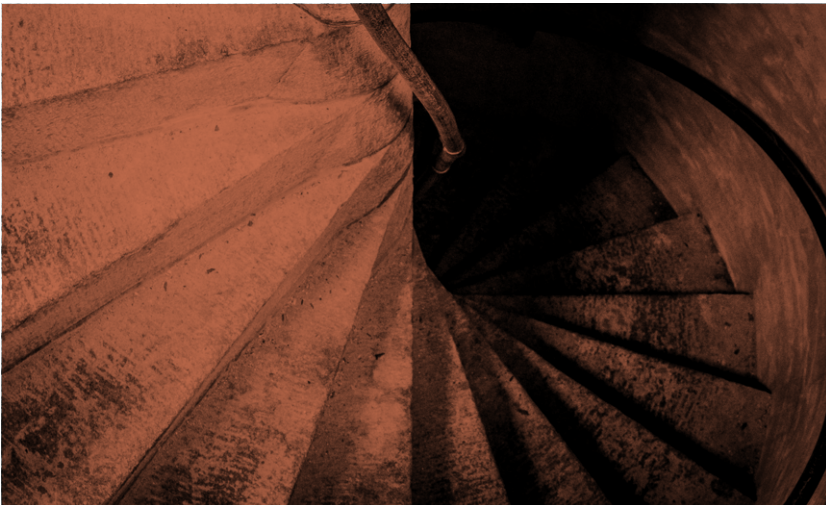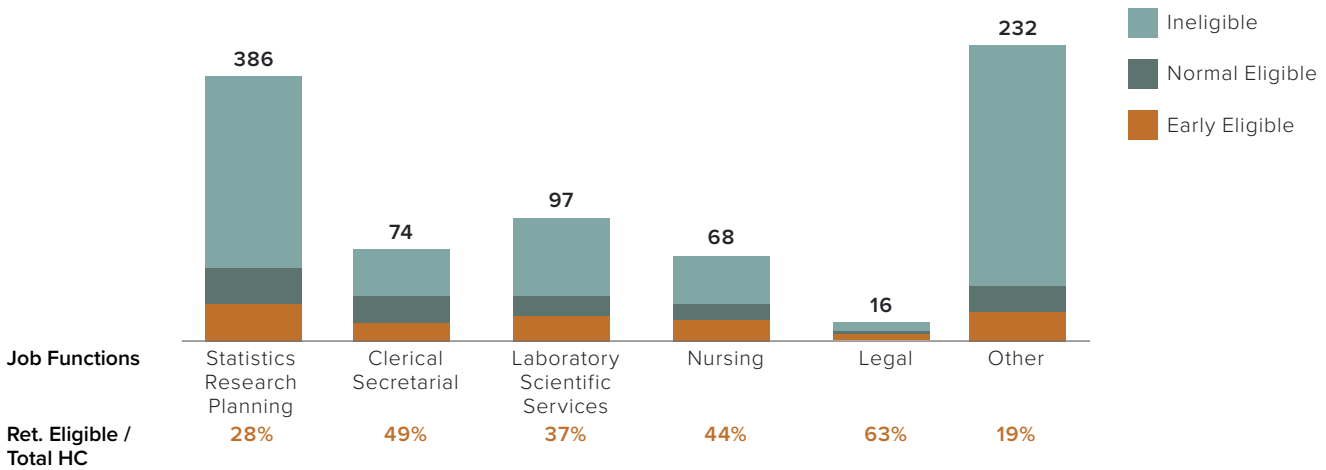

Psychiatric Security Review Board (PSRB)

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.

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

Ineligible
Normal Eligible
Early Eligible

Job Functions	Statistics Research Planning	Clerical Secretarial	Laboratory Scientific Services	Nursing	Legal	Other
	386	74	97	68	16	232
Ret. Eligible / Total HC	28%	49%	37%	44%	63%	19%

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.
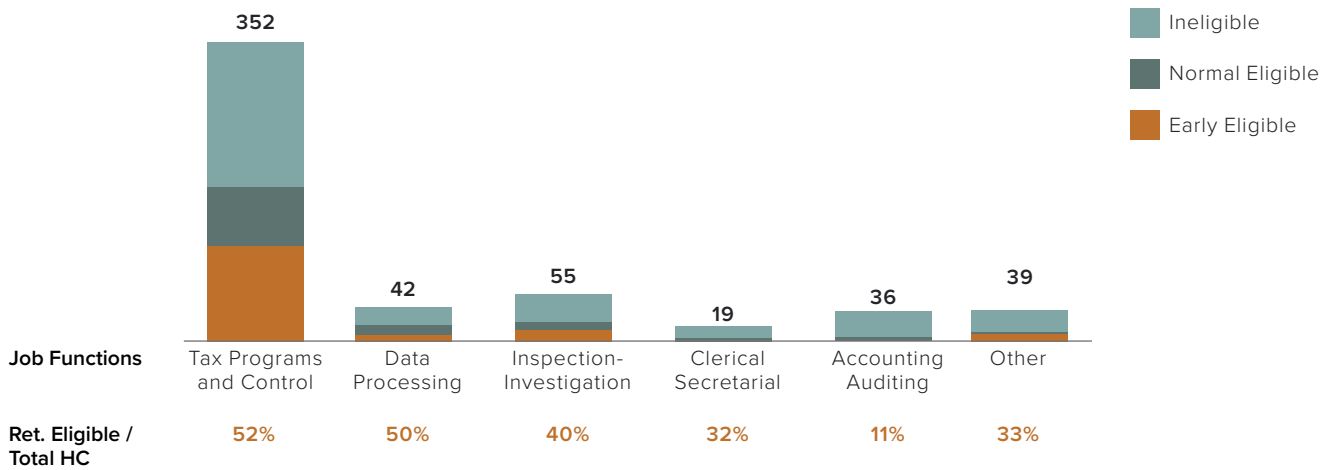
Department of Revenue Services (DRS)

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.

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

352

Ineligible

Normal Eligible

Early Eligible

Job Functions	Tax Programs and Control	Data Processing	Inspection-Investigation	Clerical Secretarial	Accounting Auditing	Other
	352	**42**	**55**	**19**	**36**	**39**
Ret. Eligible / Total HC	**52%**	**50%**	**40%**	**32%**	**11%**	**33%**

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 re-port 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.
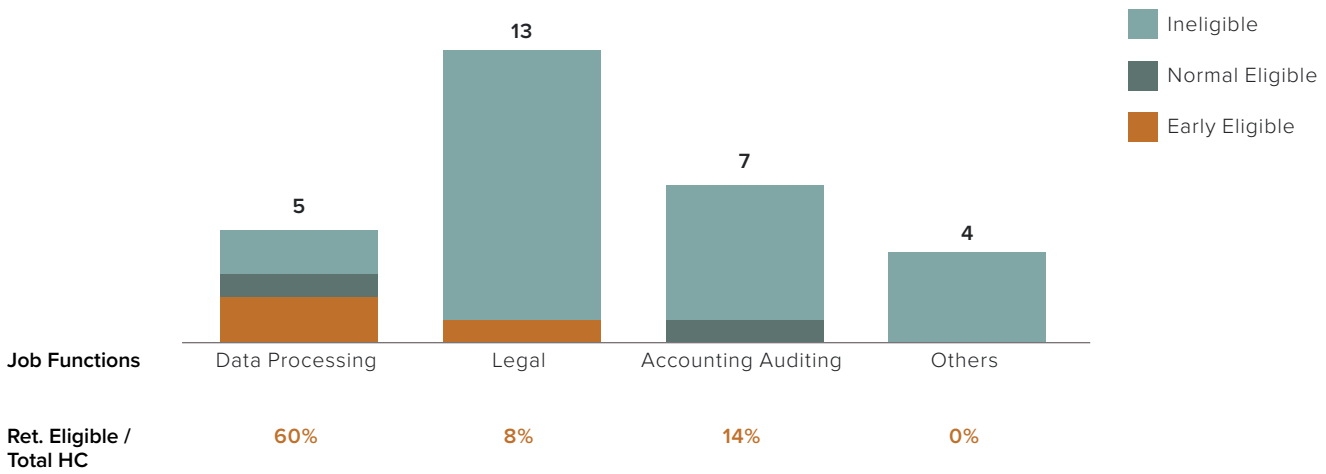
Finally, certain individual processes at DSS require significant manual effort and could be conducted more efficiently if further automated and/or digitized, including digitizing the case visit documentation system, further automating call centers to provide help more effectively to residents, and instituting 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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Bar values:
- Data Processing: 5
- Legal: 13
- Accounting Auditing: 7
- Others: 4

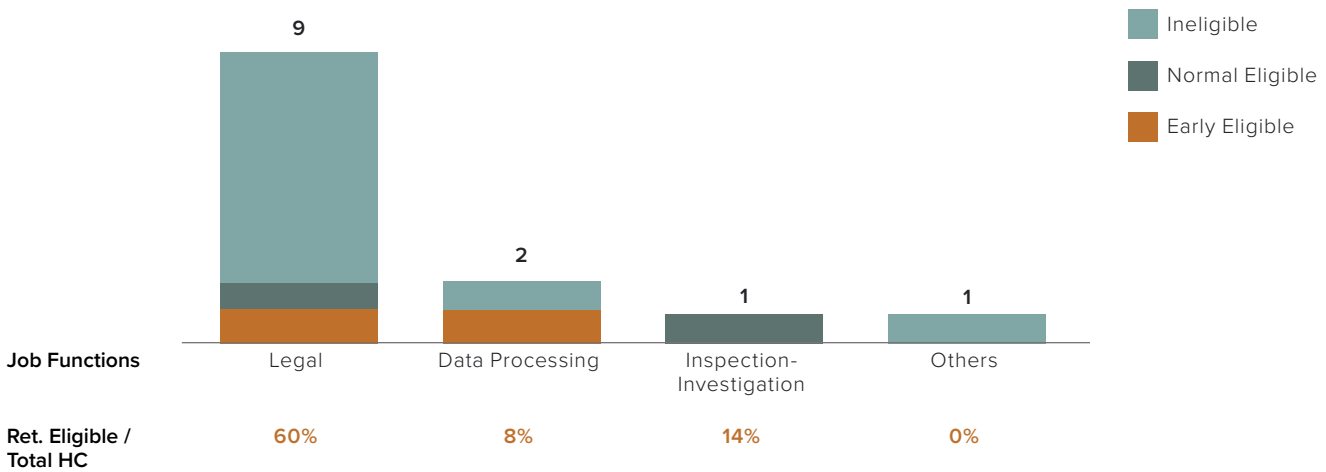| Job Functions	Data Processing	Legal	Accounting Auditing	Others
Ret. Eligible / Total HC	60%	8%	14%	0%

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

Legend:
- Ineligible
- Normal Eligible
- Early Eligible

Job Functions	Legal	Data Processing	Inspection-Investigation	Others
Headcount	9	2	1	1
Ret. Eligible / Total HC	**60%**	**8%**	**14%**	**0%**

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.
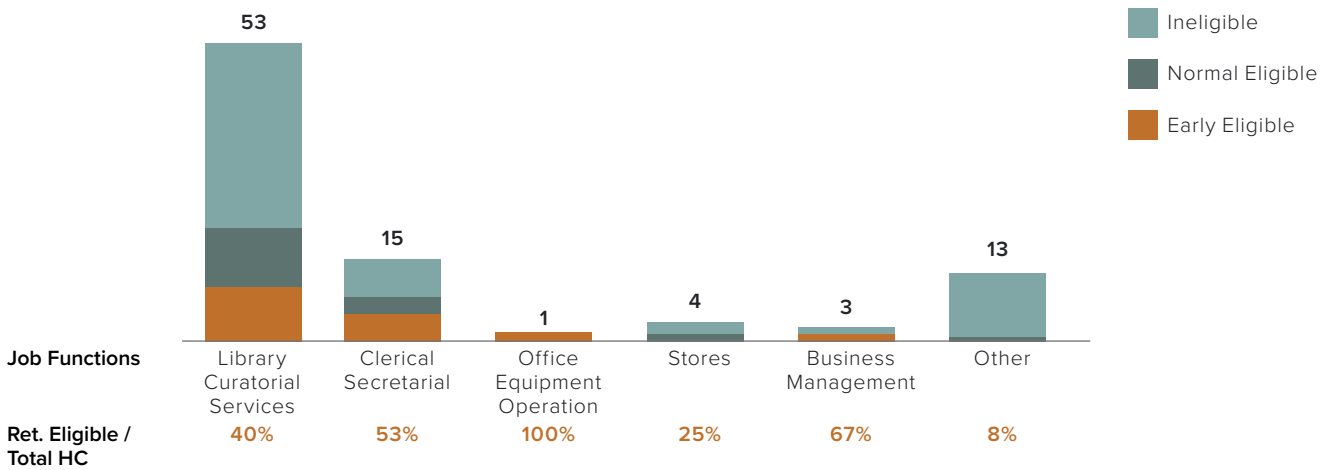
Connecticut State Library (CSL)

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.

Ineligible
Normal Eligible
Early Eligible

53
15
1
4
3
13

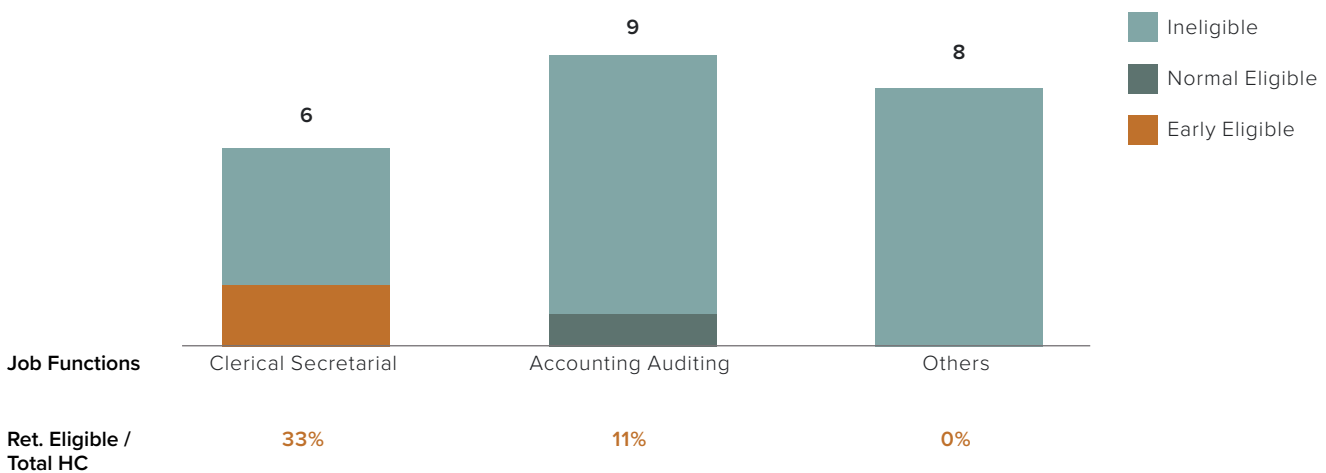| Job Functions	Library Curatorial Services	Clerical Secretarial	Office Equipment Operation	Stores	Business Management	Other
Ret. Eligible / Total HC	40%	53%	100%	25%	67%	8%

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

Ineligible
Normal Eligible
Early Eligible

6
9
8

Job Functions	Clerical Secretarial	Accounting Auditing	Others
Ret. Eligible / Total HC	33%	11%	0%

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.
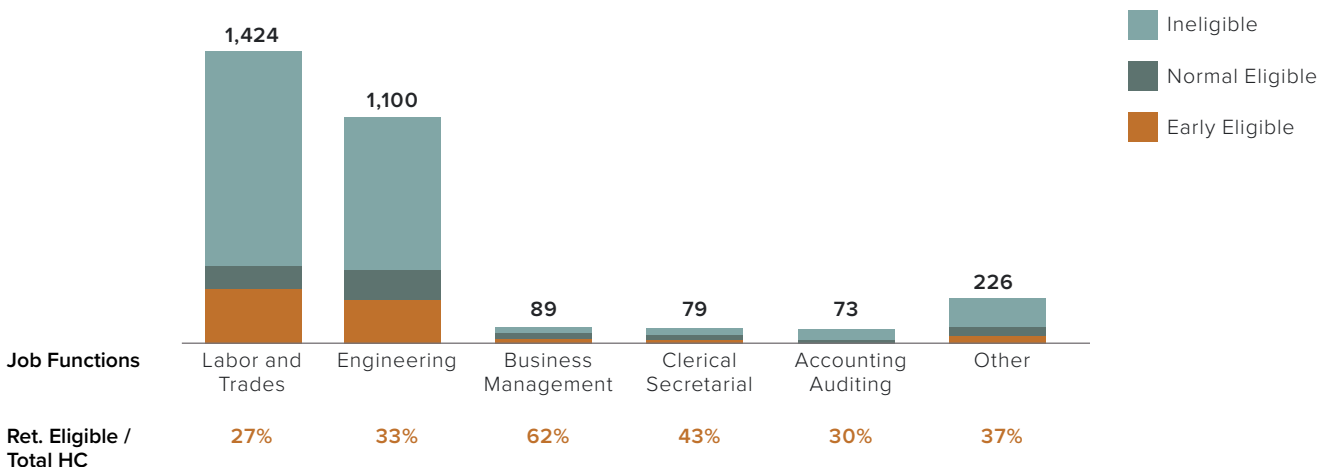
Department of Transportation (CTDOT)

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

Job Functions	Labor and Trades	Engineering	Business Management	Clerical Secretarial	Accounting Auditing	Other
	1,424	1,100	89	79	73	226
Ret. Eligible / Total HC	27%	33%	62%	43%	30%	37%

Legend: Ineligible, Normal Eligible, Early Eligible

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

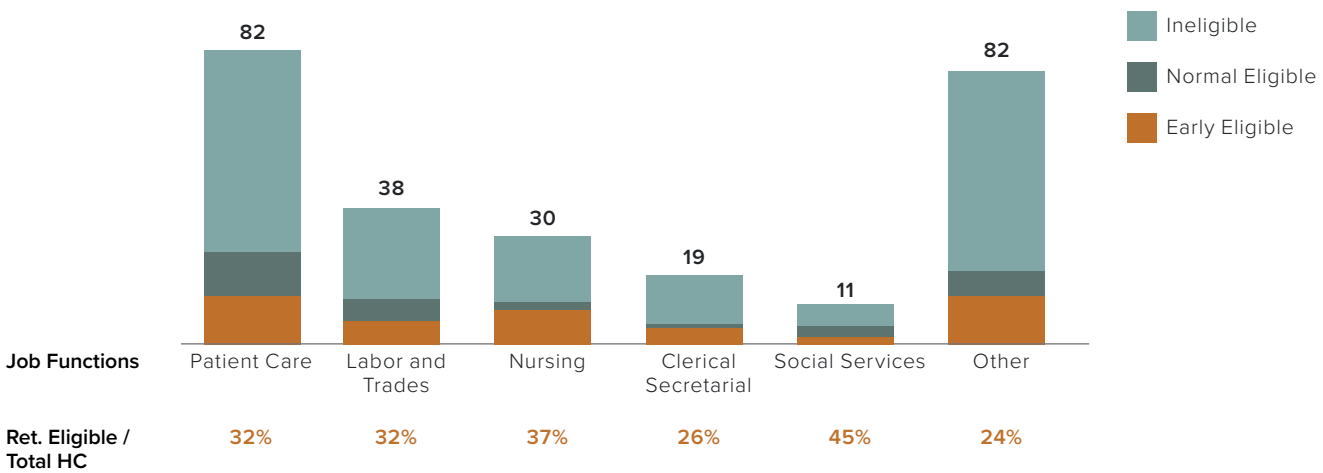smaller efficiency savings or take a longer time horizon to realize include:

- **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

Legend: Ineligible, Normal Eligible, Early Eligible

Job Functions	Patient Care	Labor and Trades	Nursing	Clerical Secretarial	Social Services	Other
Total	82	38	30	19	11	82
Ret. Eligible / Total HC	32%	32%	37%	26%	45%	24%

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.