

These materials accompany the public report for the CREATES project

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

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

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

1.1 CREATES Project Summary

CREATES project summary



Background

 8k+ employees eligible for retirement by June 30, 2022

Represents an imperative and an opportunity to modernize

 PA 18-81 asked the Governor to direct OPM to hire a national subject matter expert to find \$500m in operational efficiencies



Outcomes

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





Residents

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



Businesses

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



Taxpayers

- Optimizes tax dollars for a more efficient government
- Finds new sources of revenue and cost savings without raising tax rates



State employees

- Increases capacity by automating manual, repetitive tasks
- Mitigates workload burden from retirement surge
- Provides more incentives to grow as a leader

Three-phase approach to improving Connecticut's efficiency

Objectives



Ensure continuity of operations



Manage expenses



Improve service quality

Approach

Baseline and calibration
Sep –Oct

Analyze retirement surge to understand risk and impact

Identify improvement opportunities

Develop **prioritization criteria** for opportunities

Develop stakeholder map

Develop recommendations
Oct - Dec

Conduct employee survey

Filter and prioritize opportunities

Conduct **detailed analysis** for prioritized opportunities

Ensure prioritized opportunities address retirement surge risk

Engage stakeholders to test and refine initiatives

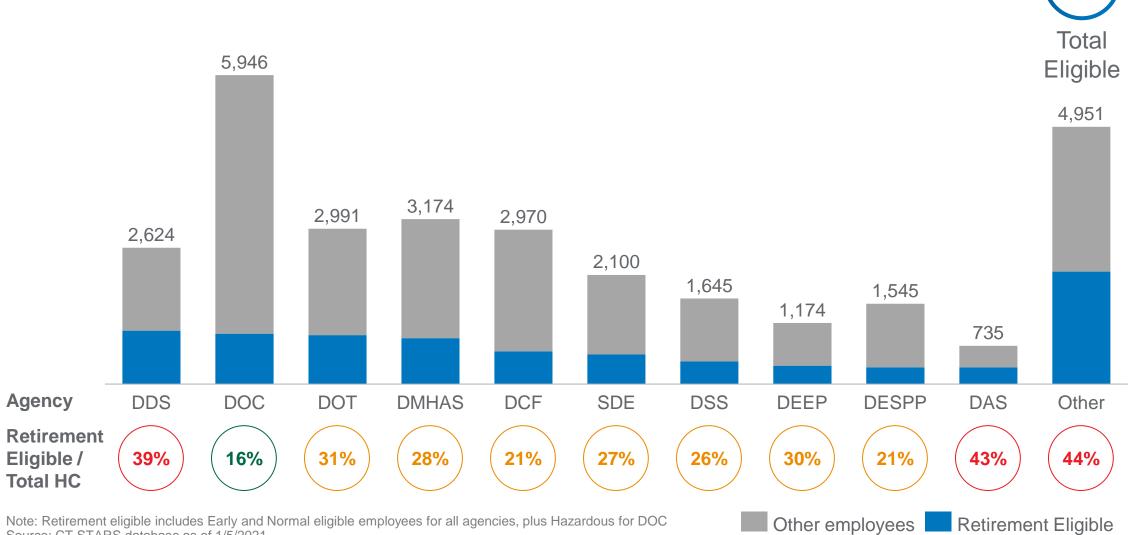
Report and roadmaps
Dec - Feb

Develop **high-level implementation plan** for prioritized initiatives

Develop **case for change** and supporting
communications

Write final report

8,145 executive agency employees (27%) eligible for retirement by 2022



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

Opportunities were developed using a variety of inputs and engagement



Collaborating with 200+ senior employees, including agency leadership, staff and analysts, as well as 2.5k+ survey respondents



Benchmarking versus state, federal and private sector leaders to capture best-practices



Analyzing extensive internal financial and operational data



Engaging additional stakeholders, including non-profits, businesses and government experts across functions

Recommendations | Modernize management of the State workforce



Report Observations

- High number of vacancies due to difficulty in recruiting and retention for certain positions
- Long duration hiring process
- Non-competitive compensation for managers and high-skill jobs
- Lack of flexibility in changing org structures and job classes
- High levels of overtime experienced
- Tightly defined job duties



- Streamline the hiring process
- Improve manager value proposition and retention
- Manage overtime/absenteeism
- Improve management of workers' compensation expenses
- Return DOC staffing to previous levels
- Optimize CSP trooper target and civilianize administrative functions
- Optimize CTECs administration and teacher levels

Recommendations | Streamline services and pool resources



Report Observations

- Some pooled resources but many repetitive functions operating individually within each agency
- Confusing landscape for residents who interact with multiple health and human services agencies
- Sub-optimal coordination across agencies with overlapping customers or geographic focus areas
- Uneven capabilities across agencies and lack of shared best-practices



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

Recommendations | Digitize resident services and internal processes



Report Observations

- Uneven digital capabilities across the State
- Many agencies operating on legacy IT systems and paper records
- Digital-laggard agencies unable to build capability individually
- Residents restricted in their ability to conduct motor vehicle transactions at home or from partner locations
- Below average audit coverage ratios within DRS



- Expand usage of common payment platform
- Digitize document management
- Streamline Affirmative Action reporting
- Digitize more DMV transactions
- Complete Revenue Services digitization program
- Modernize Unemployment Insurance
- Digitize DMHAS patient records
- Adopt new maintenance and inspection tools in DOT

Recommendations | Optimize sourcing



Report Observations

- State has well-established and robust engagements in place but faces obstacles related to certain specialized services
- High number of direct care staff eligible for retirement
- Longstanding transit operating contracts with generally high costs and little transparency
- Decade-long litigation over bus certificate requirements



- Expand non-profit engagement for providing LMHAs
- Expand non-profits for DDS group homes
- Bid out public transit service operations
- Contract operations of veterans' convalescent care
- Review transportation structure and maintenance contracting

Recommendations | Design services to meet resident needs



Report Observations

- Ongoing initiatives to control healthcare spend
- Potentially hundreds of millions of dollars in uncollected taxes
- Public transit services designed for old ways of working
- Depleting STF with no appetite to introduce new revenues



- Align rail and bus service to resident needs
- Adopt value-based health payments
- Control health spending and maximize federal funding
- Improve tax compliance
- Cut low-ROI film and tax programs
- Find new transportation revenues



1 CREATES report context and approach

Connecticut demographics

	Attribute	2019
Population	Population	3,565,287
Age	0-18 years	25.5%
	19-64 years	-
	65+	17.7%
Race (Top 3 only)	White alone, percent	79.7%
	White alone, not Hispanic or Latino, percent	65.9%
	Hispanic or Latino, percent	16.9%
	Black or African-American alone, percent	12.2%
Education	High school graduate or higher, percent of persons age 25 years+, 2014-2018	90.5%
	Bachelor's degree or higher, percent of persons age 25 years+, 2014-2018	38.9%
Health	With a disability, under age 65 years, percent, 2014-2018	7.3%
	Persons without health insurance, under age 65 years, percent	6.2%
Income and Poverty	Median household income (in 2018 dollars), 2014-2018	\$76,106
	Per capita income in past 12 months (in 2018 dollars), 2014-2018	\$43,056
	Persons in poverty, percent	10.4%
Business	Total employment, 2018	1,528,867
	Total annual payroll, 2018 (\$1000)	97,728,524
	Total employment, percent change, 2017-2018	-0.5%

Source: U.S. Census aBureau

CT has suffered significant net migration losses in recent years – COVID presents opportunity to mitigate



Domestic net migration



Birth rate



International net migration



Opportunity to attract domestic migration from neighboring states

16,000

New Yorkers moved to Connecticut from March-June

NY & NJ are historical sources of net domestic inflows

US Rank: 44th

Est. loss of ~130M people from 2015-19

US Rank: 47th

15%+ below national average

US Rank: 16th Somewhat offset I by inflow of ~75M internationals

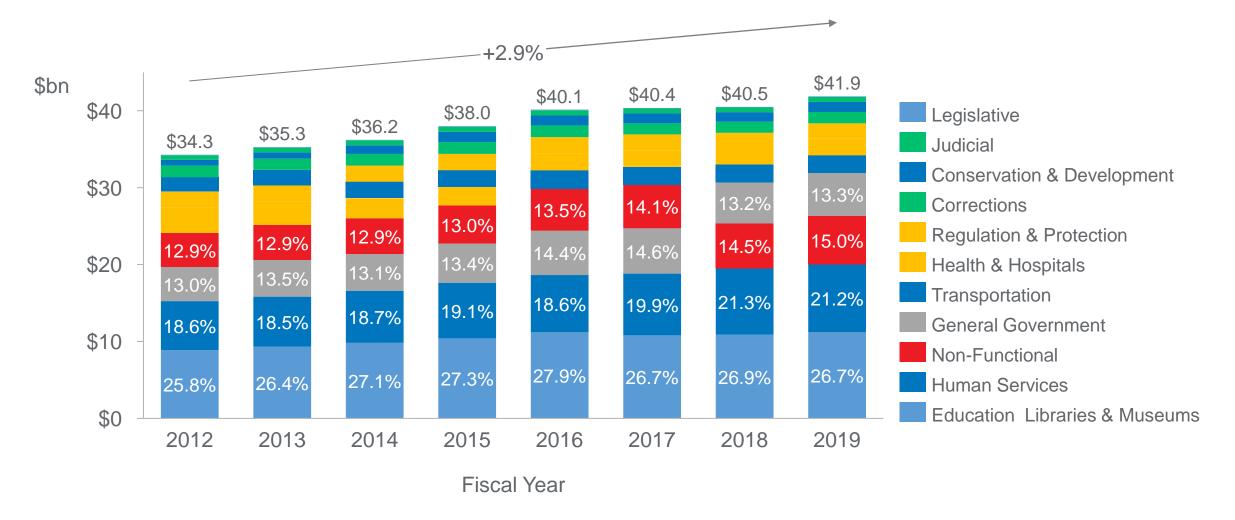


CT consistently scores poorly in CNBC's annual Top States for Business, driven by high costs and poor infrastructure

	Weighting	2015	2016	2017	2018	2019
Overall	100%	33	43 🜉	33 🛖	37 🖊	35♠
Workforce	18%	4	18	7	16	15
Economy	15%	26	43	41	45	43
Infrastructure	14%	46	47	47	47	43
Cost of Doing Business	14%	47	47	43	46	43
Quality Of Life	13%	11	25	23	22	20
Education	7%	11	18	3	9	8
Tech. & Innovation	7%	19	19	13	17	18
Business Friendliness	7%	32	29	32	26	21
Access To Capital	3%	30	25	20	18	20
Cost Of Living	2%	49	46	45	43	43

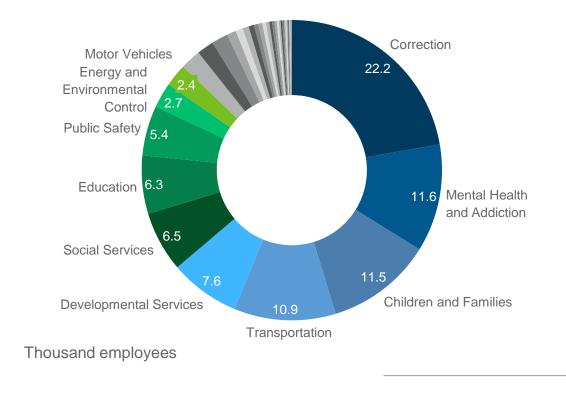
- High taxes and energy costs, poor fiscal health, lack of infrastructure and income inequality are often cited as drags on CT's attractiveness
- High ranking schools, quality of life, young workforce, & strong innovation provide areas of strength
- State also fares poorly in Forbes 2020 survey (43rd)

CT's state expenses have grown nearly 3% CAGR since FY12, led by \$2.5bn rise in Human Services (~40% rise)

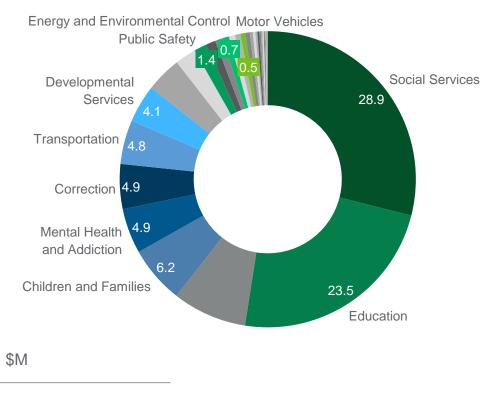


CREATES covered State executive agencies, with focus on areas with greatest opportunities for efficiency and savings





... and 80% of the 2020 budget



Also need to consider retirement risk impact across department

Three-phase approach to improving Connecticut's efficiency

Objectives



Ensure continuity of operations

Prevent the retirement surge from impacting services provision



Manage expenses

Lower costs by identifying potential efficiency improvements



Improve service quality

Create value through improved citizen experience, better distribution and improved outcomes

Approach

Baseline and calibration
Sep -Oct

Analyze retirement surge to understand risk and impact

Identify improvement opportunities by cluster

Develop **prioritization criteria** for improvement opportunities

Develop stakeholder map

Develop recommendations Oct - Dec

Filter and **prioritize improvement opportunities**

Develop **high-level business cases** for prioritized opportunities

Ensure prioritized opportunities address retirement surge risk

Engage broad set of stakeholders to test and refine improvement opportunities Report and roadmaps
Dec - Feb

Develop **high-level implementation plan** for prioritized initiatives

Develop case for change and supporting communications

Write final report

CREATES identified improvement opportunities and integrate with other work

Focus was on operational efficiency improvements within current policy framework

Focus of CREATES



Op model and org structure

Leverage more efficient delivery models, remove redundancies, optimizing spans/layers and sourcing



Digitization

Replace manual processes or services (internal and external) with digital and automation



Process improvement

New ways of improving current activities, including through simplification and deduplication



Service design

Enhance services for citizens and industry, eliminate nonvalue-add services and enable self-service



Workforce management

Across the employee lifecycle, including hiring, learning and development, deployment, retention



Revenue optimization

Identify new opportunities for revenue and improve revenue realization

Additional State projects in progress



IT efficiency analysis

Review of the IT footprint conducted through the Department for Administrative Services



Lean management

Review of use of Lean techniques to follow-up on progress since official adoption in 2016



Workspace realignment

Updates to teleworking policy and projected impact on estate footprint



Procurement

Processes through which the State purchases services and current value from those services



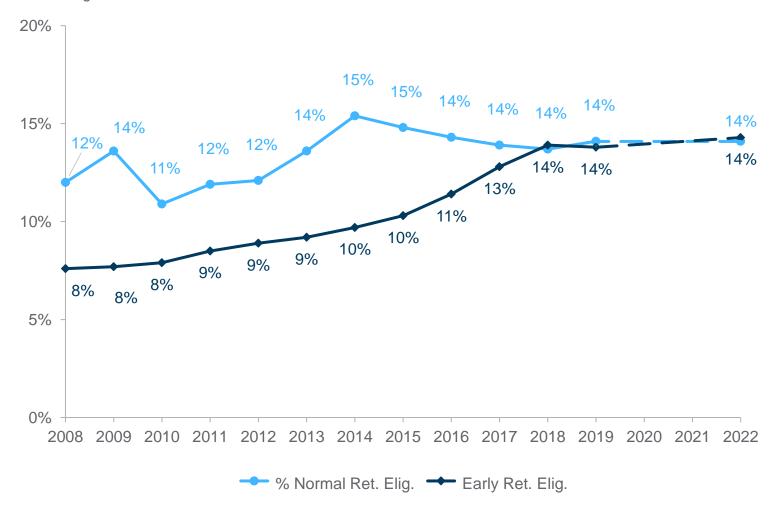
We feed relevant ideas into this work and ensured alignment in final report

2 State Employee 2022 Retirement Surge

2.1 State employee retirements

Over the last decade, the share of State workforce eligible for retirement has continued to rise

Share Eligible for Retirement



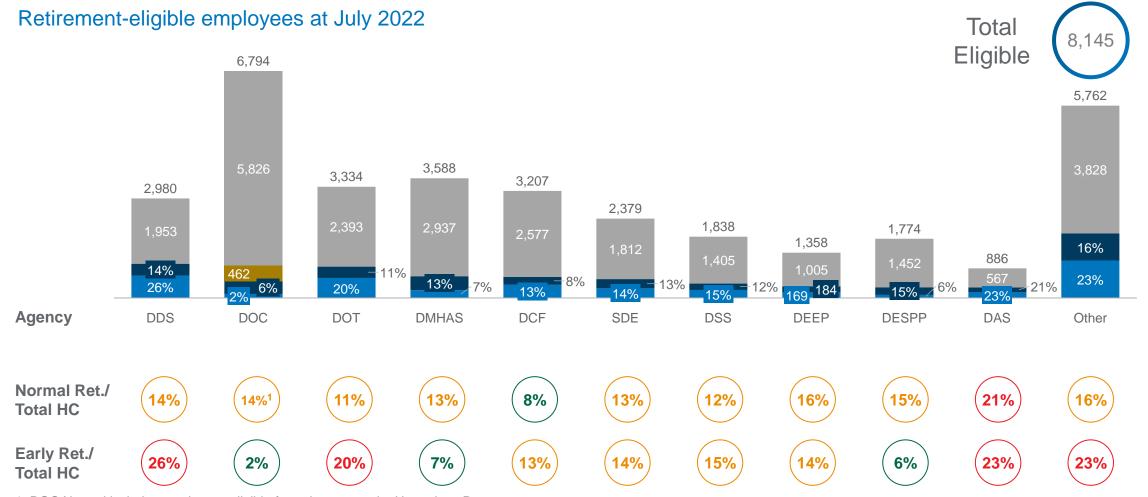
27% of workforce will be eligible to retire by July 1, 2022, split between those eligible for reduced/full benefits



^{1.} Includes DOC employees eligible for retirement under Hazardous Duty Source: CT STARS database as of 1/5/2021

Agency lens | Retirement risk varies significantly by agency

DDS, DOT, DMHAS, DAS and the smallest agencies are at greatest risk



^{1.} DOC Normal includes employees eligible for retirement under Hazardous Duty

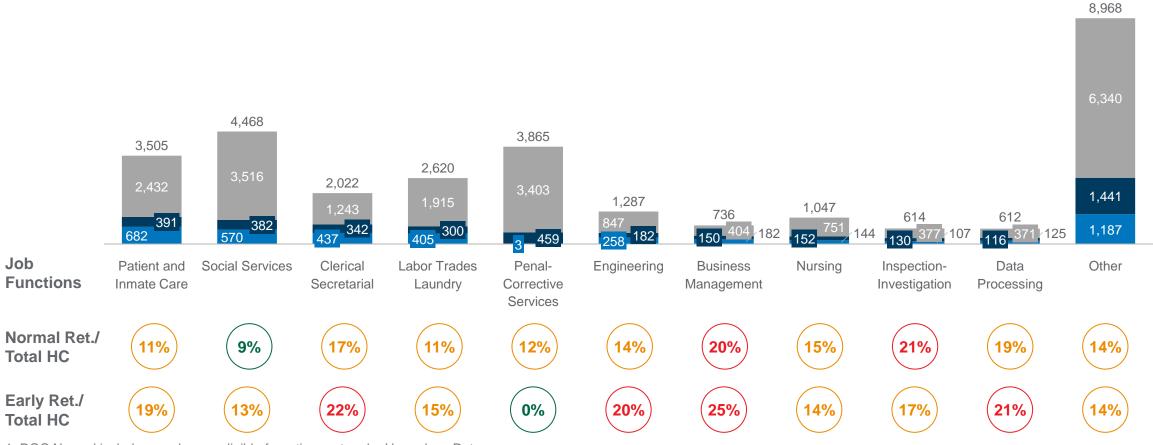
Note: Color coding is based on % vs. statewide benchmark (Normal = 13.6%, Early = 13.8%); Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red

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

Other employees Hazardous Normal Ret.-Eligible Early Ret.-Eligible

Profession lens | Admin, health and managerial positions are at highest risk

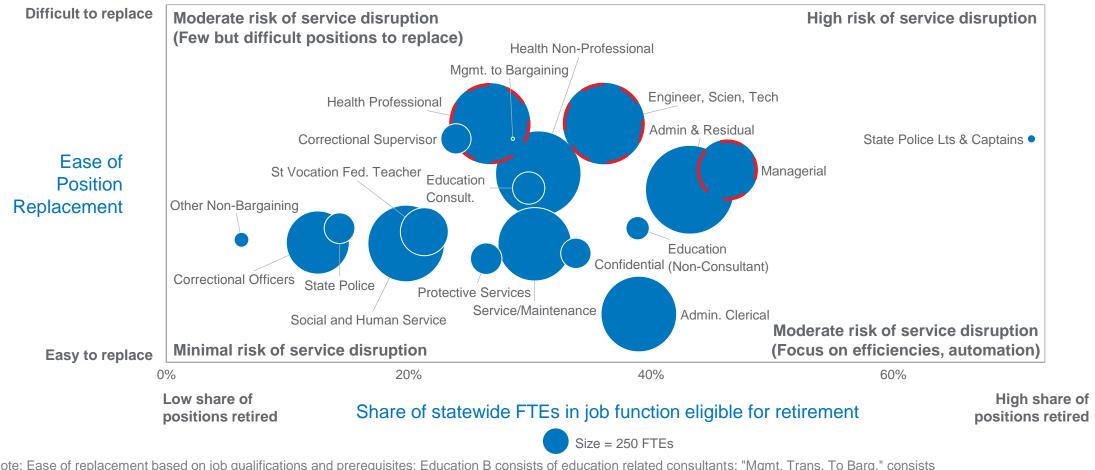
Retirement-eligible employees at July 2022



^{1.} DOC Normal includes employees eligible for retirement under Hazardous Duty
Note: Color coding is based on % vs. statewide benchmark (Normal = 13.6%, Early = 13.8%); Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red
Source: CT STARS database as of 1/5/2021

Other employees Normal Ret.-Eligible Early Ret.-Eligible

Health professionals, engineers/scientists and managers represent greatest risk for service continuity due to difficulty to replace retired employees



Note: Ease of replacement based on job qualifications and prerequisites; Education B consists of education related consultants; "Mgmt. Trans. To Barg." consists of temporary unit managers transitioning to bargain units represented by A&R union Source: STARS database. DAS HR

Delayed retirement results in loss of 2% COLA floor, delays first COLA by ~18 months and increases healthcare costs for under 65

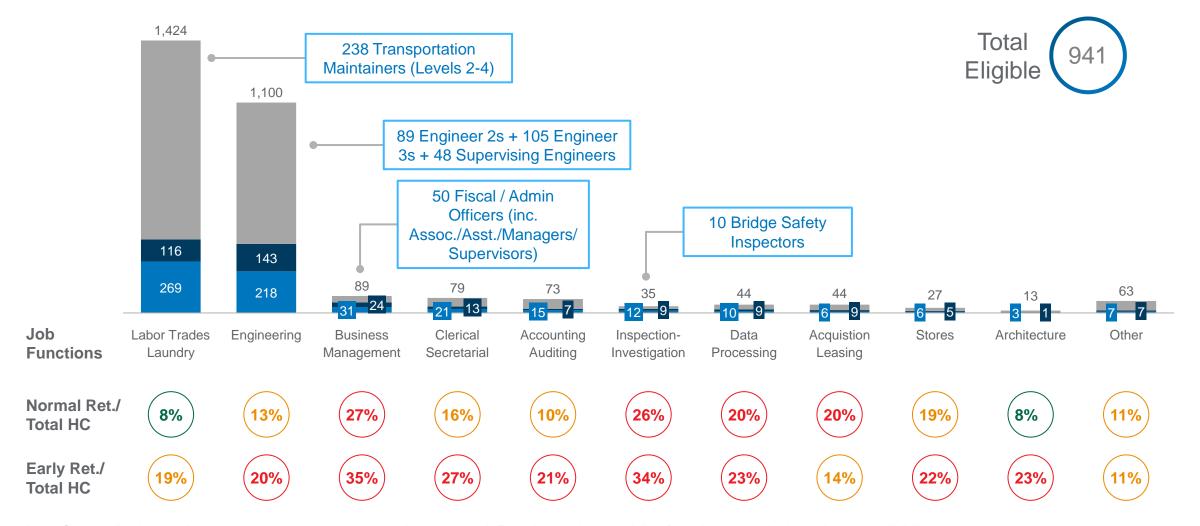
	Retirement before 7/1/22		Retirement on or after 7/1/22		
	Hazardous	Non-Hazardous	Hazardous	Non-Hazardous	
Cost of Living Adjustment					
Annual cost of living adjustment (COLA)	2% or 60% of CPI-W1 up to 6	6% and 75% of CPI-W above 6%	CPI-W up to 2%, then 60% of CPI-W up to 6% and 75% of CPI-W above 6%		
Minimum COLA	2%		0% ☆		
Maximum COLA	7.5%		7.5%		
First COLA Adjustment	~12 months (9-15 months)		30 months (Kick-in added if annualized COLA > 5.5% first 18 months) ²		
Healthcare					
65 years+/Medicare-Covered Retirees	No change		No change		
Premium share paid by employees < 25 yrs. service	0 to 1.5%	1.5% to 3.0%	3.0% 😭	5.0% ☆	
Medicare Part B Premium Reimbursement	State pays 100% premium for Medicare-covered retirees		50% reimbursement of add'l cost beyond standard premium for high earners 3 (~\$1.2-2.4k cost p.a. to individual) 4		

No relief provided to early retirees in terms of benefit reduction

^{1.} COLA = annual Cost of Living Adjustment, based on CPI-W (Consumer Price Index for Urban Wage Earners & Clerical Workers) 2. Kick-in = [(60% * CPI-W)–2.5%] * 1.5 3. \$85K salary for single filers 4. Additional premiums start at \$2,429 per year for single filers with salaries \$87-109K, \$3,470 from \$109-\$136K, \$4,512 from \$136-\$162K Source: SEBAC 2017 agreement

Department of Transportation

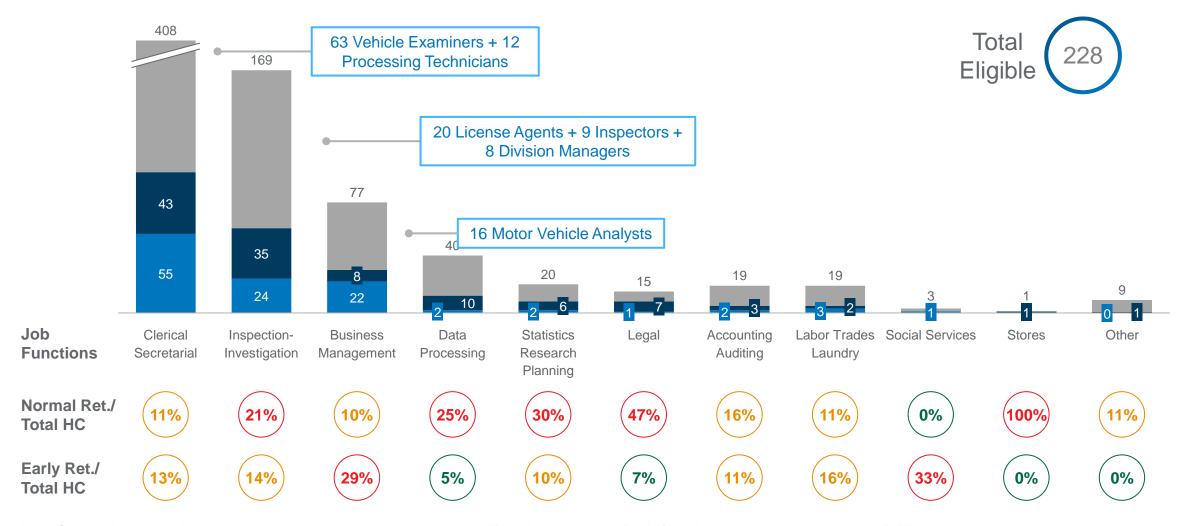




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Department of Motor Vehicles

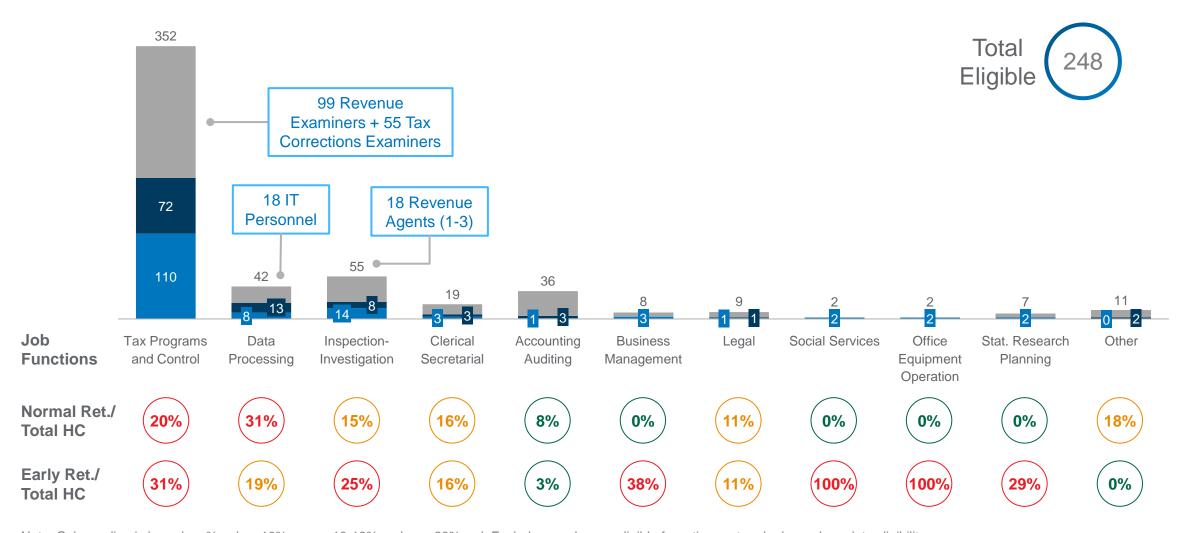




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Department of Revenue Services

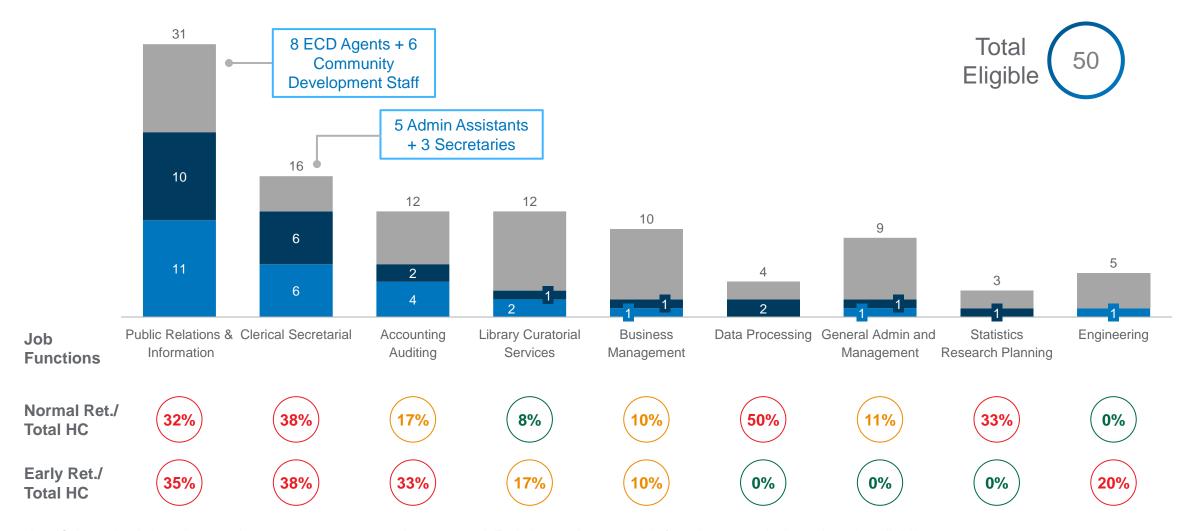




Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Economic and Community Development

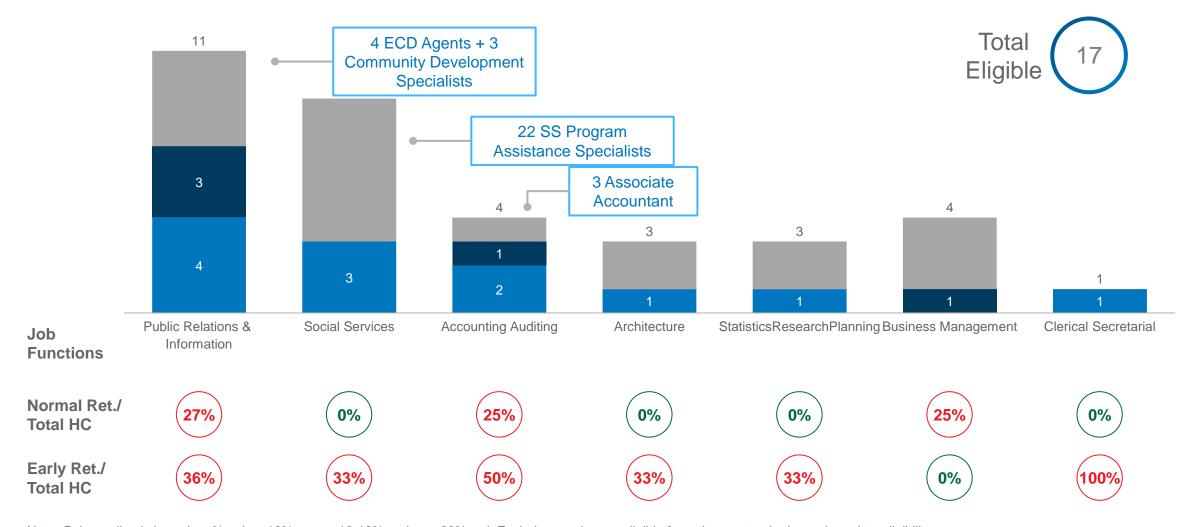




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Department of Housing

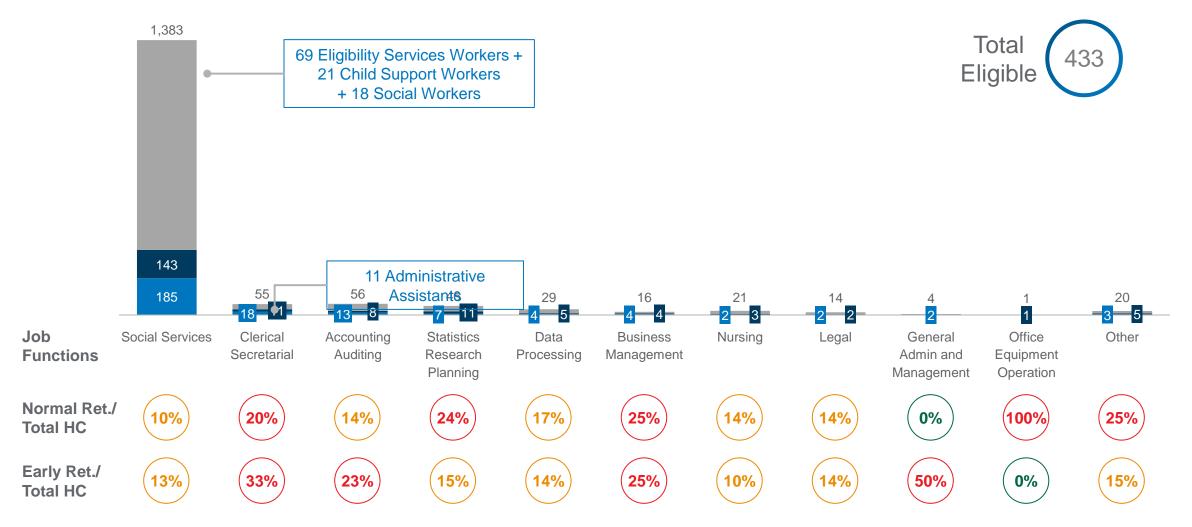




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Department of Social Services

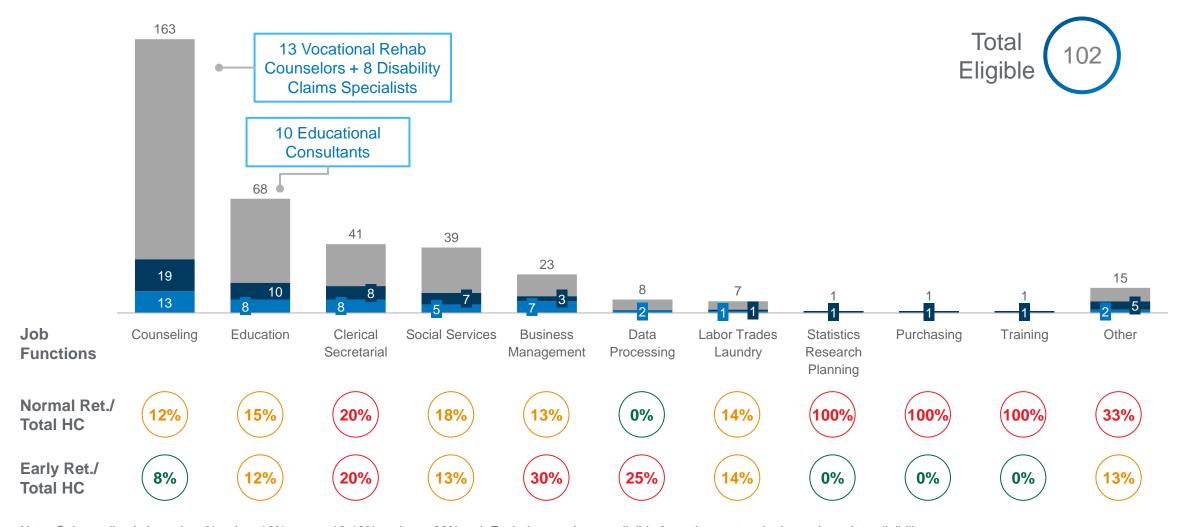




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Aging and Disability Services



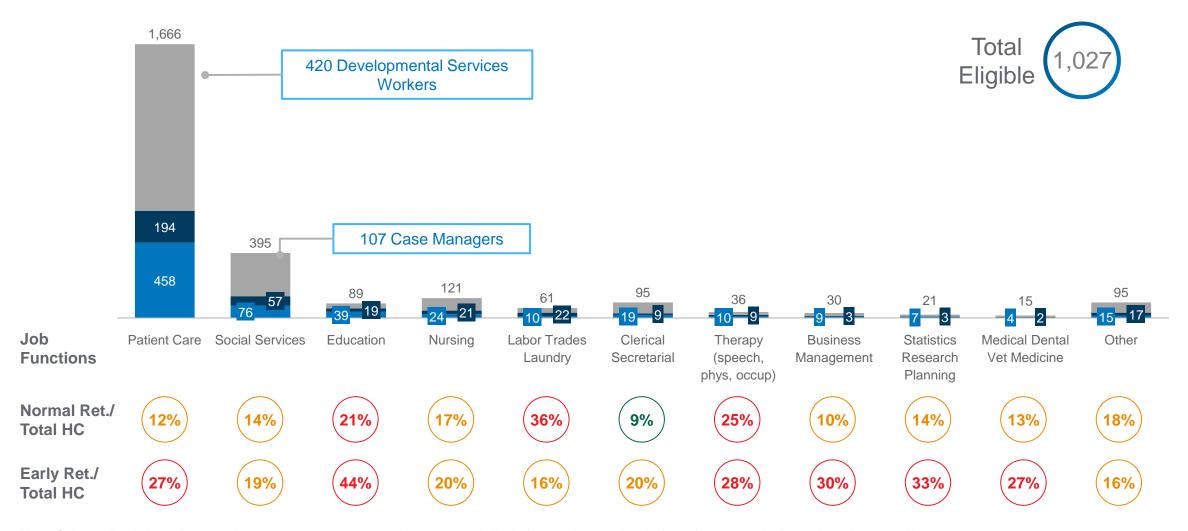


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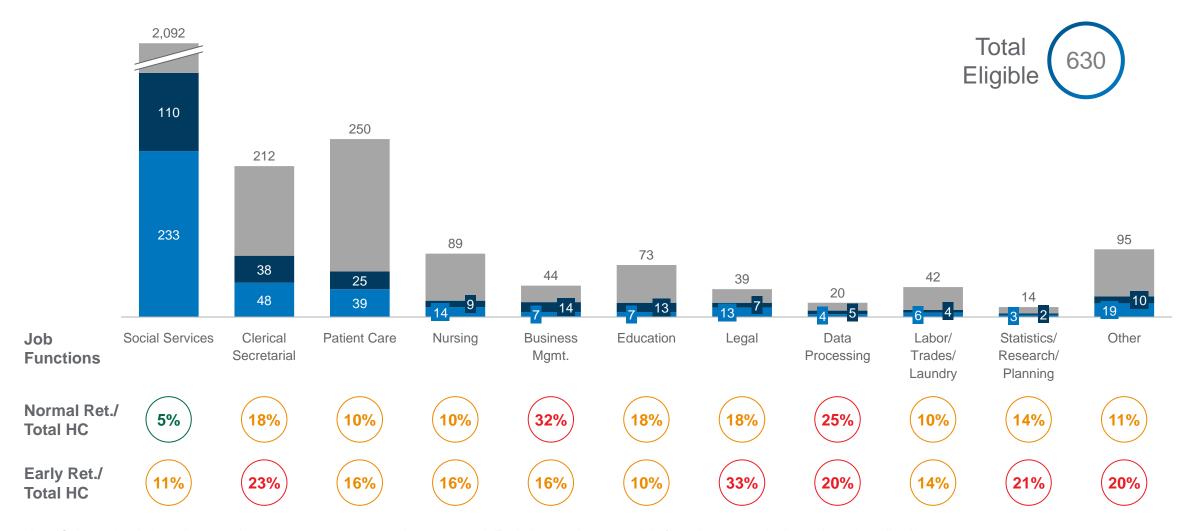
Department of Developmental Services





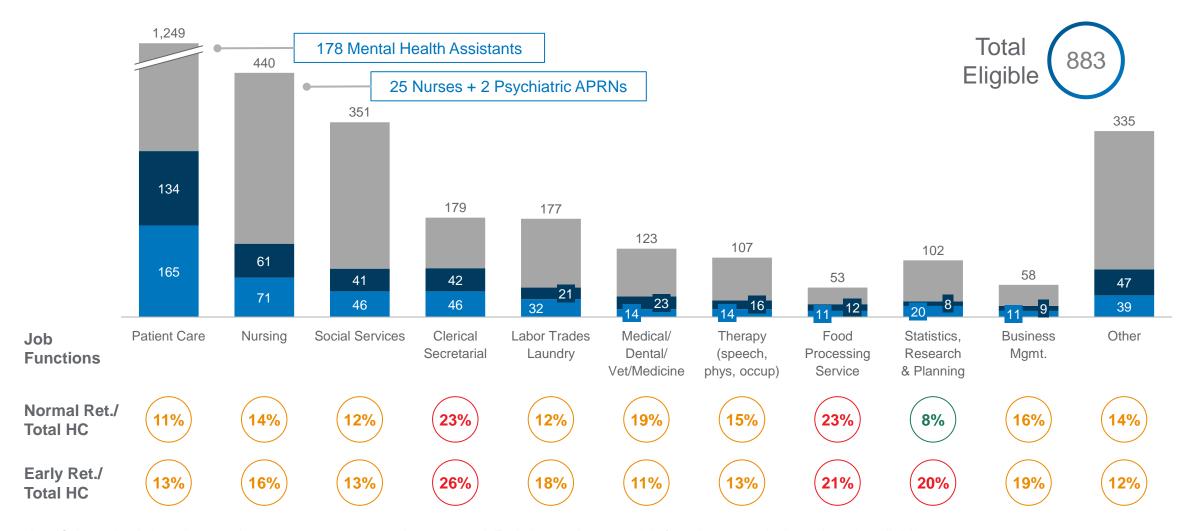
Department of Children and Families





Department of Mental Health and Addiction Services

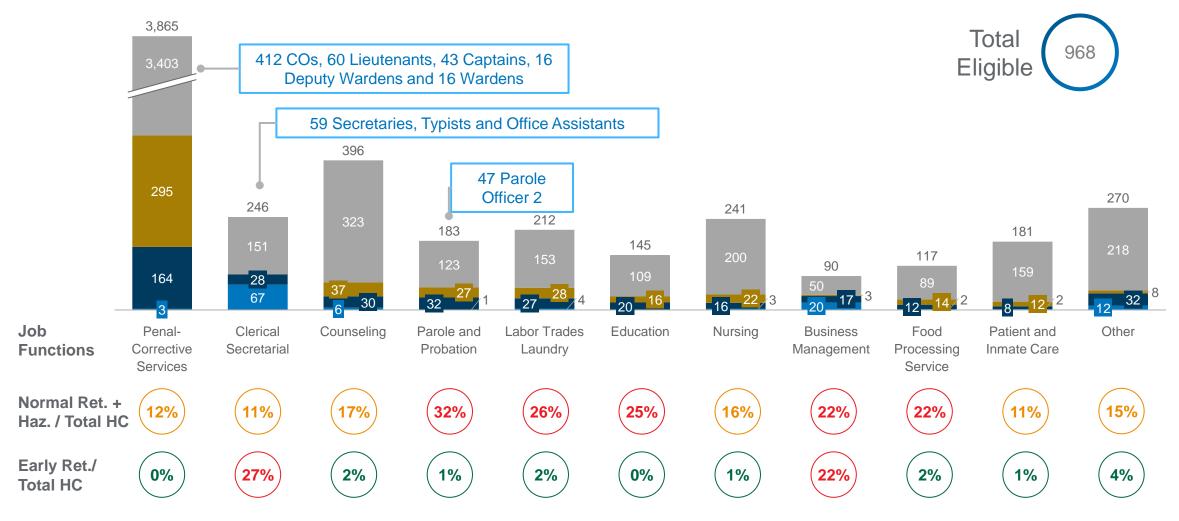




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Department of Corrections



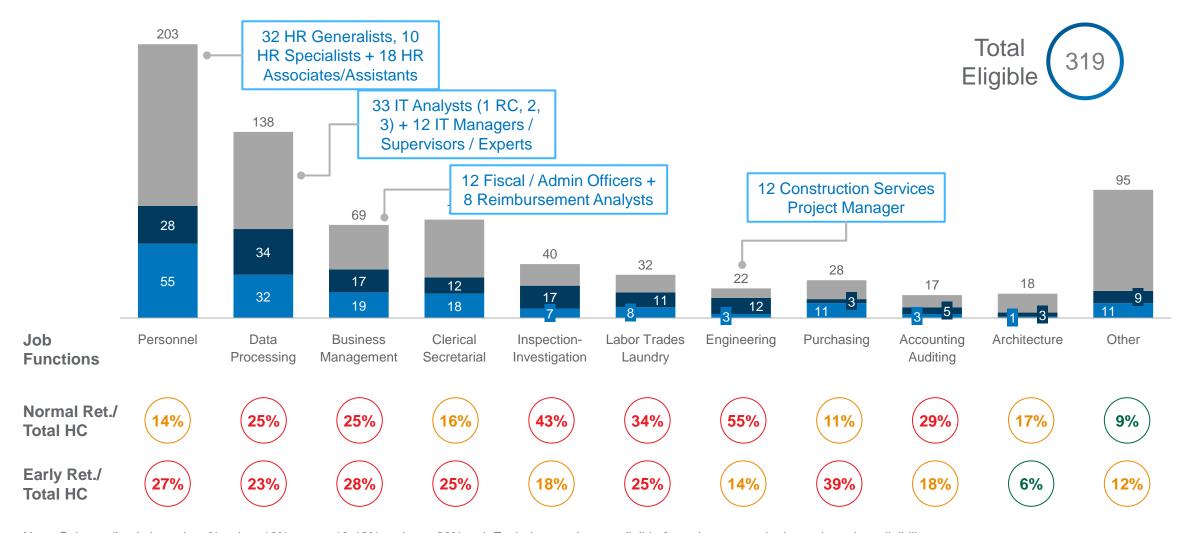


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Includes hazardous duty eligible employees. Source: CT STARS database as of 1/5/2021

Ineligible Hazardous Eligible Normal Eligible Early Eligible

Department of Administrative Services

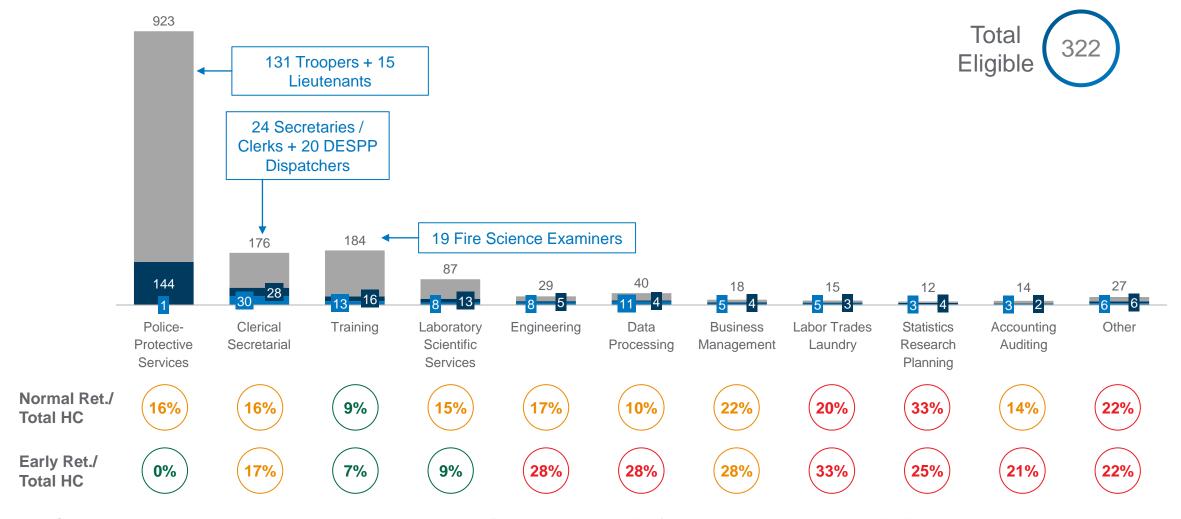




Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Emergency Services and Public Protection

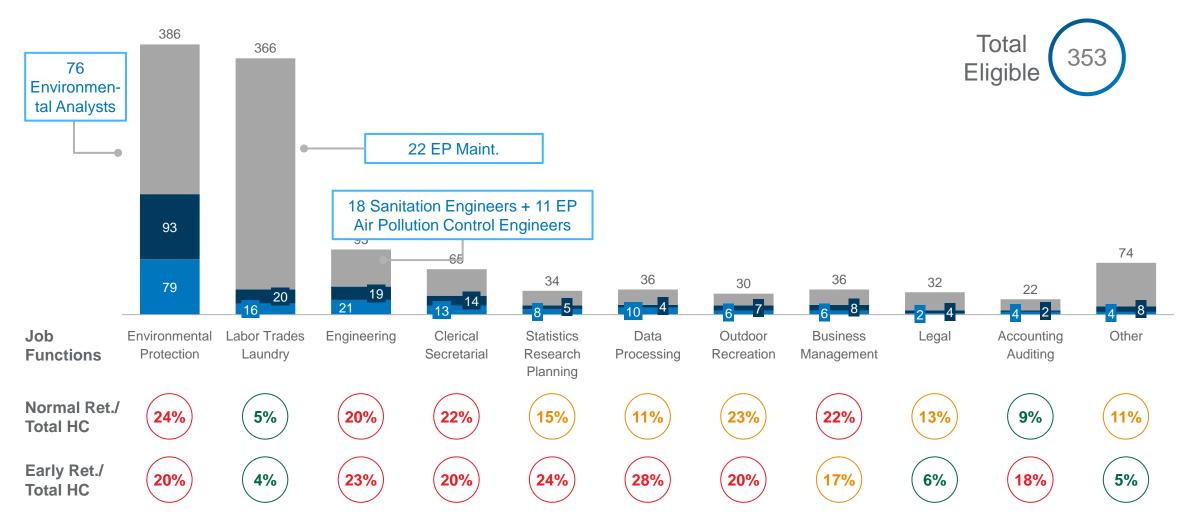




Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database, BCG analysis

Department of Energy and Environmental Protection

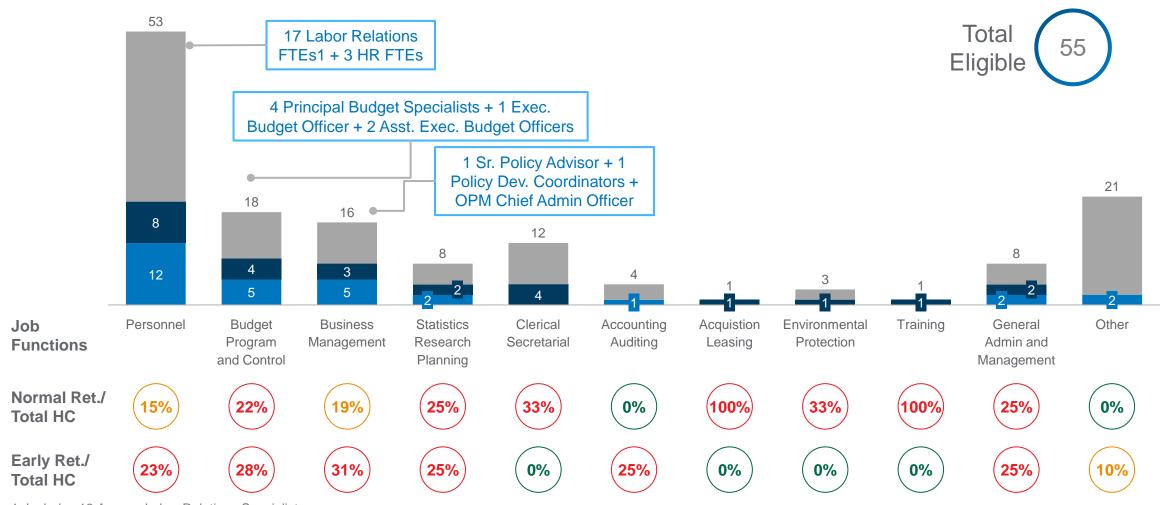




Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Office of Policy and Management





1. Includes 12 Agency Labor Relations Specialists

Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility.

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

State Department of Education

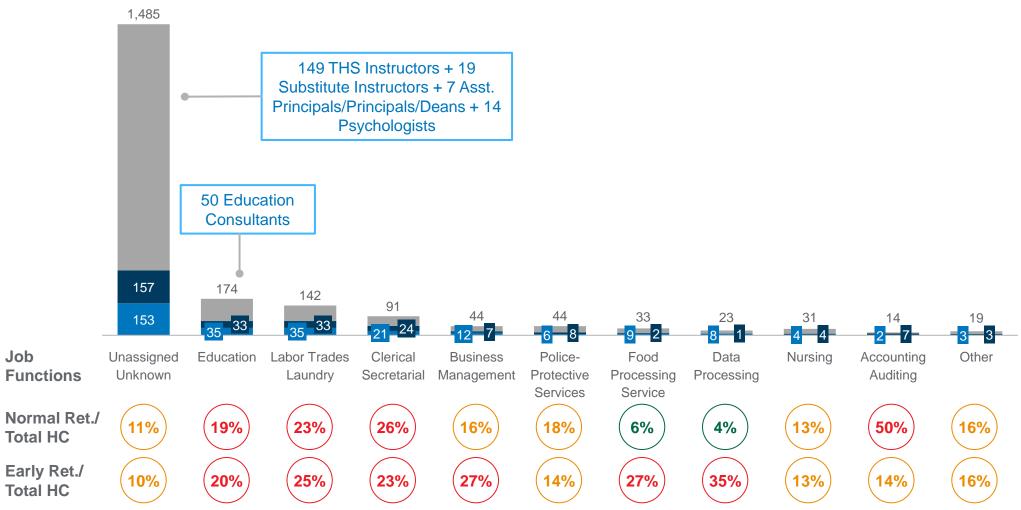


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567

Total

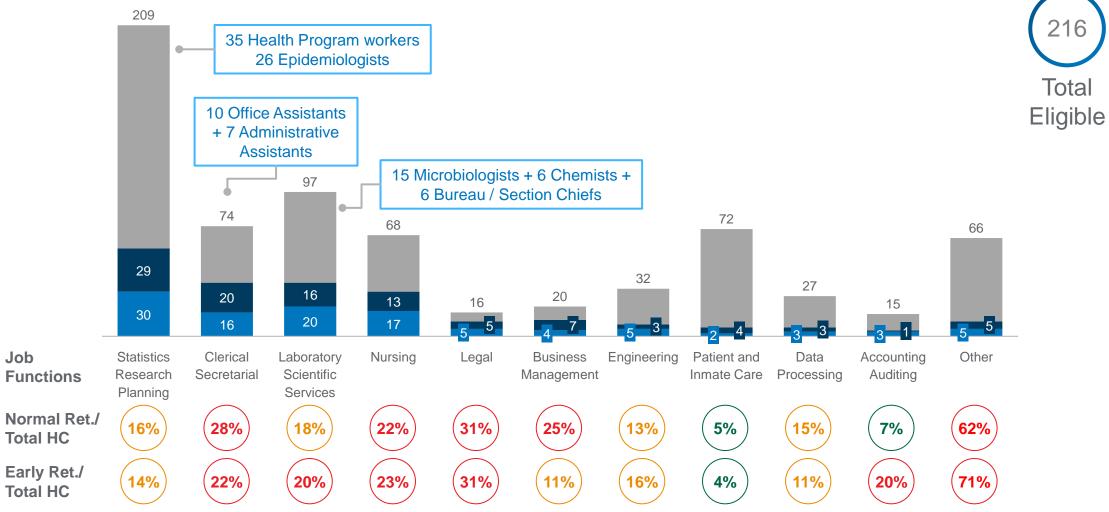
Eligible



Department of Public Health



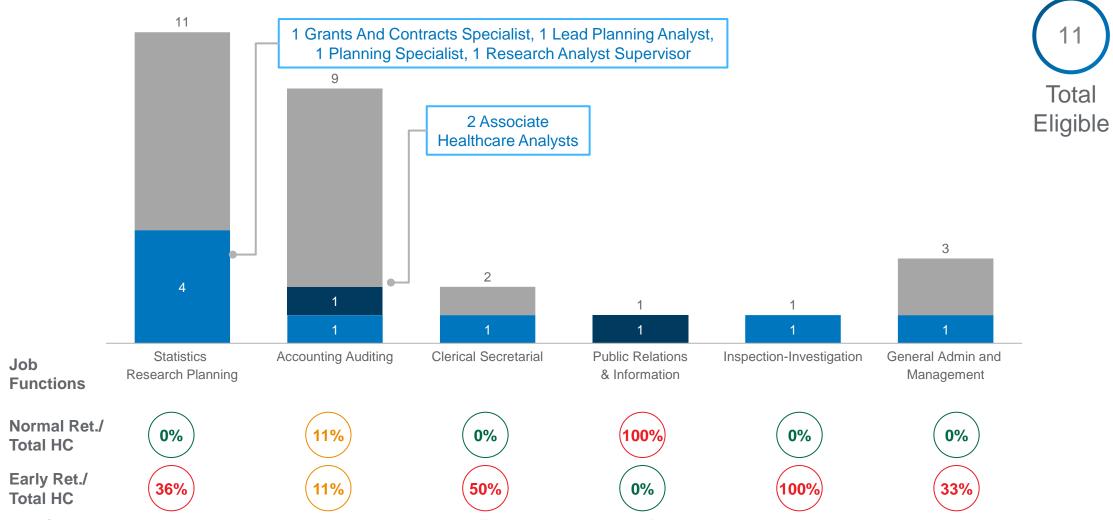
46



Office of Health Strategy



47



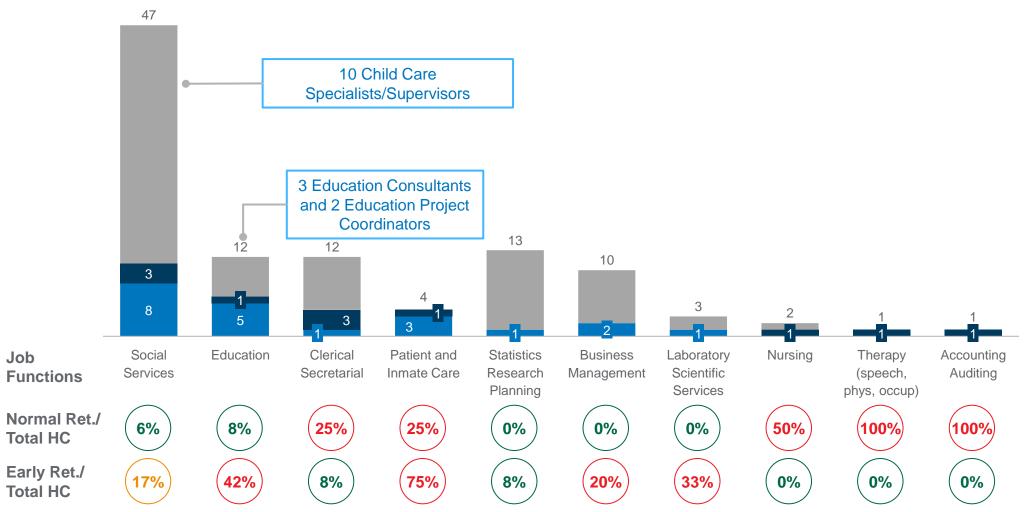
Office of Early Childhood



48

Total

Eligible



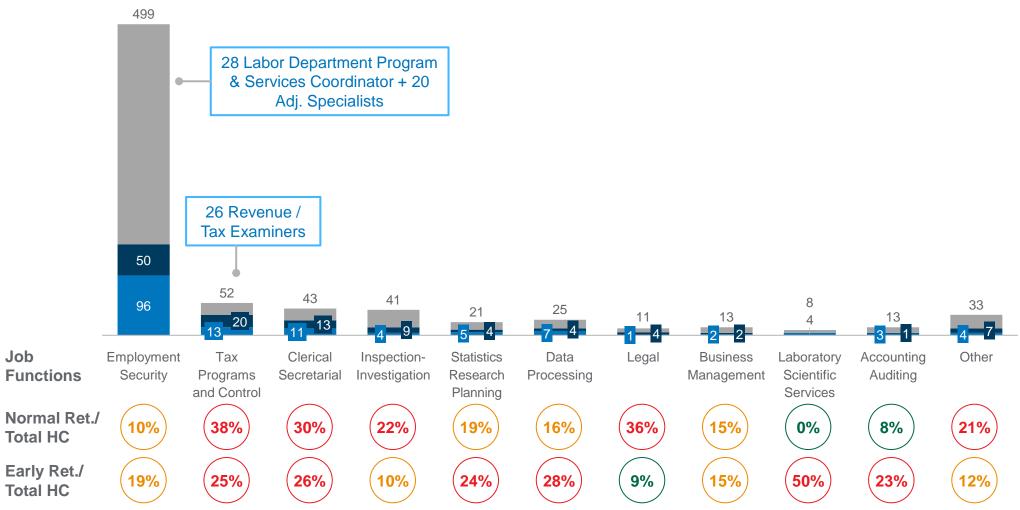
Department of Labor



49

Total

Eligible



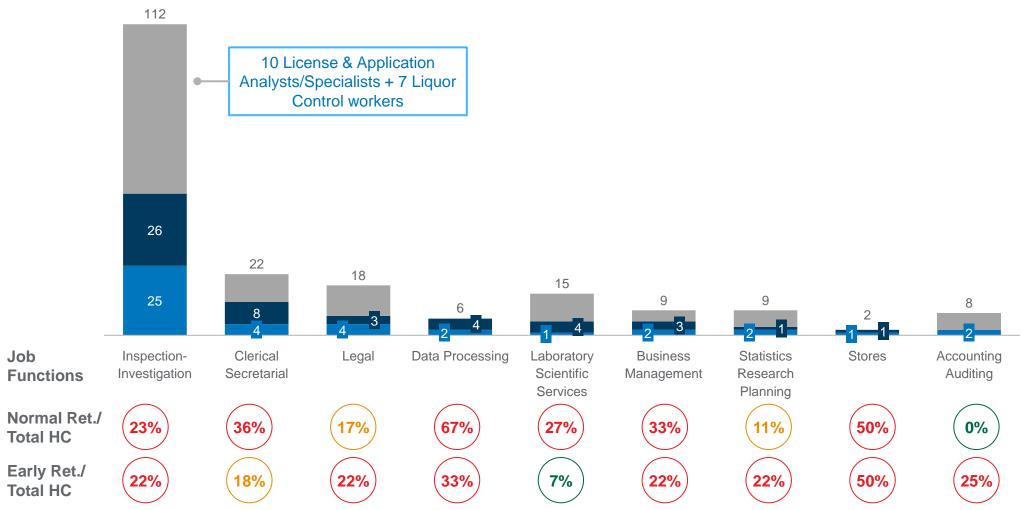
Department of Children and Families



Total

Eligible

50

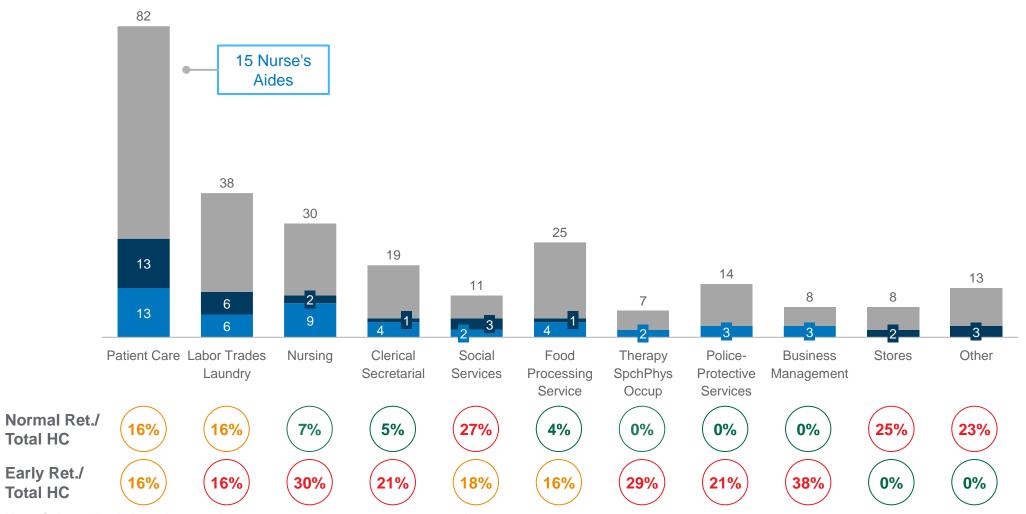


Department of Veterans Affairs



Total

Eligible

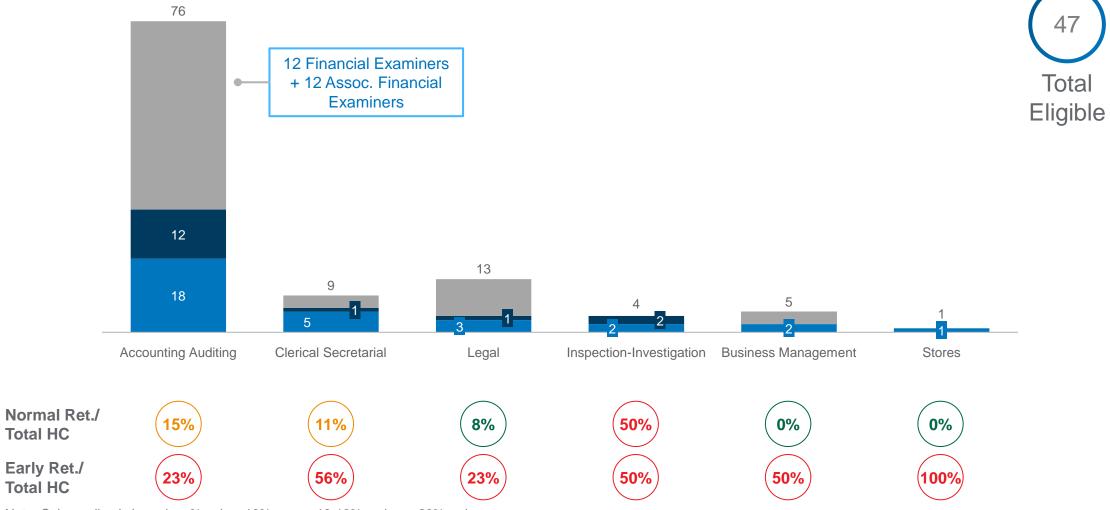


Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

Department of Banking



Total



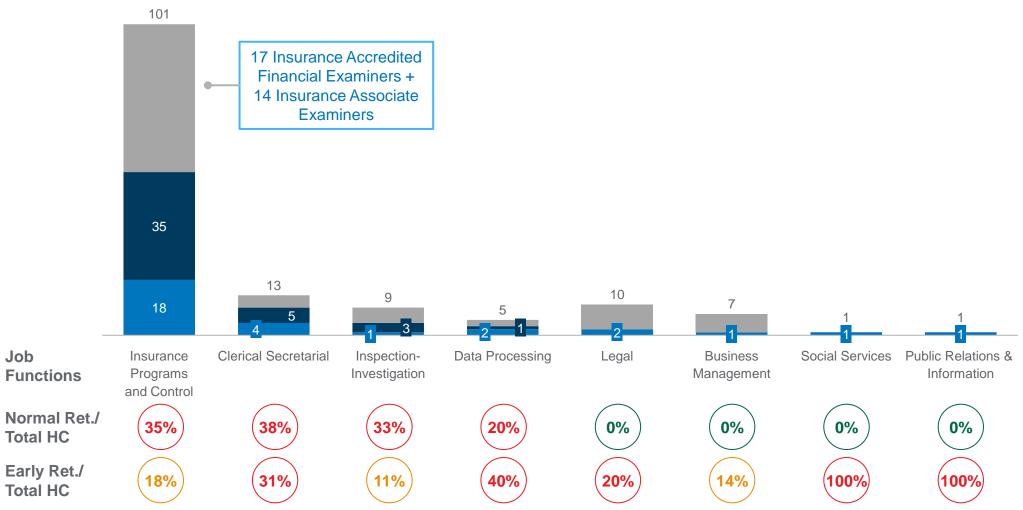
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

Insurance Department



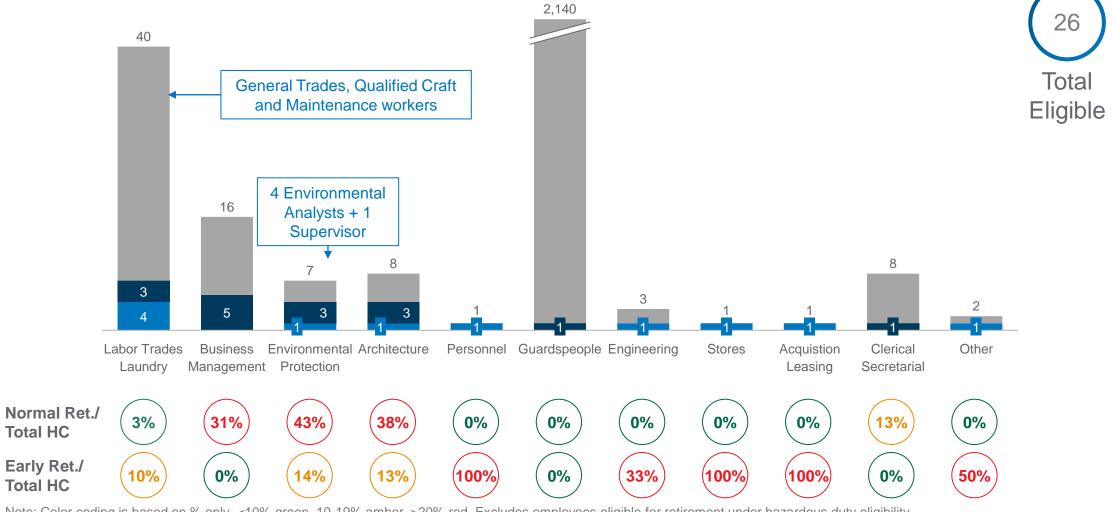
Total

Eligible



Military Department





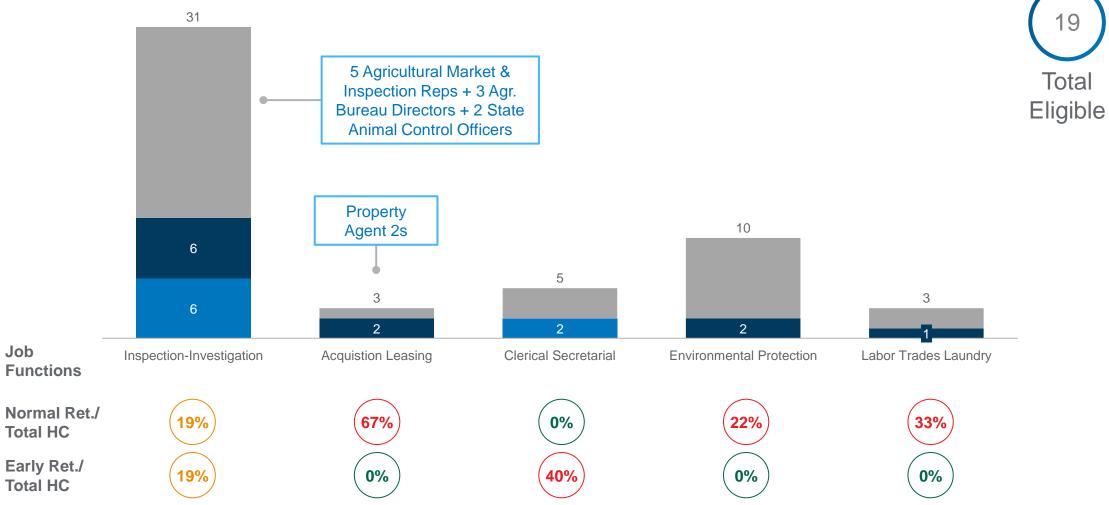
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Department of Agriculture

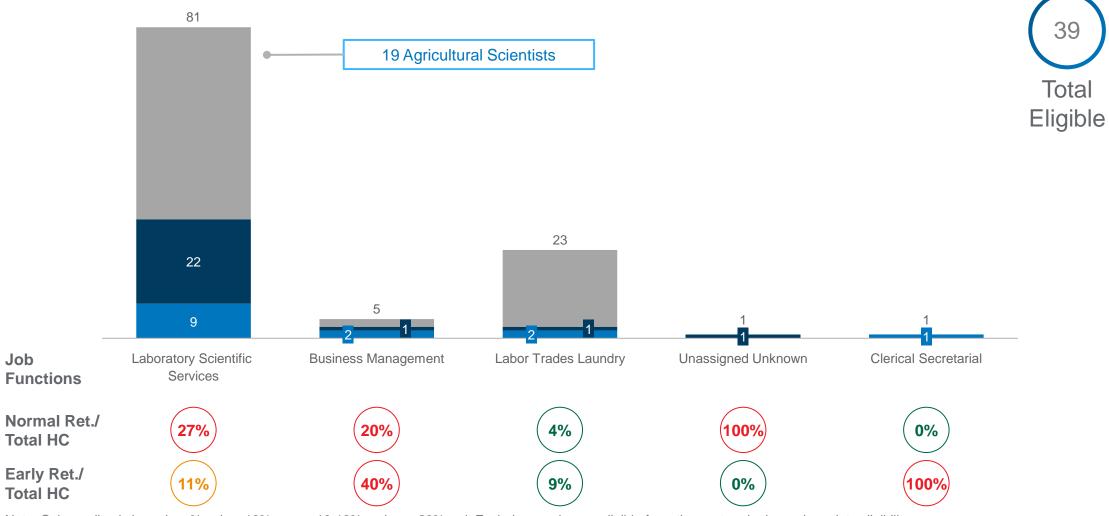


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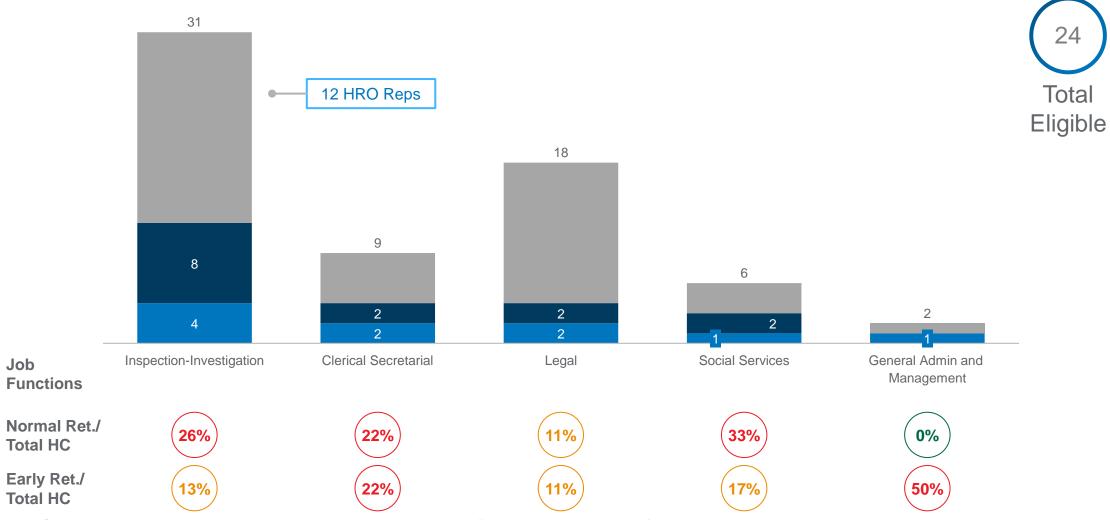
Agricultural Experiment Station





Commission on Human Rights and Opportunities





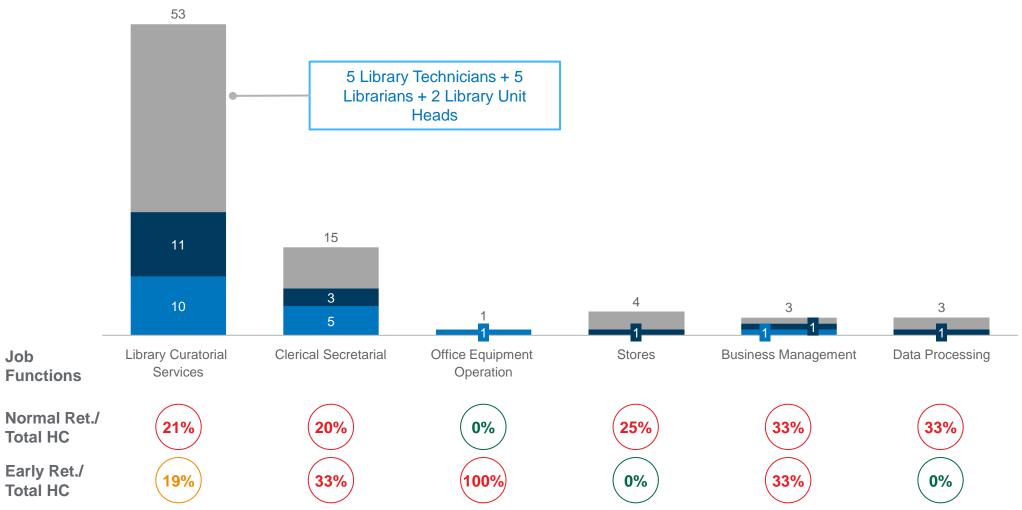
Connecticut State Library



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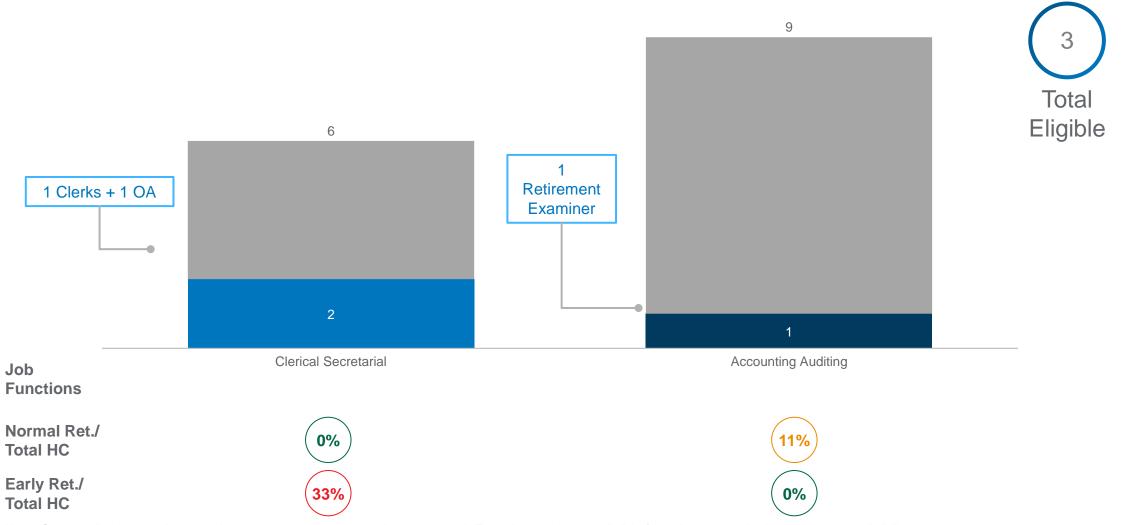
Total

Eligible



Teachers Retirement Board

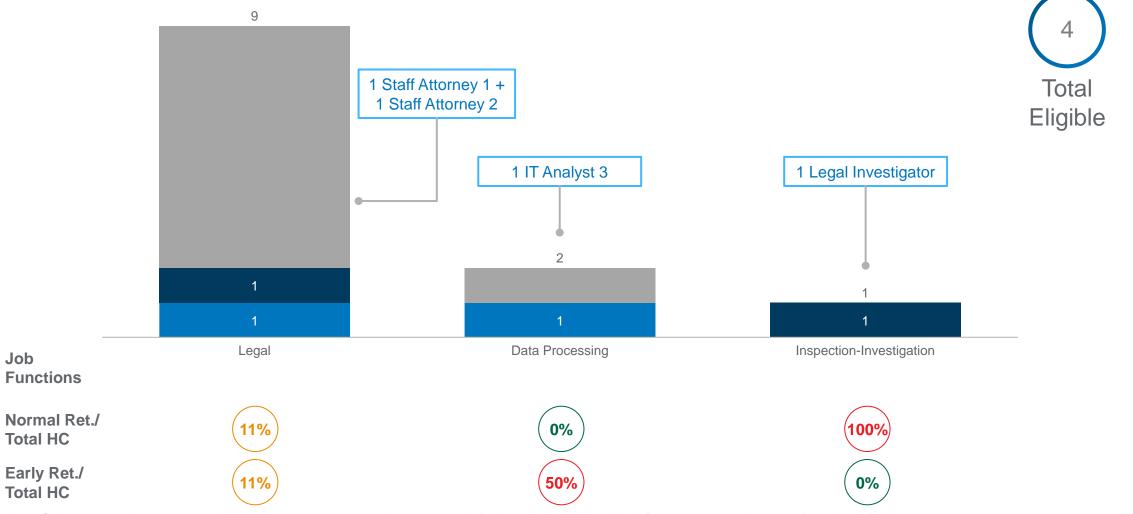




Office of State Ethics

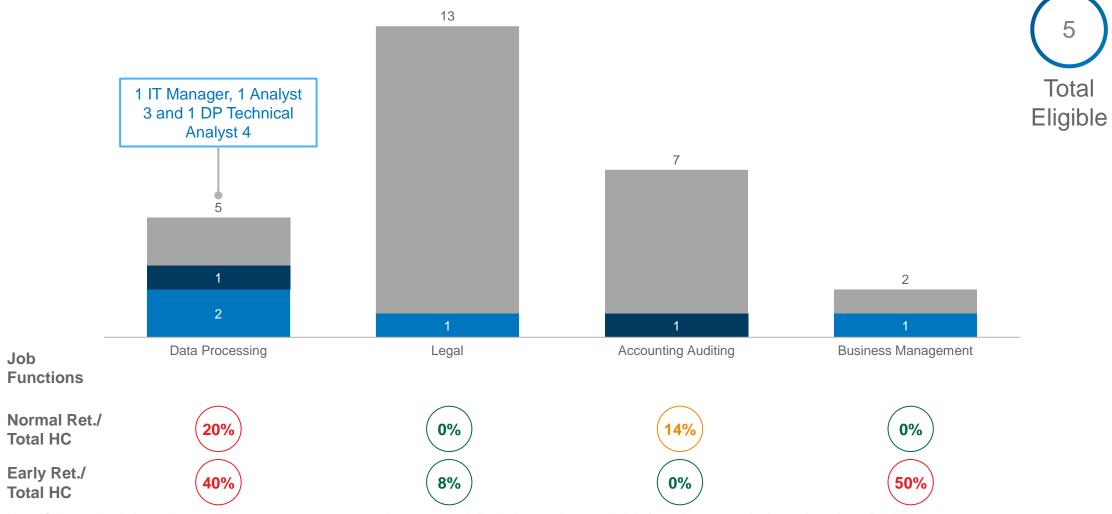


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State Election Enforcement Commission





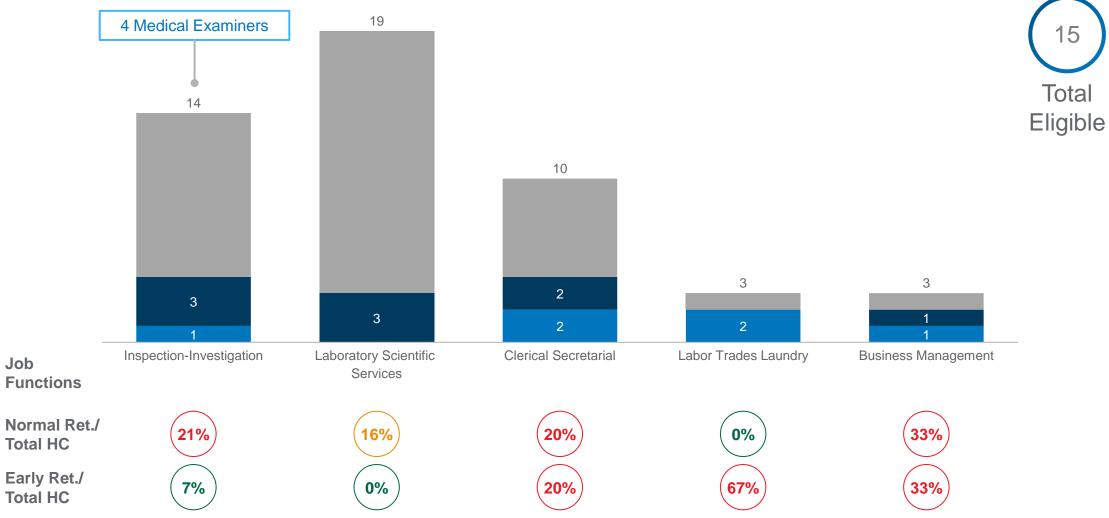
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

61

Office of the Chief Medical Examiner



62



Freedom of Information Commission



63

Total



Office of Governmental Accountability



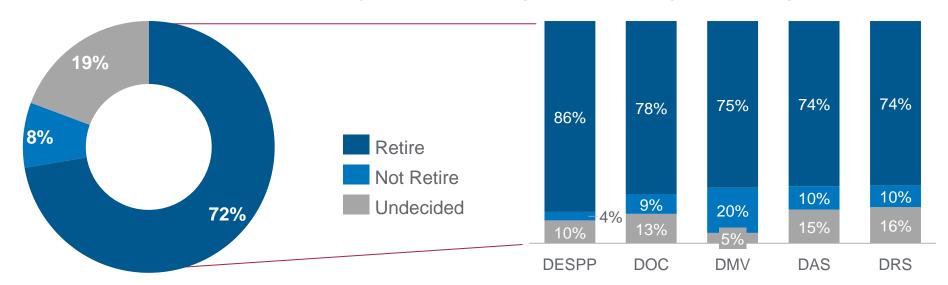


Overview of retirement risk (survey results)

Survey results indicate 72% of self-identified eligible employees leaning towards retirement, led by DESPP, DOC and DMV

Retirement Decision by Self-Identified Eligible¹

Five agencies have significantly higher uptake intentions²





Uptake among Early Retirement eligible



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



Intend to move out of CT upon retirement

Most common reasons cited for retirement include

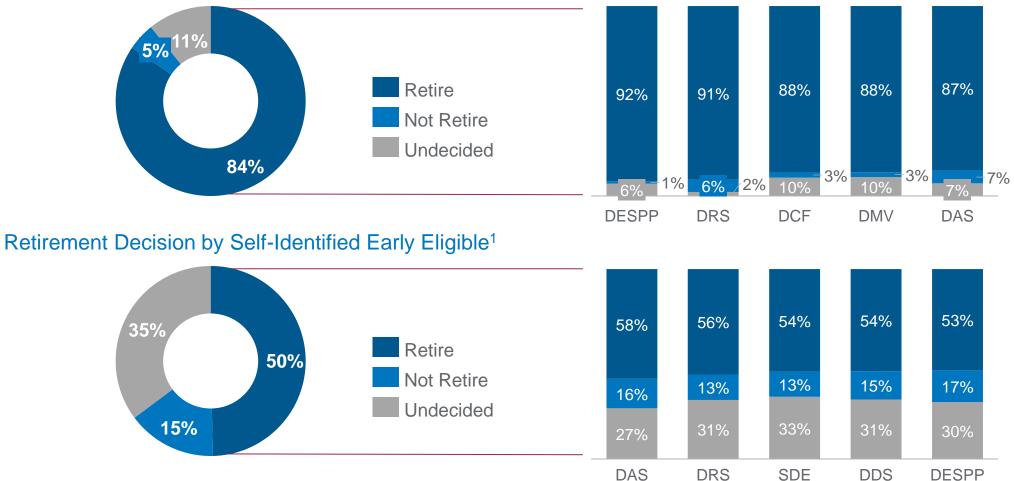
- Changes to COLA ranked as top reason by 46% and as a factor by 75%
- Health benefits ranked as top reason by 24% and a factor by 64%
- Concerns surrounding COVID-19 cited by just 19% vaccine unlikely to be a catalyst for changing intentions

Most common factors cited for being undecided include

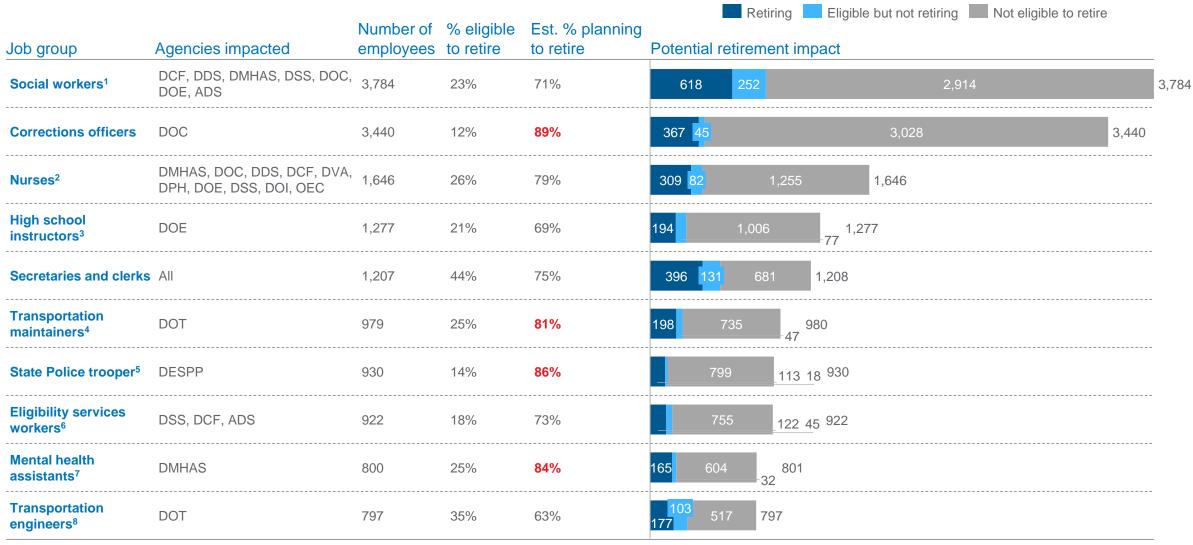
- Having a better understanding of the retirement benefit changes named the top factor by 77% and named as a factor by 91%

Significantly higher retirement intent and certainty for workers eligible for full benefits (84% vs. 50%) – 35% of early-eligible employees remain undecided

Retirement Decision by Self-Identified Full Eligible¹ Five agencies have significantly higher uptake intentions²

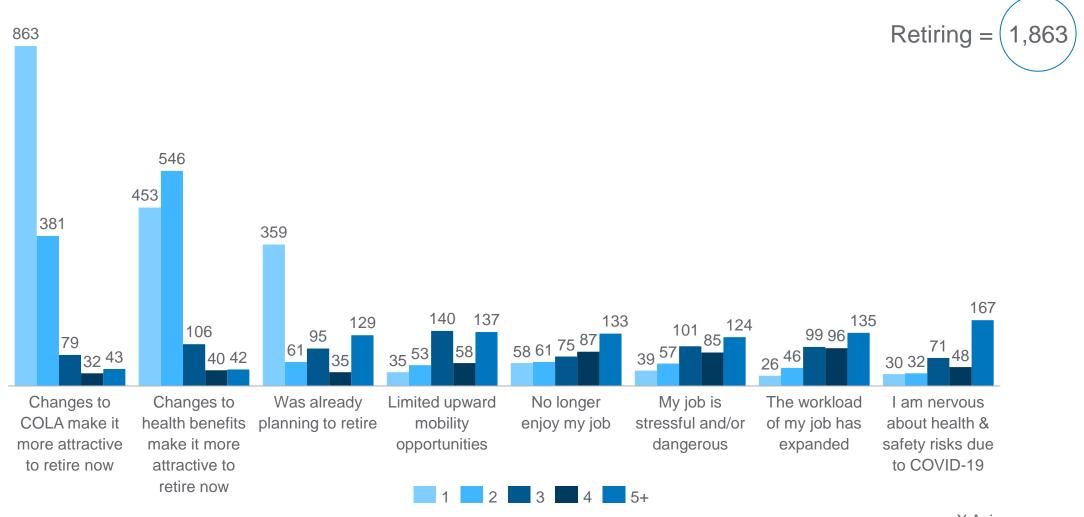


Retirement intent varies by job group

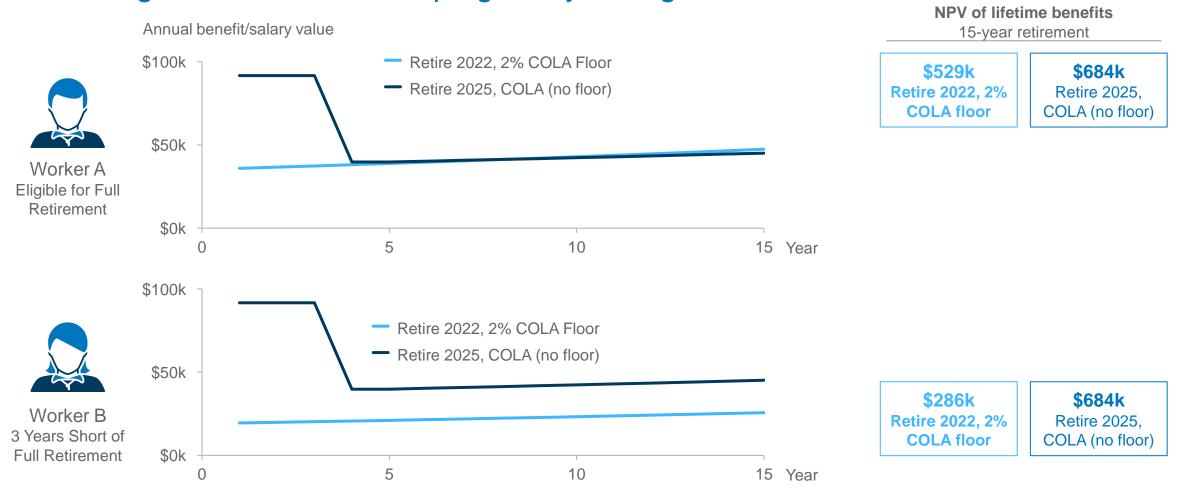


^{1.} Includes children, clinical, case aides, developmental 2. Includes NPs, aides, coordinators, consultants and per diem RNs 3. Includes instructors and department heads 4. Includes grades 1-4 5. Includes first class through Master Sergeant 6. Includes specialists and supervisors 7. Includes grades 1-2 8. Includes engineer techs, district engineers and principal engineers Source: CT STARS, Survey of state employees December 2020

Changes to COLA was listed as a top 2 factor in deciding to retire by two-thirds of respondents intending to retire, followed by changes to health benefits



COLA and health coverage changes minor impact for most employees; targeted marketing and education campaign may change views



Comments in survey highlight importance of HR, career development and telework; common government issues which are top-of mind for eligible retirees

Management specific issues (5.3%)

Pay raises for managers, fair treatment of managers, etc.

Issues with management (6.3%)

"Top heavy", less managerial layers, better communication from management, less micromanagement, etc.

Taxation & compensation (4.1%)

Reduce state taxes, competitive compensation for employees

Automation & technology (7.3%)

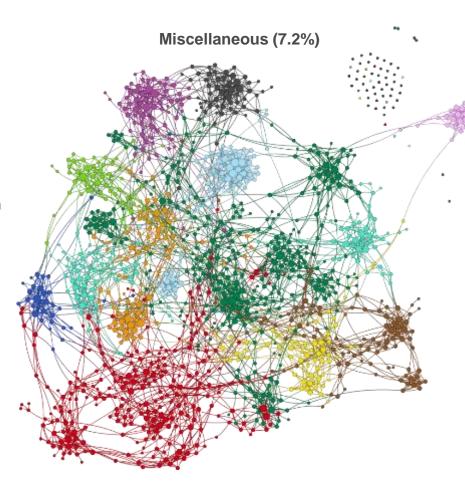
Replace paperwork with electronic workflows, offer more services online, improved electronic health records, more data sharing, etc.

Spending (2.3%)

Reduce government spending, change contracting processes, etc.

Teleworking (19%)

Continue teleworking options beyond the COVID-19 pandemic



Accountability & the police accountability bill (1.6%)

Increased accountability of employees, revisit the police accountability bill

HR, hiring & career development (25%) Quickly fill vacancies, increased staff, more recognition, more trainings, merit-based promotions, etc.

Process improvements (8.4%)

Reduce paperwork, eliminate redundancy and streamline processes such as hiring, contracting, etc.

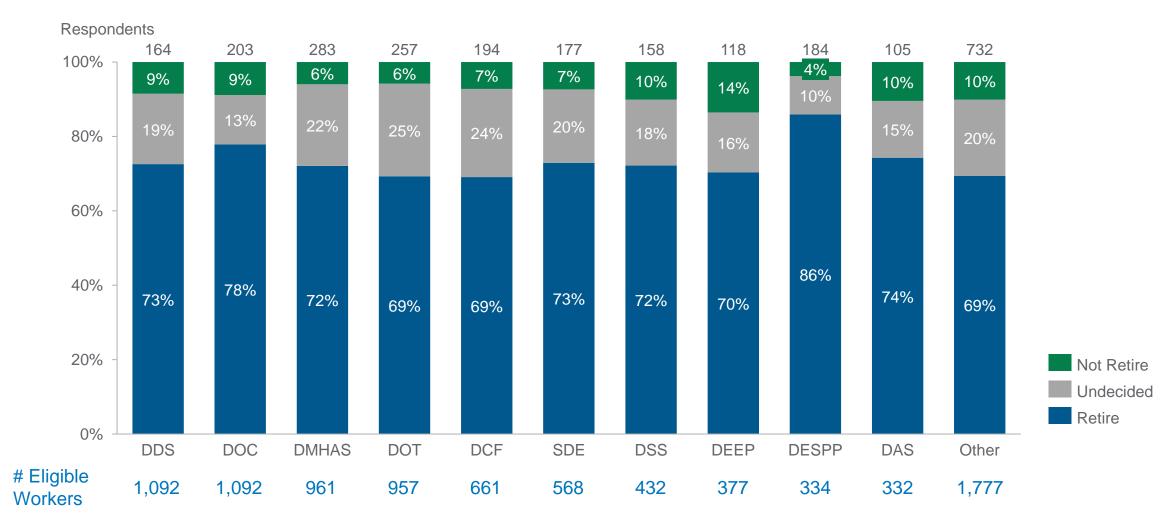
Retirement related issues (7.4%)

Remove early retirement penalty, make information around retirement easily accessible, avoid making changes to retirement benefits, etc.

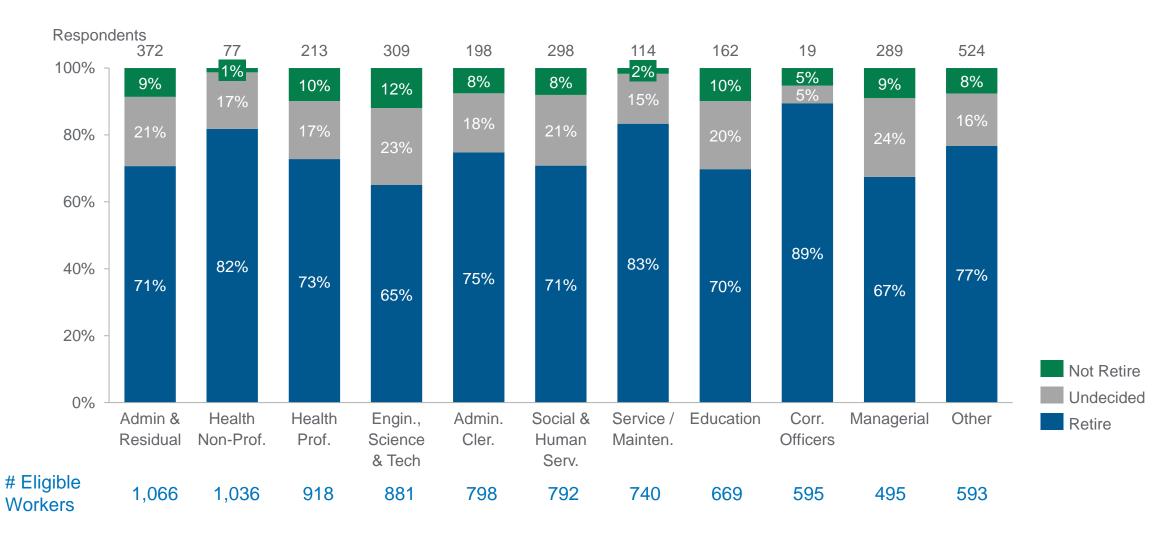
COLA changes (5.1%)

Extend COLA past 2022, better communication around changes to COLA

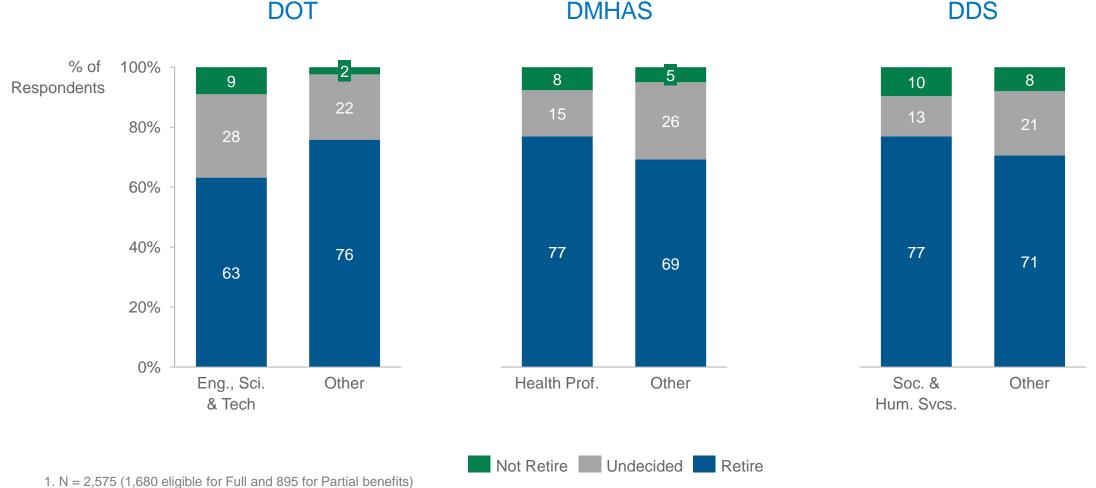
By Agency | Retirement intentions highest among hazardous duty agencies



By Job Function | Health workers among highest retirement uptake

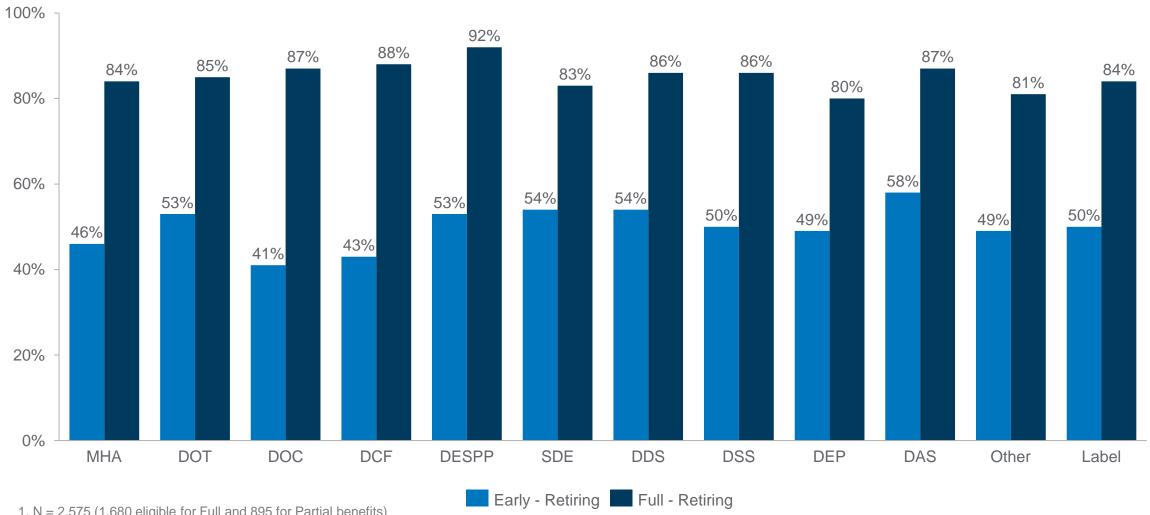


Largest jobs within agencies | Health and human services fields at greater risk of service continuity as providers intent outpaces non-direct care workers

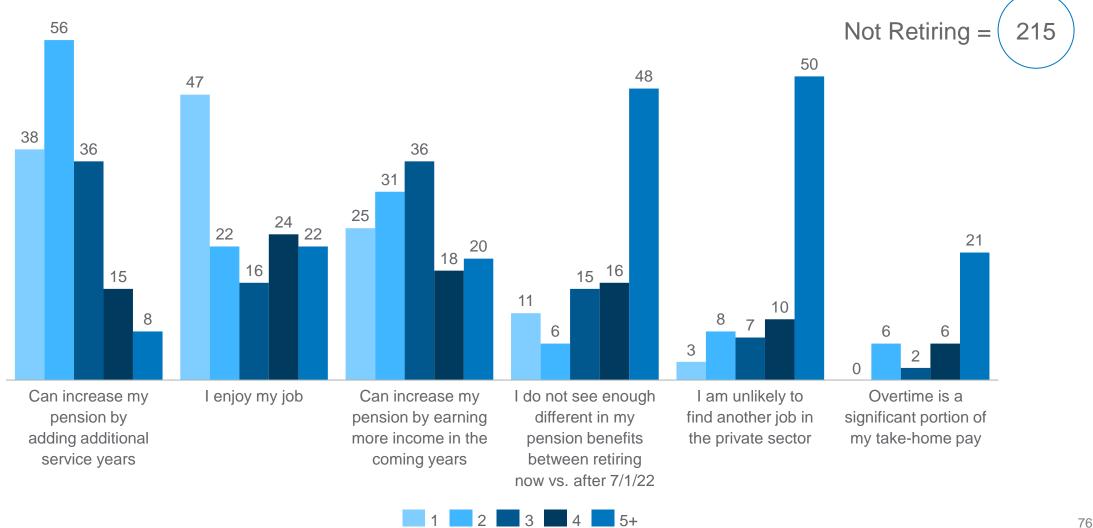


By Agency and Eligibility | Early retirement intent typically ~30%+ below that of those eligible for Full Retirement

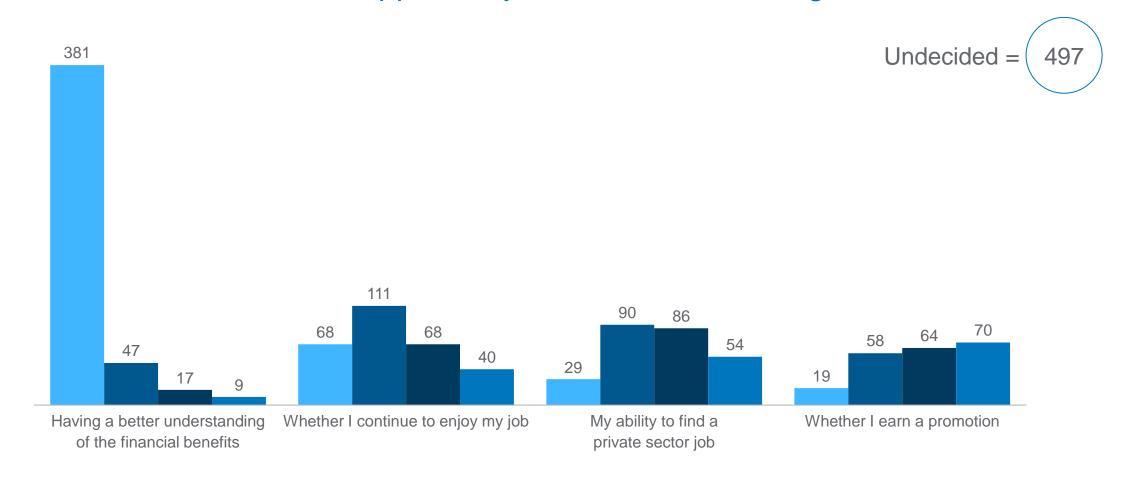
% of Respondents



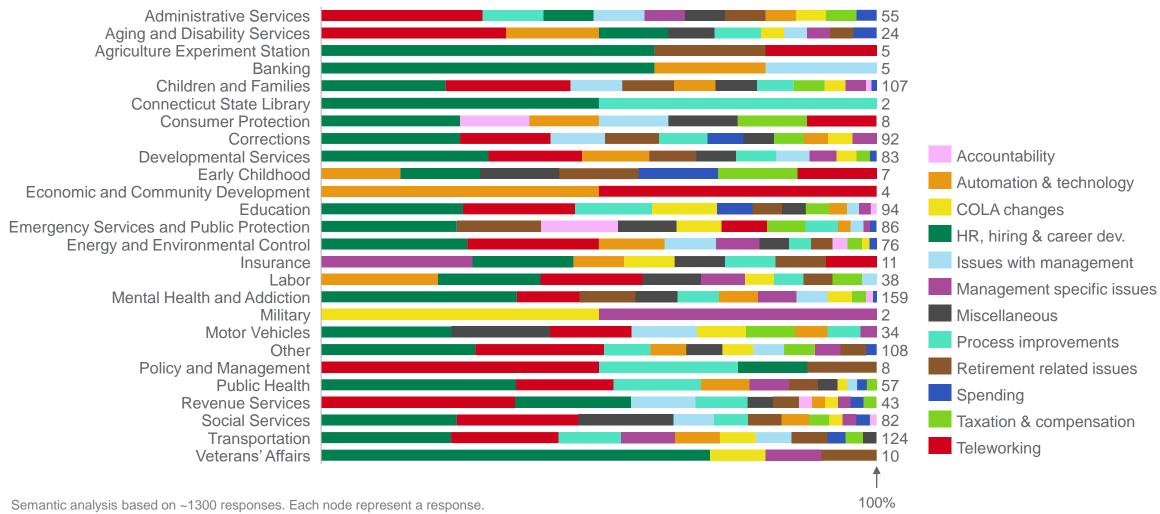
Leading reasons for not retiring include ability to increase pension through added service time (71%) or increased earnings (60%), as well as enjoying work (61%)



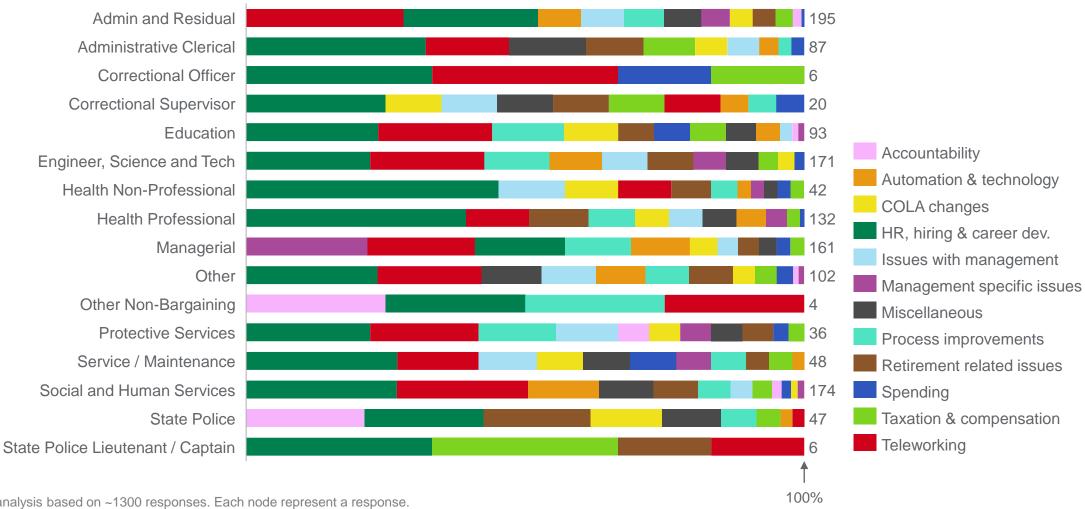
Vast majority of undecideds cite the need for a better understanding of the relative financial benefits – opportunity to use education to guide decisions



'HR, hiring & career dev.' and 'Teleworking' are the frequent top suggestions across agencies



'HR, hiring & career dev.' and 'Teleworking' are the frequent top suggestions across job functions as well

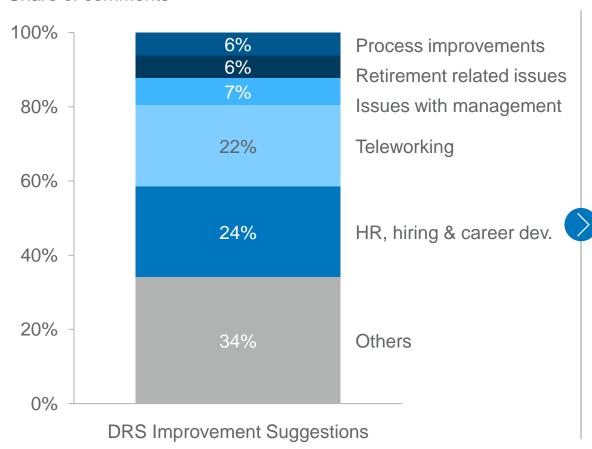


Insights from state workers largely support teleworking and need for more tools / automation, as well as consolidating agencies

- Employees that can work from home during COVID should continue to be able to work from home. This can reduce building sizes and help decrease traffic from commuting
- (Fill] positions [ahead] of departure. An enormous amount of time and effort are wasted in the current process of waiting for positions to become vacant
- Allow us to continue working from home even after COVID...most of us are more productive..., the State can save on rentals, electricity, etc., and we can help the environment...
- Filling vacancies needs to be revamped as it is unnecessarily lengthy, arduous and inefficient and has created an unfair burden on existing staff
- I think rather than having so many experienced workers retire the state could benefit from offering these experienced workers a part time schedule
- I work in a hospital and we have been so shortstaffed for the last few years that everyone is exhausted. Its really hard to work with people that are too tired to really care about their jobs.
- Look at 'non-essential' employees (myself included) if these folks are 'non-essential' well, why do we need them?
- Extend the 7/1/22 cutoff date by at least another couple years...Many employees planning to retire in 2022 ...would plan to work longer if this date is extended.
- Systemically, there are no incentives for state employees to be more competitive and accountable. We cannot recruit in a timely fashion. We do not reward employees for good work.
- Use technology wisely to automate low-level tasks for employees to concentrate on resolving more complex issues... Enhance online service for increased accessibility self-help

Insights from DSS respondents support teleworking and improved hiring processes

Share of comments



- Rather than having so many experienced workers retire the state could benefit from offering these experienced workers a part time schedule
- Remove constraints that prevent us from doing work we were able to do in the past which are covered under our job specifications. Also give us the opportunity to work out of our job specification class.
- Continue to show flexibility such as telework options [and] continue to consolidate services amongst agencies.
- I think we should plan to have the retired person's position posted prior to their retirement so agencies can have a smooth transition of new staff.

2.2 Changes to state employee pensions

Delayed retirement results in loss of 2% COLA floor, delays first COLA by ~18 months and increases healthcare costs for under 65

	Retirement before 7/1/22		Retirement on or after 7/1/22		
	Hazardous	Non-Hazardous	Hazardous	Non-Hazardous	
Cost of Living Adjustment					
Annual cost of living adjustment (COLA)	2% or 60% of CPI-W ¹ up to 6% and 75% of CPI-W above 6% CPI-W up to 2%, then 60% of CPI-W up to 6% and 75% of CPI-W above 6%		60% of CPI-W up to 6% 😭 I-W above 6%		
Minimum COLA		2%	09	0% ☆	
Maximum COLA	7.5%		7.5%		
First COLA Adjustment	~12 months (9-15 months)		30 months (Kick-in added if annualized COLA > 5.5% first 18 months) ²		
Healthcare					
65 years+/Medicare-Covered Retirees	No change		No change		
Premium share paid by employees < 25 yrs. service	0 to 1.5%	1.5% to 3.0%	3.0% 🏠	5.0%	
Medicare Part B Premium Reimbursement	State pays 100% premium for Medicare-covered retirees		50% reimbursement of add'l cost beyond standard premium for high earners 3 (~\$1.2-2.4k cost p.a. to individual) 4		

No relief provided to early retirees in terms of benefit reduction

^{1.} COLA = annual Cost of Living Adjustment, based on CPI-W (Consumer Price Index for Urban Wage Earners & Clerical Workers) 2. Kick-in = [(60% * CPI-W)–2.5%] * 1.5 3. \$85K salary for single filers 4. Additional premiums start at \$2,429 per year for single filers with salaries \$87-109K, \$3,470 from \$109-\$136K, \$4,512 from \$136-\$162K Source: SEBAC 2017 agreement

Retirement changes do not provide clear economic incentive to retire – ability to find supplemental income could drive decisions



NPV of lifetime benefits 15-year retirement

\$529k Retire 2022, 2% COLA floor

\$684kRetire 2025,
COLA (no floor)

Breakeven Supplemental Salary: ~\$54k

Scenarios do not account for potential earned income from new employment

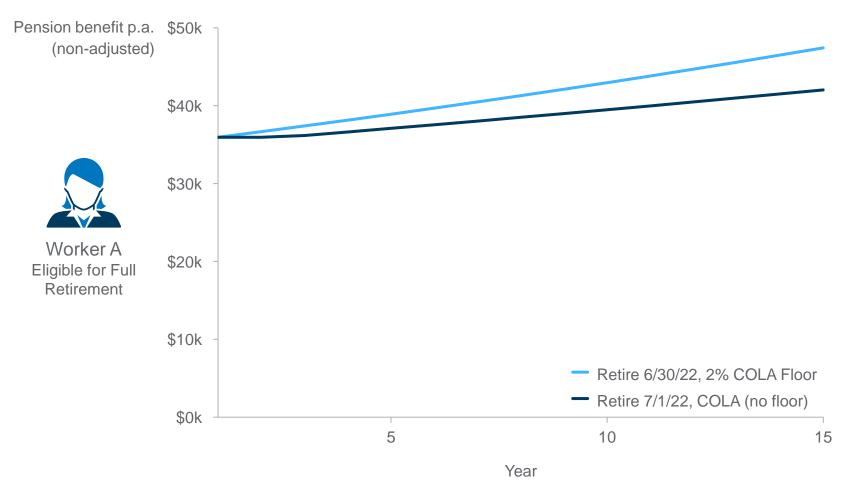
\$286kRetire 2022, 2%
COLA floor

\$684kRetire 2025,
COLA (no floor)

Breakeven Supplemental Salary: ~\$138k

Note: Scenarios based on median annual rate of ~\$92k and 28 service years, as well as 2.1% CPI-W est. (actual CT COLA based on 60% of CPI-W up to 2%) Breakeven Supplemental Salaries – salaries above this value would make retiring now more beneficial from NPV perspective

For many workers, retirement changes do not provide clear economic incentive to retire before 2022 effective date



Based on median salary for retirement eligible employees, the difference in expected cumulative value between retiring on 6/30/22 and 7/1/22 over 15 years is ~\$35k¹

For many employees, this difference may be offset by an additional year of working at full salary²

^{1.} Discounted at 2% for Net Present Value 2. Each additional year of service also adds to annual benefit percent (not included in this analysis)

Note: Scenario based on median annual rate of ~\$92k and 28 service years, as well as expected CPI-W of 2.1% (actual CT COLA based on 60% of CPI-W up to 2%);

2.2 Challenges and opportunities for Connecticut

Budget includes value of \$20m in FY22 and \$155m in FY23 tied to opportunities from CREATES

Priority initiatives for implementation (FY22 & FY23)

Agency initiatives	Cross-agency initiatives
Close prison facilities and units	Streamline hiring process; manage OT/absences
Optimize CTEC administrative and teacher levels	Centralize payroll
Increase revenue through application of analytics	Manage workers' comp expense
Expand DECD contracting to AdvanceCT	Expand common payment platform
	Streamline Affirmative Action reporting
	Increase office co-location

Program led by Steering Committee with representation from OPM and DAS, supported by a project management office to track progress and savings

3.0 Key state-wide opportunities

Four major types of implementation challenges for consideration

		Description	Examples	Questions for Implementation
	Opportunities already underway by agencies Ensure completion	Opportunities currently being implemented by state agencies	DoC prison closuresDRS tax digitization programDoL unemployment modernization	How do we track progress?How do we get early warning signs of challenges?
	Opportunities with clear agency path Get started and then track	Opportunities not underway, but with clear agency ownership	 New non-service transportation revenues Increase office co-location 	How do we create initial momentum for these?
The second second	Opportunities challenging to start Align stakeholders and catalyze decision	Opportunities that require key decisions from leadership and political will to implement	 Increase use of non-profits for LMHA services Cut low-ROI film/tax credits 	 How do we create buy-in, especially over the long term? Should we prioritize a subset of these opportunities?
	Cross-govt opportunities complex to deliver Shape and find ownership	Opportunities that require coordination among multiple stakeholders to implement and manage	 Improve managerial value proposition and retention Develop common grant platform Consolidate human service agency back-office functions 	 Who is the logical owner? How should we leverage Fellows to lead change?

Some questions to be resolved in order to implement CREATES opportunities









Who is accountable for implementation?

What is the role of agency leadership? Of OPM? Of DAS?

For initiatives without clear agency owners (e.g., workers comp), who should be accountable?

What team(s) is/are responsible?

What team is responsible for managing implementation?

What skills and capabilities do they need?

For digital opportunities, what support comes from the CIO group?

How do we prioritize opportunities?

How should initiatives be prioritized (e.g., service risk and cost value)?

Who makes the decision on which opportunities to pursue? How?

What are our limiting factors? (e.g., funding, agency change capacity)

How will change vary by agency?

How will implementation differ by agency?

How do we assess agency readiness for implementation?

How does each agency initiative fit in the overall CREATES roadmap?

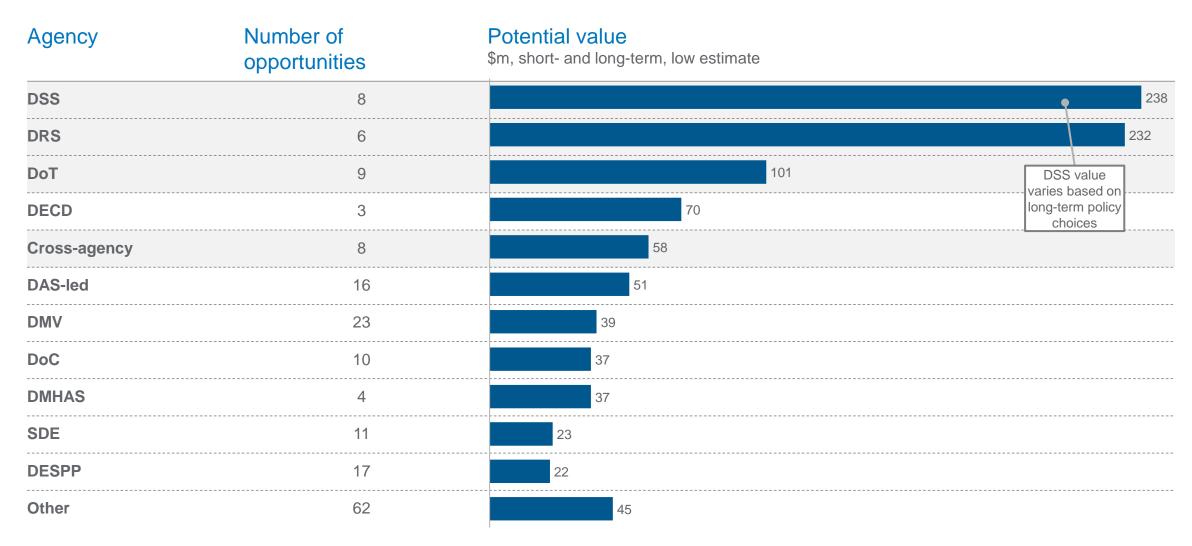
How do we monitor implementation?

How do we define success for each opportunity?

What goals/KPIs do we set?

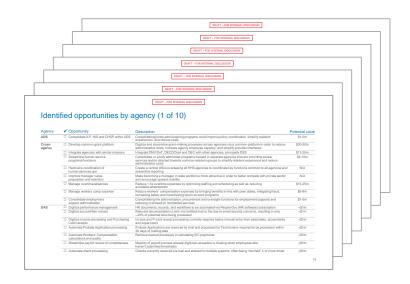
How do we ensure ongoing leadership and agency alignment?

Number of opportunities and value varies by agency



The highest-value opportunities are spread across multiple agencies

~200 opportunities identified across 28 agencies



Full list by agency and current status in annex

The 11 biggest opportunities represent ~70% of value

Top 11 opportunities	Agency	Value
Long-term transition of Medicaid to value-based payments	DSS	\$200m+
Improve tax compliance	DRS	\$150-250m
Complete tax digitization program	DRS	\$80-100m
Cut low-ROI film/tax programs	DECD	\$68-100m
Align rail/bus service to resident needs	DoT	\$50-60m
Bid out public transit service operations	DoT	\$40-60m
Corrections reform	DoC	\$43m+
Increase office co-location	Cross-agency	\$32m+
Expand non-profits for LMHAs	DMHAS	\$20-50m
Optimize CTEC admin and teacher levels	SDE	\$20-25m
Manage overtime and absences	Cross-agency	\$15-25m+

Complexity means a rigorous implementation approach required

•	Rigorous program management					
Portfolio management	Initiative on-boarding	Interdependency mgmt	Tracking	Issue resolution	Reporting	Benefit reconciliation
 Assess initiative on-boarding priority Determine level of Activist PMO involvement with initiative development and on-boarding 	 Write initiative charters and draft Roadmap with impacts, milestones, KPIs, risks and interdependencies Apply Rigor test to Roadmaps Assess likelihood of success with DICE Lock-down Roadmaps 	 Define initiative interdependencies, stakeholders and risks Actively manage cross- initiative interdependencies 	Track progress of initiatives, and programs against plan with exception-based reporting and portfolio analysis tools	 Elevate deviations from initiative plan and structure interventions Assess risk on portfolio level and develop interventions Ensure continuing leadership alignment and mobilization 	 leadership with insight into progress and major issues Enable course corrective actions Challenge and provide support 	 Create baseline Track benefit realization against baseline Reconcile benefits with Finance Ensure cooperation and engagement in reconciliation effort on all org levels

KPI framework

View on KPIs that provides insight into progress and achievement of strategic and financial targets

Several opportunities improve resident experience of public services (1 of 2)

	Service Improvements
Bid out public transit service operations	Competitively bid rail contracts to reduce costs and improve performance. Incentivizes high quality transit service operations through competition, improving resident experience in transit.
Contract veterans convalescent care operations	 Privatize operations of veterans' convalescent care facility. Incentivizes competition in healthcare services and leads to improved resident experience in healthcare.
Common doc mgmt and payment platforms	 Digitize document management via a common platform across agencies and standardize payment processes state- wide (e.g., acceptance of credit cards). Expands digital platforms, increasing ease of use for residents.
Long-term transition of Medicaid to Value-Based Payments (VBP)	VPB incentivizes clinicians based on quality of care, improving resident healthcare experiences and outcomes.
DMV transactions online and third parties	Enhance ability for customers to pre-upload documents, reducing failed transactions and cutting transaction times.
Complete tax digitization program	 Improve ability of residents to conduct full lifecycle of tax filings online (e.g., virtual assistance, complete filings, submit payments).
Digitize DMHAS patient record	 Electronic Health Record (EHR) will improve DMHAS data capture and patient tracking, resulting in more consistent and efficient care delivery to residents

Several opportunities improve resident experience of public services (2 of 2)

Service Improvements
 Consolidate or jointly administer programs housed in separate agencies that are providing similar services and/or directed towards common resident groups to simplify resident experience.
 Make becoming a manager in state workforce more attractive in order to better compete with private sector and encourage upward mobility. Increase workforce opportunities leading to improved resident experience in state employment.
 Limits taxpayer expenses on direct OT spend as well as long-term pension costs related to OT. Reduction in absenteeism improves service continuity.
 Increased focus on return-to-work programs, case management and rehabilitation helps reduce burden on remaining employees, reduces need for unpredictable overtime, and stabilizes staffing levels to provide more predictable and timely service to residents.
 Modernize and synchronize bus systems schedules across districts, while rail transit services to move in-line with actual demand. These changes will contribute to prolonging solvency of the STF
 Opportunities to automate and/or digitize currently manual processes at individual agencies with potential for cross-agency solution (e.g., accepting credit cards, moving eligibility applications online, and expanding e-licensing)

Several opportunities require legislative change

	Legislative change required
Corrections reform	 Political backing and plan to address labor/stakeholder issues. Legislation enabling DoC to regulate and maintain low prison populations.
Cut low-ROI film/tax programs	Amend Chapter 208 Sec. 12-217jj to eliminate film production tax cedit
DMV transactions online and third parties	Legislative action required to expand third-party partners, scope of activities permitted and expansion of kiosks
Improve manager value proposition and retention	 Legislation addressing sections No. 1937-E (which superseded 1624-E) allowing granting managers with the same percentage increases as bargaining unit employees. In addition, adjustments to maximum salary ranges should be enacted to ease compression issues.
Manage overtime/absences	 Several legislative changes required, including caps on pensionable overtime, enablement of selective usage of DROP, elimination of four-hour minimums, enabling verification of FMLA and other leave.
Manage workers comp expense	 Revise statute limiting partial and total disability durations to match peer states (Sec. 31-307, 307b and 308). In addition, legislative action to transfer post-retirement payments to pension expenses rather than W.C. budget, implementing state-approved second medical opinion providers, formularies and preferred drug lists (PDL), and reducing maximum wage coverage.
Align rail/bus service to resident needs	Public hearings required for service changes lasting more than one year

Several opportunities mitigate risk for the State

Common doc mgmt and payment platforms Reduces risk of disruption to business operations due to clerical/secretarial/administrative retirements by further automating and standardizing processes DMV transactions online and third parties Decrease revenue backlog by moving transactions previously done in-person to online and self-service kiosks Reduce manual processes and bring FTEs per capita in-line with digitally advanced peers, mitigating backlogs as retirements increase and volumes return (e.g., state re-openings, REAL ID) Streamline hiring process Initiatives identified (streamlining approvals, reducing barriers to external hires, providing more autonomy to agencies, etc.) reduce the time needed to identify, recruit and onboard new hires by 17 weeks Manage overtime/absences Reduce overtime, optimize schedules and accelerate hiring to control and mitigate risk of occupational injuries and absenteeism Manage workers comp expense Increases auditing to control abuse and reduce medical severities Improve tax compliance Increases tax compliance and systematically engages stakeholders (e.g., preparers) to reduce unintended fraud increases usage of data analytics and AI to identify advertent and inadvertent fraud and targeting suspicious tax preparers Reduces risk of disruption to resident-facing services due to service worker and clinical retirements by shifting to non-profit operation Reduces risk of incorrect patient data processing and increases capacity of DMHAS facility employees to take on additional workload caused by retirements		Risk mitigation
Reduce manual processes and bring FTEs per capita in-line with digitally advanced peers, mitigating backlogs as retirements increase and volumes return (e.g., state re-openings, REAL ID) Streamline hiring process Initiatives identified (streamlining approvals, reducing barriers to external hires, providing more autonomy to agencies, etc.) reduce the time needed to identify, recruit and onboard new hires by 17 weeks Reduce overtime, optimize schedules and accelerate hiring to control and mitigate risk of occupational injuries and absenteeism Increases auditing to control abuse and reduce medical severities Improve tax compliance Increases tax compliance and systematically engages stakeholders (e.g., preparers) to reduce unintended fraud Increases usage of data analytics and AI to identify advertent and inadvertent fraud and targeting suspicious tax preparers Reduces risk of disruption to resident-facing services due to service worker and clinical retirements by shifting to non-profit operation Poligitze DMHAS patient record Reduces risk of incorrect patient data processing and increases capacity of DMHAS facility employees to take on	Common doc mgmt and payment platforms	
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homes non-profit operation Digitze DMHAS patient record • Reduces risk of incorrect patient data processing and increases capacity of DMHAS facility employees to take on	Improve tax compliance	 Increases usage of data analytics and AI to identify advertent and inadvertent fraud and targeting suspicious tax
	Digitze DMHAS patient record	

Implementation phase of CREATES requires understanding of priorities and path forward

CREATES opportunities

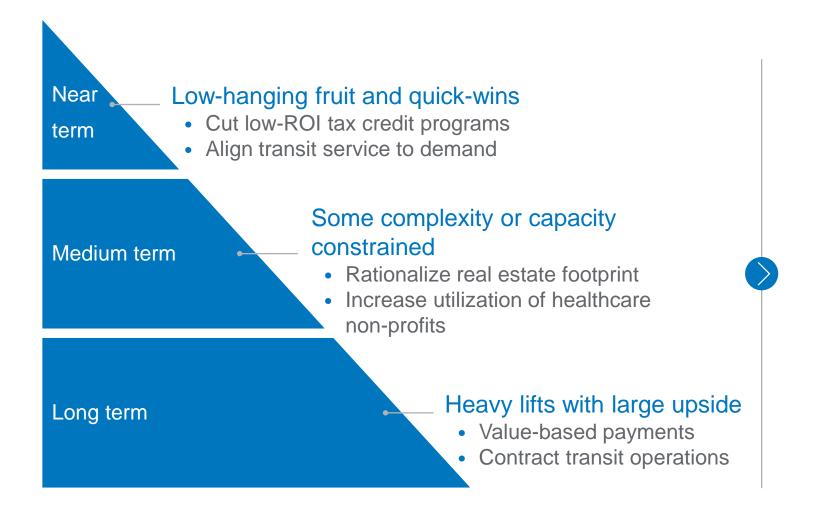


- Identified 200+ opportunities, from which 34 were filtered and will require executive attention due to complexity
- Some opportunities are already underway, while others require further planning
- Many have clear agency owners, plans and teams capable of execution – others require support in some capacity or require policy/bargaining enablers
- Across all initiatives, will need ability to track milestone progress and measure benefits

Suggested approach

- 1 Clarify accountable owner, responsible team and level of support required for each initiative
- 2 Build required capability, including central PMO to track full program
- 3 For opportunities without them, develop detailed implementation roadmap including milestones and timelines

Implementation waves provide a path to realizing opportunities while aligning on need for additional stakeholder activities



Stakeholder engagement and actions required

- Bargaining changes to provide more flexibility in work rules and streamlining hiring processes
- Legislative action to amend statutes, giving agencies the flexibility needed to modernize
- Resident input required to ensure optimal design of customer-facing initiatives

3.1 Modernize management of the state workforce

Four personnel management drivers reviewed

Drivers	Observations	Challenges	Potential opportunity
Hiring and recruiting	 Current hiring processes can take 5-6 months or more to complete Hurdles to hiring external talent Retirement surge likely to exacerbate delays 	 Many changes will require bargaining Must balance simplification of processes with appropriate checks (i.e., OPM oversight) 	 Streamline approval workflows and EEO/AA processes Remove duplicative approvals Ease burden to hire externally Utilize AI / analytics to ID candidates Required to address retirement surge, reduces absenteeism/OT, and millions of dollars in potential efficiencies
Management retention	 46% eligible for retirement while others seeking BU positions Manager comp down 10% since 2009 (inflation adjusted) Manager retention cited as a risk in several commissioner interviews 	Increasing managerial pay may be unpopular with unions, media and public – requires strong data driven defense	 Increase compensation to ensure equitable pay relative to BU workers Communicate lack of benefit from retirement changes Provide additional recognition and upward mobility potential Required to address retirement surge
Overtime expenditures	\$256m spend per year, at higher rates than peer states	 Most changes require bargaining OT is a major component of compensation for some staff Some OT is desirable (i.e., straight-pay, variable demand) 	 Reduce absenteeism, optimize schedules and accelerate hiring Amend statutes/provisions that increase OT needs Cap pensionable OT Tens of millions of dollars in annual potential savings
Workers' compensation	 \$105m spend per year CT provides more generous benefits than nearby states Excessive W.C. leads to OT needs 	 Most changes require bargaining or legislation Some changes may require political capital 	 Limit duration for temporary disability Increase auditing to control abuse Focus on return-to-work (i.e., light duty) Use settlements to opportunistically buy-out claims Reduce medical severities Millions of dollars in annual potential savings

Each of these four factors have significant ties to the retirement surge and must be addressed before 2022



Hiring and Recruiting

State's already lengthy hiring timelines likely to be exacerbated by surge in vacancies

Without addressing, agencies will rely on more costly measures (e.g., overtime, TWRs)



Management Retention

Low value proposition for managers has led to difficulty in hiring and retaining

46% of managers eligible for retirement by July 1, 2022 – high risk of knowledge loss



Overtime & Absenteeism

Vacancies from retirement surge likely to increase need for OT to backfill for retirees

With fewer remaining employees, more likely to require mandatory (i.e., 2x) overtime



Workers' Compensation

Largest driver of absenteeism and OT is workers' comp

Reducing absenteeism from W.C. can free OT capacity for retirement surge

3.1.1 Streamline the hiring process

Hiring issues impact all departments





Uncertainty on vacancy timing since employees can rescind retirement

No stringent deterrence for providing minimal / no notice period

Lack of ability to overlap employees for training



Multiple approvals needed

Several layers of approval required from multiple sources (e.g., agency management, DAS HRBP, OPM)



Difficult to hire external candidates

Mandatory Lists provide obstacle to identifying highest quality candidates

Minimal flexibility to considering workers' experience for salary or adjusting total comp



Lengthy review process

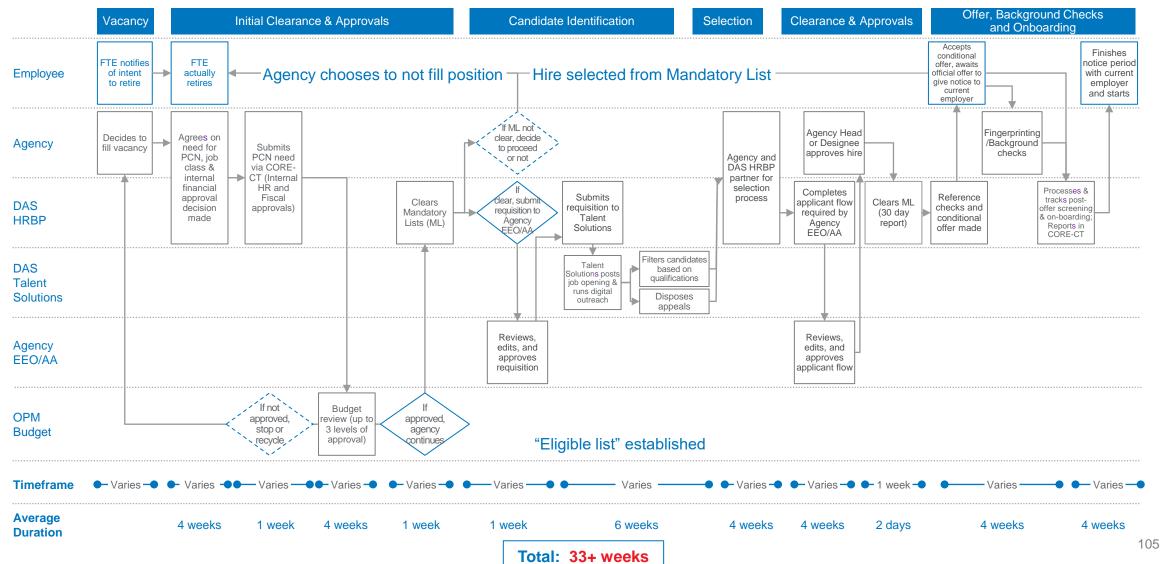
Average hiring process takes 6 months and often extends closer to a full year



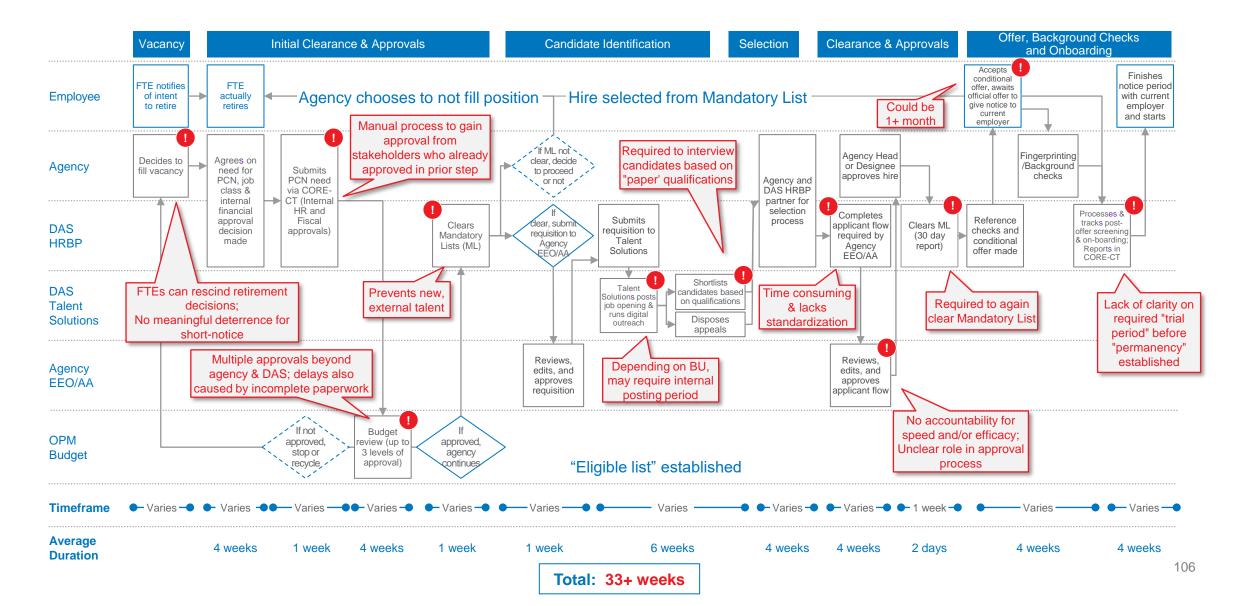
Inability to correct mistakes

Hires permanent after 6 months but cannot be laid off for poor performance without ambiguous time to demonstrate progress

Current process | Average of 33 weeks to fill vacancy driven by multiple approvals, incomplete requests, background checks and timing uncertainties



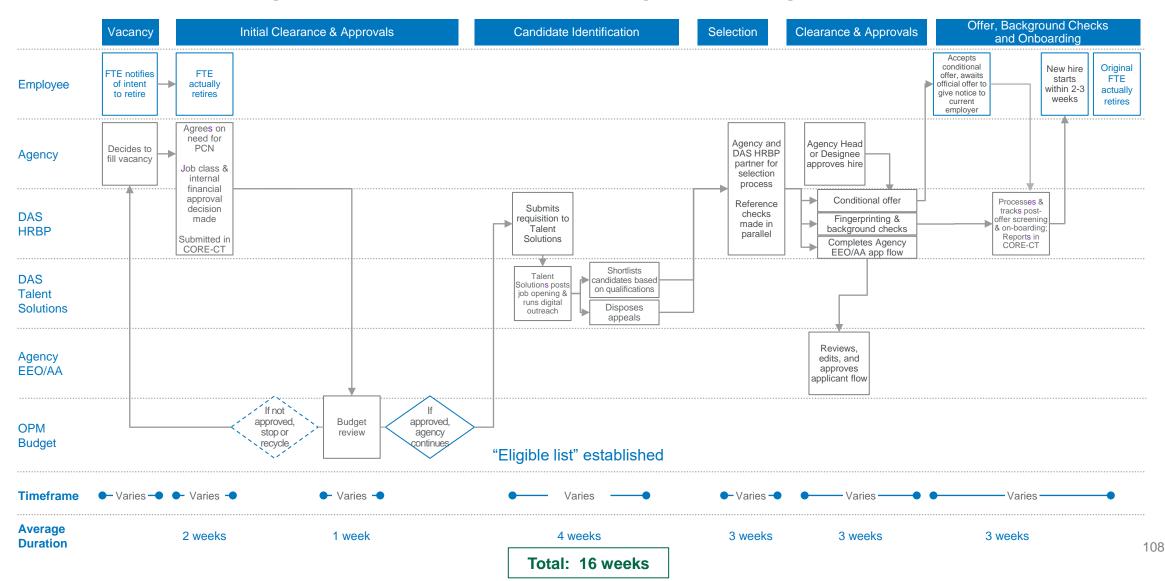
Current process | Issues observed across the hiring process



Process changes could cut months from hiring process and provide flexibility

Recommendation		Rationale	Impact
\rightarrow	Clarify hiring process statewide	Inconsistent awareness of permissible hiring processes (i.e., not knowing when they can initiate the recruitment process)	Minimize need for TWRs
Constant of the second	Incentivize employees to retire on previously agreed upon date	 Provide agencies with certainty & visibility into staffing needs, allowing them to start the process upon initial departure notice Also allows for overlap to transfer knowledge 	Immediately commence process at time of notice
	More stringent deterrence for quitting/retiring on short-notice or at inconvenient times	 Current system has no significant consequences for workers who retire with little or no notice period (i.e., < 2 weeks); more meaningful consequences for those who may seek to return to state workforce Requires expensive stopgaps (e.g., teachers retiring October 1st) 	Minimum 2 weeks notice
	Standardize approval workflow	Establish consistent approval workflow integrated into CORE-CT	1 week
	Eliminate internal-exclusive posting period & duplicative approvals	 Delays recruitment process without any clear benefits Budget approval duplicative but provides "check"; simplify 	5+ weeks saved
	Give more discretion to agency hiring managers	Managers often required to interview too many candidates based on "paper" qualifications	2-3 days saved (on average)
	Eliminate Mandatory Lists (use one-shot job fairs as needed)	Waste of resources if not cleared on second check, inhibits ability to hire new talent and leads to reluctant vacancies	1+ week, avoid resource waste, remove hurdle to new talent
	Streamline, clarify & parallel process EEO/AA after offers	 Each agency required to develop their own EEO/AA plans & reports Lack of accountability and clarity on their approval role 	1-2 weeks (at least)
	Standardize offer-acceptance and start-date window	Current process allows offerees to delay acceptance/start, resulting in building backlogs or needing expensive consultants/TWRs	Up to 5 weeks + savings on 107

Proposed hiring process saves ~17 weeks by removing unnecessary steps and parallel processing while also better enabling knowledge transfer



Reforms would provide significant financial and time savings

Vacancies require combination of TWR extensions and significant overtime while jeopardizing service continuity for Connecticut residents

System strain likely to be further exacerbated by HR personnel retirements

Retirement Surge has potential to increase vacancies by 5-10x, overwhelming recruiting team



Savings from 10% reduction in overtime across non-24/7 agencies



Savings from reducing TWR usage by 15 weeks



Weeks saved per year from recruiting process



Potentially saved while filling 864 current vacancies¹

3.1.2 Improve manager value proposition and retention

Managers significantly impacted by the retirement surge



Share of statewide managers eligible for retirement by July 1, 2022



Positions that could become vacant due to the Retirement Surge



Managers officially transitioning into bargaining unit positions, with more likely to follow



Median service years today of eligible employees

Manager value proposition for Connecticut often less appeal than value proposition for bargained employees



Effective base pay reductions

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



Reduced earning potential

Lack of overtime means loss of significant earnings upside



More hours and stress

Increased hours and accountability without commensurate rewards



Less job security

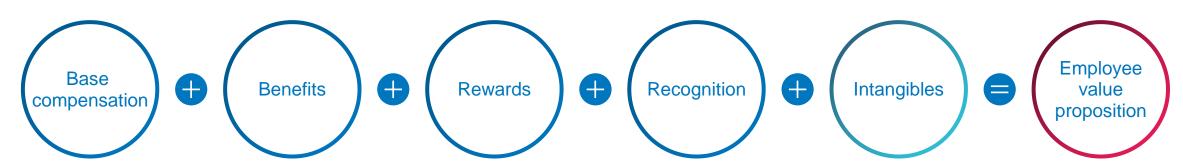
Lack of bargaining agreements means no protection from layoffs



Lack of ancillary benefits

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

Five key elements of employee value proposition drive employee satisfaction and help reduce turnover



- Fixed cash compensation
- Linked to job grade and long-term performance
- Provides security and predictability

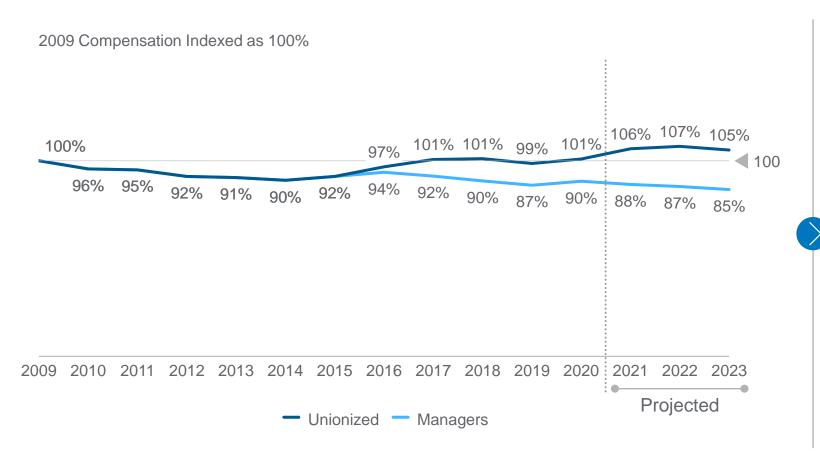
Pension, medical insurance, paid time off, health memberships, etc.

- Variable comp based on pay grade/ performance
- Other comp (e.g., gift cards)
- Incentivizes effort, can also be a source of security

- Tangible and intangible recognition and appreciation
- Recognizes performance AND drives discretionary effort

 Employer mission, work environment, social connections, location, interest in duties performed, job security, learning & development, etc.

MAC analysis | Previous analysis showed that base compensation has improved for union employees but declined for managers, accounting for inflation



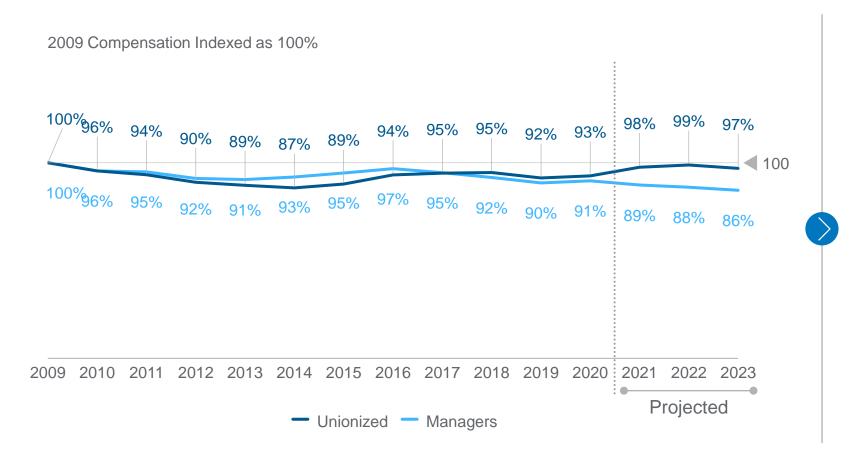
Divergence in pay began in 2015 and has continued to widen since

Example: 25% managers' comp premium in 2009 expected to be eliminated by EOY 2023

Unionized employees received 3 additional COLAs (2015, 2016, 2020)

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

DAS Analysis | Base compensation has improved for union employees but declined for managers, accounting for inflation



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

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

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

Numerous opportunities exist to improve managers' value proposition

	Rationale	Possible actions	Additional Considerations
Increase Pay	Pay inequity vs. union employees most frequent complaint raised by managers	 Hawaii model: any raises negotiated by labor must be matched for managers "Slow drip" approach: small annual adjustments that catch up over time Increase pay to be more competitive immediately 	 May encounter political backlash for providing pay for leadership during a time of budgetary constraint
Communications	 Managers may overestimate benefits from retiring pre-2022 Recognition and purpose key to improving employees' sense of engagement and motivation² 	 Communicate benefits from remaining beyond 2022, including offset of COLA from additional service years Increase acknowledgement and engagement from senior leadership (e.g., commissioner mentoring, statewide appreciation) 	>
Performance management %	 Focus on retaining and rewarding only top-performing managers Managers demoralized by lack of performance feedback 	 Vary compensation and bonuses based on a clear, objective performance management system Incorporate stakeholder feedback in designing system, goals and implementation plans 	 PM must be tailored to fit unique needs of each agency Requires continuous feedback from colleagues
Intangibles	 Non-monetary benefits increasingly important Managers thrive with additional autonomy and sense of career development L&D focused intangibles can improve productivity for the employer long-term 	 Flexible work locations & schedules Additional vacation days More discretion (e.g., hiring decisions, budget control Supplemental training/leadership & development programs (including reskilling) Opt-in internship programs to reduce burden of small tasks while also providing mentoring opportunities Access to family and financial planning workshops 	 Antiquated sentiment pre-COVID prevented managers from

Note: Compensation indexed to 2009 starting levels; changes include inflation, COLA, PARS (step-ups) and healthcare contributions Source: CT DAS (https://portal.ct.gov/-/media/DAS/Statewide-HR/A---Z-Listing-Task-PDFs/Mass-Salary-Chart.pdf)

HI and MA are examples of how to executive compensation improvements



Slow-Drip Increases

Approach

 Statutorily allowed non-bargaining managers to receive same or greater compensation adjustments received by BU employees

Pros

- Ensures equity gap does not diminish over time
- May discourage outsized adjustments to unionized employees if the State must match for managers

Immediate and Variable Increases

- \$1,000 discretionary bonuses awarded to managers
- Accompanied by performance management system
- \$1,000 discretionary bonuses awarded to managers
- Accompanied by performance management system

Considerations

- Fails to close existing equity gap (simply prevents wider gaps)
- Less likely to face pushback

- Requires strong leadership to "own" and communicate rationale
- Important to make metrics clear, transparent and consistent

Source: Hawaii Statute 89-C-2.

Five best practices for rewards and recognition

Public sector agencies will have specific requirements within each of these dimensions

Select examples

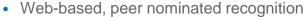
Drive performance & impact



- One-off, surprise rewards for employees who go above and beyond (e.g., paid days off, lunch with leadership, gift cards)
- Annual recognition teams and individuals for their contributions to the agency and the federal government (SAMMIES, Ike awards)
- Discretionary year-end surprise small bonuses combined with public recognition ceremony

Engage leadership & workforce







- Great Manager Award: experiential awards, employee nominated
- "Kudos to You" awards, where employees can recognize their peers and award reimbursement for expenses

Honor right people with right rewards



- Presidential-level recognition for recipients from across 24 agencies (supplements their own award ceremonies)
- 30-day paid leave for employees involved with new product launches
- Sabbaticals for employees ranked as consistent or highperformers

Have transparent criteria





- Personalized gift and memento for annualized tenure
- Awards that combine specific customer and employee outcomes
- Clear metrics enabling matrix placement with review panels

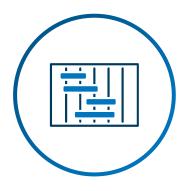
Build a culture of recognition



- A goal of # of times for each employee to be recognized each year
- Starting each staff meeting/huddle with a story of recognition
- Award badges to employees who reflect core values

3.1.3 Manage overtime/absenteeism

Four primary drivers of overtime across state agencies



Scheduling

Suboptimal schedules result in overlapping staff or consistent gaps



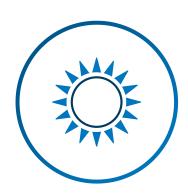
Statutes and Labor Rules

Structural causes of excess OT hours at higher costs (e.g., minimum call-backs)



Vacancies

Slow hiring process, constrained budgets and hurdles to external talent

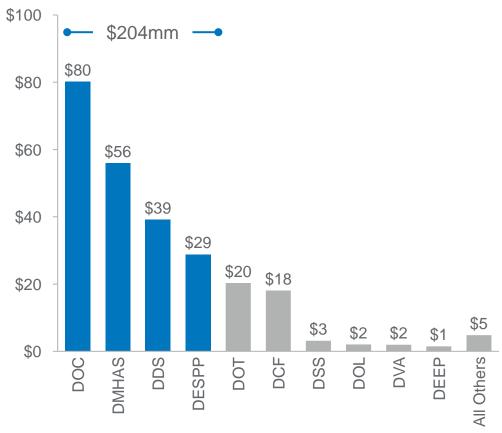


Absenteeism

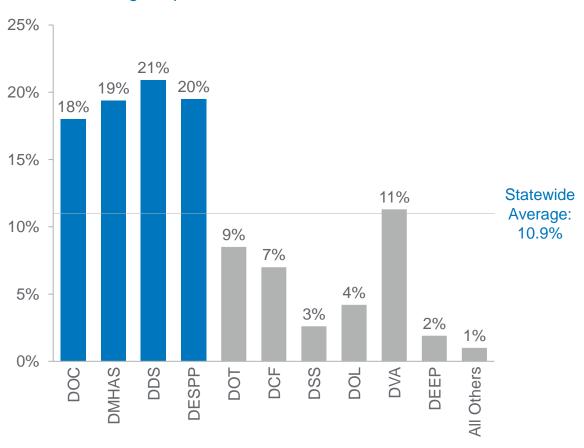
More generous benefits than neighboring states

Four agencies drive 80% of \$256mm statewide overtime spend

OT spend (\$mm)

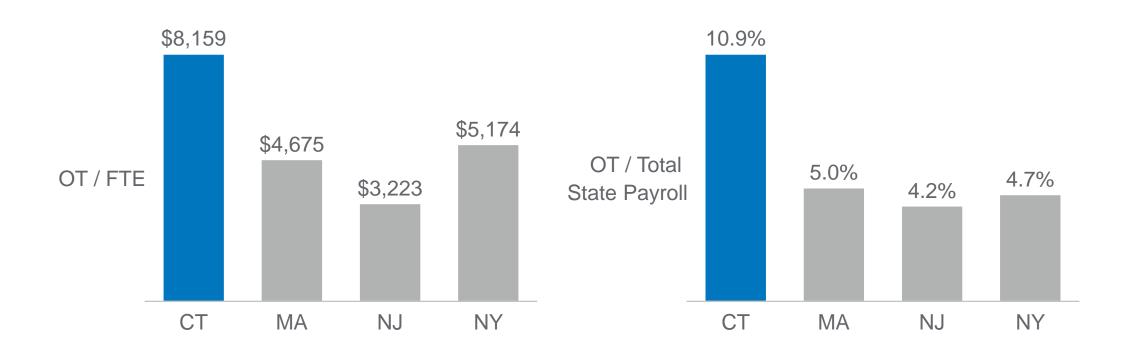


Share of all wages spent on OT

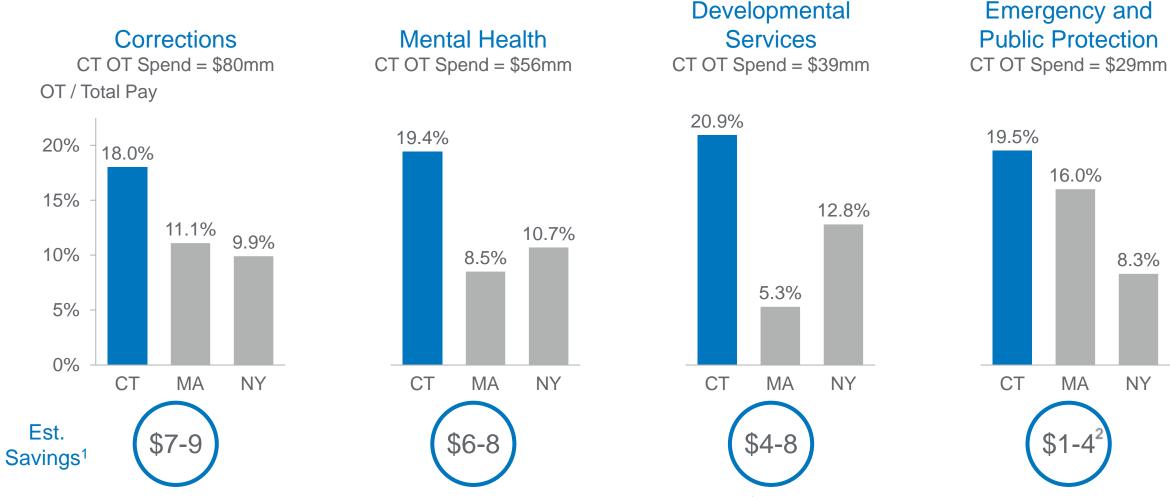


Source: CT STARS data 121

Connecticut spends a higher share of total payroll on overtime than neighboring states

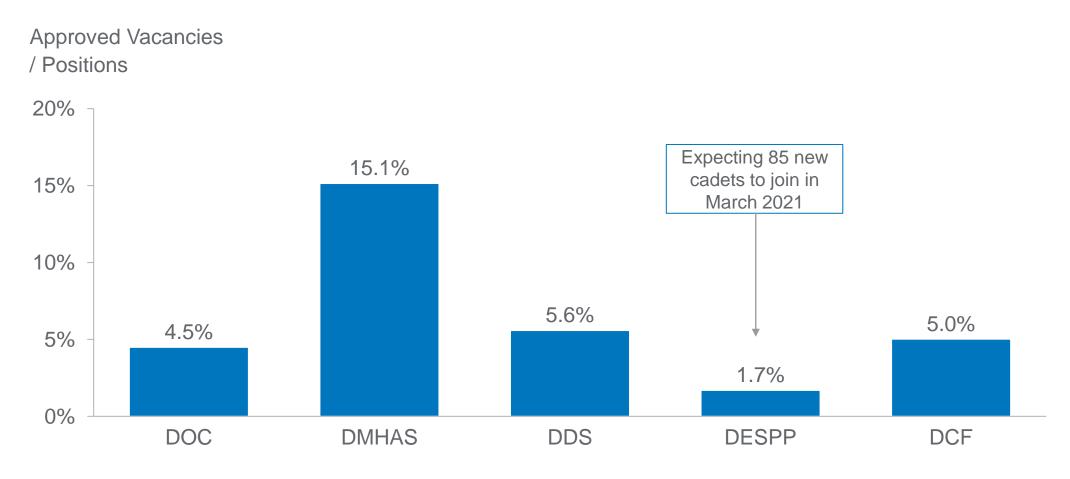


CT spends more than MA and NY across all major service categories

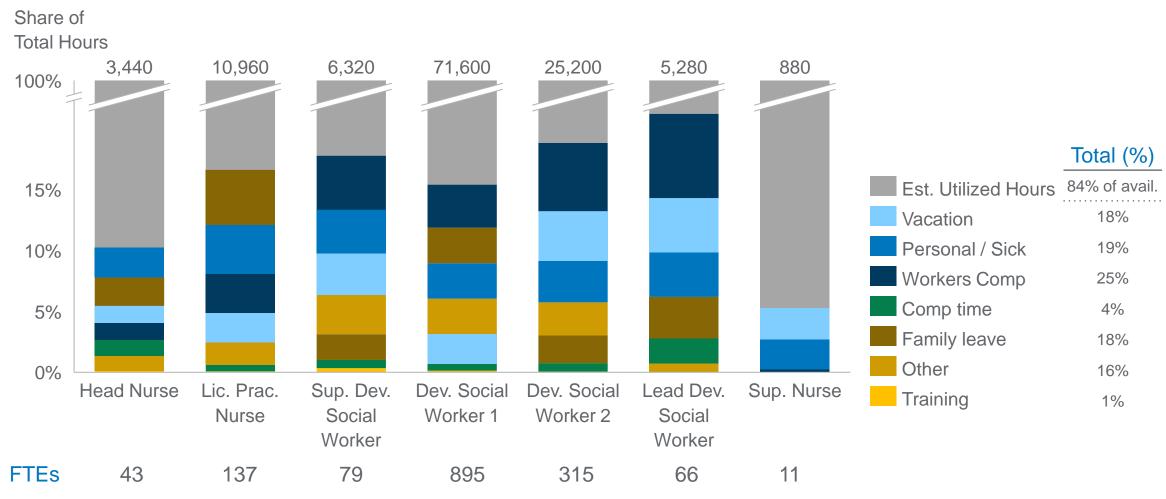


^{1.} Estimated savings range calculated using MA and NY data and haircut by 75% 2. DESPP potential savings as high as \$10m per year at 1,100 trooper level per agency interviews Note: Total payroll includes full-time salary, part-time salary, other compensation and overtime Source: State comptroller's office (CT, 2020; NY, 2018; MA, 2018), Office of Civil Service Commission (NJ, 2018)

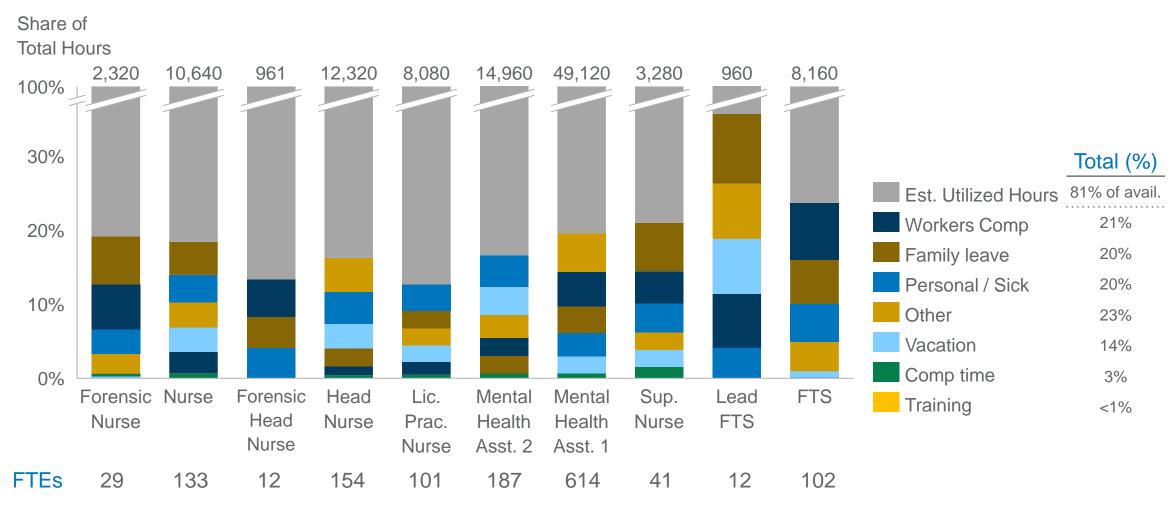
Pre-freeze approved vacancies vary as share of total positions across largest-OT agencies – DMHAS vacancies driven by private sector competition for nurses



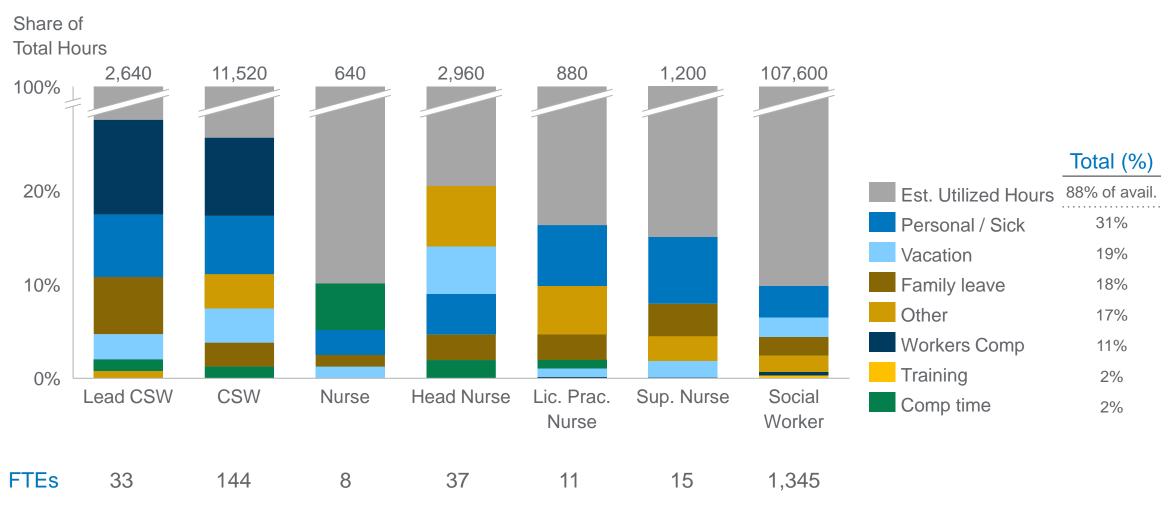
DDS | Workers Compensation drives a quarter of absenteeism, driven primarily by Development Social Worker 1 and 2 employees



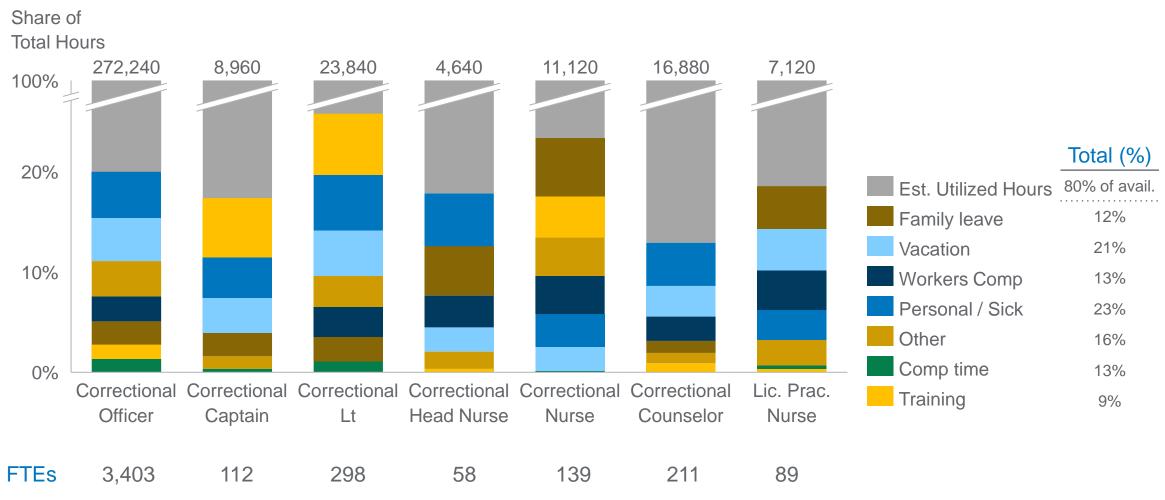
DMHAS | Other category (23% of absenteeism) driven by unpaid sick leave as workers run out of paid time off



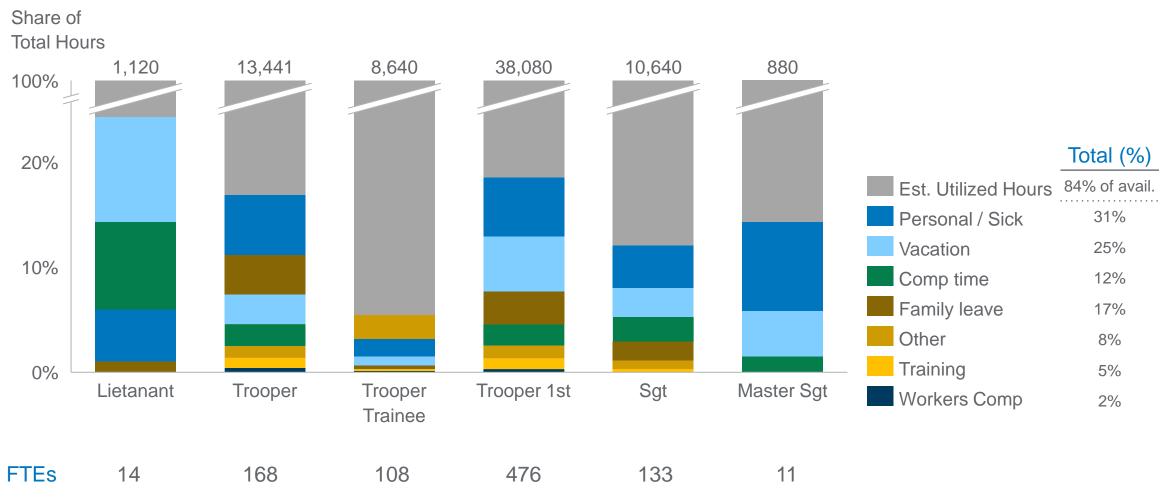
DCF | Personal / sick leave drives absenteeism as 9-day pay period leads to higher instances of call-outs on "non-weekend off" weeks



DOC | Absenteeism driven by personal / sick leave and vacation, while training also drives significantly higher share than other agencies



DPS | Absenteeism driven primarily by personal / sick leave and vacation; reduced trooper levels and expanded roles cited as factors in requested time off



DDS reduced overtime spend by 10% with an approach that replicable for other agencies



Context

 Agency had significant number of vacancies in a 24/7, high stress field

- Labor workers were facing significantly long hours
- Timeline to onboard new recruits could reach a full year or more



Approach

- Replaced more expensive OT wages (50% premium on higher bases) with new employees (<40% premium on entry-level bases)
- Negotiated with labor union to remove Mandatory Lists to facilitate external hiring
- Mandatory Lists and internal posting periods were replaced with oneshot job fairs



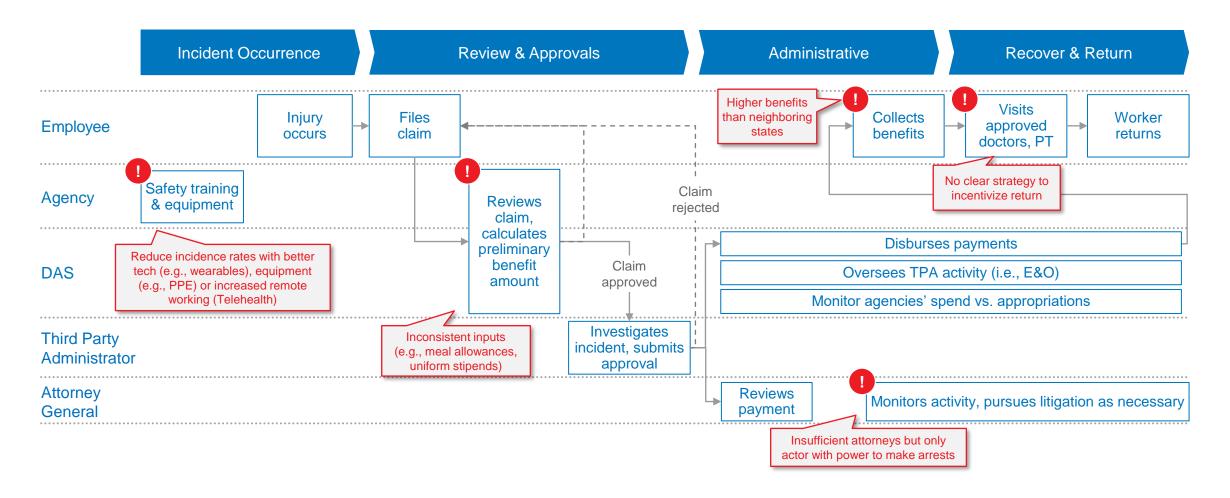
Outcome

 Reduced OT spend by 10% in a single year

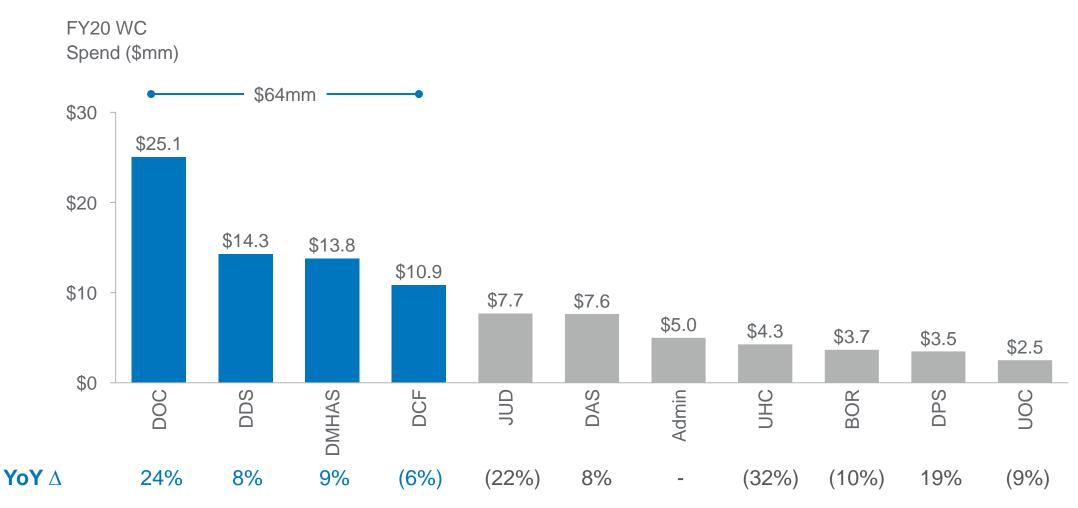
- Employee satisfaction improved (i.e., pulse checks)
- Reduced hiring and recruiting timeline by three months

3.1.4 Workers' compensation

Multiple issues in current process for workers' compensation

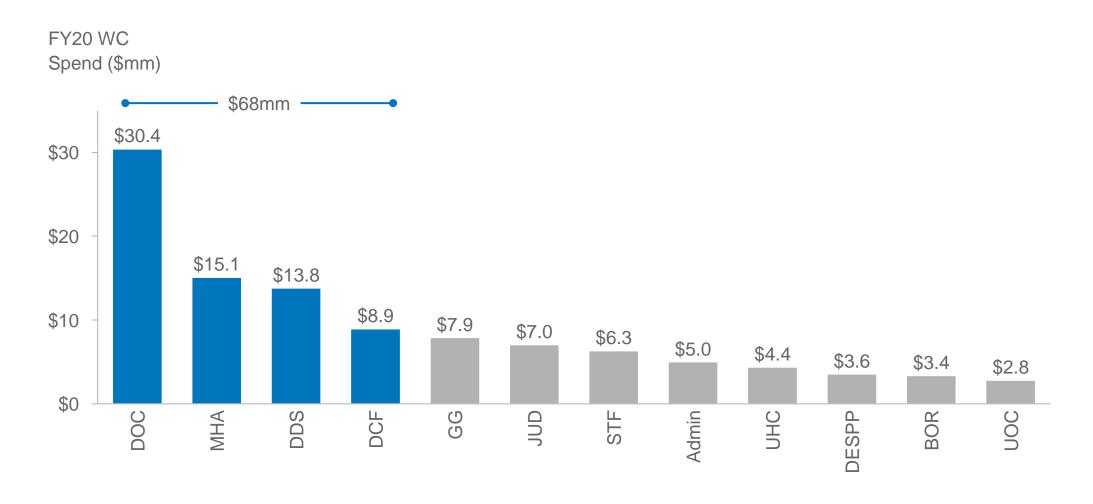


CT spends ~\$100m per year on workers' compensation – 65% in four agencies



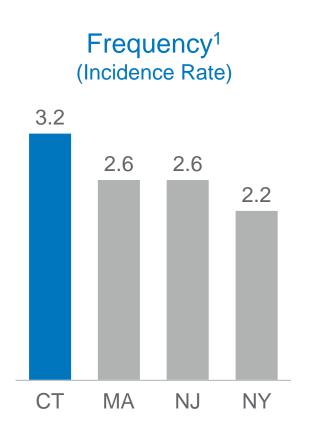
Note: W.C. expenses include medical and indemnity spend Source: DAS Workers Compensation Unit

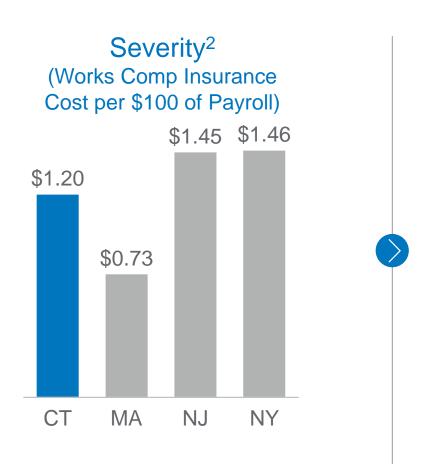
CT spends ~\$100m per year on workers' compensation – 65%+ in four agencies



Note: W.C. expenses include medical and indemnity spend Source: DAS Workers Compensation Unit

CT workers' comp more generous than neighbors in duration and higher-frequency





Important for
Connecticut to
receive periodic
benchmarks of other
states from T.P.A. /
broker to identify
sources of higher
risks and cost

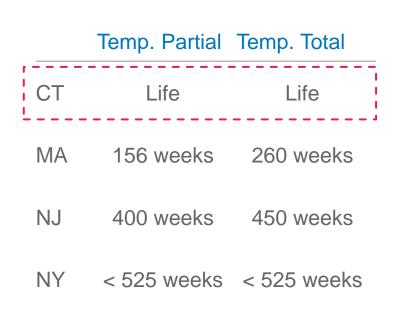
^{1.} Incidence rate defined by BLS as # of injuries & illnesses per 100 FTE workers 2. Severity for this chart defined as Average W.C. Insurance Cost per \$100 of Payroll per State Source: U.S. Bureau of Labor Statistics, National Academy of Social Insurance (NASI)

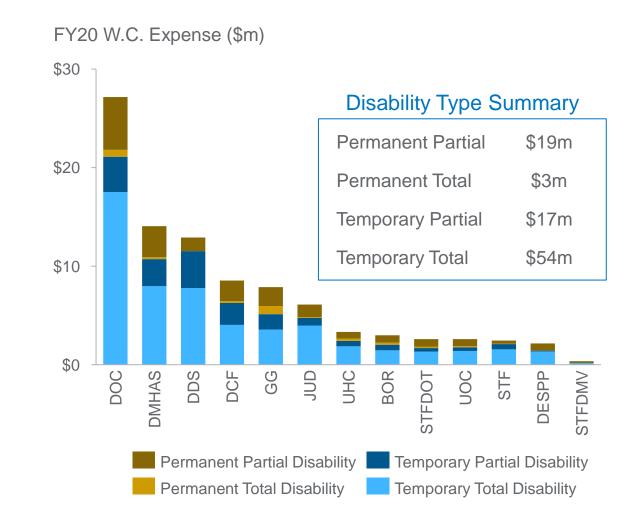
Benchmarking workers' compensation across states

		СТ	MA	NY	NJ	
Population (M)		3.6	3.6 6.9		8.9	
Total State FTEs		33,394	85,779	236,307	132,425	
Total Average Workers Compensation Rate Incidence Rate ¹		\$1.20	\$0.73	\$1.46	\$1.45	
		3.2	2.6	2.2	2.6	
Femporary and Permanent Total	Benefit	75% after-tax	60% (temporary) / 67% (permanent)	2/3 * avg. weekly wage * % of disability	70% of gross wage	
Disability	Max weekly benefit	\$1,373 (total) \$1,174 (partial)	\$1,488	\$967	\$969	
	Min weekly benefit	\$275	\$298	N/A	\$258	
	Duration	Life	156 weeks	< 525 weeks	450 weeks	
emporary Partial Disability	Benefit	75% after-tax	60% of wage difference but < 75% of TTD benefits	2/3 * avg. weekly wage * % of disability	70%	
	Max weekly benefit	\$1,174	\$1,488	\$967	\$969	
	Min weekly benefit	None	\$298	\$150	\$258	
	Duration	Life	260 weeks	< 525 weeks	400 weeks	
Permanent Partial Disability	Benefit	Varies by schedule	Varies by schedule	Varies by schedule; 2/3 of earnings differential	Varies by schedule	
	Max weekly benefit	\$1,174	\$1,498	Varies by schedule	\$969	
	Min weekly benefit	\$50	\$298	Varies by schedule	\$35	
	Duration	< 520 weeks	Life	< 525 weeks	< 600 weeks	

Sources: https://www.bls.gov/iif/soii-chart-data-2018.htm#BLS_table_8_footnotes; https://wcc.state.ct.us/download/acrobat/Benefit-Rate-7able-2020-2021.pdf; https://www.nj.gov/labor/wc/content/stats.html#Benefit-Rates; https://www.nj.gov/labor/wc/content/stats.html#Benefit-Rates; https://www.policygenius.com/blog/state-by-state-guide-to-workers-compensation/, https://www.nass.gov/service-details/learn-about-workers-compensation-benefits

CT has significant temporary disability expenditures (76% of total W.C.) as well as more generous terms than neighbors, including lifetime temporary disability





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

Four main cost drivers could lead to significant savings in workers' compensation

Cost Drivers	Observations	Challenges	Potential opportunity					
Frequency	 Higher incidence rates than neighboring states Majority of claim expenses come from three agencies (DOC, DDS, DMHAS) 	1 0 1 0 1	 Workplace safety training, equipment & wellness programs Incentivize managers to drive incidents lower Investigate root causes of injuries 					
Severity (Medical and Indemnity)	 Complicated benefit calculations due to varying statutes One of only States in the country to avoid enacting reforms providing less generous benefits since 2004 Expenses split 60/40 among indemnity and medical, respectively 	 Significant political capital required Multiple cost factors may result i more limited choices for beneficiaries (e.g., generics, physician choice, etc.) 	 Using formularies to control outliers / caps on reimbursement (when more cost- effective alternatives are available) 					
Duration of claims paid Administrative costs	 No cap on "temporary" total benefits (MA caps at 3 years) Currently spending \$22mm on claims beyond 8 years old; unclear split between temporary and permanent Third-party fee of \$5mm p.a. 	 Significant political capital required Consideration required for most significant injuries (e.g. amputees) Potential learning curve for new Administrator 	Case management driven by outcomesCaps on duration of wages paid					

Ideal future design of workers' compensation program focuses on reducing costs and complexity

Current Process Pain-Points and Inefficiencies





Ideal Future Design

- High benefits relative to neighboring states
- Complex calculation of eligible wages
- No cap on duration of "temporary" workers' compensation
- 100% of wages for 5 years, 50% thereafter
- Insufficient focus on returning workers
- Lack of investigators and arrest powers
- 1 attorney for all municipalities & employers
- No central resources to assist agencies on safety and injury prevention strategies
- Agencies process claims and submit expense reimbursements to DAS

- 70% cap on wages for eligible workers
- Standard benefit calculations (i.e., salary only)
- 3 year cap on maximum allowed wages for temporary workers' compensation benefits
- Incentivize employees to return to work, even if partial or in alternative roles
- More transparency and flexibility around settlements to reduce long-term costs
- Agencies responsible for implementing workplace safety training and monitoring with performance impacts to reimbursement shares

Multiple levers can be pursued to provide savings on workers' comp expenses



Frequency of Claims

- Reduce frequency to be in-line with MA (\$2-4mm savings)
 - Investigate cases to ID causes
 - Target abusers (individuals, doctors) using advanced analytics & social media; publicize fraudulent actors
 - Incentivize managers to improve workplace safety
 - Dedicate safety training units at high incidence facilities
 - Encourage wellness programs



Severity of Claims

- Reduce indemnity and medical costs (60/40 split)
 - Conduct medical bill reviews to minimize rack-rate payments
 - Partner with younger doctors
 - Increase funding to buy-out long-term claims at discounted lump sums
 - Disincentivize use of nongenerics (when feasible)
 - Simplify benefit calculations (i.e., work apparel stipends)



Claim Duration

- Cut length of claims for temporary and partial disabilities
- Cap temporary disability terms to be in-line with neighboring states (3-8 years)
- Monitor physical therapy utilization rates
- Utilize case managers with outcome-driven payments
- More strongly emphasize backto-work programs including expanded light-duty roles

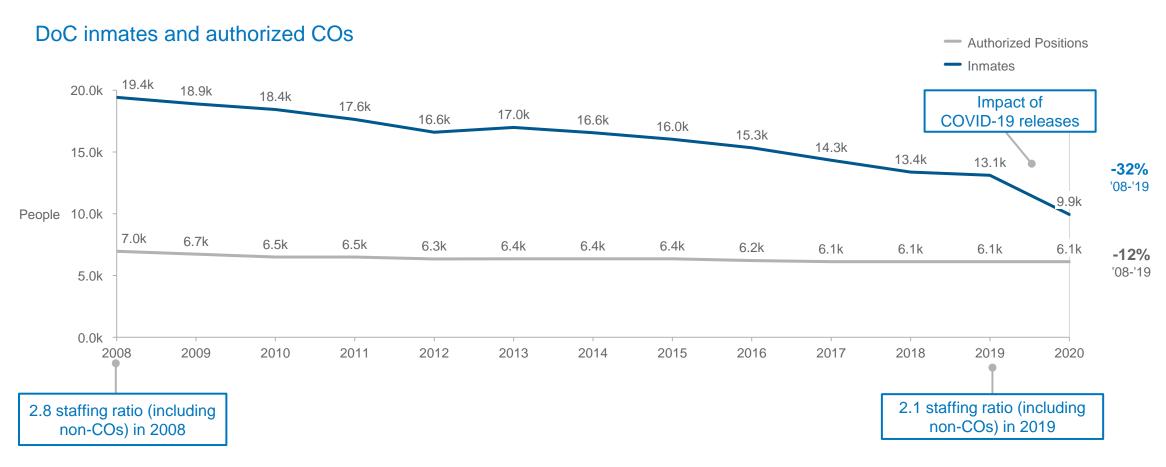
3.1.5 Return corrections staffing to previous level

Overview of Department of Corrections facilities and staffing

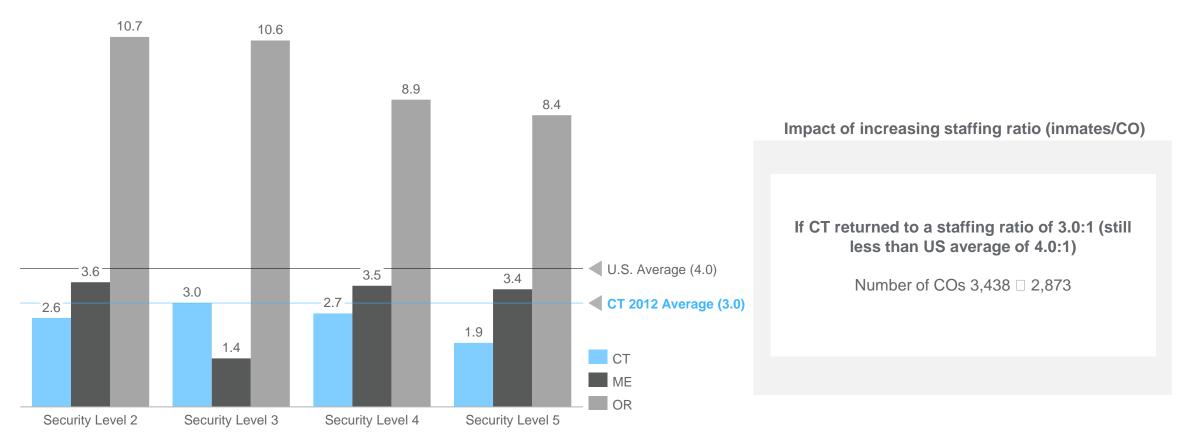
Facility Level(s)	Facility	Type of Facility Location		Staff		Inmate Population		Inmates per CO		Physical Bed Capacity	Facility Use		Building Date	Trade Programs
				Total	COs	2019	2020	2019	2020	2018	2019	2020		
2	Willard-Cybulski CI	CI	Enfield	218	155	1103	434	7.12	2.80	1104	100%	33%	1990	Yes
3	Brooklyn CI	CI	Brooklyn	113	78	452	321	5.79	4.12	456	99%	66%	1990	
3	Carl Robinson CI	CI	Enfield	332	249	1413	807	5.67	3.24	1441	98%	55%	1985	Yes
3	Osborn CI	CI	Somers	347	279	1322	988	4.74	3.54	1886	70%	48%	1963	Yes
4	Bridgeport CC	CC	Bridgeport	254	179	690	598	3.85	3.34	840	82%	74%	1958	
4	Cheshire CI	CI	Cheshire	450	314	1234	1098	3.93	3.50	1392	89%	79%	1913	Yes
4	Garner CI	CI – Mental Health	New Town	275	195	543	521	2.78	2.67	684	79%	72%	1992	Yes
4	Hartford CC & UCHC Medical Unit	CC & Medical Unit	Hartford	324	244	869	733	3.56	3.00	984	88%	76%	1977	
4	Manson Youth Institute	Youth	Cheshire	285	314	286	215	0.91	0.68	670	43%	33%	1982	Yes
4	New Haven CC	CC	New Haven	252	183	689	607	3.77	3.32	716	96%	88%	1976	
5	Northern CI	CI	Somers	209	165	80	90	0.48	0.55	584	14%	14%	1995	
2 - 5	York CI	CI - Female	Niantic	505	346	907	516	2.62	1.49	1458	62%	34%	1994	Yes
3 & 4	Corrigan-Radgowski CI	CI	Montville	411	300	727	845	2.42	2.82	1489	49%	38%	1994	
4 & 5	MacDougall-Walker Cl	CI	Suffield	589	437	1441	1813	3.30	4.15	2151	67%	64%	1993	Yes
						State average was 3.6; cu compared to U.S. average					Facility utilization aver currently at 56%			ó;

^{1.} CI is for sentenced individuals (prison), CC houses unsentenced individuals (jail)
Sources 1) Staffing: 2020 DOC filled staffing spreadsheet. 2) 2019 Inmate Population from Monthly Statistics on DOC website. 3) 2018 Physical Bed Capacity taken from DOC bed capacity vs. filled as of 10-31-18. All documents were provided by DOC budget analyst on 10/7/2020. Facility Utilization = Inmate Population/Phyiscal Bed Capacity

Prison population has declined over the past decade, to less than 10,000 at the end of 2020



Connecticut staffing ratio lower than peers; potential to return to previous staffing ratio (still lower than national average) through accepting CO retirements



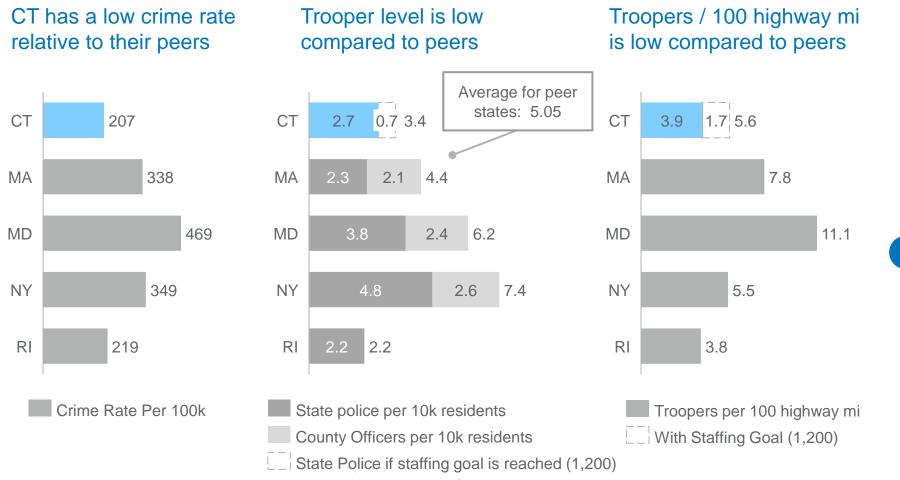
Staffing ratio: 2020 DOC filled staffing spreadsheet. Inmates/CO+Warden = Staffing ratio. 2) Cost savings = (Current Staffing – Proposed staffing) * average CO salary (\$64,000) Source: 1) 2019 Inmate Population taken from Subcommittee spreadsheet. All documents were provided by DOC budget analyst on 10/7/2020. 2) 2008 & 2012 CO from https://www.correctionalofficeredu.org/connecticut/

3.1.6 Setting an optimal Connecticut State Police target and civilianizing admin functions

Retirements offer the opportunity to define a new target CSP staffing level

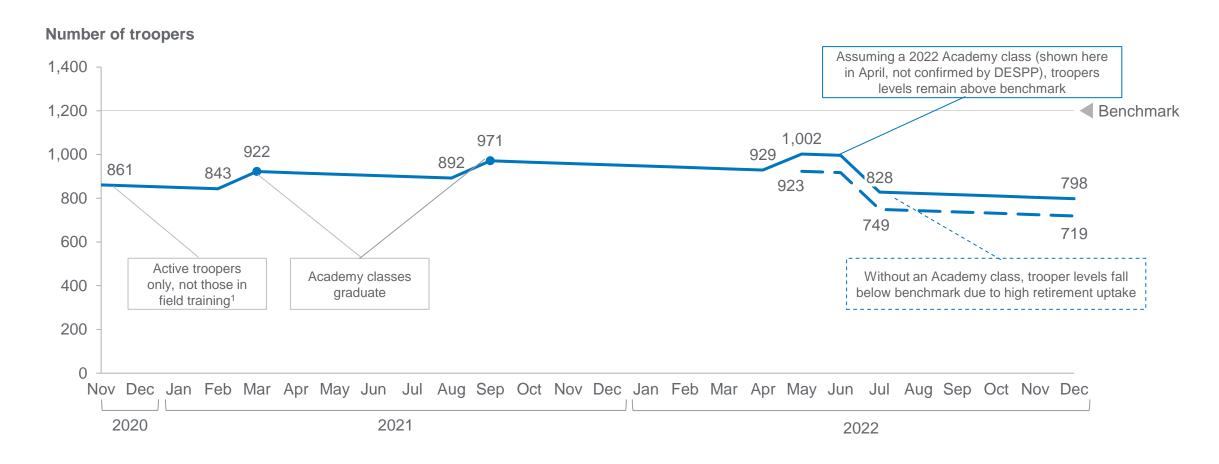
Drivers		Observations	Ideas for discussion	Challenges
	Set target staffing level	 Currently 923 troopers, down from 1,100 three years ago; CSP staffing target 1,200 (to be confirmed) Projected to further decline by ~100 due to retirement surge Police levels lower than in peer states, especially after retirements 	 Reach staffing levels based on peer benchmarks; understand where more police are needed to ensure public safety and impact of lower numbers Review drivers of OT, including non-protective work, and address through operational and labor negotiations where possible 	 Existing CSP capacity is limited due to non-enforcement and administrative responsibilities given to CSP (e.g., data entry, boxing regulation) Currently face high levels of OT (20% of total comp), which could be a sign of under-staffing
	Increase cadet graduations from academy	 Trooper levels require advance planning due to academy structure; 80- 100 new troopers after nine-month program 	Increase target academy class size if required to achieve higher staffing level	 Length of training program means personnel levels 'locked in' in advance Cadet drop-outs increase uncertainty in future trooper numbers
	Reduce admin and non-police duties given to CSP	 CSP enforce state laws (e.g., on freeways) and provide essential policing services in rural areas Role largely defined by statute but has expanded over time (e.g., sport event enforcement) 	 Explore civilianizing non-enforcement police activit e.g., responding to mental health crises 	providers (e.g. social workers, mental

Top-down benchmarking suggests that state police numbers are low compared to peers



- Matching peer benchmarks would require ~1200 troopers
- Department is able to address trooper capacity challenges by achieving a CSP target of 1,100

Expected levels of retirements will bring staff levels even lower than peer benchmarks; need to align Academy class with staffing needs for 2022



^{1. 930} total troopers shown on previous page includes both active and those in training Source: CSP Current Outlook 2020-02-1.pdf

Drawing on other alternative workforces for some responses could potentially reduce pressure on state police and help manage staff levels

State Police responsibilities	Potential alternative worker	Rationale	police time based on Rice study ¹
Non-emergency 9-11 calls pertaining to mental health	Mental health workers	Eliminates crisis intervention training for police	00/
Non-emergency 9-11 calls unrelated to mental health	Social workers	Targeted response based on civilian need (e.g. homelessness, drug abuse)	9%
Reporting on non-injury, non- DUI accidents	Private company (e.g. On Scene Services)	Routine task; does not require sworn in personnel	30%
Patrolling rural regions	Private organizations or neighborhood watch groups	Sworn officers may not be required for non- violent calls in rural areas	
Managing highway weight stations	DMV	DMV currently supports DESPP in this function and they have the tools necessary	15%
Code enforcement (e.g. cite handicapped parking violators)	Civilian police service officer	Routine task; does not require sworn in personnel	
Investigation support (e.g. online searches for case info)	Civilian police service officer	Does not require sworn in personnel	
Missing persons (e.g. phone banks and command centers)	Civilian police service officer	Does not require sworn in personnel	4%
Sex offender registries	Civilian police service officer	Highly administrative; does not require sworn in personnel	

Responses to some incidents may require multiple types of staff (e.g. social worker and police)

Current share of

Opportunity to increase CSP capacity by 25%-30% through alternative policing models

Source: NY Times, Nola, Rice University

Potential to further increase CSP capacity by civilianizing administration functions







Team	Activity which could be civilianized	Description
Office of Field Operations	Traffic Services Unit	Safety inspections, collision analysis and reconstruction service
Office of	Research, Development, and Planning Section	Updating and expanding policies and procedures, and automating how the agency collects, analyzes, and disseminates data
Administrative Services ~50 FTE	Infrastructure Planning and Management Unit,	Key physical infrastructure projects are managed to improve the more than fifty facilities throughout the agency
	Fleet Administrative Unit	Oversees the maintenance and continued development of more than 1,900 vehicle assets
	Finger Printing	Oversees finger printing services
Misc. ~20 FTE	Administrative Services	Provides administrative support to agency office for duties including but not limited to analysis, accounting, etc.



Civilianizing admin functions could free up to **70 troopers** and lead to savings of ~\$1m¹

Backup | Police cost more than civilians, civilianization leads to savings

Category	Job title	Avg. Annual Rate (\$k)	Category Avg. Annual Rate (\$k) ¹	
D. II	State Police (NP-1)	\$87		
Police (protective services)	State Police Lts & Captains (NP-9)	\$135	\$87	
(protective services)	Protective Services (NP-5)	\$77		
Capial warker	Clinical social worker	\$83	#00	
Social worker	Clinical social worker Associate	\$94	\$88	
	Mental Health Assistant 1	\$54		
Mental health worker	Mental Health Assistant 2	\$64	\$57	
	Mental Health Associate	\$77		
	Administrative Clerical (NP-3)	\$61		
	Admin and Residual (P-5)	\$90		
Administrative	Managerial	\$107	\$75	
	Exempt/Elected/Appointed	154.3		
	Confidential	81.2		

Note: 1) Annual rate is a weighted average

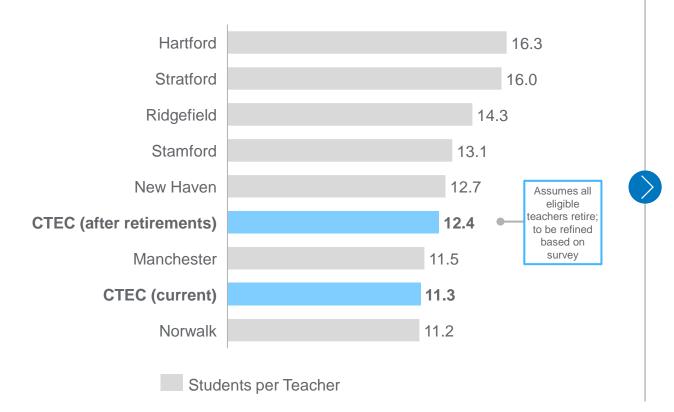
3.1.7 Optimize CTEC administrative and teacher levels

Greatest opportunity from matching benchmark class sizes and centralizing administrative functions

Drivers		Observations	Potential opportunity	Challenges
وَ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْم	High school instructors	 Student/teacher ratios currently at 11 students per instructor, lower than CT average With retirement surge, student/teacher ratios wireach 12.4 (more in line with CT districts) 	by sharing staff across CTEC schools and sharing non-vocational staff (e.g., English) with	numbers and maintain program viability CTEC employees are state employees,
	Administrative costs	 Administrators represent 11% of CTEC school staffing, compared to <5% of similarly sized districts in CT 	ts • Centralize administrative services as a district rather than in individual schools	Central office already lean; will require organization re-structure to increase central office capacity
	Program rationalization (covered previously)	Most programs at scale (>100 students total or >20 students at an individual site)	 At a school level, rationalize classes with student enrollment <20 At a program level, rationalize programs with student enrollment <100 Limited opportunity (<\$1m in savings) 	Program consolidation creates political complexities regarding access to education

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

Student/teacher ratios for Connecticut districts

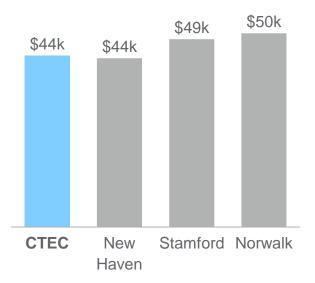


To accept instructor retirements without rehiring CTEC should consider sharing instructors

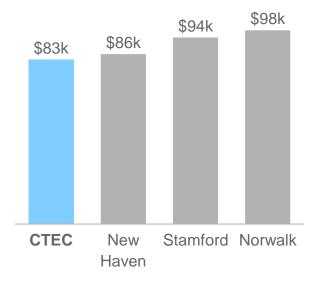
Opportunity	Considerations
Share instructors with municipalities in same geography	Financial arrangements with municipalities would be complex; CTEC teachers are state employees
Share instructors among similar programs	Program offerings vary by location; have faced challenges with inducing teachers to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

CTEC annual salary for instructors is largely in line with other CT districts

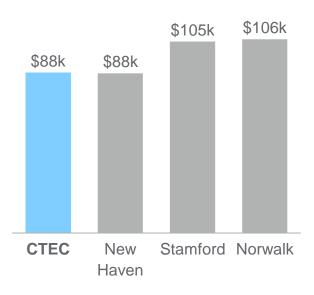




New hire – Master's degree

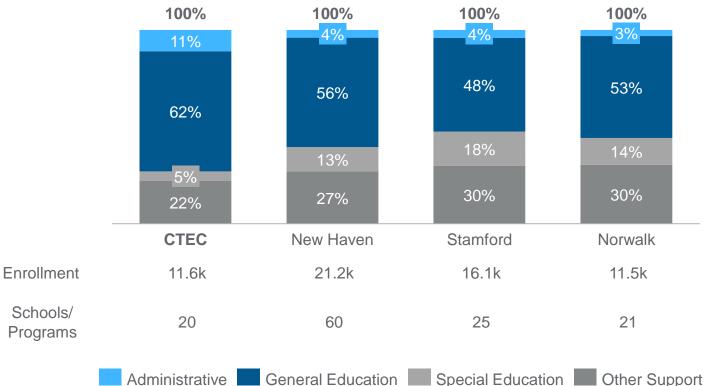


Six years experience – Master's degree



CTEC spends more on overhead than other CT districts due to decentralization

FTE breakdown by Connecticut school district



Other CT districts centralize back office support functions at a district level

Opportunity for CTEC to treat state school system as a single district; creates opportunity to centralize back office support functions (e.g. rationalize business officers and legal services)

Savings from reducing administrative personnel to 5% in line with other Connecticut districts could be \$5-10m

3.2 Streamline services and pool resources

3.2.1 Integrate agencies with similar missions

State should review integration opportunities for four benefits which have potential to mitigate retirement surge risks

Integration benefits mitigating retirement surge



Approach

Focused on opportunities which would mitigate retirement surge risks

Did *not* look for reorganization opportunities simply to reduce number of agencies

Developed list based on outside-in review and agency interviews

Mission and decision clarity

Streamlined accountability for given services or clients

Faster decision making

Eliminating risks that issues 'fall between the cracks' due to lack of ownership

However, ensure 'checks and balances' on decisions maintained (e.g., on spending)



Client experience and outcomes

Streamline service design for few handoffs and time-consuming 'back and forths'

Improve policy and service design with stronger ownership

Create obvious 'homes' for various service types



Scale and excellence in capabilities

Increase ability to invest in new skills and knowledge

Facilitate common platforms across service types (e.g., shared eligibility platform)

Ensure agencies have scale required for 'seat at the table' in cross-government decisions



Administrative and operational efficiency

Reduce administrative or management costs from increased scale

Eliminate duplicative functions or streamline program spend

3.2.2 Further centralize shared services

Greatest potential opportunity in further centralizing finance and facility functions

Drivers		Observations	Potential opportunity	Challenges
	Finance	 Budgeting and audit functions centralized, with strong spend control Some financial managed by individual agencies e.g. payroll and AR/AP 	Explore centralizing financial functions including payroll and AR/AP	Requires buy-in from agencies
	Facilities, real estate and asset manage- ment	,	 Explore centralizing maintenance and security functions where done by state employees and procurement where not Maintain decentralized model for unique assets (e.g., parks in DEEP) 	 Real estate asset types differ e.g. vehicle garages versus national parks Hard to consolidate due to nonspecific management roles e.g. maintenance vs. construction
	HR and procure-ment	 Most HR functions already centralized Procurement part centralized, with some carve-outs (e.g., professional services to OPM, capital projects to DoT) 	()	Functions already largely centralized
	IT	Current decentralized model undergoing centralization as a result of IT efficiency project	Limited immediate opportunities to further centralize beyond what is planned	Project underway to further centralize

Reviewed seven corporate functions for opportunities to achieve efficiencies by coordinating similar activity across departments and achieving scale (1 of 2)

		Similar across	Efficiency benefits	Opportunities to
Shared service function	Current centralization or coordination	multiple depts	from scale	explore
Finance				
Budgeting	Centralized through OPM			
Payroll	Not centralized	<u> </u>	✓	☆
• AR/AP	Not centralized	<u> </u>	V	☆
Audits	Centrally coordinated and executed	<u> </u>		
Pension calculation	Centralized through OSR/CORE-CT for state employees	<u> </u>	<u> </u>	
Pension payments	Partially centralized (state employees and teachers)	<u> </u>	<u> </u>	
HR				
Job posting/recruiting	Centralized through DAS			
Grievances	Centralized through DAS	<u> </u>	<u> </u>	
Labor relations	Centralized through OPM OLR	<u> </u>	<u> </u>	
Diversity and targeted recruiting	Partially centralized through DAS	<u> </u>	<u> </u>	
AA/EO reporting	Limited centralization; each dept creates own AA report	<u> </u>	<u> </u>	☆
Workforce planning	Coordinated between DAS and departments	<u> </u>	(
Procurement				
 Contracting for amounts >\$200k 	Centralized through DAS			
Professional services	Carved out to OPM	✓	<u> </u>	
Roadways	Carved out to DoT		<u> </u>	
Construction	Carved out to specialized team in DAS		<u> </u>	
Large health/human services contracts	Carved out to OPM		<u> </u>	
Contracting for amounts <\$200k	Conducted by individual departments	(

Reviewed seven corporate functions for opportunities to achieve efficiencies by coordinating similar activity across departments and achieving scale (2 of 2)

Shared service function	Current centralization or coordination	Similar across multiple depts	Efficiency benefits from scale	Opportunities to explore
IT				
Desktop support	Further coordinating through IT efficiency project			
New system development	Further coordinating through IT efficiency project	<u> </u>	<u> </u>	
IT infrastructure	Further coordinating through IT efficiency project	<u> </u>	<u> </u>	
Back-end system support	Further coordinating through IT efficiency project	V	✓	
Data analysis	Central data team in OPM, some depts have capability		(
Tech policy	Centralized in OPM			
Real Estate/Asset Management				
Asset acquisition and disposals	 Coordinated across OPM, DAS and departments 			
Office space planning	Coordinated across OPM and DAS	<u> </u>	✓	
Asset management	Function within each department (e.g., DEEP, DOT)		<u> </u>	
Facility maintenance (internal)	Each department has own staff or procures service	✓	<u> </u>	☆
Fleet management	 Coordinated where there are large fleets (DAS/DOT) 	<u> </u>	<u> </u>	☆
Site security (internal)	Multiple department-level contracts, some coordination	<u> </u>	✓	☆
Legal/Legislation				
 Development of policy 	 Coordinated across constitutional offices and departments 	3		
Legislative engagement	Specialized teams in each department			
Legal advisory	Specialized teams in each department and central AG tea	ım		
Communication				
Strategic communications	Not a shared function			
Communications execution	Not a shared function		$\overline{m{ee}}$	

Detail on potential shared services opportunities

	Function	Potential opportunity	Rationale and risks	Impact
Finance ~300 FTE	Payroll	Centralize function	Duplicative financial processRemove risks of inefficiency	Addresses retirement surge risk from losing
across state agencies Facilities	• AR/AP	Centralize function	 Duplicative accounting process Cut operational costs to improve department's organization and speed 	senior finance management in large agencies (e.g., DESPP, DRS) • ~\$5-10m savings from consolidating finance functions
Facilities and real estate	 Facility maintenance (internal) 	 Increase coordination across departments and coordinated/centralized contracting 	 Duplicative processes Create consistency in control of standards and procedures Increasing quality and equipment reliability 	 Enables greater coordination of property strategy and financial savings from
~150 facilities and ~25 security FTE	Fleet management	 Review fleets and potentially further centralize 	Consolidate DAS/DOT car effortsAvoid overhead and redundancy	consolidation • ~\$1-5m savings from
across agencies	Site security (internal)	 Move to as single state team and coordinated/ centralized contracting 	 Inefficient to have responsibility lie with agency Achieve cost savings through economies of scale 	consolidating facility management and security functions
HR	AA/EO reporting	 Automate or centralize AA reporting Explore single report for executive branch 	 Process is extremely time consuming Requires a significant number of reports Pain-point identified across agencies 	Minimal, but major pain point for agencies

^{1.} Based on org charts received from agencies totaling >75% of state headcount

Centralizing payroll function mitigates significant retirement risks while providing opportunity to realize several million dollars in savings

Current context and retirement surge risk

- Payroll responsibilities today currently handled by 80+ FTEs within each agency, though only ~30 handle bulk of actual processes
- Significant risk of being unable to manage payroll functions across the State following 2022 retirement surge
- Moreover, non-payroll employees at higher rates often assist with payroll (e.g., A&R)

Proposal to consolidate within OSC

- Transition and centralize payroll and benefits within OSC across 30 FTEs
- Allow for attrition of dozens of eligible FTEs
- Transfer remaining workers who are not centralized and elect not to retire to other functions / job classes of equal rate and status
 - Eliminate permanent positions to avoid future backfilling







- 50% expected attrition of eligible workers performing payroll functions today
- Reduced overtime (e.g., spreading agency-specific spikes in payroll across centralized FTEs)
- Eliminating need for higher-rate job classes supplementing payroll duties (e.g., HR, A&R)

3.2.3 Streamline similar human service programs and support functions

We examined human service programs from multiple angles

Agency and OPM input

Interviews conducted with agency commissioners and OPM analysts to identify potential overlap

Additional discussions to verify services provided and populations serviced

Program research and review

Research conducted through publicly available information on agency websites

Biennial budget document review

External benchmarking

Compared CT program structure to peer states

Program and service streamlining can lead to several benefits



Policy coordination and improved outcomes

Complementary policy design across programs

Coordinated decision making across programs



Simplified resident experience

Targeted outreach efforts

Consolidated "access points" (e.g., websites, phone lines)



Reduced administrative costs

Less need for reporting and data processing

Physical location combination



Reduced program costs

Duplicative services streamlined

Increased economies of scale

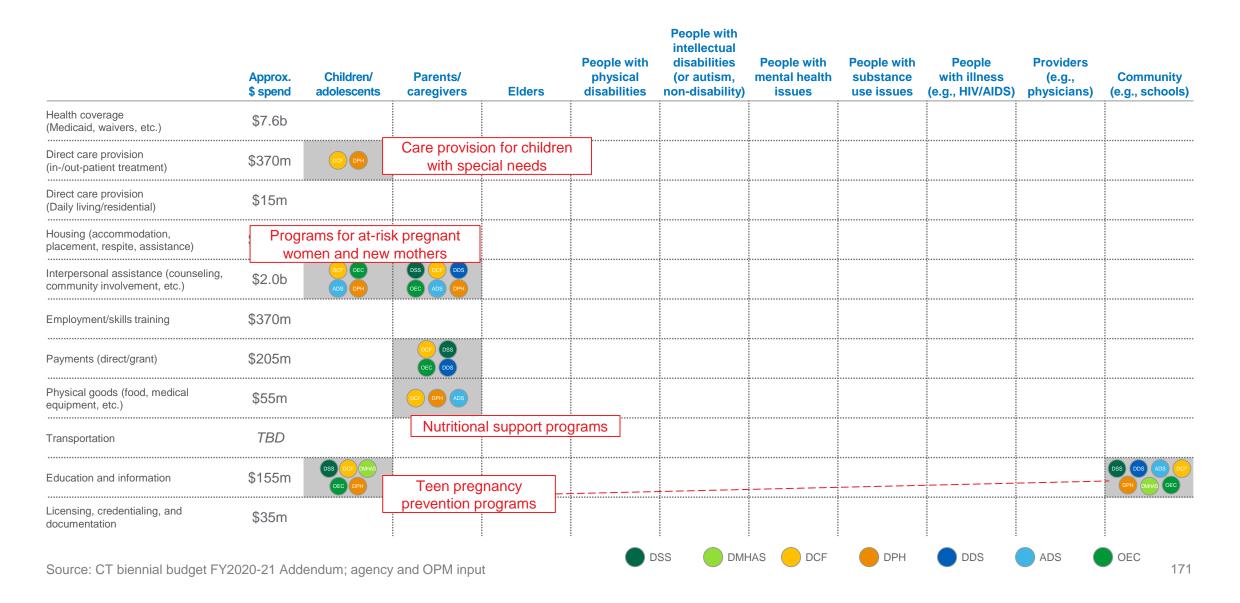
Mapping client and service types can be used as a framework to identify areas of overlapping service provision

	Children/ adolescents	Parents/ caregivers	Elders	People with physical disabilities	People with intellectual disabilities (or autism, non-disability)	People with mental health issues	People with substance use issues	People with illness (e.g. HIV/AIDS)	Providers (e.g. physicians)	Community (e.g. schools)
Health coverage (Medicaid, waivers, etc.)										
Direct care provision (in-/out-patient treatment)										
Direct care provision (Daily living)										
Housing (accommodation, placement, assistance)										
Interpersonal assistance (counseling, respite, community involvement, etc.)										
Employment/skills training										
Payments (direct/grant)										
Physical goods (food, medical equipment, etc.)										
Transportation										
Education and information										
Licensing, credentialing, and documentation										

Significant agency overlap in some areas... Validated with individual agencies and OPM

	Approx. \$ spend	Children/ adolescents	Parents/ caregivers	Elders	People with physical disabilities	People with intellectual disabilities (or autism, non-disability)	People with mental health issues	People with substance use issues	People with illness (e.g., HIV/AIDS)	Providers (e.g., physicians)	Community (e.g., schools)
Health coverage (Medicaid, waivers, etc.)	\$7.6b	DSS DCF	DSS	DSS ADS	DSS	DSS DDS	DSS	DSS	DSS		
Direct care provision (in-/out-patient treatment)	\$370m	DCF DPH				DDS	DMHAS	DMHAS	DPH		
Direct care provision (Daily living/residential)	\$15m	DCF	DCF	DSS ADS	DDS	DDS	DMHAS	DM+AS	DPH		
Housing (accommodation, placement, respite, assistance)	\$470m	DCF	DDS	DSS ADS DMHAS	DDS DMHAS ADS DSS	DM-IAS DDS	DMHAS	DM+AS	DMHAS		DPH
Interpersonal assistance (counseling, community involvement, etc.)	\$2.0b	DCF OEC ADS DPH	DSS DCF DDS OEC ADS DPH	ADS	ADS	DDS	DMHAS	DMHAS	DPH	DPH	DSS
Employment/skills training	\$370m	DCF	OEC	ADS	DSS ADS	DDS	DMHAS	DM+AS		DPH	DPH
Payments (direct/grant)	\$205m	DCF	DCF DSS OEC DDS	DSS	DSS	DDS	DSS	DSS	DSS DPH	DCF DPH	DCF DPH OEC DSS DMHAS
Physical goods (food, medical equipment, etc.)	\$55m	DCF DPH	DCF DPH ADS	ADS	ADS	DDS	DMHAS	DMHAS	DPH	DPH	DPH
Transportation	TBD	DCF		DSS	DSS ADS	DDS	DMHAS	DMHAS			
Education and information	\$155m	DSS DCF DMHAS	DCF DMHAS OEC DPH	DCF DPH DSS ADS	DSS DPH ADS	DDS DSS	DCF DPH DM+AS	DCF DPH DMHAS	DMHAS DPH	DCF DPH	DSS DDS ADS DOF
Licensing, credentialing, and documentation	\$35m		DCF		DSS ADS	-				DCF DSS DPH	DDS DPH DCF OEC

... suggests four key opportunities for program streamlining



Key opportunities to coordinate human services programs

Service type	Agencies with relevant programs	Opportunities	\$ spend does not include all administrative costs; total spend likely higher	\$ spend (State spend)	Est. potential savings
Nutritional assistance	Connectical Department of Social Fernicas Valence of Social Services Agency and Display Social Services	service delivery and reduce ad	ns within DSS to simplify service delivery and	\$96m (\$4m state)	<\$1m+
Care provision for children with special healthcare needs	DCF PPH		Medical Health and Wellbeing Services to leverage tion capabilities and resources and reduce sts	\$2m (\$2m state)	<\$1m+
Teenage pregnancy prevention education and interpersonal support	Convertical Department of Social Services	De-duplicate educational progradelivery and increase federal forms.	ramming across programs could streamline service unding	\$2m (\$1m state)	<\$1m+
Interpersonal support for atrisk pregnant women and new mothers	DCF PH		DPH programs and facilitate coordination with DCF and reduce administrative costs	\$41m+	TBD
			Total	\$141m+ (\$7m state)	\$2m+

Program detail | Nutritional assistance

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail				Funding source	\$ spend
Supplemental Nutrition Assistance Program (SNAP)	Specifical Reportment of States Services	•	Payments to low-income/asset households for purchasing food (formerly called Food Stamps)			Federal	\$50m
Special Supplemental Nutrition Program for Women, Infants and Children (WIC)	₽PH	low-income pr	Food, healthcare referrals, nutrition education, and breastfeeding support provided to low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk			Federal	\$41m
The Emergency Food Assistance Program (TEFAP)	Emerging Reportment of Sector Services Sector (1) Williams (1)		Contract with Connecticut Food Bank, Inc. and Foodshare, Inc. to distribute USDA commodities to food pantries, shelters, etc.				\$1m
Commodity Supplemental Food Program (CSFP)	Enumation: Report most of Sector Services and " or Williams in		Supplemental food products provided by US Department of Agriculture (USDA) to low-income people 60 or older				<\$1m
Elderly Nutrition Program	Aphy and Drubbby Sunday	centers, school targeted base	Meals provided to people 60 or older; home-delivered or served at sites such as senior centers, schools, churches, etc. No specific income requirements – services are targeted based on economic/social need, living situation (rural vs. urban), English proficiency, and more			State	\$3m
Connecticut Nutrition Assistance Program (CTNAP)	d Sada Service of Sada Service service Mileson o	Contract with Connecticut Food Bank, Inc. to bulk purchase nutritionally beneficial foods for distribution to needy households			State	\$1m	
Recommendation		coordination/ ed outcomes	Simplified resident experience	Reduced admin costs	Reduced program costs	Est. potential	savings—
Consolidate administration of federally funded programs (SNAP, CSFP, TEFAP) within DSS	/-	⋖	⊘	⊘		<\$1n	า+
Combine state-funded Elderly Nutritio Program and CTNAP within DSS	n	✓	✓	✓	✓		

Program detail | Care provision for children with special needs

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative	PH	Health, education, and recreation service coordination, payment for services, and family respite for income-eligible children under 21 at elevated risk for chronic physical, developmental, behavioral, or emotional conditions	State	\$2m
Medical Health and Wellbeing Services at DCF	DCF	Branch of DCF responsible for administering and monitoring health care to children in DCF custody	n/a	



Recommendation

House CYSHCN and Medical Home Initiative in DCF's Medical Health and Wellbeing Services and leverage existing health care administration capabilities and resources Policy coordination/ improved outcomes

Simplified resident experience

Reduced admin costs

Reduced program costs





Est. potential savings-

<\$1m+

Program detail | Teenage pregnancy prevention education and interpersonal support

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Connecticut Personal Responsibility Education Program (PREP)	<u>P</u> PH	Pregnancy, HIV, and STD awareness and prevention educational sessions conducted in schools and other community settings for adolescents	Federal	<\$1m
Teen Pregnancy Prevention Initiative	Specifics, Apperhand of acid for Call dada's a Wildows o	Initiative to prevent adolescent pregnancy spanning multiple programs, including intensive after-school educational and support programs (Comprehensive Children's Aid Society Carrera Model/CCM) and school-based community-service programs (Teen Outreach Program/TOPS)	State	\$1m



Program detail | Interpersonal support for at-risk pregnant women and new mothers

\$ spend does not include all administrative costs; total spend likely higher

Program	Agency	Detail	Funding source	\$ spend
Special Supplemental Nutrition Program for Women, Infants and Children (WIC)	PH	Food, healthcare referrals, nutrition education, and breastfeeding support provided to low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk	Federal	\$41m
Healthy Choices for Women and Children	₽PH	Home visits, need assessments, substance abuse and parenting education, and service referrals for pregnant/postpartum women residing in Waterbury who use or are at risk of using substances	Federal	TBD
Save Haven Act for Newborns	DCF	Program allowing a parent to voluntarily give up custody of infant age 30 days or younger to DCF without being arrested for abandonment	n/a	



Recommendation

Consolidate administration of WIC and Healthy Choices for Women and Children programs within DPH and facilitate coordination with DCF Policy coordination/ improved outcomes

Simplified resident experience

Reduced admin costs

Reduced program costs



Est. potential savings-

TBD

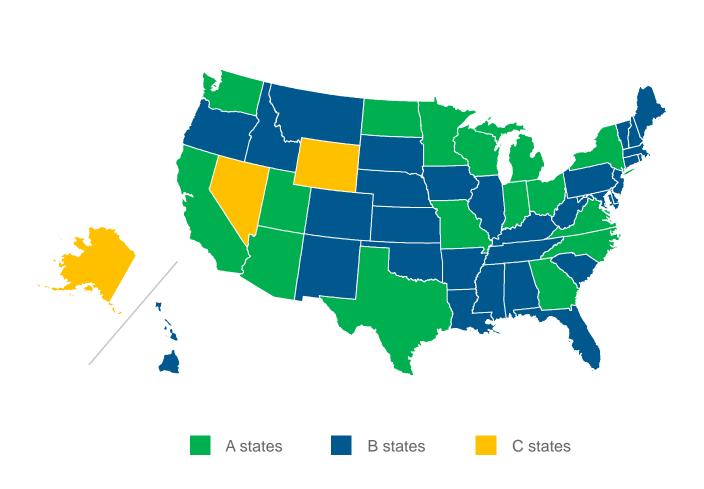
3.3 Digitize resident services and internal processes

Central digital team could spearhead execution of the most impactful automation/digitization opportunities with a focus on state-wide solutions

Agency	Opportunity	Est. annual FTE hours saved	Est. annual cost savings	Detail
dmhas	Implement electronic health record	50-60k+	\$15-20m+	 Electronic health record would streamline chart management, medication administration, inventory control, and activities at DMHAS facilities and reduce central IT workload Increased staff efficiency would result in improved patient outcomes Improved intake, billing, and reporting processes would reduce lost revenue
	Automate/digitize new hire process	100-125k+	\$2-5m+	 Includes listings, candidate review, and onboarding; already in progress HR documents, records, and workflows to be automated via People-Doc (HR software) subscription
CSDE LANGUAGO CARA	Streamline "purple sheet" document review process	25-50k+	\$1-2m+	 Approval process for documents often involves multiple passes through various departments including Legal, Fiscal, Commissioner's office, etc. Automated process with ability to pre-flag required reviewers based on standard set of rules (e.g. any mention of statutes requires Legal review) would reduce time spent per document and minimize irrelevant reviews
CONNECTICUT DEPARTMENT OF LABOR	Modernize initial claims processing	50-60k+	\$1-1.5m+	 Customer service representatives currently review claims for completeness and perform data transfers Modernization process will allow claimant to enter claim directly and remove need for processing – already in progress Anticipated timeline for modernization: 1-2 years
	Digitize site case management	40-50k+	\$1-1.5m+	 Responders currently use a step-by-step approach that requires individual processing by many departments - remediation can last months or years Opportunity to leverage Business One Stop web platform for dispatch and notification module Initiative in very early development – projected to take 2+ years

Source: Agency input; CT STARS

Context | CT digital maturity relatively well-regarded nation-wide; B+ grade in Center for Digital Government 2020 survey ranked below 16 states



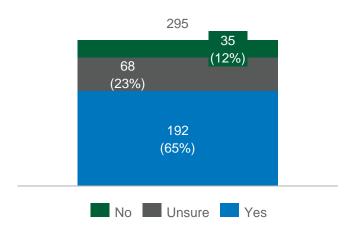
Grade	Total states receiving	States receiving
А	5	Georgia, Michigan, Missouri, Ohio, and Utah
A-	11	Arizona, California, Indiana, Minnesota, New York, North Carolina, North Dakota, Texas, Virginia, Washington, and Wisconsin
B+	14	Colorado, Connecticut , Delaware, Hawaii, Idaho, Illinois, Maine, Maryland, Massachusetts, Mississippi, Montana, Pennsylvania, Rhode Island, and Tennessee
В	13	Arkansas, Florida, Iowa, Kentucky, Nebraska, New Hampshire, New Jersey, New Mexico, Oklahoma, Oregon, South Carolina, Vermont, and West Virginia
B-	4	Alabama, Kansas, Louisiana, and South Dakota
C+	2	Nevada and Wyoming
С	1	Alaska

Total states resulting. Otales resulting

Digital capability spread across departments; expected substantial retirement uptake among IT employees presents opportunity to accelerate digital reform



Responses from Science and Tech employees re. intent to retire by 2022 (as of 12/10)



- Assuming projected 65% uptake applies to all IT employees, ~25% of state IT workforce may retire in 2022
- Retirements present an opportunity to accelerate reform and elevate Connecticut's digital capabilities to best-in-class levels

CT has opportunities to improve strategy, common platforms, capability development and procurement, many of which are addressed by current efforts

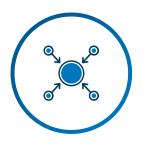
Funct	ion	Detail	Key	/ capabilities	Status in CT	Ra	tionale
	Strategy, policy, architecture and governance	 Set overarching digital and IT strategy & governance (inc. architecture, data and cyber) Provide architecture support to priority cross-department projects 	•	Digital and IT strategy and portfolio support Digital advocacy Service design support Critical cyber response support	Significant opportunity		IT workforce mostly decentralized; centralization in progress, but challenging to execute quickly due to agency pushback Prioritization framework for individual agency requests unclear
	Delivery of common platforms	 Deliver state-wide platforms Support departmental and agency migration to common platforms 	•	Central delivery of common and core platforms for state-wide usage	Significant opportunity		Individual agencies tend to operate on different platforms Potential for certain platforms to be expanded, e.g. ImpaCT for eligibility determination
***	Customer experience (residents and business)	 Develop state-wide design standards for customer experience Centrally coordinate cross-department life events Lead user research 	s •	Ethnographic research	Improvements in process	•	Citizen and Business One Stop initiatives in progress to establish common "front door" and standardize resident and business intake
010110 0010 00101 01001 01000	Data and analytics	 Set state-wide standards and governance for data storage, quality, capture, security, and sharing Provide analytics support to priority use cases 	•	Data sharing governance	Improvements in process		Ongoing P20 WIN initiative is working to establish state-wide data governance framework OPM implementing flexible and durable legal agreements for data sharing
	Capability building and innovation	 Coach/guide agencies on how to provide digital capabilities Provide assurance for digital programs 	•	Innovation hub and incubator	Significant opportunity		Individual agencies currently have decision rights regarding new initiatives Digital Services Team not mandated to drive end-to-end change
\$	IT, digital procurement, and efficiency	 Extend state-wide procurement of IT Support departments in reaching transformation targets 	•	Central procurement for key digital and IT categories Support to departments and agencies in meeting government IT taskforce targets	Significant opportunity	•	Agencies often unclear on services offered by DAS/OPM and struggle to manage procurement and digital spend
	Investment mgmt. and assurance	 Co-authorize funding decisions for digital and IT investments Provide early-stage initiative input & ongoing assurance 	•	Digital and IT transparency	Exemplar	•	Close alignment between DAS and OPM on funding decisions

Efforts underway with some visible successes (e.g., Business and Citizen One Stop), and room to push further

Ongoing initiatives address many key functions...

Initiative Rele		ant functions
IT centralization		All
		Strategy, policy, architecture and governance
Digital Services Team efforts (e.g.		Delivery of common platforms
Business and Citizen One Stop)	٥	Customer experience (residents and business)
		Capability building and innovation
		Strategy, policy, architecture and governance
P20 WIN expansion	010110 10010 100101 101101 01000	Data and analytics
	٥	Customer experience (residents and business)
Agency-led projects		All

... while further defining state-wide operating model will drive more effective outcomes across agencies



Further centralize digital & data initiatives





Clarify Digital Services Team role; strategy-focused rather than implementation



Implement state-wide digital strategy with a resident-centric focus

Peer state centralization efforts indicate that strong top-down messaging, rather than a consensus-based approach among agencies, drives most effective results



Massachusetts

- Restructured IT as a centralized function reporting directly to the governor
- Heavy emphasis on contract consolidation and unified, off-the-shelf systems with minimal agencyspecific solutions



New York

- Underwent significant IT centralization, though a few major entities remain outstanding
- Built single data center and harmonized software, with teams to manage agency-specific software
- Improved speed and functionality state-wide



- Individual operating units tend to resist centralization, making it challenging to achieve consensus
- Strong endorsement from the governor crucial to successful reform
- Structural reform can be executed in a shorter time window and have lasting impact



Source: BCG experience 183

Dedicated central digital teams have driven success in other states



Georgia Office of Digital Services

- Streamlined, user-centric central website
- Improved digital accessibility for people with disabilities
- Proactive and productive utilization of social media



Utah Department of Technology Services

- Created single sign-on system encompassing ~900 digital services, allowing solutions and updates to be deployed system-wide rather than agency by agency
- Utilized AI to process user feedback and identify priority initiatives



Michigan Department of Technology, Management, and Budget

- Combined functions ensure lean and efficient automation and digitalization
- Standardized legacy application modernization process



Automation/digitization opportunities | DAS (I/III)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Disc	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Automate/digitize new hire process (Workforce)	 100-125k+ Primarily conducted by administrative staff; high retirement rate expected 	\$2-5m+	 Includes listings, candidate review, and onboarding HR documents, records, and workflows to be automated via People-Doc (HR software) subscription 	✓
Digitize performance management (Workforce)	20-25k+All 3 payroll staff retirement eligible	\$750k-1m+	HR documents, records, and workflows to be automated via People-Doc (HR software) subscription	✓
Digitize accident/lien notices (Collections)	 15-20k+ Primarily conducted by administrative staff; high retirement rate expected 	\$750-900k+	 Relevant documentation is sent via certified mail or fax due to email security concerns, resulting in only ~20% of potential liens being processed Discussions re. new system ongoing–RFQ initiated, significant investment required Additional staff capacity likely to increase revenue capture 	✓
Digitize invoice processing and Purchasing Card receipts (Business Office)	 7.5-10k+ Digitization would free up capacity in accounting staff, potentially reducing need for backfills 	\$400-500k+	 Invoice and P-card receipt processing currently requires heavy manual entry from associates, accountants, and supervisors Standardizing purchase orders, implementing optical readers, and moving to electronic receipts would free capacity of accounting staff 	



Automation/digitization opportunities | DAS (II/III)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Disc.	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Automate Probate Application processing (Collections)	 8-10k+ Primarily conducted by administrative staff; high retirement rate expected 	\$300-400k+	 Probate Applications are received by mail and processed by Technicians—required to be processed within 30 days of mailing date System being tested that will send Probate Applications to electronic report accessible by DAS-DAS working to ensure proper information included to facilitate routing to Large or Small Estates groups Additional staff capacity likely to increase revenue capture 	✓
Automate Workers' Compensation calculations and audits (Workforce)	 8-10k+ Primarily conducted by administrative staff; high retirement rate expected 	\$200-300k+		
Streamline payroll review of completeness (Business Office)	1-1.25k+All 3 payroll staff retirement eligible	\$30-40k+	 Majority of payroll process already digitized–exception is chasing down employees who haven't submitted timesheets Timesheets currently are generated by one system (TPS) and must be submitted in CoreCT, increasing likelihood of delinquency TPS being phased out for other functions (e.g. leave requests, overtime approvals) New system that feeds CoreCT directly could decrease delinquency 	✓



Automation/digitization opportunities | DAS (III/III)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Disc	cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Automate check processing (Collections)	 1-1.25k+ Primarily conducted by administrative staff; high retirement rate expected 	\$25-35k+	 Checks currently received via mail and entered in multiple systems, often being "touched" 4 or more times DAS Collections IT implementing system that will require only one entry and facilitate bulk transmittals to business office—expected by EoY 2020 Additional functionality could include direct CoreCT interface and auto-scanning into Bank of America (state's bank) Additional staff capacity likely to increase revenue capture 	✓



Automation/digitization opportunities | DDS (I/II)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	✓ Initiative in progress ✓ Disc Detail	In progress?
Implement online portal for Individual Service Plan	 3-3.5k+ Increases capacity for case workers, potentially reducing need for backfill 	\$100-150k+	 12k+ Plans a year are developed in conjunction with service providers and with input from the individual and guardian, requiring signed approvals Efficiency benefit for staff as well as improved access and usability benefit for beneficiaries, families/guardians, and providers (if applicable) Providers would see a particular benefit in licensing checks that often cite missing documentation. 	
Implement online service eligibility application	 1.5-2k+ Application processing performed by administrative staff and psychologists; high retirement rate expected 	\$75-100k+	 Eligibility applications received in paper and scanned into FileBound scanning system (avg. 750/year) Applicants/families/guardians cannot access information or status Online centralized application with smart prompts could generate efficiencies for staff and improved access for residents for multiple agencies 	
Automate payment/payment tracking system	### 400-450+ • Performed by administrative staff; high retirement rate expected	\$5-10k+	 Monthly payments are manually entered into accounts in CORE Automated payment and payment tracking system would reduce or eliminate manual process work for agency staff while allowing provider business owners to monitor and track as well as report on payments from state 	



Automation/digitization opportunities | DDS (II/II)

	Est. annual FTE hours saved	Est. annual	Initiative in progress V Discu	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Cross-agency contact information maintenance	 5-8k+ Increases capacity for case workers, potentially reducing need for backfill 	\$5-10k+	 Case Managers review contact information annually Identity information could be managed across agencies/platforms and kept better up to date 	
Automate Affirmative Action reporting	200-250+ • Performed by administrative staff; high retirement rate expected	\$5-9k+	 Creation of the Affirmative Action Plan requires extensive analysis of conditions in the employment market on annual basis Automation of Affirmative Action reporting across agencies could benefit agency staff and increase capacity within EEO offices to proactively work towards achieving goals 	



Automation/digitization opportunities | DEEP (I/III)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail Initiative in progress Obisco	In progress?
Digitize site case management	 40-50k+ Minimizes need for administrative and IT oversight; high retirement rates expected 	\$1-1.5m+	 Implement Release Based approach to site remediation (activities that occur after a spill or other incident) Responders currently use a step-by-step approach that requires individual processing by many departments Remediation can last months or years for major incidents Opportunity to leverage Business One Stop web platform for dispatch and notification module Initiative in very early development – projected to take 2+ yrs 	✓
Paper record digitization	 3-4k+ File room maintained by administrative staff; high retirement rate expected 	\$100-120k+	 Majority of records remain in hard copy, requiring manual file pulls – online access would greatly reduce administrative effort Digitization of materials in progress – hazardous waste manifests already online, spill reports in progress (1.3m pages) Remediation files will be bulk of effort (3.8m records, many m pages) Will require additional funding to complete 	✓



Automation/digitization opportunities | DEEP (II/III)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Disc	cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Digitization/ scanning of incoming mail	 3-4k+ Mail sorted and distributed by administrative staff; high retirement rate expected 	\$100-120k	 Would need to be compatible with general records digitization initiative to ensure proper sorting of incoming documents Previous DEEP document taxonomy work could be leveraged 	
Migrate pesticide licensing to ELMS eLicensing system	 1.5-2k+ FTE managing system retirement eligible; would reduce administrative effort required, making backfill easier 	\$50-75k+	 8-month projected expected to go live by EoY 2020 for 7k licenses/year Potential opportunity to expand and include pesticide registrations as well (12k annually) 	✓
Enhance and expand e-permitting via EZ File	 1.5-2k+ Permitting activities conducted by analysts and IT; high retirement rate expected 	\$50-75k+	 5 permits already included, with 5 more in progress (certificate of permission, structures, dredging and fill, spill contractors and transporters) and general permits planned – will require continual investment Overall, 1500-2500 authorizations issued/year E-permitting would automate quality control for customers as well, saving effort for both state and customers and improving customer experience by reducing need for re-work on improperly filled-out forms 	· ·



Automation/digitization opportunities | DEEP (III/III)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	✓ Initiative in progress ✓ Di	scussed, not in progress In progress?
Further automate/digitize municipal grant processes	• Grants require heavy engagement across departments, particularly fiscal and IT; high retirement rates expected	\$25-30k+	 50 projects currently under management Existing contract with DocuSign to streamline signature process Could be part of state-wide initiative 	✓



Automation/digitization opportunities | DESPP (I/IV)

	Est. annual FTE hours saved	Est. annual	Initiative in progress V Disc	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Streamline case reporting and review (Division of Scientific Services)	 2-2.5k+ Primarily performed by Forensic Science Examiners; high retirement rate expected 	\$100-125k+	 Includes redaction and review of case discovery material, sample status queries, paperwork reconciliation, etc. Multiple systems currently utilized (Acrobat, instrumental software, spreadsheets, printed materials) Would reduce manual effort required from case management 	
Implement grant management system at DEMHS	 1.5-2k+ DEMHS staff multi-tasking would free capacity and potentially reduce need for general department backfills 	\$70-80k+	 DEMHS oversees typically oversees 140 subgrants with number recently doubling due to supplemental funding, in addition to other programs Grants management system may provide options currently not available, such as creating reports, updating existing information (rather than re-entry), etc. Could be utilized agency wide 	
Accept credit cards agency-wide	 1-1.5k+ Reduces administrative effort; high retirement rate expected 	\$60-70k+	 Credit card reconciliation process will replace current manual reconciliation of funds received via check May reduce daily bank deposits via armored car service Improves customer experience and payment timeliness 	
Digitize quality control activities	 1-1.5k+ Reduces administrative effort; high retirement rate expected 	\$40-50k	 Includes inventory monitoring, reagent quality control, process review required by accreditation, instrument/equipment maintenance Currently requires manual vendor queries and spreadsheets 	



Automation/digitization opportunities | DESPP (II/IV)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Discu	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Implement online ordering for bookstore (Fire)	1-1.5k+Reduces administrative effort; high retirement rate expected`	\$50-60k+	 Bookstore currently requires phone, email, or in-person ordering Current Point of Sale software no longer supported and requires update Implementing online sales would reduce administrative effort and help bookstore compete with e.g. Amazon, increasing revenues 	
Upgrade electronic student registration and payment (Fire)	 750-1k+ Reduces administrative effort; high retirement rate expected 	\$70-80k+	 Existing SABA system antiquated and requires upgrade Systems used by regional fire schools are superior and could be exemplars Pilot testing of LMS system in progress 	✓
Digitize student certification (Fire)	 750-1k+ Reduces administrative effort; high retirement rate expected 	\$60-70k+	 Testing largely in-person at multiple locations Certifications currently distributed in physical copy Ideal future system would allow students to download directly Pilot testing remote testing and use of state college/university computer labs in progress 	✓



Automation/digitization opportunities | DESPP (III/IV)

	Est. annual FTE hours saved	Est. annual	Initiative in progress Discussed, not in progres	
Opportunity	and retirement implications	cost savings	Detail	In progress?
Digitize officer and instructor certification processes and documents	250-275+ • Reduces administrative effort; high retirement rate expected	\$10-12k+	 Includes initial certification for new officers, recertification, cross-state certification Officers must be recertified every 3 years (~2800 per year), in addition to hundreds of new officers each year ~1500 instructors statewide require recertification every 1-3 years Documents are paper-based and data entry processes are manual Automation would reduce incomplete submissions and ease time demands on officers 	
Automate basic training data entry, maintenance, and planning/logistics	 150-175+ Primarily conducted by IT and administrative staff; high retirement rate expected 	\$5-7.5k+	Significant manual data entry, with oversight required for 6 satellite academies	
Fully digitize CLESP-related data for accreditation	<100 Reduces administrative effort; high retirement rate expected 	\$1-1.5k	Data storage inconsistent across agencies – some are digitized, others require hand searches of files	



Automation/digitization opportunities | DESPP (IV/IV)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail One in progress Discussed, not in progress In progress?
Automate/further centralize grant-making at State Police	TBD	TBD	
Update fleet/fuel tracking system	TBD	TBD	
Accept credit card payments for background/records checks	TBD	TBD	
Digitize firearm license renewals	TBD	TBD	
Digitize early steps of Sex Offender and Deadly Weapon Offender Registries	TBD	TBD	



Automation/digitization opportunities | DMHAS

	Est. annual FTE hours saved	Est. annual		cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Implement Electronic Health Record	 50-60k+ Increases capacity for direct-service worker (nurses, physicians, etc.), potentially reducing need for backfill 	\$15-20m+	 Electronic Health Record would streamline chart management, medication administration, inventory control, and activities at DMHAS facilities and reduce central IT workload Increased staff efficiency would result in improved patient outcomes Improved intake, billing, and reporting processes would reduce lost revenue 	
Automate shift staffing via KRONOS	 20-24k+ Optimizes scheduling and increases nurse capacity 	\$750k-\$1m	 Lean HR resources limit ability to implement KRONOS Would require seed money and/or resource allocation 	
Centralize and automate Affirmative Action reporting	 5-8k+ Performed by administrative staff; high retirement rate expected 	\$300-350k+	Affirmative Action reporting currently requires year-round staff and generates thousands of hard-copy pages	
Data sharing across agencies	2-2.5kPerformed by administrative staff; high retirement rate expected	\$100-125k+	Cross-agency data sharing is a major component of Behavioral Health Homes, Targeted Case Management; Medicaid initiatives of CHESS, 500 Familiar Faces, and the 1115 waiver; DMHAS works with the 2 Administrative Services Organizations Advanced Behavioral Health and Beacon Health Options	



Automation/digitization opportunities | DOT (I/VII)

	Est. annual FTE hours saved	Est. annual	Initiative in progress	cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Digitize bridge/building/sign support Inspection	TBD	TBD	Utilize InspectTech application	
Further digitize project management	TBD	TBD	 Potential applications for project estimations, bids, designs, analytics, and more Utilize AASHTOWARE, Estimator/Adobe SVG, Compass, BidExpress, andmore 	
Further digitize pavement data tracking	TBD	TBD	 Estimate and track lifecycles, costs, condition, history, and more Utilize Deighton dTIMS and Vision 	
Digitize tracking of municipal capital projects	TBD	TBD	Utilize LOTCIP Database	
Digitize job log for customer care center	TBD	TBD		



Automation/digitization opportunities | DOT (II/VII)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Disc	sussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Hardwire components of statewide traffic signal systems	TBD	TBD		
Digitize service memo and work order system	TBD	TBD		
Implement adaptive traffic control system	TBD	TBD	Traffic signal timing would change based on actual traffic flow	
Model traffic congestion to identify additional solutions	TBD	TBD		
Digitize consultant invoice process	TBD	TBD	 Streamline consultant invoice and payment process Reduce the number of steps and employee/ management touches in the process. 	



Automation/digitization opportunities | DOT (III/VII)

	Est. annual FTE hours saved	Est. annual cost savings	✓ Initiative in progress ✓ Discussed, not in progress	
Opportunity	and retirement implications		Detail	In progress?
Streamline environmental permitting	TBD	TBD	 Develop an environmental permitting process that allows for the early action and revisions in both design and permitting Establish the needed flexibility for the Design-Build process while still addressing the environmental regulations and guidance documents 	
Digitize guiderail database	TBD	TBD		
Digitize right-of-way data	TBD	TBD	 Create mosaic to display all right-of-way assets owned by DOT in blueprint fashion Create dataset of all right-of-way assets 	
Digitize police report data	TBD	TBD	Create searchable database	
Increase use of electronic forms	TBD	TBD	Utilize cloud-based document management system and lean internal processes Standardize critical business processes across districts	

Excludes all items noted as "On-Going Support" or "Completed". Initial investment to automate/digitize process not included.

Source: DOT input



Automation/digitization opportunities | DOT (IV/VII)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	Detail One of the progress of
Digitize scenic land strip data	TBD	TBD	
Digitize tracking of physical inventory	TBD	TBD	Utilize mobile applications
Implement electronic signature technology	TBD	TBD	
Implement facility management work order system compatible with existing systems	TBD	TBD	System should tie into Financial, Inventory Control, and Asset Management modules



Automation/digitization opportunities | DOT (V/VII)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Discu	issed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Digitize disadvantaged business and contractor prequal process	TBD	TBD	Allow disadvantaged businesses (DBEs) to apply and renew status online	
Digitize code enforcement for municipal building departments	TBD	TBD	Utilize off-the-shelf software package that deals with permitting/inspection / close-out / occupancy to improve organization	
Implement adaptive traffic control system	TBD	TBD	Traffic signal timing would change based on actual traffic flow	
Digitize tracking of fuel station tank volume	TBD	TBD		
Digitize material storage documents	TBD	TBD		



Automation/digitization opportunities | DOT (VI/VII)

	Est. annual FTE hours saved	Est. annual	Initiative in progress	cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Digitize Highway Safety Office grants management	TBD	TBD	Utilize web-based grant application and reimbursement system that will generate timely submission of accurate enforcement grants and reimbursements utilizing electronic signature capabilities	✓
Further digitize internal permitting for water/natural resources unit	TBD	TBD		
Digitize regulation and permitting of livery transportation companies	TBD	TBD	Utilize RCIS application	✓
Increase tracking of Major Traffic Generator applications	TBD	TBD		✓
Digitize tracking of vehicle repairs	TBD	TBD		



Automation/digitization opportunities | DOT (VII/VII)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Discussed, not in progress	
Opportunity	and retirement implications	cost savings	Detail	In progress?
Update Newington/ Bridgeport Access database	TBD	TBD	 Replace the existing Access databases used in Newington and Bridgeport Ops., Centers with more current programs Determine if custom database solutions can be replaced by a new product developed and supported by IT 	
Potentially outsource closed loop traffic signal system software	TBD	TBD	Highway Operations currently investigating whether closed loop traffic signal system software will remain on the DOT network (which will require additional IT resources) or whether it could be outsourced to run on the Cloud	✓
Expand use of cellular modems for closed loop traffic signal systems	TBD	TBD	Replace existing dial-up modems	
Digitize and standardize FEMA reimbursement request process	TBD	TBD		
Automate equipment resource allocation and distribution	TBD	TBD		



Automation/digitization opportunities | DSS

	Est. annual FTE hours saved	Est. annual	Initiative in progress Discussed, not in progress
Opportunity	and retirement implications	cost savings	Detail In progress?
Streamline Affirmative Action data download from CoreCT	TBD	TBD	
Converting case visit documentation system to Salesforce	TBD	TBD	
Further automate call centers	TBD	TBD	
Further automating eligibility document approval process	TBD	TBD	

Initial investment to automate/digitize process not included Source: DSS input



Automation/digitization opportunities | OEC

	Est. annual FTE hours saved	Est. annual cost savings	Initiative in progress Discussed, not in progre	
Opportunity	and retirement implications		Detail	In progress?
Utilize Citizen One Stop for resident call support	n/a – already outsourced to United Way	\$800-900k	 Receiving resident calls estimated to result in ~30% reduction in call volume to United Way and simplify system for residents CCDF funds could be applied elsewhere as needed 	
Utilize mobile inspections	 10k+ Reduces work for licensors; high retirement rate expected 	\$400k+	Replace current paper forms and reduce travel time for licensors Potential for real-estate cost reduction due to licensers no longer needing office space to process paperwork	✓
Automate grant reporting activities	 3-3.5k+ Grant-related staffing already low, with further retirements expected 	\$150-175k+	 Majority of OEC budget is from federal grants – meeting requirements requires significant effort Providers often produce multiple reports for different programs OEC using Preschool Development Grant to develop program reporting software and automate data reports 	✓
Add live fingerprint scans for background checks	 2.5-3k+ Reduces administrative work; high retirement rate expected 	\$100-125k+	 Reduce need to mail cards, re-process unusable submissions, etc Could be incorporated into state-wide background check system 	



Automation/digitization opportunities | OPM

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	✓ Initiative in progress ✓ Discussed, not in progress	
			Detail	In progress?
Automate grant reporting activities	 TBD Reduces administrative work; high retirement rate expected 	TBD	 Grant reporting performed by several divisions within OPM Centralizing could create standard forms and reduce administrative effort Large investment and federal funding monitoring required 	



Automation/digitization opportunities | SDE (I/III)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	✓ Initiative in progress ✓ Discussed, not in progress	
			Detail	In progress?
Streamline "purple sheet" document review process	 25-50k+ Administrative staff process large numbers of documents; high retirement rate expected 	\$1-2m+	 Approval process for documents often involves multiple passes through various departments including Legal, Fiscal, Commissioner's office, etc. Documents that are irrelevant for a given department generate unnecessary churn and administrative complexity Automated process with ability to pre-flag required reviewers based on standard set of rules (e.g. any mention of statutes requires Legal review) would reduce time spent per document and minimize irrelevant reviews 	
Continue automation of certification processes	50-60k+ • Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill	\$1-1.5m+	 BESC has undergone several years of LEAN training to streamline processing with declining staff/resources Existing online certification system, Connecticut Educator Certification System (CECS), processes ~60-70% of applications online DocuSign and eCert being considered to modernize additional processes—concerns about costs and inability to handle nuances (e.g. educators holding multiple certificates), respectively Conversations with Parchment to streamline etranscript process ongoing 	



Automation/digitization opportunities | SDE (II/III)

Opportunity	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	✓ Initiative in progress ✓ Discussed, not in progress	
			Detail	In progress?
Standardize contracts and streamline online grant approval process	 400-500+ Performed by administrative staff; high retirement rate expected 	\$20-25k+	 Contract templates do not currently exist; process could be automated so only new/specific information changes and boiler plate language (e.g. assurances) remains fixed Approval forms currently require both wet signatures and online system approval Expand existing online system capabilities to include additional grants, e.g. Perkins grants 	
Automate Teacher Negotiation Act (TNA) supervision	 300-400+ Increases capacity of Educational Consultants, potentially reducing need for backfill 	\$20-25k+	Office of Commissioner of Education facilitates local board of education negotiations and must supervise TNA process, track and post timelines/dates, assign mediators and arbitrators, etc	
Digitize HR forms and integrate with CORE	700-900+ • Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill	\$15-20k+	 Existing HR processes involve duplicative approvals and manual data transfer between systems Opportunities include: Allow for online timesheet approval and reimbursements Issue automated reminders for outstanding forms Expand existing systems to facilitate new processes, e.g. use Electronic Leave Request system for telework approval 	



Automation/digitization opportunities | SDE (III/III)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Discussed, not in progress	
Opportunity	and retirement implications	cost savings	Detail	In progress?
Streamline awards scoring and program monitoring	 100-150+ Increases capacity of Educational Consultants, potentially reducing need for backfill 	\$5-9k+	 Existing processes include significant manual data transfers, e.g. Qualtrix to Excel, Educator Data Base to EASTCONN dashboards, and systems could be streamlined Candidate awards/programs for review include: Teacher Education and Mentoring Program (TEAM) Anne Marie Murphy Paraeducator of the Year 	
Automate Alliance District data monitoring	 100-150+ Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	\$4-5k+	 Data for 33 Alliance Districts (districts with low Accountability Index measures) is reviewed 3x/year to inform monitoring meetings Process could be further automated 	

3.3.1 Common payment platform

Payment processes differ across agencies despite availability of common payment platform

What we heard

- Individual agencies determine processes for receiving payments with no central mandate
- Agencies are primarily responsible for procuring and deploying relevant technology and systems
- Payment methods include cash/check, PayPal, and credit cards and can vary within agencies
- Payment processing is often highly manual and requires high administrative capacity to e.g. process cash and check payments

DAS and Office of the Treasury input

- Office of the Treasury houses master credit card processing contract with GlobalPay – last renegotiated FY20
- Est. ~17% of state-wide transactions¹ are processed via GlobalPay platform with average fees of 1.3-3.3%
- Existing GlobalPay contract limits functionality –
 e.g. no ability to accept payments from digital wallets
- Visibility is limited on end-to-end payment process, making it challenging to identify opportunities for improvement

^{1.} Excludes UConn and other non-SDE education systems, federal grants, escheats, recoveries, interest, refunds of prior year expenditures, non-sales/use taxes, and DRS sales/use taxes Source: Agency engagement; DAS and Office of the Treasury input

Further streamlining payment processes could help realize several sources of value



Lower fees/charges

by optimizing use of lower-cost platforms/payment methods



Reduced operational

costs through increased automation and fewer employees needed to process payments, staff call center



Revenue uplift

from increased compliance, earlier payment



Simplified resident experience for

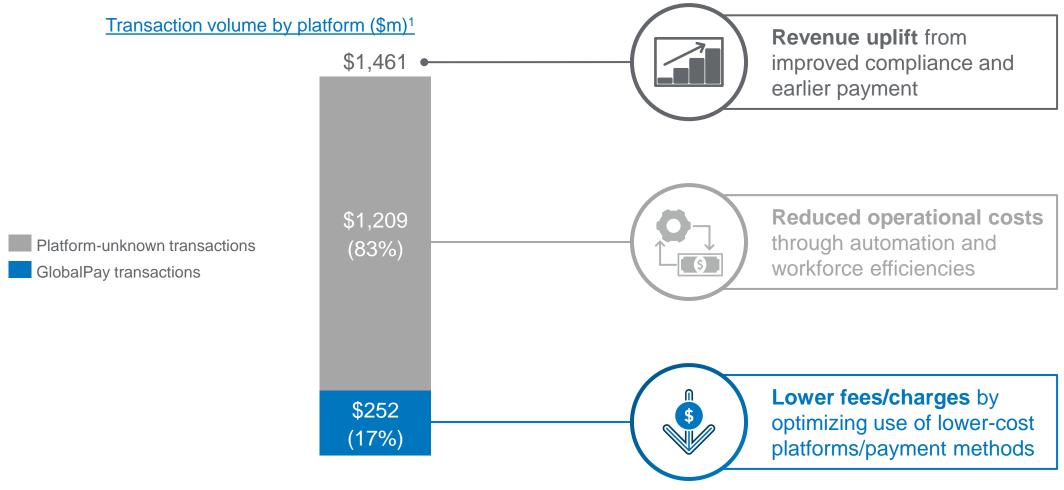
submitting and tracking payments



Streamlined operating model with

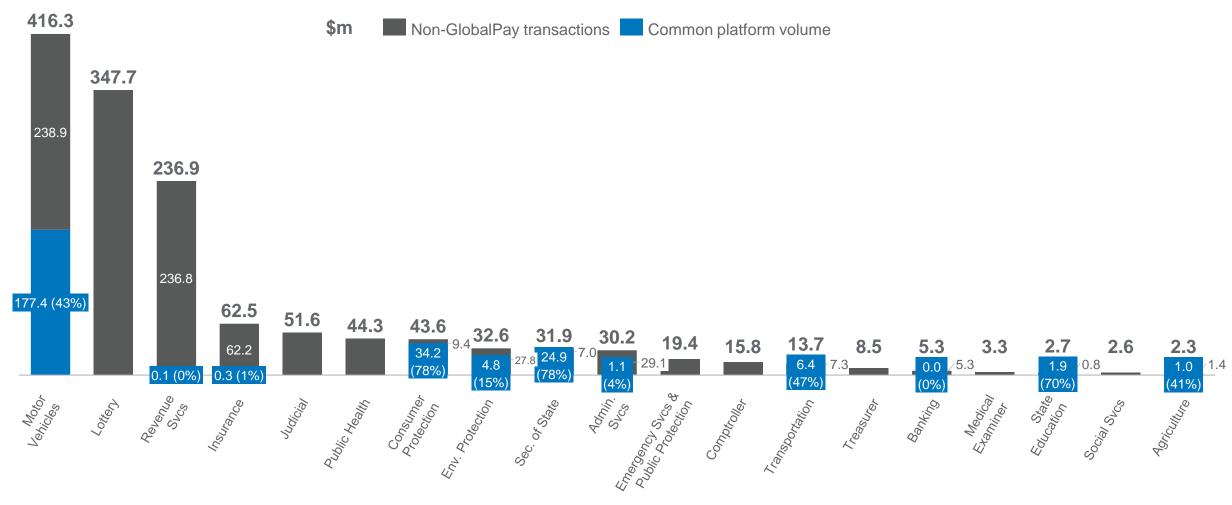
clearer visibility into state-wide fees, transaction volumes, and processes

Est. ~17% of transaction value processed via the common platform; opportunity to realize savings and increase total revenue through streamlining processes



^{1.} Excludes UConn and other non-SDE education systems, federal grants, escheats, recoveries, interest, refunds of prior year expenditures, non-sales/use taxes, and DRS sales/use taxes Source: DAS input; State of Connecticut General Ledger report; GlobalPay transaction volumes via Office of the Treasurer

Utilization of common platform is uneven, with many agencies and departments not utilizing it at all despite high transaction volumes



3.3.2 Common document management platform

Implementing a state-wide digital document management system could improve data hygiene and increase capacity individual agency capacity

What we heard

- Any time we need to provide a policy update, we send blast faxes to facilities
- We have millions of detailed records in hard copy
- Employees of all levels have to manually enter data every day to keep up
- We receive all our eligibility applications on paper and each takes hours to process

Potential benefits of a state-wide digital system



Improved data hygiene and visibility into historical records



Reduced workload for clerical and administrative staff freeing capacity for other tasks and reducing need to backfill vacant positions



Increased standardization of interfaces for residents, providers, and other third parties



Reduced physical footprint allowing for more efficient use of office space

3.3.3 Automate Affirmative Action reporting

Automating and centralizing Affirmative Action reporting could generate significant efficiencies and reduce manual effort for individual agencies

Multiple agencies have dedicated Affirmative Action staff (not exhaustive)¹



Transportation: 9 employees



Correction: 5 employees



Mental Health/Addiction Services: 4 employees



DDS Developmental Services: 3 employees



Motor Vehicles: 3 employees



Labor: 1 employee



- The yearly Affirmative Action plan is thousands of pages long and requires year-round staffing
- Affirmative Action staff involvement is very variable across agencies
- It would make more sense for [Agency X] not to individually handle Affirmative Action reporting

Est. 75-100+2 FTE of effort dedicated to AA reporting state-wide not including central team Automation and centralization could result in 30%+ reduction in work required (20-30+ FTE, \$1.5-\$2m+)

^{1.} List not exhaustive – totals represent all Equal Opportunity Employment positions listed for select agencies in CT STARS data 2. Estimate scaled across 41 agencies – CT STARS data shows 38 positions across 14 agencies

3.3.4 Department of Motor Vehicles (DMV) digitization

As retirements hit front- and back- office staff, multiple levers to mitigate build-up of wait-times and backlogs



Extend employee time/productivity

- Extend hours
- Leverage alternate shift models (e.g., split shifts, 9x80, 4x10, etc.)
- Maximize staffing during morning and lunch rushes
- Focusing on predictability of hours to lower absenteeism



Add temporary capacity

- Leverage temp employees during peak periods and/or to support the REAL ID surge
- Use mobile units and employees in highest demand branches



Add long term capacity

- Add additional terminals to busiest branches
- Outsource select services to contractors (e.g., AAA) or to schools
- Open new branches (either DMV operated or out-sourced)

Best practices observed at other DMVs nationally



- Issue ticket immediately upon arrival—give greeters tablets to check people in and start / complete transactions while in line
- Improve triage efficiency and leverage express/priority lanes based on complexity of transactions
- Use online verification of documents to reduce time in branch.
- Direct customers to self-service kiosks/computers for transactions that could be completed online



Accessibility

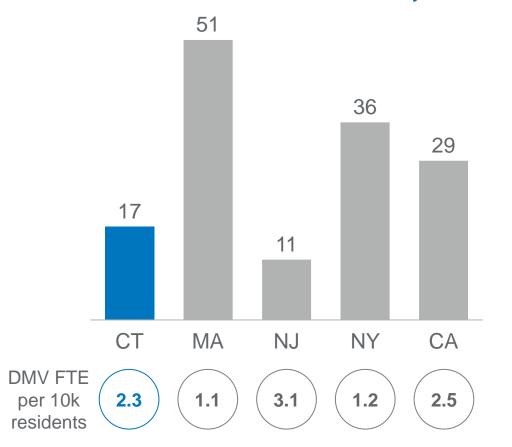
- Have 24/7 accessible self-service kiosks at various locations.
- Expand usage of partner third-parties that offer DMV services
- Employ a mobile branch for accessibility and support

Data and performance tracking

 Track performance and customer satisfaction and use to drive real-time business decisions and long-term strategy

Transaction channel | CT offers fewer transactions online than other states; opportunity to add renewals, duplications, COAs and more

Observed transactions online by state¹

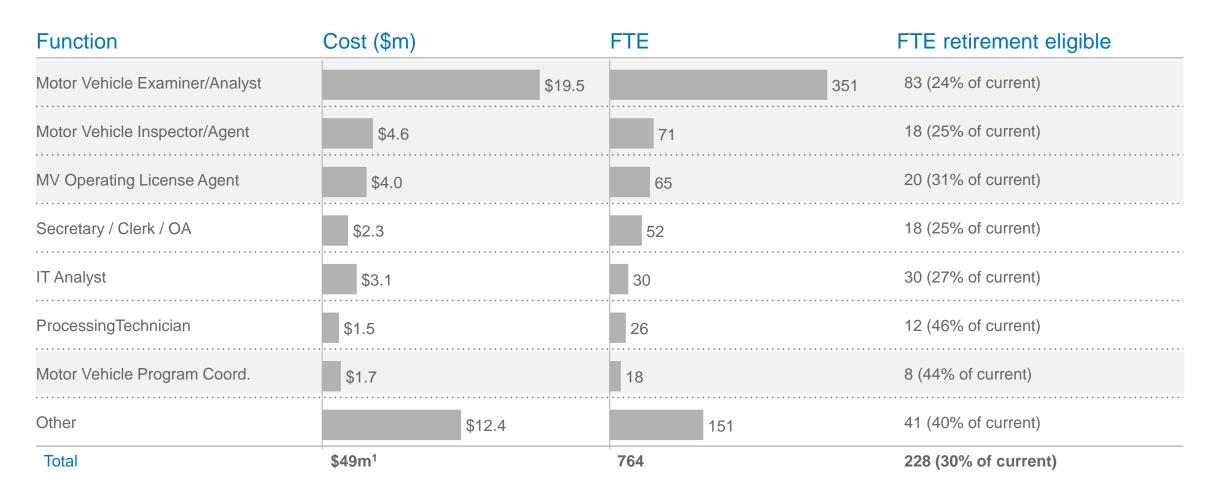


Not exhaustive – reviewed and collapsed to ensure appropriate comparisons Note: Based on state DMV websites for online services Source: State budgets, personnel reports

Potential Opportunities

- Bringing per capita staffing in line with MA and NY would yield annual savings of tens of millions of dollars
- Do-It-Yourself services and virtual offices shift tasks to customers and allows for reduction in backfilling needs, while bringing forward much-needed revenue during COVID-19 pandemic
- Primary transactions to prioritize include:
 - Pre-apply online for new licenses
 - Vehicle registration
 - Change of Address (inc. on driver's license / ID)
 - Renew driver's license (including CDL) and state ID (in progress for non-CDL)
 - Renew driver's license (including CDL) and state ID
 - Payment of infraction, reinstatement fees, etc.
 - At-home knowledge testing (class D)
- Shifting full and partial transactions online reduces wait times
 - Critical to implement changes before REAL ID demand surge
 - Validate documents before completing transactions in-person (exception for REAL ID)

Within DMV, customer-facing representatives and inspectors are bulk of retirement eligible workers – potential for long wait-times and backlogs



^{1.} Number does not tie to programmatic budget due to rounding; Excludes fringe benefits Note: Includes federal and state funding Source: STARS database as of 1/5/2021, Connecticut 2020-2021 Biennial Budget Program Addendum

Based on other states who have invested in DMV digitization efforts, CT could realize tens of millions of dollars in expense savings and revenue uplift

%	DMV Expense Reductions								
	Internal Target (High)	Internal Target (Low)	Rec. Adj. to FY23 Budget						
DMV FTEs/ 10K residents	1.2	1.8	1.9						
FTE savings	~400	~165	~150						
Cost savings	~\$26m	~\$11m	~\$8-10m						

	/ Detential T	on Line Im	a a a t						
DIVIN	MV Potential Top-Line Impact								
	Internal Target (High)		Rec. Adj. to FY23 Budget						
Revenue backlog		Unknown							
Est. revenue backlog reduction	~\$9m	~\$6m	\$5-7m						
Potential net budget impact	~\$35m	~\$17m	~\$13-17m						

Assumptions and Takeaways

- Top-down and bottoms-up analysis indicate annual expense savings potential of at least several millions of dollars
- CT DMV staffing per capita ratio is ~2x that of more digitally mature peers (MA and NY)
- Leadership did not cite revenue or transaction backlogs as an issue, but agency lacks ability to accurately measure
 - Given prevalence of backlogs at DMVs nationwide pre-pandemic, highly manual processes within CT DMV and pandemic-induced branch closures, significant backlogs are expected
 - Benchmark states further along on digital maturity curve than CT

Priority should be on moving high value transactions online as well as further digitizing those already online (i.e., increased share or components)

Transactions/processes to (further) digitize	2019 Volume	FTEs saved	Cost reduction (\$M)	СТ	MA	NJ	NY	CA		Once digitized, CT
New Registration	220+	49	~\$2.0				✓		_	should use financial
Cancel Registrations	293K	26	~\$1.1	✓	✓				•	and convenience
Driver Services—Medical Reporting Schedule	62K	22	~\$1.3			Unk	nown			incentivizes for self- service tools
Check Payment Processing for Services	71K	11	~\$0.8			Unk	nown			Bulk of
Driver's License Renewal	96K	16	~\$0.7	Delayed	✓	✓	✓	Ø		recommended
Boat Registration Renewals	86K	11	~\$0.6		⊘			Ø	•	savings can be
Driver License Duplicates	61K	11	~\$0.6	Delayed	⊘	✓	✓	✓		found within <10
Change of Address	53K	4	~\$0.2	Delayed	⊘	✓	✓	✓		transactions
		150	\$8M							
Additional transactions to further digitize w/o CT data										Prioritize transactions with (i.)
CDL New Issuance	~1K				⊘		✓		_	high volumes, (ii.)
CDL License Renewal	16K				✓			✓	•	self-service in peer
Non-Driver ID Renewal	7K	Data	Not Available		✓		✓	⊘		states and (iii.) those
Transfer Out-of-State License	N/A	Dala	NOT Available							likely to see
CDL Downgrade to Passenger License	N/A				⊘					increases in demand

Note: Assumes 50% of FTE time spent on transaction processing (remainder spent on paperwork, idle, breaks, etc.) Source: CT DMV, external analysis

Statutory changes required to expand scope of partner transactions and ease burden on DMV from retirement surge

Limited use of partners today...



Partners limited to AAA and Nutmeg Credit Union¹

Statutes permit these partners to perform few functions, including:

- License/ID renewal
- License/ID replacements
- Change of address and/or name
- Copy of driver's history

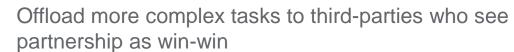
Transactions which involve more complexity (e.g., titles and registrations, paying municipal vehicle property tax owed) not permitted or feasible without data integration

Self-service kiosks not approved for usage in CT

...should be expanded to increase capacity at DMV branches for complex transactions

Cannibalizing partner functions may produce limited net efficiency opportunities, necessitating expanded scope of activities for partners and usage of kiosks

- Transactions currently allowed should be included in DMV's online service offerings
- Requires statutory changes



 ~40% of Nutmeg's new accounts came from DMV affiliated branches²

Partner-model enables residents to be serviced more quickly and allows DMV to rationalize footprint without placing burden on residents



Transaction channel | DMV goal should aim to limit customers' in-person appearance to a single time as all transactions become digitized and automated



Ideal future state should need customers onsite at a branch once in their lifetime



Leverage electronic verification from other trusted federal and state agencies wherever possible (e.g., DRS, DOL)



All paperwork and transactions should be digitized and automated



All services that can be performed outside of a DMV location should be made available (e.g., mobile, web site, partners, etc.)

Multiple technologies and shared-services can be used to ease burden on manual back-office processes



Enhance online customer portal

- Self-service appointment scheduling with optimized scheduling
- Chatbots / voicebots to answer FAQs
- Real-time status check
- Self-uploading of documents with AI for validation



Digital document reading and storage

- Use of Natural Language Understanding, Optical **Character Recognition** and Robotic Process Automation to read and upload documents
- Use of e-Signature software to mitigate need for "wet signatures", print & mail operations



Back-office automation

- Expanded use of electronic payments
- Automatic banking / check deposits
- Streamlined IT systems
- Integration with other state agencies for single resident POV (i.e., Citizen One Stop integrating DRS, DMV, DOL, etc.)



Performance management

- Implement real-time performance management dashboards to enable reps. and managers to view performance trends
- Include token rewards (e.g., gift cards, commissioner calls. etc.) to drive productivity

Online benchmarking (I/V)











	Est. Volume/					
Services	Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Apply for a State ID	High		⊘			
Cancel Registration and License Plates	High	Ø	Ø			
CDL—Complete New Issuance (must have passed road test)	High		⊘			
CDL—Renew My Commercial (Class A, B, C) Driver's License	High		⊘		Ø	⊘
Change My Address	High		✓	✓		Ø
Change Name on My License/ID	High		⋖			
Pay Emissions Test Late Fee	High	Ø				
Pay My EZ Pass Fees	High		✓			
Pay My License and Road Test Fees	High		✓			
Pay My Vehicle Sales Tax	High		⊘			
Pre-upload REAL ID Documents	High	No	No	No	No	Yes
Register My Vehicle	High		⊘		⋖	
Register to vote online here	High	Ø	⊘		Ø	
Reinstate My License	High				⋖	
Reinstate My Registration	High		✓	•		
Renew a Motor Carrier Permit	High					⊘
Renew my Driver's License	High		 ✓	Ø	 ✓	✓
Renew non-driver ID	High		✓		Ø	
Renew Registration	High	Ø	⋖	Ø	⋖	Ø
Replace Damaged License Plates	High	Ø				
Replace My License ID	High		✓	Ø	✓	⊘

Online benchmarking (II/V)











	Est. Volume/					
Services	Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Replace My Lost/Damaged Plate	High		⊘			
Replace My Plate Return Receipt	High		⊘			
Replace My Registration	High	⋖	Ø	✓	✓	
Replace My Title	High		Ø		⋖	
Replace non-driver ID	High				⋖	
Transfer My Out of State License	High		Ø			
Apply for a Learner's Permit	Medium		Ø			
CDL—Downgrade to a Passenger License	Medium		Ø			
Order a Disability Placard or Plate	Medium		②			
Order a Special/Vanity Plate	Medium	✓	Ø	✓	⋖	✓
Pay driver responsibility assessment	Medium				⋖	
Pay for additional road test	Medium				⋖	
Pay Infraction Ticket (e.g., parking and traffic tickets)	Medium	✓	Ø	✓	⋖	
Pay insurance lapse civil penalty	Medium				⋖	
Pay suspension termination fee	Medium				⋖	
Reprint Registration Certificate (There is no fee to reprint a registration certificate online)	Medium	⋖				
Request a Duplicate Title	Medium					✓
Request a Temporary Driver License Extension	Medium					✓
Request Replacement Sticker or Registration Card	Medium					✓

Online benchmarking (III/V)











	Est. Volume/					
Services	Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Restore license after revocation	Medium				Ø	
Schedule to take a road test	Medium	Ø	⊘	<	Ø	
Senior License Renewal (must be at least 74 years old)	Medium		⊘		Ø	
Transfer a Title	Medium					•
Transfer My Out of State Registration	Medium		Ø			
Add/Remove a Lienholder on a Title	Low		⊘			
Add/Remove Affidavit of Non-Use	Low					•
Amend My Registration	Low		⊘			
Appeal a ticket conviction	Low				Ø	
Apply for a Liquor ID	Low		⊘			
Apply for a Salvage/Owner Retained Title	Low		Ø			
Apply for a Vehicle Salesperson License	Low					•
Be an organ, eye, or tissue donor	Low		Ø	⊘	Ø	
Calculate Estimates of Vehicle Registration/Licensing Fees	Low					•
CDL—COMMERCIAL Permit Exam (Class A, B, or C)	Low		Ø			
CDL—Self Certify a Commercial Driver's License	Low	✓	⊘			
Check Driver's License Status	Low	✓			Ø	
Check driving privilege status and points	Low				Ø	
Check Property Tax, Insurance, Emissions and Other Compliance Issues	Low	Ø				

Online benchmarking (IV/V)











	Est. Volume/					
Services	Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Child Safety Class Registration	Low	Ø				
Complete a Notice of Transfer and Release of Liability	Low					•
Correct a Title	Low		Ø			
Driver's License Suspension Payments	Low	Ø	Ø			•
Extend My Temporary Plate	Low		Ø			
File for Planned Non-Operation	Low					•
Fill out a Driver License/ID card Application	Low					•
Find a Traffic School	Low					•
Find vision test location near you	Low				✓	
Get a copy of a TVB ticket	Low				Ø	
IRP—Register a New Vehicle	Low		Ø			
IRP—Renew My Apportioned Registration	Low		Ø			
Look up an Active Motor Carrier Permit Holder	Low					•
Look up Occupational Licensing Status	Low					•
Lookup Registration Status	Low	Ø				
Partial Year Registration (PYR)	Low					•
Pick Up My Vanity Plate	Low		Ø			
Replace My Liquor ID	Low		Ø			
Request a Crash Report	Low		Ø			
Request a Public Driving Record	Low		⊘	⊘		⊘

Online benchmarking (V/V)











Services	Est. Volume/ Impact Rank	Connecticut	Massachusetts	New Jersey	New York	California
Request a Refund of Vehicle/Vessel fees	Low					⊘
Request your Vehicle Record	Low					⊘
Schedule and or Pay for a Salvage Inspection	Low		Ø			
Submit a Medical Exam Report	Low					⊘
Take a Professional Driver Instructor Exam	Low		Ø			
Take a School Pupil Transport Exam	Low		⊘			
Title My Vehicle	Low		Ø			
Track License/ID Delivery Status	Low	✓				
Transfer Vehicle to a Surviving Spouse	Low		⊘			
Update Lawful Presence Verification	Low		⊘			
View Fatal Crash Administrative Hearings	Low				⊘	



Automation/digitization opportunities | DMV (I/IV)

	Est. annual FTE hours saved	Est. annual	✓ Initiative in progress ✓ Disc.	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Further digitize new registrations	30-40k+Conducted by examiners; high retirement rate expected	\$700-900k+	 Online dealers already perform ~30% of new registrations DMV recently deployed Out of State Dealer Registration and Pre Registration portals 	✓
Streamline Medical Reporting schedule	 15-20k+ Conducted by administrative staff; high retirement rate expected 	\$500-600k+	Single process with single notice would replace 3 separate processes (establishing due date, notifying driver, and suspending for non-compliance)	
Fully digitize registration cancellation	20-24k+Conducted by examiners; high retirement rate expected	\$400-500k+	DMV already allows online cancellation if plate has not expired; seeking to fully digitize	✓
Automate check payment processing for services	8-10k+Conducted by administrative staff; high retirement rate expected	\$250-350k+	In-person staff currently required to receive checks by mail, apply payments to customer accounts, and prepare bank deposits	
Complete digiti- zation of Driver's License renewals	 10-12k+ Conducted by examiners; high retirement rate expected 	\$250-300k+	 Currently being digitized via SalesForce project Lockbox mail-in process being stood up as well, and CIOU and DS Divisions are processing mail-in renewals Business partners already provide ~45% of renewals 	✓

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DMV input; CT STARS



Automation/digitization opportunities | DMV (II/IV)

	Est. annual FTE hours saved	Est. annual	Initiative in progress 🕢 Disc	cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Digitize boat registrations renewals	 80-100k+ Conducted by examiners; high retirement rate expected 	\$250-300k+	DMV has previously worked on a venture with CT Dealers and Marine Trade Assoc to allow renewals online using Dealer Online System	
Digitize Driver's License duplicates	8-10k+Conducted by administrative staff; high retirement rate expected	\$200-250k+	DMV seeking to digitize via SalesForce project as well – duplicates currently processed in-person	✓
Digitize address updates	3-3.5k+Conducted by administrative staff; high retirement rate expected	\$50-75k+		✓
Automate Driver's History requests	1.5-2k+Conducted by examiners;high retirement rateexpected	\$30-40k+	Typically requires multiple examiners	
Automate Ignition Interlock Device (IID) removal authorization	 1-1.4k+ Conducted by analysts; high retirement rate expected 	\$25-50k+	Automated notice to customer and IID vendor that IID requirement is complete would free analysts to do other work	

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DMV input; CT STARS



Automation/digitization opportunities | DMV (III/IV)

	Est. annual FTE hours saved	Est. annual	Initiative in progress V Disc	cussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Fully digitize registration renewals	1-1.5k+Conducted by examiners; high retirement rate expected	\$20-30k+	 ~85% of renewals conducted through mail-in lockbox system or online – remaining 15 % will visit branch Renewals being expanded to DMV business partners such as AAA and Nutmeg. 	
Digitize billing process	 500-600+ Conducted by accounting staff; high retirement rate expected 	\$20-25k+	Billing process currently manual and includes: sending invoice letters to customers, manual QuickBooks tracking, processing flags/restrictions on customer accounts, collection enforcement actions, and cashiering payments	
Automate call center resident support where feasible	 750-1k+ Conducted by administrative staff; high retirement rate expected 	\$15-20k+	• ~45 calls received daily	
Fully automate Affirmative Action reporting	500-600+One of 3 Equal EmploymentOpp. Staff retirement-eligible	\$15-20k+	Already partially automated; CHRO is charged with fully automating per statute	✓
Implement portal for medical professionals to complete medical reports	200-350+Conducted by analysts; high retirement rate expected	\$10-12k+	 Online form would force medical professionals to complete and answer all required sections/questions, eliminating incomplete/unreadable forms that need to be handled multiple times Portal would store completed forms, similar to CDL portal 	

FY 2019 transaction volumes used

Cost savings estimated based on average annual rate for indicated positions; does not include overtime. Initial investment to automate/digitize process not included. Source: DMV input; CT STARS



Automation/digitization opportunities | DMV (IV/IV)

	Est. annual FTE hours saved	Est. annual	Initiative in progress O Discu	ussed, not in progress
Opportunity	and retirement implications	cost savings	Detail	In progress?
Fully automate customer refund request processing	 150-200+ Conducted by administrative staff; high retirement rate expected 	\$5-8k+	 Requests received from customers, branches, and contact center (email) Majority entered into CIVLS in automated fashion, but ~10% are still processed manually 	
Digitize boat cancellations	 200-250+ Conducted by administrative staff; high retirement rate expected 	\$3-5k+	Multiple employees may be required depending on season	
Digitize title duplications	 150-200+ Conducted by examiners; high retirement rate expected 	\$2-4k+		
Complete digitization of registration duplicates	<100+ Conducted by examiners; high retirement rate expected 	<\$1k	 DMV's online system can already service this transaction DMV business partners will also be able to service this transaction 	✓

Fees | DMV fees in-line with peers; opportunity to add CPI-indexing, safety inspections and EV fees

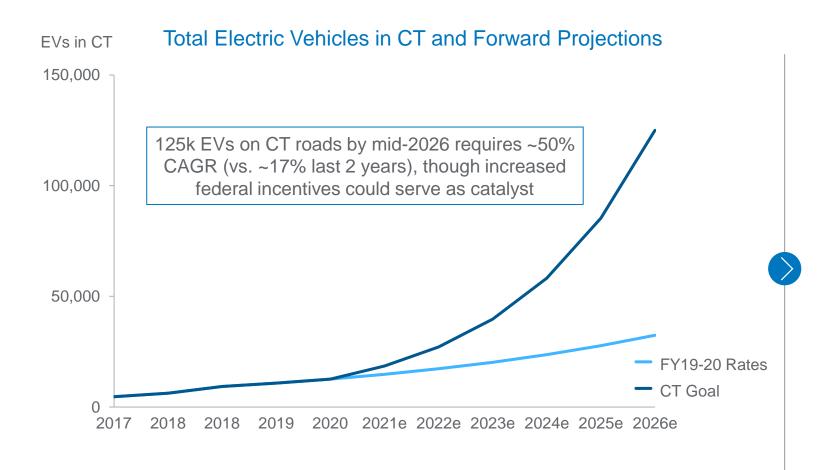
	СТ	MA	NY	
New License	\$84.00	\$75.00	\$164.50	
Duration (years)	5.5-7 years	5	8	
License Renewal	\$72.00	\$50.00	\$64.50	
Duration (years)	6	5	8	
Renewal Late Fee	\$25.00	None; 2 years cap	\$25-40 for < 60 days, \$75- 300 for 60+	
Commercial License	\$70.00	\$75.00	\$164.5-180.5 (MCTD)	
Duration (years)	4	5	8	
REAL ID Cost	\$30.00	\$25 upgrade	Same	
Commercial Renewal Late Fee	\$25.00	N/A	\$0 (2 years)	
Duplicate License	\$30.00	\$25.00	\$17.50	
Make any change to license	\$30.00	\$25.00	\$12.50	
Out of State License conversion (Class D)	\$124.00	\$115.00	\$65.00	
License Exam	\$40.00	\$20.00	\$10.00	
Learner's Permit	\$19.00	\$30.00	\$80.00	
Duplicate Learner's Permit	\$19.00	\$15.00	\$17.50	
Non-Driver ID (new)	\$28.00	\$25.00	\$9.00	
Duration (years)	7	5	4	
Inspection Cost	\$20	\$35	\$21	
Frequency	Bi-annual	Annual	Annual	
Safety / Emissions	Emissions	Both	Both	

Potential Opportunities

- No obvious candidate for fee increase (in-line with peers)
- Opportunity to add safety inspections without added cost to State (inspections carried out by private dealers)
- Indexing fees to inflation provides consistent, palatable revenue increases and are seen in other states (e.g., CA, NC, PA)
- Charging for EV & fuelefficient vehicles offsets gas tax declines, ensures equitable contribution
 - 28 States, including CA, charge \$50 to \$200 for electric vehicles
 - 12.6k EVs in CT as of July 2020¹



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



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

3.3.5 Complete revenue services digitization program

DRS entering second of four phases for tax digitization program

Initiative goals

- Improve ability for filers to engage with DRS online (myconneCT), including:
 - Filing taxes
 - Sending and receiving messages
 - View filing history and outstanding payments
- Shift channel mix of tax filings from predominantly paper returns to predominantly electronic returns
- Reduce filing errors and allow agency to manage attrition from retirement surge

Keys to sustaining progress

- Strong project
 management leadership to
 hold program accountable
 to key milestones
- Engagement with variety of stakeholders (e.g., residents, preparers, auditors, policy makers, other agencies, etc.) to optimize design, interface, functionality and data architecture
- Integrating with data-driven tax compliance program to maximize revenue uplift

\$495m

Revenue uplift expected in first 5 years after program completion

3.3.6 Unemployment Insurance (UI) modernization



Automation/digitization opportunities | DOL

Opportunity`	Est. annual FTE hours saved and retirement implications	Est. annual cost savings	✓ Initiative in progress ✓ Discu	In progress?
Modernize initial claims processing	50-60k+ • Initial claims processing currently conducted by clerical staff with anticipated high retirement rate	\$1-1.5m+	 Customer service representatives currently review claims for completeness and transfer from Salesforce Standard Claim Queue to TICS (Telephone Initial Claims System) and IBM (processing, payment, etc.) Anywhere from 40-100+ processors working at any given time depending on volumes Modernization process will allow claimant to enter claim directly and remove need for processing Anticipated timeline for modernization: 1-2 years 	•
Implement DocuSign for UI Reemployment Services & Eligibility Assessment Program	 2-2.25k+ Reduces administrative effort; high retirement rate expected 	\$50-60k+	 Currently being tested Would reduce time spent on intake processes and allow for more efficient direct service provision Additional cost savings on printing, mailing, and other physical materials 	♥

3.3.7 Digitize DMHAS patient record

Implementing an electronic health record for DMHAS facilities could generate significant time and cost efficiencies

Context

- DMHAS operates 6 local mental health authorities (LMHAs) and two additional in-patient facilities
- DMHAS' lack of an electronic health record (EHR) results in non-standard and heavily manual processes across facilities
- Crucial positions such as nurses and mental health assistants have high numbers of 2022retirement-eligible employees, creating risk of service disruption at facilities

Key benefits of an EHR include, but are not limited to...

- Improved patient care as a result of better care documentation, access to data, and monitoring of outcomes
- Increased staff capacity due to automation and standardization of processes such as medication administration, chart management, and patient intake
- Cost savings due to better visibility into spend, lower staff hours, and reduced administrative overhead



DMHAS estimates that implementing an EHR could save 50-60k+ employee hours and \$15-20m+ annually while improving resident health experiences and outcomes

Source: DMHAS input 246

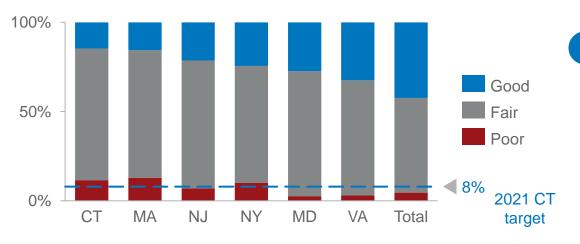
3.3.8 New maintenance and inspection tools

New tools | Using aerial inspection drones mitigates risk in area with large number of retirements and could save up to \$17m

\$120m currently spent on bridge renewals, but still behind condition target

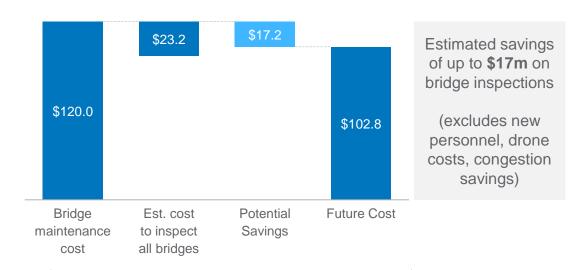
- Significant progress made over last ten years at risk from retirement surge and STF insolvency concerns
- 11 of 14 DOT bridge inspectors retirement-eligible

Share of bridges by FHWA Structural Condition (FY19)



Opportunity to invest in new tools that save money, time and lives

- Drones free capacity, reduce use of expensive snooper trucks and dangerous rappelling, helps prioritize repairs and attracts new talent (i.e., university partnerships)
- Estimated cost of \$1,200 per bridge deck inspection compares to \$4,600 under manual procedures¹



^{1.} Assumptions by AASHTO: Manual cost for 2 people for 8 hours at \$100/hr + 2 lane closures at average cost \$1,500/lane vs. UAS 2 people (pilot and spotter) for 1 hour at \$600/hr Note: CT DOT responsible for inspecting 5,049 bridges (1,020 NHS) and maintaining 4,044 annually Source: Condition of Connecticut's Roadway Bridges 2020, 2019 AASHTO UAS/Drone Survey of All 50 State DOTs

3.3.9 Common contracting and grant platform

Connecticut administers a diverse portfolio of ~4,400 total grants worth ~\$14b

Grant type	Total # of grants (unique SIDs)
Other Than Local Governments	249
Local Governments	104
Federal Grants	2,435
Federal Stimulus Grants	141
Non-Federal Grants	542
Pass Through Grants	48
Restricted State Grants	462
Grant Transfers	395
Total	4,376

Examples of diversity in CT grants

State-designed grants to major providers

 Example: Board and Care for Foster Children program through DCF supports 3,750 children in foster care with a budget of ~\$137m¹

Federal programs administered by state agencies

 Example: Wildlife Restoration grant administered by DEEP with a budget of ~\$5m¹

Small one-off state grants

 Example: Arts Education grants administered by DECD's Connecticut Office of the Arts went to one recipient with budget of \$50k²

Six key stages of a grant's 'life cycle'



Engagement between agencies, communities, and providers



Grant design and recipient selection



Agreement creation and execution



Performance, compliance, and outcome monitoring



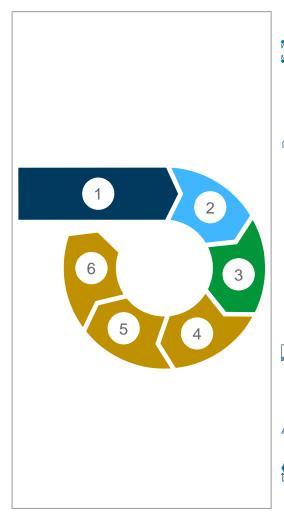
Fraud and risk management



Underspend and recovery management

All stages may not apply to certain grants

A central grant hub could play a role in each stage





1. Sector and bilateral engagement

2. Program design

and recipient

selection

Grant-making agency potential role



- Lead engagement and relationship with sector groups
- Conduct site visits and liaises to promote or understand outcomes
- Answer provider or other questions on program
- Facilitate knowledge transfer and development

Distribute provider information to agencies

Support knowledge transfer to grant recipients

- Identify key outcomes and set strategy for grant (if not defined by e.g., federal statute)
- Lead decisions on selecting grant recipients

- Quality assurance of provider documentation
- Negotiation and execution of grant agreement
- Compile grant award package for selected provider/s

3. Agreement creation and execution

- Support negotiation
- Lead decisions on any changes needed
- Final sign-off on grant

- Coordinate execution of grant awards between grantee, state agency, and OAG (if applicable)
- Set up contract and purchase order in Core-CT
- Coordinate amendment process
- Coordinate ongoing payment to grantees
- · Alert state staff and grantees of grants that are ending
- Coordinate close of award in Core-CT

4. Performance. compliance, and outcome monitoring

5. Fraud and risk mgmt.

6. Underspend and recovery mgmt.

- Collect/analyze performance reports and discuss issues with grant recipient
- · Monitor grant recipient compliance against agreed work plan
- Escalate and address breaches and/or fraud
- Manage treatment of any underspent funds

- · Receive and review reimbursement requests and share with program staff
- · Manage oversight of grantee compliance with reporting requirements
- Manage risk assessments and implement standardized controls/treatments
- Support agency efforts to address breaches/fraud
- Identify and report on potentially under/ overspent funds
- Coordinate return of funds if needed

A central grant hub could address several issues raised in interviews

Interview input

- Across state agencies, there is a lot of variety in processes
- I feel like we end up duplicating a lot of work across agencies
- As a nonprofit it is confusing that [Agency 1] wants our costs by week then [Agency 2] wants the same data, but provided by month
- We're so stretched! I just need to get the reports done—there's no time to think strategically

Potential benefits



A central team provides additional rigor to ensure value for money for the state



Another jurisdiction saved 20-30% through centralization and a further 10-20% through automation



A central hub increases standardization of processes and interfaces while giving providers a single point of contact



Reduced administrative obligations free up staff to engage with partners and seek additional sources of funding

Case study | Another jurisdiction's centralization efforts were informed by five guiding principles

Guiding principles



Potential implications for CT



Focus on insights from community and partnerships with providers, supported by efficient administration

- Administration streamlined, consolidated and automated
- Partnerships and insights work conducted by designated relationship managers



Align resource allocation to areas of greatest need

Grant "footprint" optimised with increased presence in communities of need



Establish consistent operational approach

 Use of standardized forms, reporting templates, costing model, etc.



Institute single-point accountability for service providers

- Relationship managers act as single point of contact for service providers
- Integrated management of grants operating across multiple jurisdictions and/or program areas



Build capabilities with cross-agency functionality

Shared platform/s able to remain integrated with individual agency program and policy changes

3.4 Optimize sourcing

Sourcing opportunities most relevant for agencies with high spend on directservice personnel: DCF, DDS, and DMHAS



Note: Indicated spend by job group does not include full overtime expenditure Source: CT STARS: CT expense data

Four key criteria to evaluate when considering service conversion



Available market

Competitive provider market should be established



Cost savings

Private provider services should be provided at lower cost than state services



Same or better service quality

Private provider client services and outcomes should be of same or better quality as state-run programs

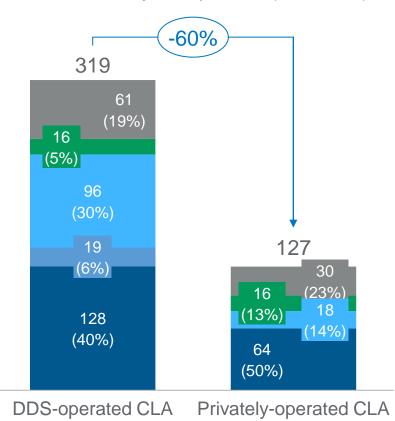


Implementation feasibility

Sourcing should be feasible given union contracts and political optics (e.g. prevent perception that state is "abandoning" clients)

Previous CT experience with private group homes demonstrates that non-profit costs can be significantly less than public sector

Annual cost breakdown per group home (CLA) client by component (FY10, \$k)



Salary

- State salaries are far higher than those of private providers
- Private wage recently rose to \$14.75/hour but still ~33% lower than state
- Qualifications the same, but employee mix may be different

Overtime

- Private providers build OT into rate, incentivizing controlling oT
- Collectively-bargained 35-hour work week drives higher OT

Benefits

• State offers more generous health benefits than private providers

Room and board

 DDS payments in lieu of taxes and facility ownership reduces state expenditure relative to private providers

Additional expenses

 Includes workers' comp, administrative costs, centralized DDS support, and more

Reviewed six opportunities identified through top-down analysis and interviews; current view is that three are worth exploring for ability to mitigate retirement risk

			State employees (% eligible to retire)		Available market		Quality	Approx. cost savings ²		Implementation feasibility
1	Local mental health authorities (expand current offer)	~14,000	~1,500 (24%)	•	Seven LMHAs already privately operated	•	Seven non-profit LMHAs all meet quality targets, lowest score 90%	~\$50-100m+	•	Previous challenges soliciting bids at low enough rates to generate savings
2	Group homes for people with intellectual/ developmental disability (expand current offer)	511	~2,000 (41%)	•	Most group homes are privately operated Some challenges with highest-need clients	•	Nonprofit service providers found to have fewer quality issues	~\$60-80m+	•	and offset revenue loss Client continuity may be disrupted State may need to remain "provider of last resort" for high-need clients
3	Veteran convalescent care (new offer)	125 ¹	175 (30%)	•	Nursing home providers	•	Contracted facility quality similar to state-run facilities in states which have contracted	\$4-5m		Facility recently opened; transition logistics complex High level of political sensitivity
4	Foster care services (new offer)	3,750	~400 (15%)	•	Numerous state providers	•	Other state privatization efforts often compromised quality	d \$3-12m+		Potentially constrained by consent decree Savings would need to offset revenue loss
5	DMHAS inpatient treatment facilities (new offer)	TBD	~900 ³ (25%)	•	Uncertain	•	Uncertain	anticipated	•	Acute care facilities consistently seek to transfer long-term clients to state facilities already
6	Children's psychiatric facility (Albert J. Solnit) (new offer)	TBD	~200 (25%)	•	Uncertain	•	Uncertain	due to higher private-sector compensation		Reimbursement system would need to be adjusted; state currently pays for 5 days

^{1.} Facility capacity, 2. Does not capture impact of lost revenue (e.g., from federal programs) 3. Incl. Connecticut Valley and Whiting Forensic hospitals only to avoid double-count with LMHAs Source: Agency org charts; CT Program Review and Investigations Committee study; CT and provider cost data; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Adden@59

3.4.1 Non-profit engagement for providing LMHAs

Further conversion of Local Mental Health Authorities to nonprofit operation could generate substantial efficiencies

State-provided services

- 6 state-operated Local Mental Health Authorities (LMHAs) provide therapeutic and crisis intervention services to people with mental illness
- State-operated LMHAs serve ~12k clients a year

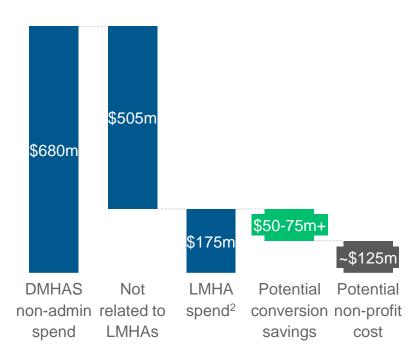
Available market and quality

- Seven LMHAs are already operated by community nonprofits
- All non-profits met client satisfaction targets with respect to quality and overall performance

Potential efficiency

- With potential annual cost savings of ~\$7k+ per client, converting state-operated LMHAs to nonprofit operation could save \$50-75m+1
- Conversion efforts could focus on full LMHAs or specific services, e.g. Young Adult Services

Annual LMHA spend



^{1.} Low end of range halves maximum savings assuming state remains provider of last resort; upper end represents estimated maximum 2. Personal Services spend All Biennial figures FY2020 Recommended

3.4.2 Expand non-profits for group homes

Additional efficiency potential via conversion of state-operated group homes for people with intellectual/developmental disability to nonprofit operation

State-provided services

- 3 Intermediate Care Facilities (ICFs), the Southbury Training School (STS), and 32 Community Living Arrangements (CLAs) provide health care, rehabilitation services, vocational services, and more to clients
- In FY2020, 533 Connecticut residents were projected to have received support

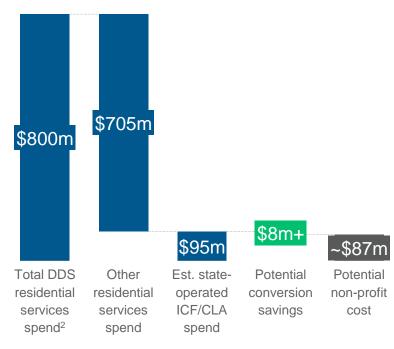
Available market and quality

- Vast majority (800+) of CT group homes privately operated
- 2011 study conducted by CT Program Review and Investigations Committee found that privately-operated facilities had fewer deficiencies per facility based on DDS and DPH inspections

Potential efficiency

 With annual cost savings of ~\$250k+ per CLA, converting stateoperated CLAs to nonprofit operation could save \$8m+1 without compromising service quality

Annual DDS residential spend



^{1.} Range factors in potential variety in pension tiers of workers 2. Incl. Community Residential Spend (DSS account) and Residential Supports (DDS department) All Biennial figures FY2020 Recommended

3.4.3 Competitive bid rail for bus contracts

Transport | CT commuter rail has among the worst fare recoveries in the region

	New Haven	New Canaan	Danbury	Hartford	Shore Line East	Waterbury	NJ Transit	MBTA	
Operator	Metro- North	Metro- North	Metro- North	Amtrak, TASI/ACI	Amtrak	Metro- North			_
Ridership (k)	40,375	1,525	740	658	595	343	89,562	31,177	
Ridership change YoY	1%	1%	(5%)	N/A	(17%)	(0%)	N/A	N/A	
Fare Recovery	69%	23%	9%	5%	5%	7%	55% ³	62%	
Subsidy / Ride	\$3.85	\$4.90	\$24.13	\$43.30	\$55.28	\$24.46	\$5.12	\$4.68	
Total Revenue (m)	\$361	\$2	\$2	\$2	\$2	\$1	\$567	\$239	
OpEx (m)	\$516	\$10	\$20	\$30	\$35	\$14	\$1,025	\$384	
Net Subsidy	(\$156)	(\$7)	(\$18)	(\$29)	(\$33)	(\$14)	(\$458)	(\$146)	_
						J	:		

Ways to improve fare recovery to peer benchmark (~35%)⁴

Reduce service on some/all commuter rail lines to match demand

- Ridership down 30%+ during COVID
- Telework trend + net-migration out of NYC

Replace high-cost commuter trains with shuttle bus service

Bid out rail operations for more competitive pricing

Implement minimum farebox recovery rates⁵

Achieving 35% fare recovery leads to ~\$30m+6 savings

^{\$257}mm+ in annual subsidies for rail operations¹

^{1.} Excludes Hartford Line subsidy given assistance from federal funding through FY21 2. Difference in revenue from current fare recovery rates vs. 30% 3. 2014 Fare recovery rates ranged from 19.6% for Atlantic City line to 88.4% Trenton/Princeton Northeast Corridor (2nd lowest line rate = 39.9%) 4. Bottom two NJ commuter lines are 20% and 40%, lowest system-wide line Seattle Sounder (33%) (Nationwide commuter rail average is ~50%) 5. Seattle Sounder policy 6. Based on improving Fare Recovery to 35% across CT commuter lines currently below Note: Data used – 2019 for New Haven, Hartford, SLE; 2018 for Waterbury; 2017 for New Canaan, Danbury Source: Federal Transit Administration (U.S. DOT), CT DOT; MBTA FY19 Final Itemized Budget

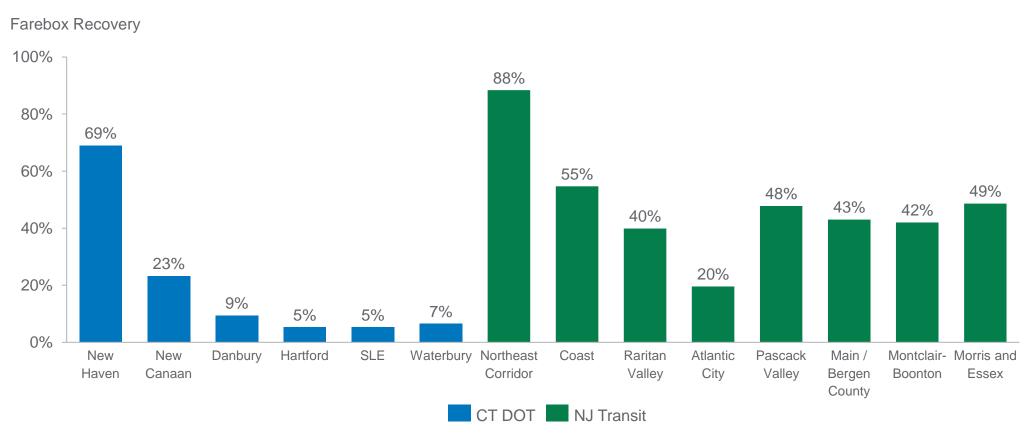
Transport | CT rail lines have among the worst fare recoveries in the region

	New Haven	New Canaan	Danbury	Hartford	Shore Line East	Waterbury	NJ Transit	MBTA
Operator	Metro-North	Metro-North	Metro-North	Amtrak, TASI/ACI	Amtrak	Metro-North		
Ridership (k)	40,375	1,525	740	658	595	343	89,562	31,177
Ridership change YoY	1%	1%	(5%)	N/A	(17%)	(0%)	N/A	N/A
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\$257mm+ in annual subsidies for rail operations¹

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Transport - backup | CT commuter rail lines receive less revenue per operating expense than lines on New Jersey Transit



Transport | Case study: Sound Transit minimum recovery policy



Context

- Seattle has three modes of public transportation:
 - Express bus
 - Light rail
 - Commuter rail
- Mission of the Sound Transit is to seek the highest possible farebox recovery maintaining fares at levels consistent with the fare policy principles
 - i.e., fares should be clear, discounted for those in need, and changes should be acceptable by customers

Policy

- Instituted minimum thresholds for farebox recovery ratios:
 - Express bus = 20%
 - Commuter rail = 23%
 - Light rail = 40%
- Once a farebox ratio falls below the threshold, the Sound Transit Board triggers action for a fare rate increase

Fare change policy

- Proposal for fare change presented within annual review:
 - CEO presents proposal to the Board, including analysis of revenue, operating costs and fare structures
 - Proposal must consider impact of rate changes on fare structures and coordinate with RTAs to reduce pricing complexity, as is applicable
- Exceptions granted if thresholds breached due to services being in start-up phase (i.e., line expansions)

Rail Contracting | CT rail operations are relatively expensive and would likely benefit from increased competition



CT Rail Operations More Expensive

- CTtransit operating expenses higher than neighboring peers and nationwide transit districts
- Expenses appear high using multiple metrics to account for several variables



Obstacles from Past & Current Negotiations

- Significant internal concern on opening negotiations given unfavorable ARSA negotiation outcome
- Decade-long bus litigation also creating mental impediment to potentially start "second-front" tensions



Competitive Process Could Unlock Value

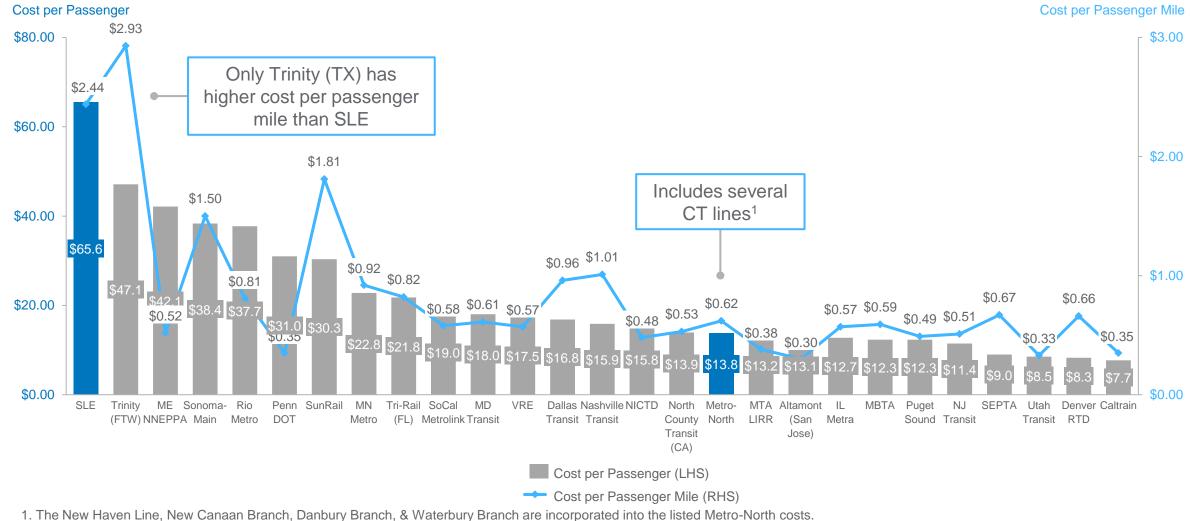
- Transit authorities domestically and abroad have turned to competitive RFPs to reduce costs
- CT DOT awarded some Hartford Line operations to TASI but lacks data to compare operating expenses



Accountability a Key Consideration

- Important to construct performance safeguards for riders / residents
- Requires upfront leadership to counter inaccurate backlash

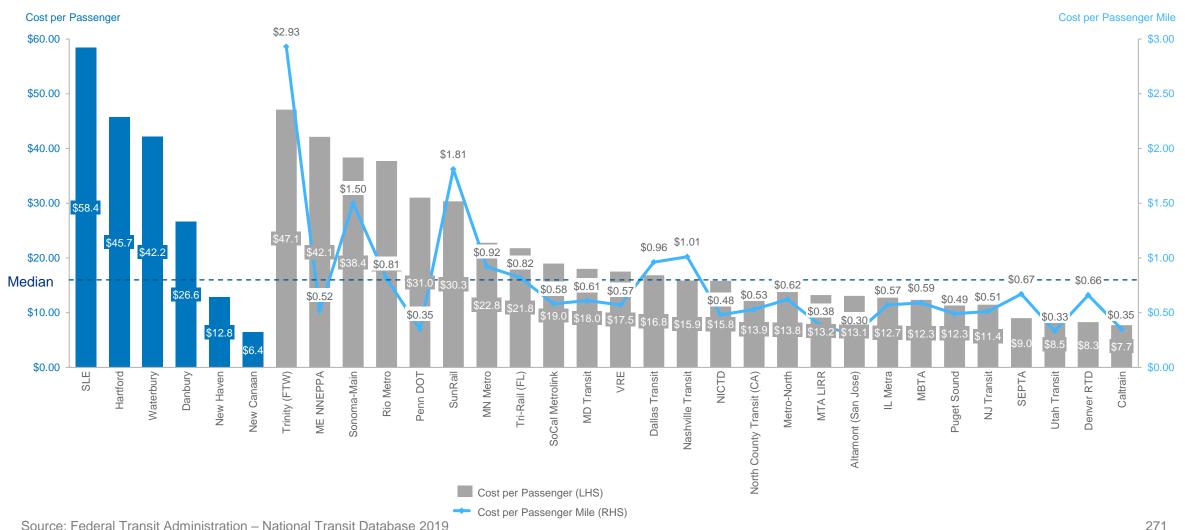
CTrail Shore Line East costs compared to other light rail systems



^{1.} The New Haven Line, New Canaan Branch, Danbury Branch, & Waterbury Branch are incorporated into the listed Metro-North costs.

Source: Federal Transit Administration – National Transit Database 2019; SLE reflect costs only associated with the Shore Line East Line. Hartford Line costs not included in this FTA profile. 270

Rail Contracting | New Haven and New Canaan are only CT rail lines with cost per passenger below national median



Rail Contracting | Top-down and external benchmarking indicate potential for savings in rail contracts

NTD Data Analysis

- Reviewed operating and financial metrics for 27 commuter rail operations across USA
- While costs can be driven by geographical, demographical and labor-specific nuances, CT operations ranked among the highest cost nationally



- Cost / Hour: 25th (3rd to last)
- Cost / Passenger: 27th
- Cost / Passenger Mile: 26th
- Fare Recovery¹: 26th

Comp State Benchmark

- In 2003, MBTA bid out operations (previously ran by Amtrak)
- Awarded to partnership between Veolia, Bombardier and Alternate Concepts
- After initial extension, Keolis awarded subsequent contract in 2012 bid process

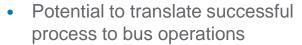


 MBTA estimated inflationadjusted realized savings of 15-20%

Opportunity

- 15-20% on CT rail operation expenses (~\$567m FY18) would result in savings between \$40-60m
- Potential savings of \$10-20m under phased implementation, with additional long-term upside





Challenges

- Difficulty in obtaining reliable and comparable data (internally and nationally) necessitates additional work to validate opportunity
- Potential backlash from Metro-North, Amtrak
- Complexity of bidding process and negotiations requires prior experience for optimal outcomes

^{1.} Based on fares and thus should not be looked at in isolation to compare cost efficiencies 2. Haircut reflects targeted approach to segment of rail operations before expanding to additional lines (upside potential from competitively bidding system-wide operations)

Source: Federal Transit Administration – National Transit Database 2019

Transport | Bus minimally impacted by retirement, but can make more efficient

Drivers	(Observations	Potential opportunity	Challenges
	Competition in bus operations	 State has not previously bid out full bus operations competitively 	Conduct competitive RFP/bid process to include parties who have been successful winning state and local bids in recent	 Internal concerns stemming from ARSA arbitration against NY/Metro-North
		 CT has complex system of operations and maintenance 	years - E.g., TransDev, Keolis, Coach, etc.	 Best value provider may face "outsider" backlash
76	Asset ownership	 CT owns 669 buses, shelters for 3,500+ and maintenance garages but outsources work 	Outsource full operation (including asset ownership)	Ownership ensures more seamless transition between operators
	Subsidy rates for local transit districts	 Total spend of \$30m p.a. with subsidies of 90-97% High number of MPOs (14) 	 Limit dollar value or subsidy amount for local bus operations Incentivize local planning authorities to redesign service to reflect modern usage while encouraging bicycle development 	At odds with Governor's push to increase service and lower fares

3.4.4 Contract operations of Veterans' convalescent care

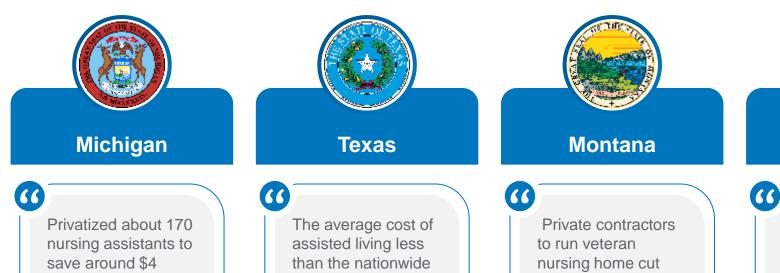
States have realized 30-40% efficiencies from contracting nursing home services for veterans

\$3.37m from \$10m

Independent

Record

budget



average

representing

substantial savings

- Veteran Aid

Average cost of assisted living in Utah is significantly less than the nationwide price tag

- Veteran Aid

Utah

Reducing cost of CT's veterans healthcare and rehabilitative services by 30-40% results in savings of ~\$4-5m¹

MI saved 40% of budget by contracting services; MT saved 34% UT and TX services were contracted from conception and are consistently lower than other similar facilities

Source: Michigan Public Radio, VeteranAid, CMS

million. Total service

\$8m of \$20m budget

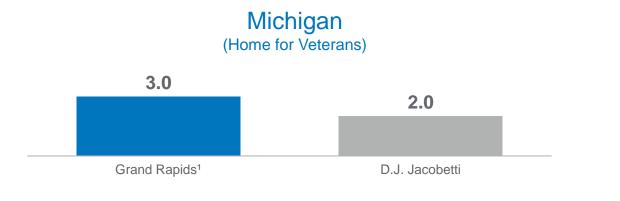
- Governor Snyder,

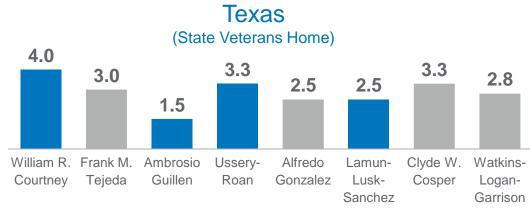
Michigan Radio 🕥

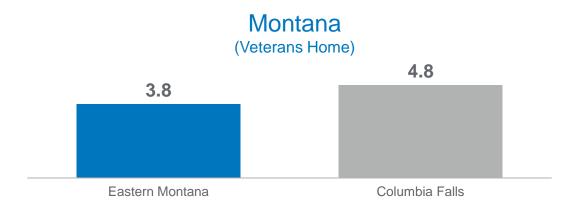
outsourcing saved

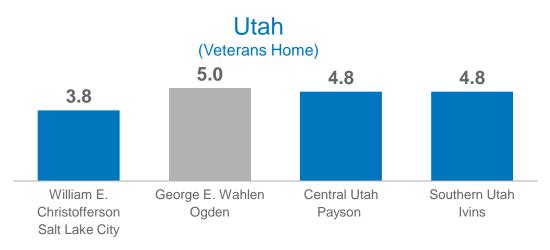
¹Estimate of potential savings calculated by taking average peer savings (37%) applied to CT Veterans Health Care Services and Residential and Rehabilitative Services budget

In other states, quality of contracted veterans' care facilities similar to statemanaged facilities







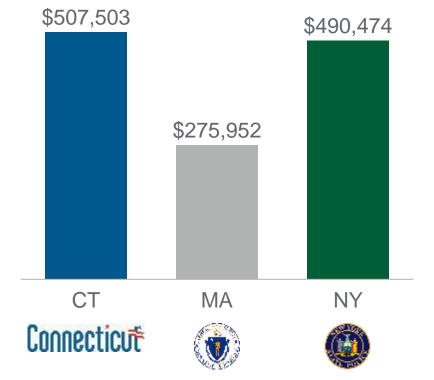


¹Grand Rapids Veteran Home not CMS certified; score calculated from average consumer rating and meeting of quality standard reports
Note: CMS Five-Star Quality Rating System ranges between 1 and 5, with 5 being the best rating. Utah serves as "best in class" veteran home case example Source: CMS, VeteransAid

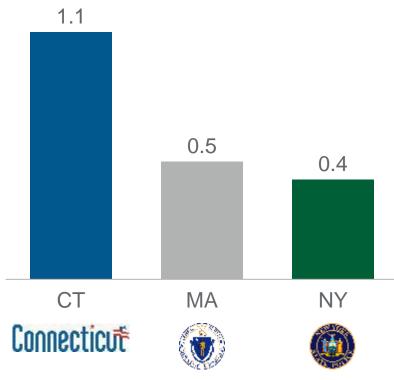
3.4.5 Transporation structure and maintenance contracting

Transportation | Connecticut spend per capita is higher than MA and NY, and personnel per capita is more the double both neighboring state staffing levels





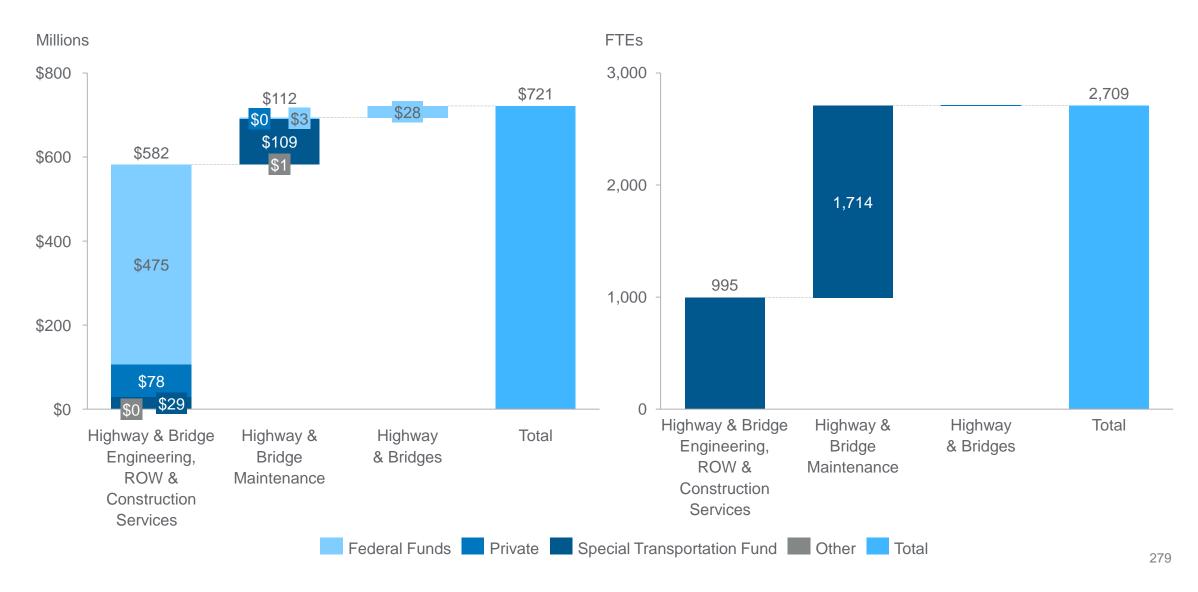
Cluster FTE per 1000 citizens



Source: CT biennial budget FY2020-21 Addendum; CT STARS data; MA Governor's Budget FY2020 Recommendations; New York State Office of State Comptroller (FY19)

Transport | \$721m spent yearly on road planning, maintenance, construction

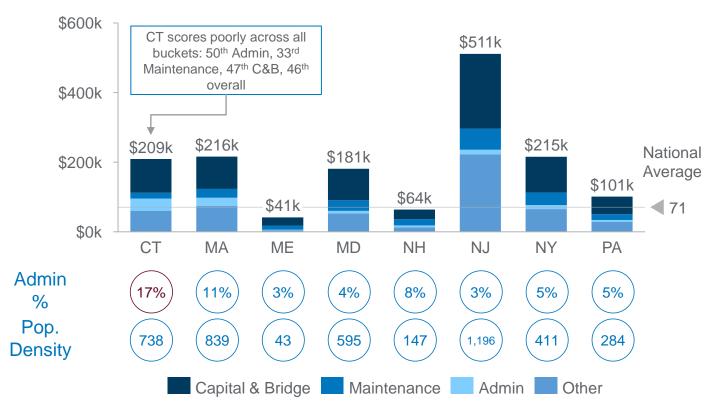
All FTE are funded out of the Special Transportation Fund



Transport | CT road construction and maintenance costs per lane-mile are broadly in-line with peers, with the exception of administrative costs

Total disbursements per state-controlled lane-mile

\$721m total spending, \$216m state-funded



Potential cost-reduction drivers

Administrative costs

- Includes general and main office expenditures as well as vacation and OT
- These costs can be managed by implementing alternate work schedules, streamlining approvals and contracting process
- Up to \$30m potential savings matching MA's 11% admin cost share)

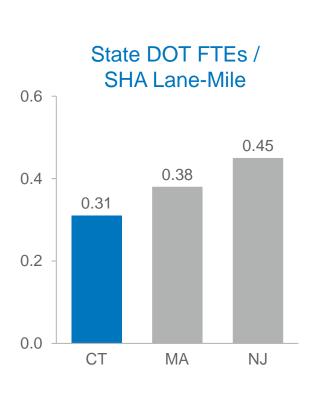
Though in-line with other states, other best practices observed in controlling capital and maintenance costs include

- Reduce material costs through lean engineering; benchmark to FHWA CCI and NH DOT CCI
- Prioritize high-return projects, e.g., expand bottleneck ramps vs. add highway lanes
- Tie performance to future contract awards to improve on-time and in-budget projects

Note: Inc. Capital & Bridge, Maintenance, Admin, Highway Law Enforcement / Safety, Interest & Bond Retirement Source: 2019 24TH Annual Highway Report (Reason.org)

^{1.} Admin includes general and main-office expenditures in support of state-administered highways; NJ counts employee benefits as Maintenance while CT includes this cost in Administrative disbursements

Organization structure | CT DOT personnel in-line with peers on lane-mile basis, so attrition must be managed through multiple options





Grade-up job classifications

Opportunity detail

 Increase breadth of responsibilities across job titles to improve productivity

- Challenges
- Will encounter pushback from labor that may require concessions
- DOT has complex system of classifications



Outsource more where contractors already used

- Outsource workload by geographic regions with strict performance KPIs
- Increase outsourced workload where contracting already exists
- Use added work to re-negotiate prices
- Prioritize projects that are complex and/or require OT hours for DOT labor
- Will encounter labor pushback
- Requires cost-benefit analysis to ensure outsourcing only where cost-effective



Right-size org structure and increase flexibility for attracting, retaining talent

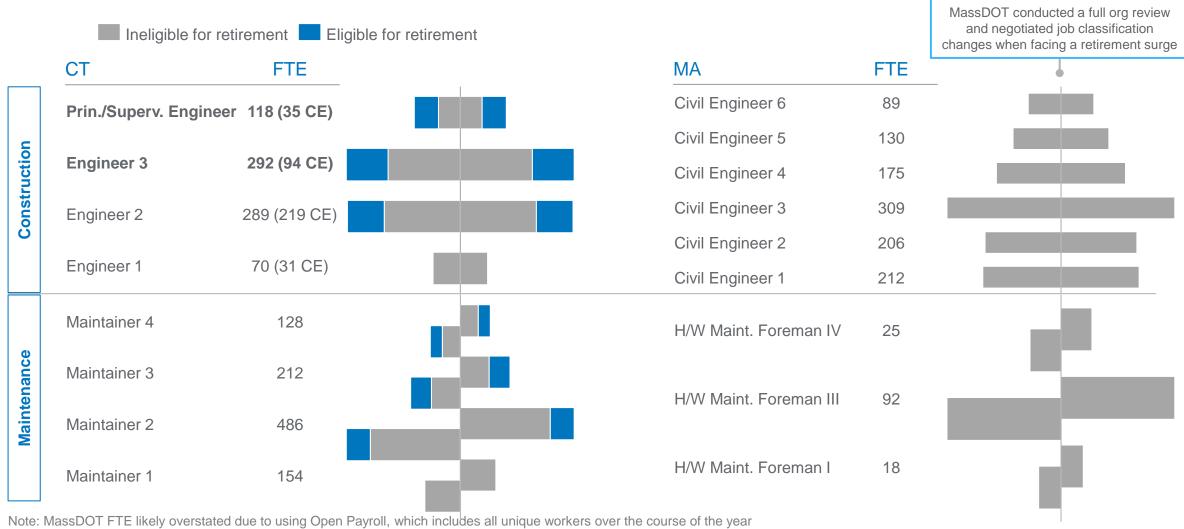
- Increase ability to attract & retain top talent / managers (i.e., fix inversions)
- Ensure proper mix and ratios across job levels (e.g., prioritize backfilling Principal, Supervising and TE3s)
- Update and add new job descriptions to ensure relevance for future DOT
- Drop requirement for CDL and add TSE (Admin) position at reduced rate
- Time-consuming and challenging exercise
- Requires full buy-in from leadership



Leverage inmate population to supplement workforce

- Enable CT DOC inmates to perform daily work (e.g., road and ROW maintenance) as well as ad hoc that requires OT (e.g., snow removal)
- Potential backlash on using inmate labor – countered by data-driven impact on reduced recidivism and skills training

Organization structure | Retirement surge unlikely to alter current job ratios, but must prioritize backfilling Principal, Supervising and Engineer 3 positions



Source: 2019 Massachusetts CTHRU Payroll data, CT STARS as of 9/20/2020

3.5 Design services to meet resident needs

3.5.1 Align rail/bus service to resident needs

Transit capacity | Transit ridership 70-90% below pre-COVID levels and likely to remain suppressed – reduced service levels can meet demand and cut costs



Reduce rail schedules



Replace highest subsidy rail lines with shuttles



Reduce express bus service levels



Cap regional bus transit subsidies

Alignment of rail and bus service levels to rider needs could save \$40m+

Current context and ridership trends

- Rail ridership remains 70-90% below prepandemic levels
- Bus ridership also down, but a relatively modest 25%
- Beyond pandemic, ridership likely to remain depressed vs. 2019 levels as remote work becomes more prevalent

Proposal to bring service in-line with demand

- DOT New Haven service change proposal estimates annual savings of ~\$35m
- 40% reduction in SLE service yields annual savings of \$5m
- DOT Express Service Efficiency proposal saves \$3m+ in annual subsidies
- Estimated annual savings from above solutions can be further supplemented by changes to remaining transit lines, replacement of rail with shuttle buses
- Impact can be mitigated by replacing rail with more cost-efficient bus services



Transit capacity | Recent reduction in New Haven service during COVID provides example of potential savings

Context

New Haven Line (NHL) primarily supports commuters working in New York City

Strong fare recovery (~69%) but significant decline in ridership due to the COVID

Despite low and stable infection rates in NYC metro, commuting has not rebounded

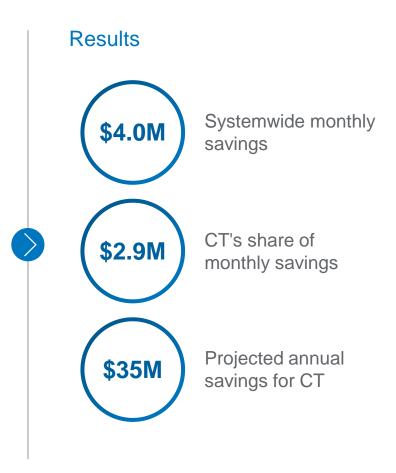
Approach

Reduced New Haven Line service to better match new demand trends

- Lower off-peak frequency
- Required coordination with NY York State, Metro-North

Maintained flexibility to ramp up service levels if demand returns to prepandemic levels

- Vaccine unlikely to be widely distributed before April 2021 at earliest
- Longer-term, many service-related companies have announced plans to continue teleworking through 2021 or permanently



Transit capacity | Replacing some rail service with shuttles can alleviate political blowback while saving money

	Current SLE Economics	Illustrative Bus Economics
Current subsidy / passenger	\$55.28	\$4.88
2019 Farebox Rate	5.3%	16.1%
Rolling Stock	45+ trains, 15 stations, rail lines	Buses, maintenance garage
One-way fare	\$10.25	\$12-20 ¹
Weekday Travel Time	60-80 minutes	~50 minutes ²
Employees / car ³	~1 Amtrak train conductor = \$60k	1 Bus driver = \$45k
Passengers / hour	3 cars * 0.5 trips * 100 = 150	1 bus * 3 trips * 75 = 225

Estimated benefits

- \$20-25m savings in operating subsidies⁴
- Reduced emissions
- Similar / reduced travel time

Political considerations

- High investment already made in rail infrastructure
 - Use stations for buses
 - Swap trains to other lines, sell off unneeded
 - Raise fares or seek alternative funding or control (PPP)
- Dependence of local community on commuter rail
 - Not supported by data
 - Shuttles viable transit option

^{1.} Based on Greyhound tickets 2. Based on Google Maps & Waze travel data for weekday peak times, but TBC with DOT based on 2018-19 bus replacement program 3. GlassDoor (https://www.glassdoor.com/Hourly-Pay/Amtrak-Conductor-Hourly-Pay-E2912 D KO7,16.htm) 4. ~500k trips per year * \$40 to \$50 subsidy saved per trip

Note: Amtrak owns and controls the Northeast Corridor east of New Haven, while DOT owns the rail west of New Haven. Ttrains are dispatched by Metro-North Source: Shore Line East website, https://en.wikipedia.org/wiki/M8_(railcar)

Transit capacity | DOT has already identified \$3m in annual savings on express bus service – extending similar actions systemwide can increase efficiencies

Temporarily or permanently discontinue low-ridership routes

- Identify routes with low ridership today as well as pre-pandemic
- Consider impact pandemic
- Minimize disruption by ensuring close proximity to alternative transit

Cap subsidies for local and/or private operators

- 90-95% subsidies to regional transit districts should be leveraged for system re-designs
- Not included in express bus savings proposal



Join routes to reduce redundancies

 Collapse nearby routes to save driver hours, reduce bus maintenance needs, etc.

Service level reductions

 Cutting off-peak / weekend service, adding time between arrivals, etc.

3.5.2 Adopt value-based health payments

Value-based payment | Detail, key enablers, and relevant analyses

7

Key questions

- How comfortable is the state that value-based care can be defined and measured effectively?
- How long is the transition expected to take?
- How would you assess the efforts of the Healthcare Innovation Committee in moving to value-based models?

Value-based models include

- Pay for Performance (P4P): Reimbursement contingent on metric-driven outcomes
- Bundles: Predetermined payment for an "episode of care", with providers covering any additional costs
- Global payment/capitation: Fixed prepayment covering all medical care for enrollee/s for predetermined period of time

Key enablers

- Longitudinal multi-payor claims and clinical patient data (e.g., though a health information exchange)
- Clear data reporting requirements and provider capabilities to meet those requirements
- Specific incentives and enforcement for providers as managed by ASOs
- Measurable and objective metrics and data to evaluate care quality and outcomes



Initial analyses

- Determine penetration of, and success in, value-based arrangements to date
- Assess potential for value-based payments based on examples and benchmarks from elsewhere
- Design and execute pilot programs for select value-based programs, and scale once impact is demonstrated

3.5.3 Control health spending and maximize federal funding

Reduce wasteful spending | Detail, key enablers, and relevant analyses

7

Key questions

- What is the state's role in fraud/waste/abuse prevention?
- How would you assess the state team's effectiveness?
- What are the contractual obligations of the ASOs in this area and how would you assess the state's oversight?



Examples include

- Fraud
 - Claims for services not provided
 - Claims for deceased or pre-birth patients
 - Claims for impossible services such as operations on three limbs
- Waste
 - Payments on behalf of patients receiving coverage from third parties, other states, etc.
 - Costs incurred by avoidable provider error (e.g., postoperative infections, incorrect procedures, etc.)
- Abuse
 - Improper billing practices (e.g., upcoding)
 - Overtreatment or over-servicing of patients



Key enablers

- Robust ASO fiduciary oversight
- Comprehensive historical claims data for beneficiaries
- Data sharing mechanisms to ensure patient eligibility
- Sophisticated internal data analysis capabilities to identify patterns of fraudulent and inappropriate spend
- Advanced analytics that raise issues of unnecessary or improbable services
- Market-facing mechanism to address issues, including:
 - Provider outreach and education
 - Coordinated care programs and guidelines



Initial analyses

- Examine claims data from multiple ASOs for patterns, aberrations, and outliers, to determine potential financial value at stake and establish fact base to determine appropriateness of additional investment in above enablers
- Benchmark Connecticut's analytical capabilities against bestin-class states such as Pennsylvania, Texas

Maximize federal funding | Detail, key enablers, and relevant analyses

7

Key questions

- How often does DSS review opportunities to maximize federal participation?
- Are there certain areas of Medicaid that have historically been paid for with only state dollars?



Ways to optimize rebates and funding include

- Maximize federal participation by ensuring that benefit design covers all areas that are federally matched
- Rebates granted under new federal programs, such as HARP-related (Health and Recovery Pans) drugs
- Establish buying consortium with other states for e.g., drug purchasing
- Ensuring that "clawback" payments to federal governments are being made only on behalf of eligible patients



Key enablers

- Regular monitoring of changes to federal programs and resulting potential rebates
- Program design to optimize federal funding
- Data sharing to ensure patient eligibility



Initial analyses

 Examine Connecticut state ledger to identify program-level discrepancies between potential and actual federal matching

Other states and organizations have realized substantial savings opportunities by controlling waste and maximizing funding



Curtailing individuals overusing services

 Molina identified \$150m-200m+ in payments to providers with costs 3+ standard deviations above average



Standardizing non-value-based pricing

Ohio reduced variation between highest- and lowest-priced facilities from \$140 to \$77
per day by transition to price-based, fee-for-service payment model for skilled nursing



Requiring alternative care

 Michigan found that requiring "prehabilitation" prior to surgery significantly reduced length of stay (~15% reduction) and total episode payments (~10% reduction)

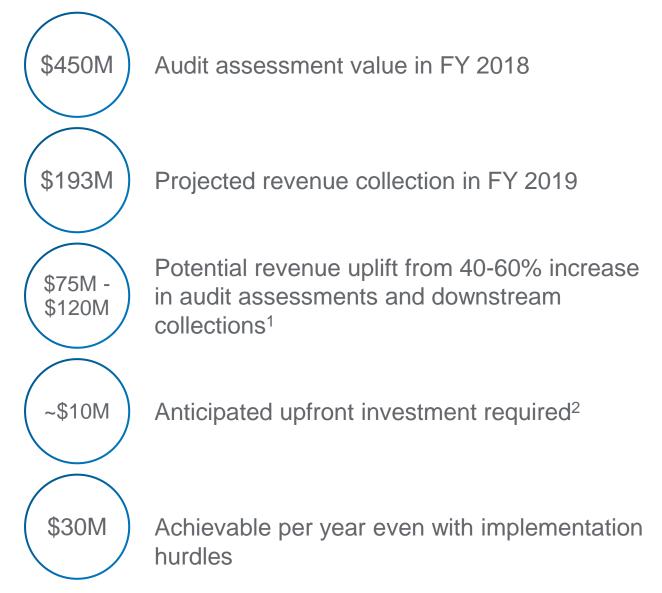


Further revenue maximization

 New York State audits in January 2020 identified ~\$425m in uncollected drug rebates from the federal government

3.5.4 Improve tax compliance

Near-term DRS opportunity focused on improving audit assessment

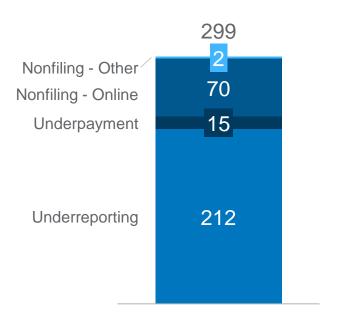


^{1.} Estimate based on prior experience; assumes 6-12 month audit timelines

^{2.} Includes upfront expense for program set-up, IT capital spend, 10-20 new DRS FTEs Source: 2020-21 Biennial Budget, BCG analysis

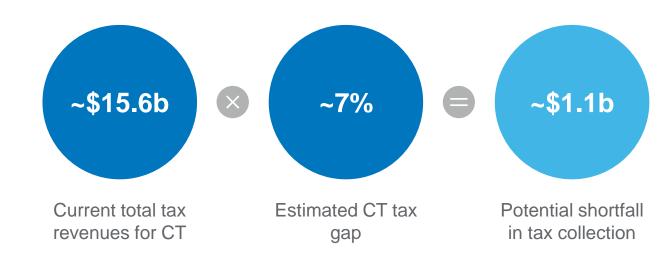
Current tax gap could be ~\$1.1b based on 2017 DRS tax gap analysis

Drivers of CT Sales and Use tax gap 2017 (\$m)



Equivalent to ~7% of total Sales and Use tax in 2017

Estimated shortfall of ~\$1.1b in tax collection for CT



Data-driven tax compliance can address each of the drivers of the tax gap by identifying non-compliance and determining the appropriate treatments

Illustrative

Drivers of non-compliance

Non-filers

Estimate income of individuals in jurisdictions based on data e.g., historical returns, social media etc. to determine those that are tax-eligible

Income under-reporting

Estimate 'actual' income based on available information and look-alikes, e.g., payment card receipts for businesses (Form 1099-K)

Improper deductions and credits

Estimate deductions based on drivers, e.g., calculating mortgage interest based on home value and interest rates



Treatments

- Different types of audits
 - Single versus multiple issue
 - Correspondence versus field audit
- Non-audit treatments
 - Return preparer outreach
 - Soft notices

Four approaches to facilitate tracking improvements in voluntary compliance – pivotal to sustaining momentum and expanding use cases



Leverage IRS NRP¹

- IRS conducts comprehensive audits on 15k filings
- Findings help create profiles/filters for future audit priorities
- CT should coordinate with IRS to obtain historical data



Taxpayer Surveys

- Increase awareness of enhanced DRS capabilities through local media
- Conduct taxpayer surveys to measure awareness and sentiment towards compliance and digitization programs



CT Research Program

- Conduct annual comprehensive audits on randomly selected but stratified sample of CT taxpayers
- Resource intensive program (e.g., audit personnel, time, etc.)



Advanced Analytics

- Embedded algorithms that track flow of revenue and collections across taxpayers over time
- Compare reported business revenues with third-party data (cross-agency and private sector)

1. National Research Program 300

3.5.5 Cut low-ROI film and tax programs

DECD | 48% of employees eligible for retirement, creating need to streamline

Program	Budget (m)	Cost/job created	State net revenue and ROI	Other outcomes
CT Aerospace Reinvestment Act (UTX/RTN)	\$400m authorized \$335m earned 2015-19	N/A (not measured) ⁴	N/A (not measured) ⁴	New HQ builtNew labs, infrastructure, R&D
Special Act (LMT)	\$220m awarded \$5.7m in 2019	1,126 new jobs \$27,000/job	\$6.4m in 2019 112% ROI	
Stranded Tax Credit/ Sales and Use Tax Offset	\$50m authorized \$6mm awarded ²	N/A	\$27.4 over 10 years ³ 55% ROI	
Urban & Industrial Site Reinvestment Tax Credit	\$950m authorized \$450m awarded since 2010	~34,000 new jobs \$13,000/job	\$284m since 2010 63% ROI	Broad array of industries benefitted
Film, TV and Digital Media Tax Credits	\$730m since 2010 \$157m awarded in 2019	3,500 jobs per year \$45,000/job	(\$680m) since 2010 (193%) ROI	Stimulated investment in education
Insurance Reinvestment Fund Tax Credit	\$170m credits issued since 2011	N/A (not focus)	\$20m since 2011 12% ROI	Broad array of industries benefited
Property Tax Abatements (Enterprise Zones)	\$3m in 2019	N/A (not focus)	~\$10m per year 333% ROI	Investments in underdeveloped areas
Direct financial assistance	\$146m provided in 2019 \$1.4bn portfolio	6,000 jobs/year \$24,000/job	\$132m since 2010 9% ROI	\$6bn non-DECD funds (4.2x leverage)

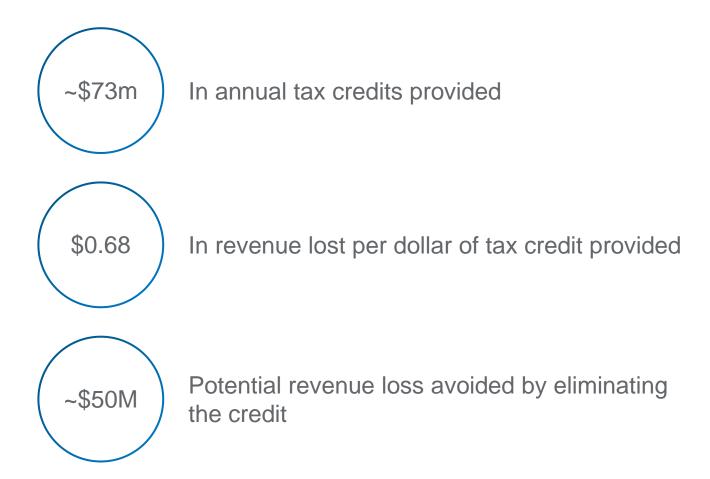
Potential opportunities to improve outcomes

- Outsource programs/initiatives to nonprofits (AdvanceCT) to avoid need to back-fill retirees onbalance sheet (48% eligible)
- Implement data sharing with DRS and DOL to automate grant recipient performance and compliance monitoring
- Ensure Abatement program does not present doubledipping with federal Opportunity Zones
- Validate value of Film, TV and Digital Media Tax Credit program, and potentially modify Insurance Reinvestment Act

Source: 2019 DECD Annual Report

^{1.} Includes income and sales taxes 2. Program authorized to award \$50m, but only 1 application approved 3. Projected—does not have sufficient data 4. 17,000 total jobs in CT with \$1.9b total payroll

Summary of savings from eliminating the film and digital TV tax credit



3.5.6 Find new transportation revenues

Fees | DMV fees in-line with peers; opportunity to add CPI-indexing, safety inspections and EV fees

	СТ	MA	NY
New License	\$84.00	\$75.00	\$164.50
Duration (years)	5.5-7 years	5	8
License Renewal	\$72.00	\$50.00	\$64.50
Duration (years)	6	5	8
Renewal Late Fee	\$25.00	None; 2 years cap	\$25-40 for < 60 days, \$75-300 for 60+
Commercial License	\$70.00	\$75.00	\$164.5-180.5 (MCTD)
Duration (years)	4	5	8
REAL ID Cost	\$30.00	\$25 upgrade	Same
Commercial Renewal Late Fee	\$25.00	N/A	\$0 (2 years)
Duplicate License	\$30.00	\$25.00	\$17.50
Make any change to license	\$30.00	\$25.00	\$12.50
Out of State License conversion (Class D)	\$124.00	\$115.00	\$65.00
License Exam	\$40.00	\$20.00	\$10.00
Learner's Permit	\$19.00	\$30.00	\$80.00
Duplicate Learner's Permit	\$19.00	\$15.00	\$17.50
Non-Driver ID (new)	\$28.00	\$25.00	\$9.00
Duration (years)	7	5	4
Inspection Cost	\$20	\$35	\$21
Frequency	Bi-annual	Annual	Annual
Safety / Emissions	Emissions	Both	Both

Potential Opportunities

- No obvious candidate for fee increase (in-line with peers)
- Opportunity to add safety inspections without added cost to State (inspections carried out by private dealers)
- Indexing fees to inflation provides consistent, palatable revenue increases and are seen in other states (e.g., CA, NC, PA)
- Charging for EV & fuelefficient vehicles offsets gas tax declines, ensures equitable contribution
 - 28 States, including CA, charge \$50 to \$200 for electric vehicles
 - 12.6k EVs in CT as of July 2020¹

^{1.} https://www.ncsl.org/research/energy/new-fees-on-hybrid-and-electric-vehicles.aspx

New revenue opportunities to explore include one-time and ongoing sources





Optimizing Existing Revenues

 Politically difficult but minimal financial, statutory hurdles (exception: minimum farebox recovery rates)





New Recurring Revenues

 Provide new sources of cash flow that are predictable and can be tied to specific construction projects



New Non-Recurring Revenues

 Non-repeatable programs that can generate cash flow but cannot be relied upon for future fiscal years

Additional revenue opportunities across DOT and DMV include increased fees on existing services as well as new innovations











Solar & wireless installations

- Install solar and wireless equipment along on State property
- Converts
 unused
 physical space
 into climate friendly assets
- Potential to add at least \$1m in revenue p.a.

Electric vehicle registration fees

- Add EV/Hybrid fees to more equitably distribute road infrastructure costs
- 28 of 50 states charge \$50 to \$200+ fees
- Potential to add several million dollars p.a.

Vehicle safety inspections

- Introduce safety inspections inline with peers
- Ensures
 vehicles are
 safe in addition
 to emission
 compliant
- Requires no additional resources
- At least several million dollars p.a.

Increased advertising

- Explore more aggressive digital and print ads across public transit, ROW and customer apps (e.g., naming rights, transit wrapping, geobased ads)
- Potential to add several million dollars p.a.

Annual blue signs program

☑ B☑ C

- Convert ROW blue sign ads from one-time to annual fees
- Requires legislative action to amend statutes

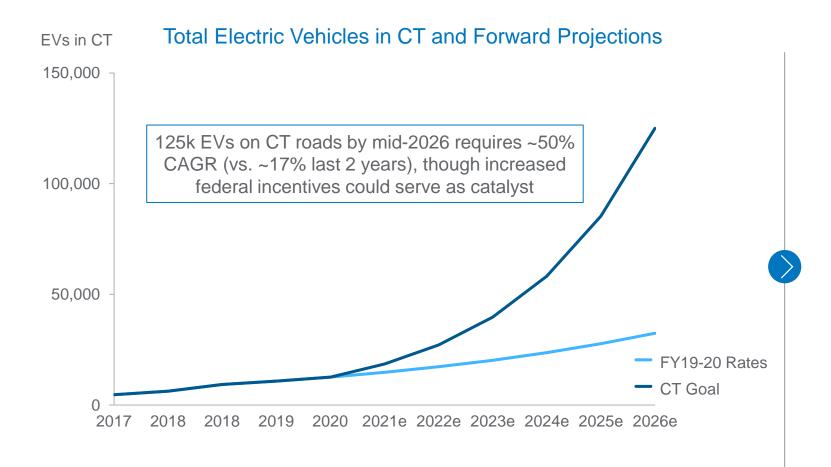
Retained revenue

- Incentivize agencies to find untapped revenue potential
- Align agency incentives with taxpayer interests
- Potential to add at least \$1m in revenue p.a.

DOT | Non-core revenue opportunities could generate more than \$10m per year

	Drivers		Observations	Challenges	Potential opportunity
		ROW solar installations	 Highway ROWs provide opportunity for P3 deals (e.g., MA-Ameresco) Financial benefits complemented by policy/environmental goals (Executive Order No. 1 2019 "Lead by Example") 		 Develop solar panel installations along DOT-owned highways and atop physical assets Potential revenue \$1-5m+ near-term, significant LT upside (\$10-20m+)
Recurring		Wireless leasing program	 Many states use ROW and state property to lease wireless facilities (e.g., Caltrans, TxDOT Small Cell Leasing) 	 Must understand federal and state requirements where applicable 	 Proliferation of telecommunication needs (e.g., IoT, 5G) present opportunity to lease space/towers to telecommunications companies Potential revenue \$1-5m+
Re	\$	Increased advertising	 Significant digital and print advertising potential across ROW, public transit, customer-facing applications Naming rights becoming more common means of revenue generation in transit (e.g., SEPTA, CTA) and non-traditional industries (e.g., NHL) 	 modernize ad displays Station naming rights require investment to change signage/displan 	 Refresh and optimize advertising strategy across State property (i.e., garbage cans to transit apps) Advertising partnerships (e.g., station naming rights, digital grocery aisles, location-based visual and audio ads) Potential revenue \$5-10m+ pending current advertising revenue status
rring	₩ A ₩ B	Convert Blue Sign ads to annual leases	 CT DOT collects one-time fee for ads Peer states have found significant delinquent payments on blue signs 	 Potential negative impact and/or perception from enforcing collections on businesses amid pandemic 	 Conduct extensive audit to ensure vendors are current on payments \ Potential revenue <\$1m
Non-Recurring		Retained revenue programs	Encourage innovation by incentivizing agencies to find untapped revenue potential	 Must ensure incentives are aligned with taxpayers' best interests Balancing act between increased autonomy and oversight to ensure famarket value obtained and proceeds monitored for compliance 	

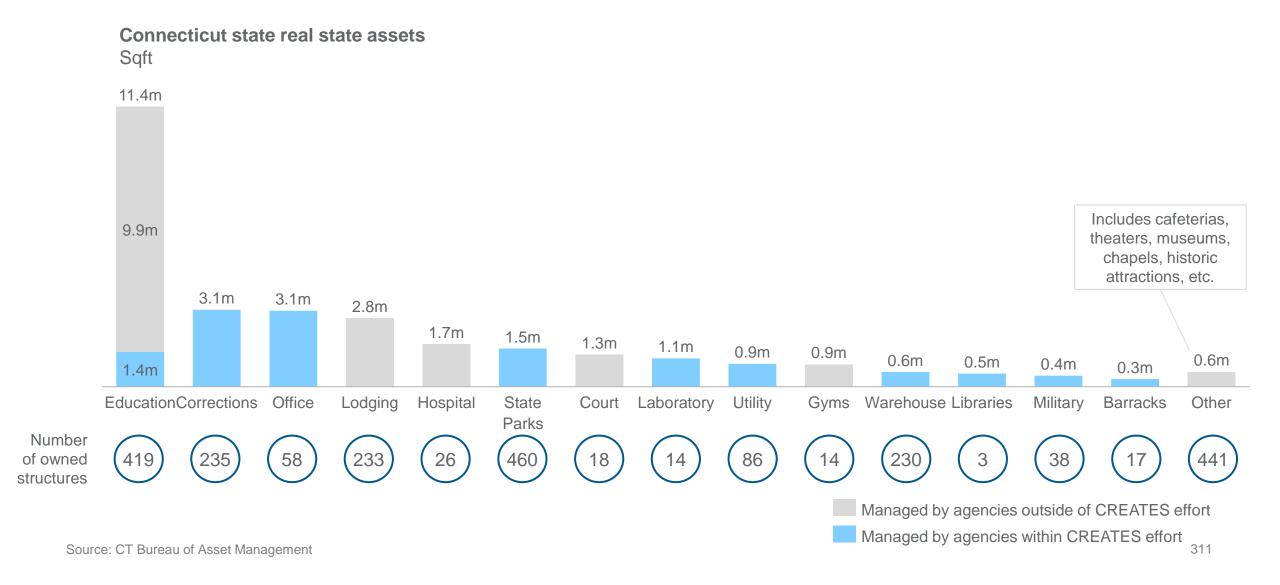
New revenue sources | Adding a fee for fuel-efficient vehicles produces little revenue at current EV adoption, but could grow to \$2m+/year



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

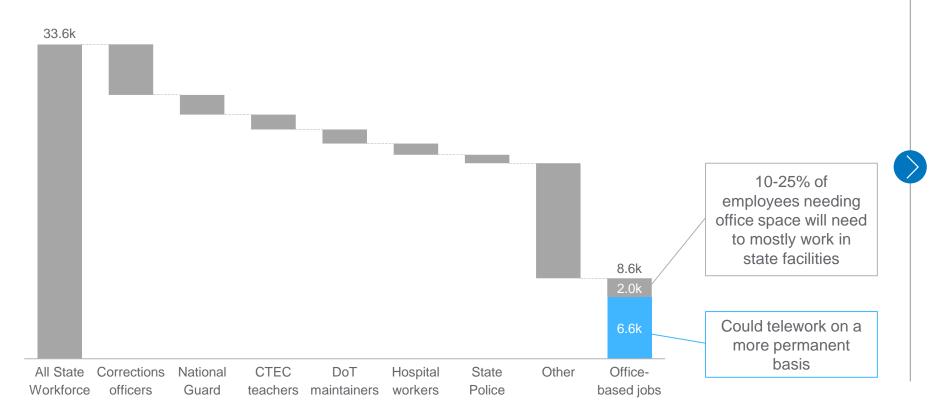
3.6 Rationalize state assets

Context | Universities, prisons, and offices are the majority of CT's real estate



Office buildings | About 7,000 state employees could feasibly telework on a permanent basis (with occasional attendance at offices)





Currently the state has 220 sq ft per employee, compared to internal benchmark of 150 sq ft

Opportunity to decrease office space footprint to match existing needs.

Office buildings | Range of options for state's real estate strategy post-COVID

Detailed analysis underway; need to confirm what to include in report

Status quo

No change in existing real estate footprint

\$0 savings

Co-location opportunities already identified

Share four buildings among similar departments to maximize occupancy

- \$4-5m opex savings
- \$170m capex savings
- \$10 investment required

Increased colocation in Hartford, 1-2 days telework

Share buildings among similar departments and work remotely 1-2 days/week

- \$10-20m opex savings
- \$200m+ capex savings
- \$10s of millions in investment required

Desk-sharing by default, 2.5 days telework

Share buildings; Work remotely 1-2 days/week, with employees alternating desk space

- \$30m+ opex savings
- \$300m+ capex savings
- \$10s of millions in investment required

Hoteling by default, >2 days per week telework

Share spaces among employees through a reservation-based system to maximize occupancy

- \$50m+ opex savings
- \$500m+ capex savings
- \$100s of millions in investment required

Office buildings | Variety of constraints to consider in rationalizing office space



Re-stacking is expensive and requires initial investment for long-term return



Re-locating employees may impact the economy of the community (e.g. restaurants and local businesses)



Building costs vary greatly and may require a clean up cost to sell based on level of building condition (e.g., dilapidated buildings)



State employees may not favor hoteling or desk sharing office models; may require union bargaining in some cases

3.6.1 Increase office co-locations

Greatest potential source of savings from office space consolidation

Savings could be used to fund e.g., investments in digitization, though some investment in re-fit required

Drivers		Observations	Potential Opportunity	Challenges
	Office buildings	 Workforce down ~26k since 2010 Ongoing efforts for co-location CT teleworking largely successful; manager feedback that many jobs can be remote ~\$30m spent annually on leases 	9	 Requires policy changes e.g., to teleworking Requires one-time cost for relocating and re-stacking offices

3.6.2 Match prison footprint to current population

Department of Corrections facility closure overview

Connecticut's imprisoned population has declined over the last decade

- Prison population was 18,431 in 2010 and 9,946 at end of 2020
- This decrease has accelerated in the last year due to inmate releases due to COVID-19

Connecticut currently has more prison capacity than it needs

- Currently DoC manages 14 prisons with an overall occupancy rate of 56%
- Number of facilities contributes to high levels of overtime for corrections officers

Closing three facilities can be done safely and lead to cost savings of about \$41.5m/year by FY23

- After targeted closures, CT will have enough capacity at all levels of security
- Closures can be done in a way which preserves innovative services (e.g., medical, vocational)

Fewer facilities leads to opex savings and opportunities to rationalize CO workforce

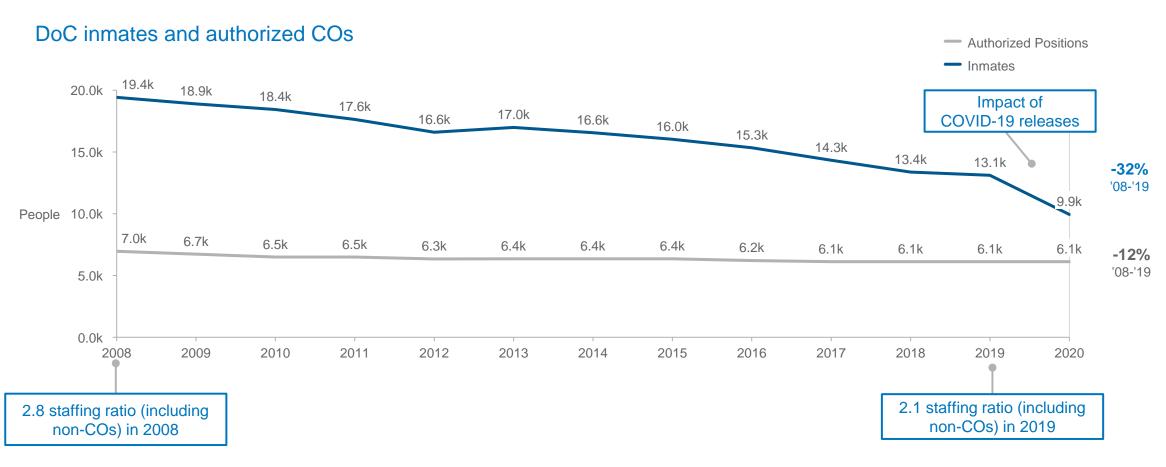
- Staffing ratio (inmates per CO) was historically 3.6 and has decreased to 2.8 due to COVID-19
- The national average for staffing ratio is 4.0

Department of Corrections budget for FY20-FY22

SID	SID Description	FY20 Expense	FY21 Appropriation	FY22 Current Services Budget
10010	Personal Services	\$405,702,633	\$412,958,209	\$421,428,097
10020	Other Expenses	\$68,983,104	\$69,596,565	\$69,596,565
12235	Workers Compensation Claims	\$30,488,797	\$31,115,914	\$31,115,914
12242	Inmate Medical Services*	\$103,014,389	\$107,970,535	\$108,856,425
12302	Board of Pardons and Paroles	\$5,796,673	\$6,927,233	\$6,974,828
12327	STRIDE	\$63,551	\$73,342	\$73,342
16007	Aid To Parld & Dischrgd Inmats	\$1,351	\$3,000	\$3,000
16042	Legal Services To Prisoners	\$774,056	\$797,000	\$797,000
16073	Volunteer Services	\$55,340	\$87,725	\$87,725
16173	Community Support Services	\$33,810,537	\$34,129,544	\$34,224,200
		\$648,690,431	\$663,659,067	\$673,157,096

Note - FY21 Inmate Medical Expenses line does not include an FY20 Carry Forward for Hepatitis C treatment in the amount of \$7,810,439. Filled General Fund Personal Services positions total 5,225 while Funded positions total 5,270. FY 20 Overtime totals \$68,390,050

Prison population has declined over the past decade, to less than 10,000 at the end of 2020



Overview for Department of Corrections facilities

Facility Level(s)	Facility	Type of Facility	Location	St	aff	Inm Popu		Inmates	per CO	Physical Bed Capacity	Facilit	ty Use	Building Date	Trade Programs
				Total	COs	2019	2020	2019	2020	2018	2019	2020		
2	Willard-Cybulski CI	CI	Enfield	218	155	1103	434	7.12	2.80	1104	100%	33%	1990	Yes
3	Brooklyn CI	CI	Brooklyn	113	78	452	321	5.79	4.12	456	99%	66%	1990	
3	Carl Robinson CI	CI	Enfield	332	249	1413	807	5.67	3.24	1441	98%	55%	1985	Yes
3	Osborn CI	CI	Somers	347	279	1322	988	4.74	3.54	1886	70%	48%	1963	Yes
4	Bridgeport CC	CC	Bridgeport	254	179	690	598	3.85	3.34	840	82%	74%	1958	
4	Cheshire CI	CI	Cheshire	450	314	1234	1098	3.93	3.50	1392	89%	79%	1913	Yes
4	Garner CI	CI – Mental Health	New Town	275	195	543	521	2.78	2.67	684	79%	72%	1992	Yes
4	Hartford CC & UCHC Medical Unit		Hartford	324	244	869	733	3.56	3.00	984	88%	76%	1977	
4	Manson Youth Institute	Youth	Cheshire	285	314	286	215	0.91	0.68	670	43%	33%	1982	Yes
4	New Haven CC	CC	New Haven	252	183	689	607	3.77	3.32	716	96%	88%	1976	
5	Northern CI	CI	Somers	209	165	80	90	0.48	0.55	584	14%	14%	1995	
2 - 5	York CI	CI - Female	Niantic	505	346	907	516	2.62	1.49	1458	62%	34%	1994	Yes
3 & 4	Corrigan-Radgowski CI	CI	Montville	411	300	727	845	2.42	2.82	1489	49%	38%	1994	
4 & 5	MacDougall-Walker Cl	CI	Suffield	589	437	1441	1813	3.30	4.15	2151	67%	64%	1993	Yes
								6; currently 2 verage of 4.0				zation ave	rage was 74% utilization	o,

^{1.} CI is for sentenced individuals (prison), CC houses unsentenced individuals (jail)
Sources 1) Staffing: 2020 DOC filled staffing spreadsheet. 2) 2019 Inmate Population from Monthly Statistics on DOC website. 3) 2018 Physical Bed Capacity taken from DOC bed capacity vs. filled as of 10-31-18. All documents were provided by DOC budget analyst 10/7/2020. Facility Utilization = Inmate Population/Physical Bed Capacity

3.6.3 Consolidate specialized assets

Greatest potential source of savings from office space consolidation

Savings could be used to fund e.g., investments in digitization, though some investment in re-fit required

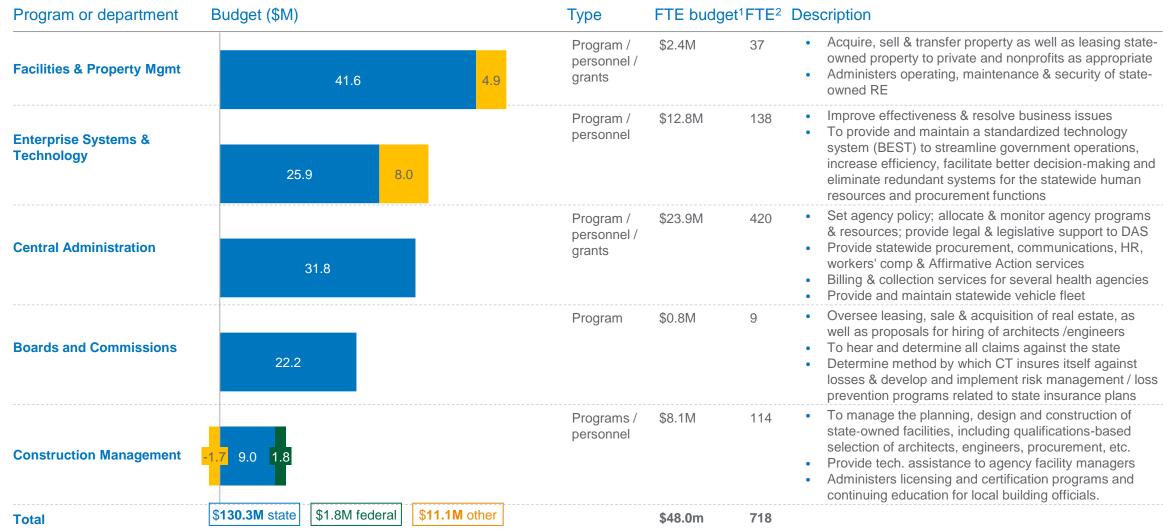
Drivers		Observations	Potential Opportunity	Challenges
	DRS help centers	 DRS closed facilities, transitioned to virtual without complaints 	Maintain virtual services post-COVID~\$1m in efficiencies	May require "clean-up cost" for selling
	DMV service centers	 CT has more DMV sites than peer despite similar population density Some services already offered in third party locations 	 De-branch low-volume DMV locations Increase use of third-parties to maintain network density (e.g. AAA) Investigating efficiencies with DMV 	 Political resistance to store front closure
	Fleet maintenance	 Multiple agencies maintain garages (DOT, DESPP, DEEP) 	Consolidate garagesInvestigating cost efficiencies with DAS	Cost for to re-locate/stack
	Police barracks	District consolidation means fewer facilities neededSome barracks dilapidated	 Consolidate barracks, divest dilapidated buildings Investigating cost efficiencies with CSP 	Cost for to re-locate/stack
	Corrections	Inmate population down across security levels	Consolidate ~3 prison facilities\$13-15m in potential savings	Labor and political challenges as discussed

4.0 Agency-by-agency impact and opportunities

Department of Administrative Services

Department of Administrative Services | Agency profile



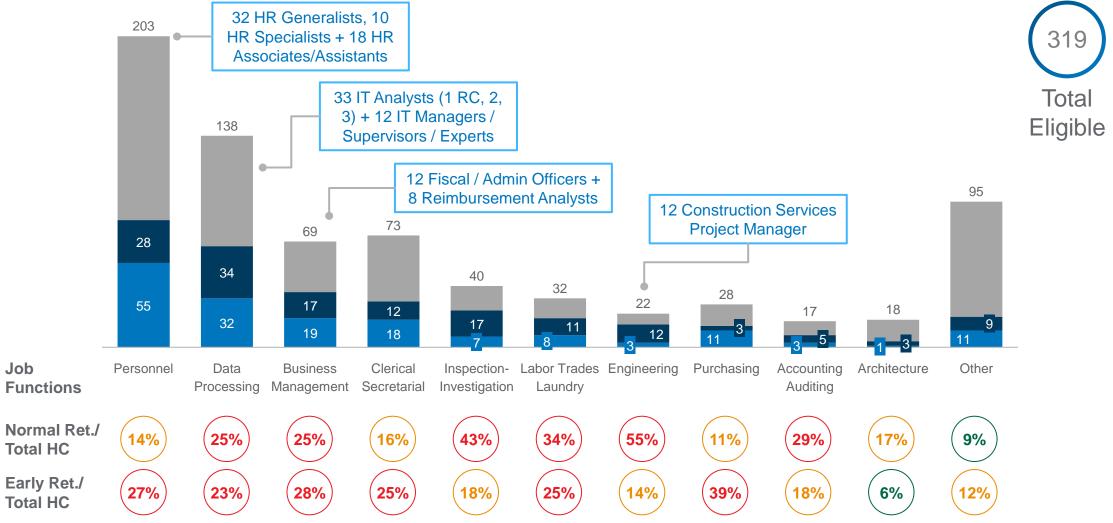


^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point; Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DAS | Initial view is HR Personnel and Data Processing staff are among highest risk for staff retirements





Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DAS | Primary retirement surge risks





HR, business management and clerical/secretarial staff represent largest risks from retirement surge

- DAS already establishing plans to reduce backfilling needs through increased automation and efficiency
- Hiring processes expected to be streamlined through AI initiatives
- Unit-specific plans being developed to prevent backfilling certain positions (i.e., hire one new employee for every three retirees)



Shared services, including key business functions, at-risk without backfilling strategy or further centralization



IT-backfilling likely to be critical for prioritization

 IT workers often difficult to attract and retain – personnel critical to DAS providing shared-services support



Reduction in personnel combined with future telework policy could reduce real estate costs while also removing a significant source of work (leases, facility management, etc.)

Department of Administrative Services | Operational opportunities (I/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Sell 18-20 Trinity and 30 Trinity St.	Facilities & Property Management	 Building requires \$40M in expected CapEx renovations on 18-20 Trinity 30 Trinity assessment value of \$2.5mm 	H \$2.5mm+ assessment \$40M+ Capex avoided
Flexible workforce model and reduction of real estate footprint	Agency-wide	 Increase permanent offering of remote work to broaden pool of candidates, improve WLB, reduce operational footprint and transition toward flexible employment policies State pays \$50mm in annual leases but can have sufficient owned capacity if telework and hoteling persist post-pandemic 	See "Real estate" section for further details
Right-size agency through attrition	Agency-wide	 ~320 FTEs eligible for retirement (43% of positions) Retirement surge seen as opportunity to right-size agency that has lacked a organizational review in recent years Significant opportunity to manage attrition with minimal backfill in select areas – exceptions potentially required in areas likely to see significant uptic in workload around retirement surge (e.g., HR, offset somewhat by AI) 	
Workers' compensation savings	Central Administration; Boards and Commissions	 Reduce claim durations using common-sense reform to prohibit lifetime "temporary" benefits Implement safety, health and wellness, and return to work incentive programs to reduce frequency of incidents Use advanced analytics to increase fraud detection Create case management system to proactively engage injured employees and doctors to ensure appropriate support is provided Create an annual settlement fund used to buy out long-term claims at a discount without disrupting individual agencies' pools 	M Potential savings of millions of dollars per year

Major impact (>\$5m or addresses retirement cliff risk)

Department of Administrative Services | Operational opportunities (II/II)



Opportunity Program impacted Detail		Detail	Retirement or efficiency impact				
eProcurement platform	Central Administration	 Utilize statewide eProcurement platform that allows approved vendors to bid on requests while enabling agencies to go outside the system for specialty needs (e.g., DOT materials, time-sensitive requests, validated better value) Use data analytics to identify high spend areas for maximizing savings 	Millions of dollars in potential savings statewide				
Digital by default, automate/digitize paperwork	Enterprise Systems & Technology	 Migrate all documentation, paperwork & comms to digital platforms (e.g., electronic correspondence, cloud storage) Utilize RPA, OCR, NLU, e-signatures, etc. softwares and scale them across State government to have a cohesive and synchronized digitization strategy and further progress towards an integrated database (e.g., Citizen One Stop 					
Right-size vehicle fleet	Central Administration	 DAS fleet of 3,600 should be reduced given agencies admit they have access number of vehicles along with less need for vehicles for many workers with permanent increases in telework Standardize options to improve purchasing power (i.e., discounts) Intention to transition to EVs provides perfect time to buy less vehicles 	TBC potential savings based on agreed telework policy				
Centralizing business functions	Central Administration	 Consolidate business functions (e.g., payroll, AR/AP, accounting) into one agency to realize efficiency savings Consolidate all collection efforts statewide to ensure efficiencies 	Millions of dollars in potential savings statewide				
Clarify and codify DAS and OPM roles	Agency-wide	 Conduct review of agency missions and roles due to perceived overlapping services and breadth of scope (e.g., hiring, policy, real estate, procurement) 	Millions of dollars in potential savings from FTE synergies with clarified roles				
Consolidate print & mail	Operations	Multiple agencies have their own print & mail centers; merge or outsource	L <\$1m in potential savings				
	Total		100+ FTEs\$100m+ (including avoided CapEx)				
			Major impact (>\$5m or addresses retirement cliff risk) Medium impact (\$1-5m) Low impact (<\$1m)				

Department of Aging and Disability Services





Program or department	Budget (\$m)			Type	FTE budg	get ¹ FTE ²	Description
Employment Services	9.4	70.1	3.4 82.8	Program/ personnel/ grants	\$0.8m	321	 Providing employment training and opportunity to people with disabilities/elders Providing rehabilitation services for individuals injured while working
Independent Living Services	9.7 <mark>0.4</mark> 0.7			Program/ personnel/ grants	\$3.2m	47	 Providing services to facilitate independence for people with disabilities/elders (e.g. fall prevention, chronic disease management) Determining disability for individuals
Educational Services	4.2			Program/ personnel	\$0.1m	43	 Providing information (online, call line, etc.) for elders regarding Medicare, payment management, etc. Training teachers to work with children with blindness
Administration	3.5			Personnel	\$2.5m	30	 Planning statewide program implementation Providing central support functions (e.g. HR, IT)
Accessibility Services	0.9			Program/ personnel/ grants	\$0.3m	7	 Providing assistive technology and related information Training individuals with disabilities to drive Providing specific communication support to individuals who are deaf/hard of hearing
Total	\$27.4 m state	\$71.6 m federal	\$3.8m other		\$7.0m	459 ³	

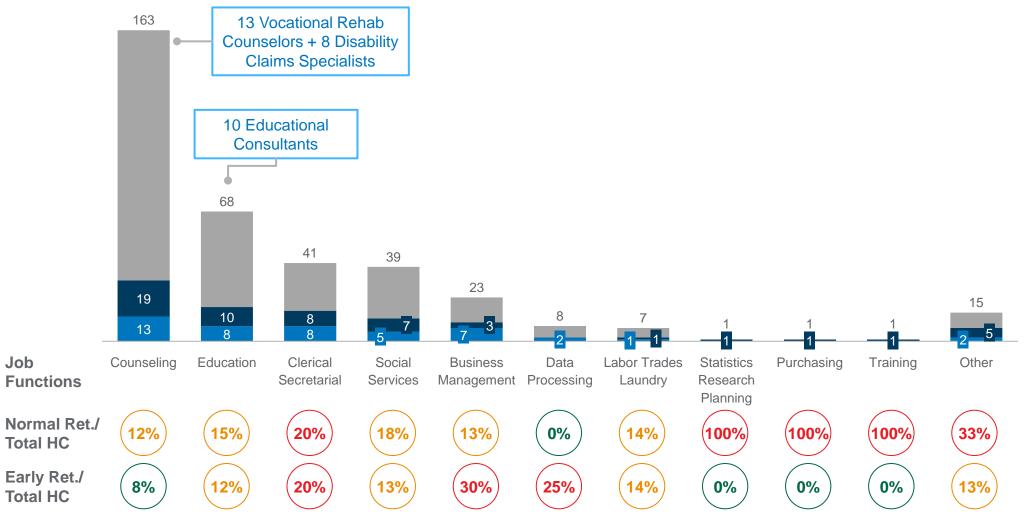
^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE 3. Incl. 11 FTE from Advocacy Services – sub-department listed with no budget. Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: FY2020-2021 Biennial Budget Program Addendum

ADS | Counseling and Education are most at risk of service loss



Total

Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



Specialized nature of ADS roles creates service continuity risk due to 2022 retirement surge; additional concern for fiscal operation disruptions



Highly specialized roles are particularly challenging to backfill, heightening risk of service disruption

- Challenging to identify candidates for roles working with people with blindness, such as Educational Consultants and Orientation and Mobility Specialists
- Two employees in Driver Training Program are eligible for retirement ADS has not yet had to recruit for these positions
- Relatively low number of employees in specialized functions may amplify impact of individual retirements



Clerical and secretarial retirements could disrupt day-to-day operations, particularly within fiscal staff

- Significant concern for disruption to fiscal operations due to retirements
- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Opportunities for ADS to streamline service provision and adopt common platforms across HHS agencies

Drivers		Observations	Challenges	Opportunities	
>>	Streamline service provision	 There is significant overlap between services offered by ADS and DDS / DSS Multiple programs across agencies offer similar service types 	 Need for some degree of specialization based on different needs of resident groups Potential political sensitivity Different funding sources could complicate consolidation efforts 	 Consolidate/jointly administe employment support and independent living programs across ADS and DDS Combine Elderly Nutrition Program with CTNAP in DSS 	
	Establish	Functions such as grant-	Creating common platforms	Establish central grant hub for	

- common agency platforms
- making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies
- requires rigorous data sharing agreements between agencies
- Technical and governance complexity
- Need for agency-specific insight in certain processes

- ter S
- for HHS agencies
- Utilize ImpaCT for eligibility determination
- Centralize program monitoring and evaluation for HHS agencies



ADS | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specifi number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Consolidate employment support programs for people with disabilities within DDS Employment Opportunities and Day Services	Employment Services	 Both DDS and ADS offer wide-ranging vocational support to people with disabilities, including skills training, employer advocacy, long-term support, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	M Potential overall savings of \$2-5m+
Consolidate Independent Living Program, Individual Home Supports, and Congregate Housing Services Program within ADS	Independent Living Services	 Both DDS and ADS offer a range of supportive housing services, including skills training for independent living, housekeeping, transportation, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	Potential overall savings of \$1-3m+
Utilize ImpaCT for ADS eligibility determination	All HHS agencies	ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs	ADS-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Implement statewide background check system for hiring	All HHS agencies	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies	M
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies DCF has second-highest number of dedicated positions among HHS agencies behind DSS Centralization could improve impartiality and sharpen focus on low-performing programs 	ADS-specific savings depend on extent of centralization Major impact (>\$5m or addresses retirement cliff risk) Medium impact (\$1-5m)

Low impact (<\$1m)



ADS | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Combine state funded	Independent Living	Poth ADS and DSS apporate state funded moal distribution programs	

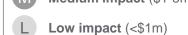
Combine state-funded Elderly Nutrition Program and CTNAP within DSS

Independent Living Services

- Both ADS and DSS operate state-funded meal-distribution programs
- Combining these programs could improve policy coordination, simplify resident experiences, and reduce costs

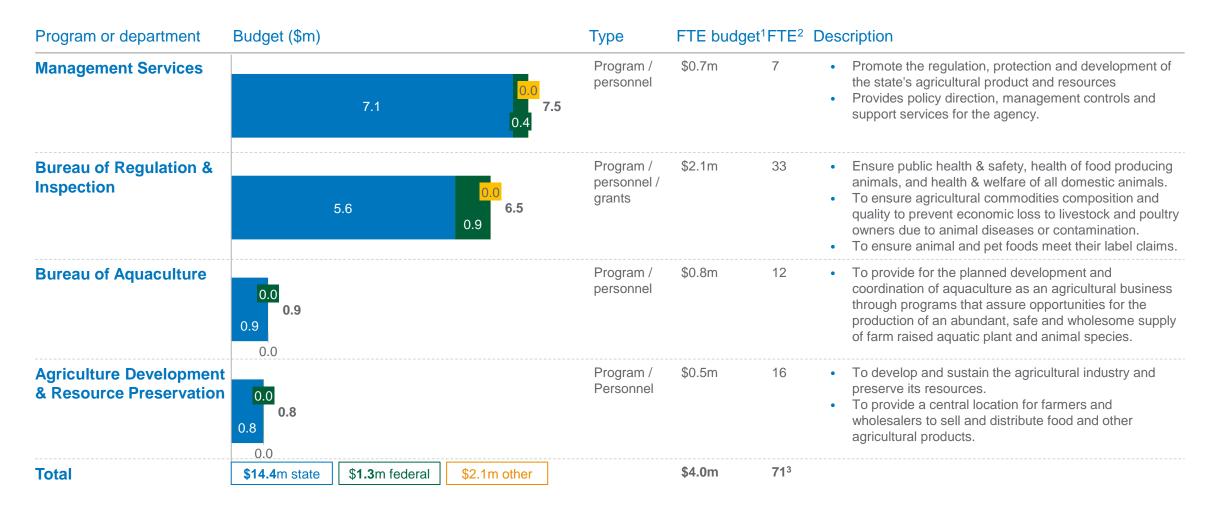












^{1.} Personal services 2. Incl. STF, Private, Emissions Enterprise Fund and Federal Fund FTEs 3. Incl. 24 FTE from Federal Funds Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DOAG | Inspection-Investigation is most at risk of service loss





Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

339



Department of Agriculture | Operational opportunities (I/I)

Opportunity	Program impacted	Detail	Retirement or efficiency impact	
Digitize processes	Agency-wide	Implementing digitization (e.g., cloud storage, OCR, RPAs, self-guided dashboards, etc.) to automate manual processes	<\$1m in est. potential savings from attrition of 5- 10 FTEs	
Increase shared services and centralized functions	Agency-wide	 Leverage CT's best-in-state technologies/practices across additional agencies (e.g., DCP, DOB, etc.) to reduce expenses through cost-sharing (e.g., collections, scanning technology, chatbots, etc.) Target burdensome licensing and registration activities, applying a cross-agency IT solution Efficiency in creating digital e-management records platform across CT 	<\$1m in est. potential annual savings from shared services (5-15%)	
Digitize processes	Agency-wide	Implementing digitization (cloud storage, OCR, RPAs, self-guided dashboards, blockchain monitoring) to automate processes	<\$1m in est. potential savings from attrition of 5- 10 FTEs	
	Total		• ~5-10+ FTEs	
	ı Olai		• \$1-5m+	

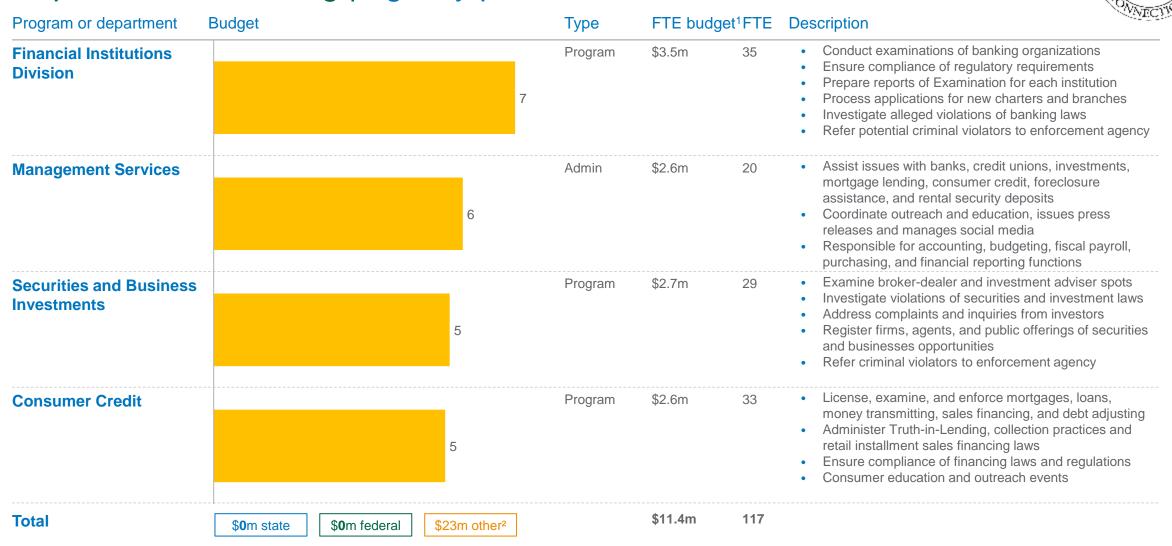






Department of Banking

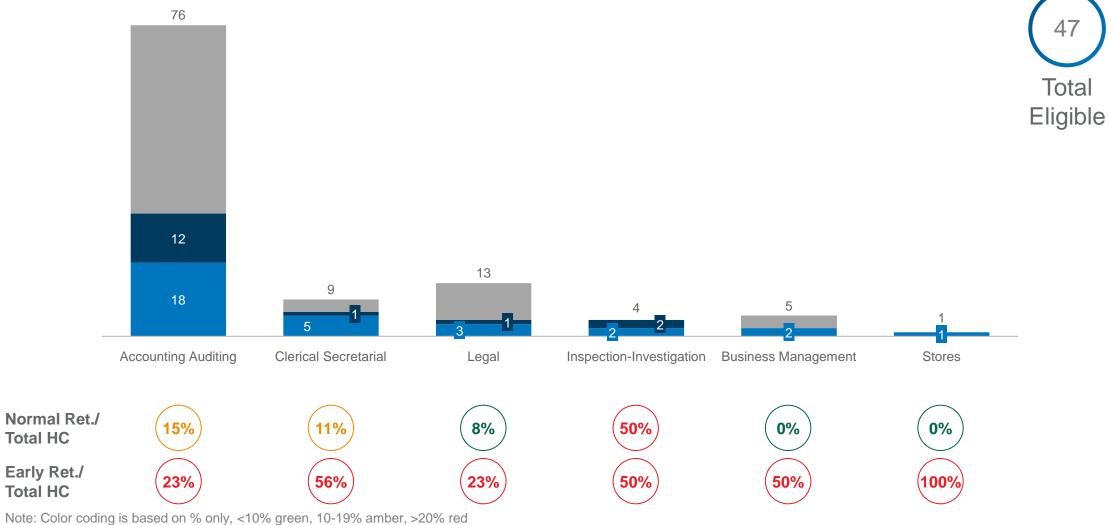
Department of Banking | Agency profile



^{1.} Personal services; 2. "Other" meaning the banking fund, both banking and insurance are funded by industry Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DoB | Large number of auditors eligible for retirement





Source: CT STARS database, BCG analysis

Ineligible Normal Eligible Early Eligible

DoB | Primary retirement surge risks





Retirement of senior leaders leads to loss of institutional knowledge for complex investigations

- E.g., auditing and financial activities
- Requires financial clerical staff that are at high retirement risk



Lack of resourcing for training means that examiners do not know how to use DoB systems

- Examiner staff do not have IT skills necessary to operate digitized systems when turnover happens
- Industry is changing dramatically demanding employees that are IT savvy



Highly trained inspectors facing significant retirement risk

- E.g.,100% of inspectors at risk for retirement
- Need to re-fill positions especially within Financial Institutions Division



Inadequate staffing level increasing risk of department acceleration loss

 Difficult to maintain adequate agency staffing levels to meet statutory and regulatory program requirements demanding more cross-training



Department of Banking | Identified opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Recognize other states' licenses	Cross-agency	Increase acceptance of out of state licenses to minimize banking applications to do business in Connecticut	Decreases number of audits required for multi- state banks, decreasing number of auditors needed
Migrate to Case Point from Concordance	Cross-agency	Eliminate personnel processing time and ensure document accuracy in preparation of legal cases	Decreases document processing time, freeing up valuable time of limited legal staff to case management
Pilot State Examination Systems	Cross-agency	Provide solution for document management, scheduling, billing and processing through piloting of examination program and electronic module	More efficient examination system will decrease document processing time straining clerical staff facing retirement risk
Increase banking examination coordination	Cross-agency	Coordinate examinations with both state and federal regulators to minimize regulatory burden and cost	L



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)

Department of Children and Families

Department of Children and Families | Agency profile



Program or department	Budget (\$m)		Type	FTE budge	et ¹ FTE ²	Description
Child Welfare Services	529.5 536 6.6	5.1	Program/ personnel/ grants	\$189.3m	2333	 Managing Careline – reporting service for child abuse Overseeing foster care, adoption, and subsidized guardianship Providing independent-living support to adolescents Contracting private non-profits to provide home/community support services (e.g. crisis response, substance use screening)
Behavioral Health Services	204.3 207.8		Program/ personnel/ grants	\$51.5m	641	 Providing in- and out-of-home psychiatric support and substance abuse treatment for children and families Operating children's psychiatric facility
Administration	42.7		Personnel	\$26.1m	364	 Setting guidelines for overall service management Providing central support functions (e.g. HR, IT)
Prevention	7.7 0.3 7.9		Program/ personnel/ grants	n/a	n/a	 Providing prevention services for child abuse via both direct provision and grants to community Running The Wilderness School program
Education	4.6 0.9 5.4		Program/ personnel/ grants	\$2.7m	26	 Managing school district for children requiring education in DCF-operated facilities Coordinating public schooling for children under DCF care Providing virtual and post-secondary educational opportunities
Total	\$788.8 m state \$11.2 m	federal \$25k other		\$269.6m	3364	

^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: Connecticut 2020-2021 Biennial Budget Program Addendum

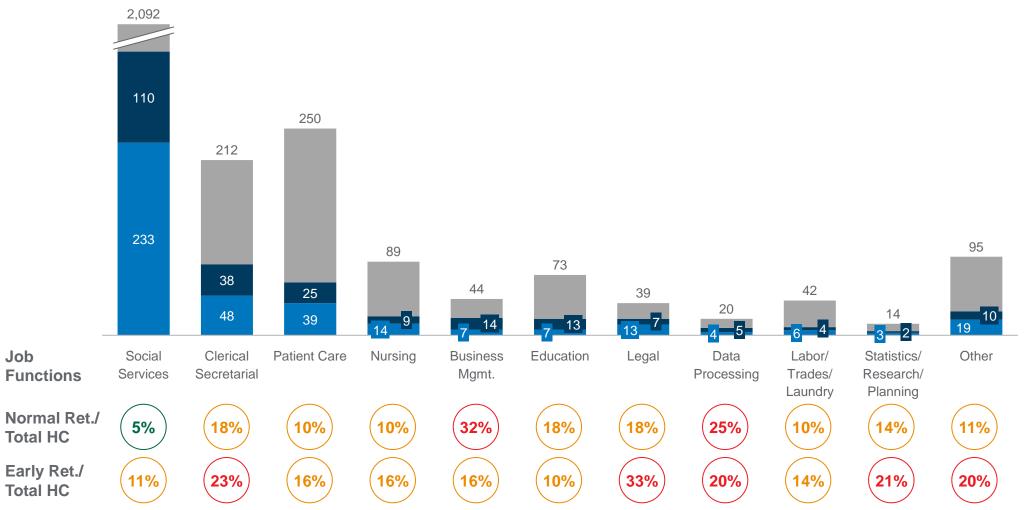
DCF | Business Mgmt. and Clerical Secretarial are most at risk of service loss



Total

Eligible

348



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



DCF | Primary retirement surge risk driven by need to comply with consent decree; potential for operational disruption and backfill challenges



Significant number of social workers and supervisors eligible for retirement; social services staffing levels mandated by consent decree

- Failure to fill positions could result in motion of contempt being filed against the state
- Backfill challenges anticipated due to lack of candidates with requisite field hours completed and high intensity of the work (see below)
- Significant hiring initiative from non-profit providers could disrupt provider operations



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Intense nature of client-facing positions (social workers and others) may complicate backfill efforts

- Positions involve high stress and liability
- Historically, state employees offered reemployment at DCF prefer other positions with same pay
- State compensation exceeds private sector for social workers, but for other positions such as psychiatrists the reverse is true

DCF | Opportunities to reduce overtime and adopt common platforms



Drivers		Observations	Challenges	Opportunities
Control overtime costs	overtime	 DCF's overtime expenditure (as share of total employee pay) is higher than peer states Manual cross-agency referral process, unnecessary investigations reduce case worker capacity 	adjustmentsRigorous data sharing agreements required between agencies for	 Reduce overtime expenditure using DDS efforts as potential roadmap Automate cross-agency referral process
\rightarrow	Streamline service provision across agencies	DPH administers multiple programs supporting pregnant women, mothers, and children	 High political sensitivity around optics of care provision for young children and families Funding structure for federal programs could complicate program consolidation/joint administration 	Coordinate administration of DPH programs
	Establish common agency platforms	Functions such as grant- making/administration, eligibility determination, and program monitoring/evaluation are often manual and duplicated across HHS agencies	 Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	agenciesExpand use of ImpaCT for eligibility
	Evaluate sourcing for services	Non-profit providers offer foster care services at lower cost per worker	 Privatization efforts in other states often compromised service quality Potential consent decree constraints Likely union resistance to privatization 	Limited opportunity due to quality concerns, constraints, and resistance

DCF | Identified opportunities (1 of 2)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specifi number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Reduce overtime	Agency-wide	 Training managers to better manage overtime could reduce cost while maintaining coverage Shifting to a 9-day work week could manage absenteeism currently used to game the system DDS efforts can serve as roadmap 	M \$1-2m in potential savings
Implement statewide background check system for hiring	All HHS agencies	 A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies 	M
Expand use of ImpaCT for eligibility determination	All HHS agencies	 ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs DCF and DSS collaborate closely on eligibility 	DCF-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies DCF has second-highest number of dedicated positions among HHS agencies behind DSS Centralization could improve impartiality and sharpen focus on low-performing programs 	DCF-specific savings depend on extent of centralization









DCF | Identified opportunities (2 of 2)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Reduce incorrect reports of abuse	Child Welfare Services	 Improving community training and resources to equip reporters (e.g. teachers) to better identify potentially abusive situations could reduce time/resources deployed to investigate "false alarms" and increase case worker capacity 	L
Automate cross-agency referral system	Behavioral Health Services & Child Welfare Services	 Referrals from DCF to other agencies are currently a highly verbal process conducted by case workers Cross-agency systems would help case workers better understand opportunities for referrals and streamline process, creating additional capacity 	
Coordinate administration of DPH's Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative in Medical Health and Wellbeing Services		 CYSHCN provides health, education, and recreation service coordination, payment for services, and family respite for income-eligible children under 21 at elevated risk for chronic physical, developmental, behavioral, or emotional conditions Housing CYSHCN in Medical Health and Wellbeing Services could improve coordination and resident outcomes while reducing administrative and program costs overall 	L
Consolidate administration of Save Haven Act for Newborns with DPH support programs for at-risk pregnan women and new mothers	Child Welfare Services	 DPH administers multiple support programs for at-risk pregnant women and new mothers: Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides food, healthcare referrals, nutrition education, and breastfeeding support for low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional ris Healthy Choices for Women and Children Home provides visits, need assessments, education, and service referrals for pregnant/postpartum women residing in Waterbury who use or are at risk of using substance Consolidating administration of these programs with that of Save Haven Act for Newborns could improve coordination and resident outcomes while reducing administrative costs 	Major impact (> \$5m or addresses
Source: DCF input: FY2020-20	21 Biennial Budget Progra	m Addendum; BCG analysis	Low impact (<\$1m)

Department of Consumer Protection





Program or department	Budget	Type	FTE budget ¹ FTE	Description
Regulation of Consumer Related Industries	6.8 0.3 5.7 12.8	Program	\$6.0m 113	 Regulating all persons and businesses of consumer related industries Conducts inspections and effectiveness checks Enforces consumer safety laws, responds to crisis during emergencies, and monitors divisions (e.g. food standards, drug control, liquor, gaming, casino, lottery)
Regulation of Trade Practice and Occupational/ Professional Licensing	3.2 0.7 3.9	Program	\$3.1m 42	 Enforces licensing obligations for occupational and professional trades Protect consumers and businesses by preventing unfair and deceptive business practices Trade practices, recalls, fraud, occupational/professional licensing, and administer testing procedure
Agency Management Services	4.4 1.7 6.1	Admin	\$4.2m 94	 Coordinate and administer policies and programs Identify priorities by anticipating marketplace problems and alert citizens to consumer news Consists of legal, license, administrative, accounting, and technical systems services
Total	\$14m state <\$1m federal \$9m other		\$13.3 249	

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

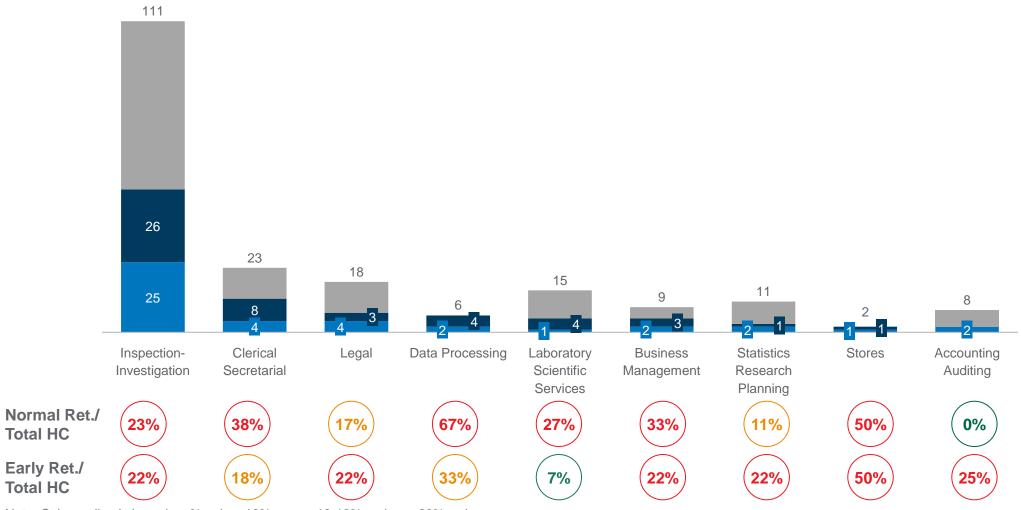
^{1.} Personal services

DCP | Large number of inspectors eligible for retirement



Total

Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

Ineligible Normal Eligible Early Eligible

DCP | Primary retirement surge risks





Challenge in hiring managerial staff and maintaining existing managers

- E.g., unions and salary compression is a huge problem
- High retention of managerial positions bring risk that others leave the department frustrated de-stabilizing organizational functioning



Retirement of inspectors leads to loss of niche institutional knowledge for particular industries

- E.g., food and standards, liquor control, gaming investigations
- Skilled nature of the work makes getting refills more challenging staggering work



Highly technical data processing capability at risk due to retirements

- E.g., 100% of data processors at risk for retirement
- Need to re-evaluate job classifications as remaining skills not well matched to future technology needs

DCP

DCP | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand common professional credentialing platform	Cross-agency	 Expand credentialing and enforcement resourcing to take on more activity. Credentialing duplication across the state which would be better housed at DCP 	Reduces duplicative inspections, decreasing number of inspectors and dedicated time needed to activity
De-credential low risk professions	Cross-agency	 Identify creative ways to minimize industry resistance for de-credentialing initiatives 	Removing processing time for low-risk professions will free time credentialing time for inspectors
Strategically target inspection activity	Cross-agency	Target inspections based on likelihood of non-compliance pushing against legislative barriers	Targeting of inspections based on level of risk will minimize dedicated enforcement staff



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)

DCP inspection job titles for consolidation opportunity addressing service risk ~22% of inspection FTE at risk for retirement

Inspection types		# of people	# of job titles1	
	Liquor	• 8	• 3	
	Food	• 16	• 1	
<u> </u>	Gaming (Casinos)	• 10	• 1	
\$	Gaming (Lottery)	• 10	• 2	
	Investigations	• 11	• 1	

Potential to merge

- Opportunity to cross-train as inspections take place at similar location sites e.g. grocery store
- Liquor control agents have variant job codes fluctuating based on level of expertise
- Food inspectors span across weights and measures (fuel), unit/item pricing and nonalcoholic beverages
- Involve same skill set to inspect varying types of games e.g. gaming regulation compliance, gaming regulation and drawing
- Physical inspections at casinos are close in location and enforcement type to use smaller FTE pool (<15 miles apart)
- Occupational trade inspectors of professional trades require additional level of expertise; as such, should remain siloed
- Consistent job codes across inspectors

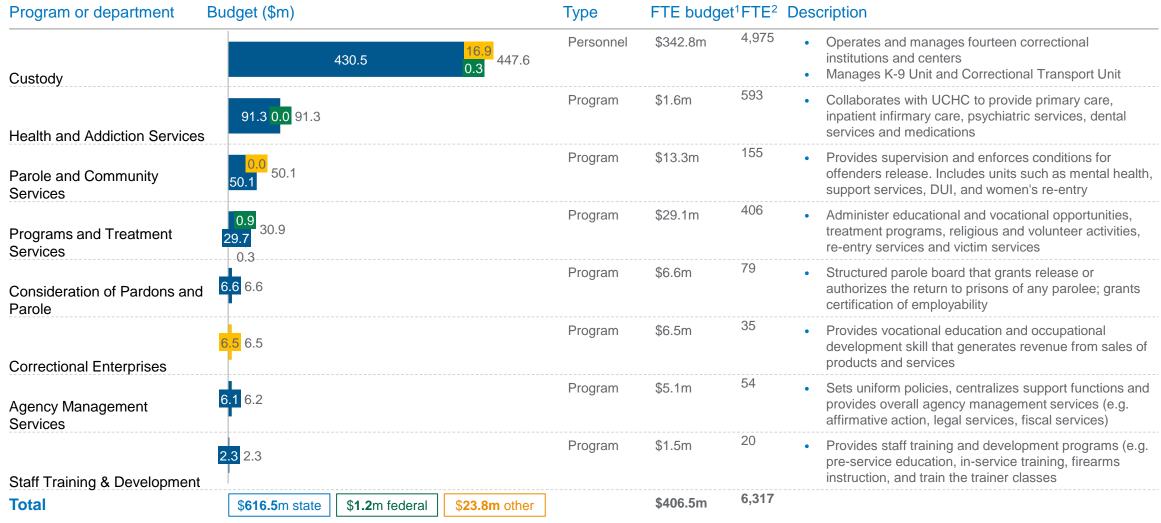
Potential cost savings opportunity of ~\$1m if inspections are consolidated across divisions. Other advantages include removal of duplicative inspections, utilization of knowledge sharing and minimizing of dedicated FTE. However, any changes to the job classifications would need to be bargained

¹ Classifications do not consider managerial or supervisor job codes Note: Inspection/investors make up the majority of DCP FTE and are most at risk for service loss Source: Department of Consumer Protection Org Chart, October 1, 2020; CT STARS database, BCG analysis

Department of Corrections

Corrections Department | Agency profile





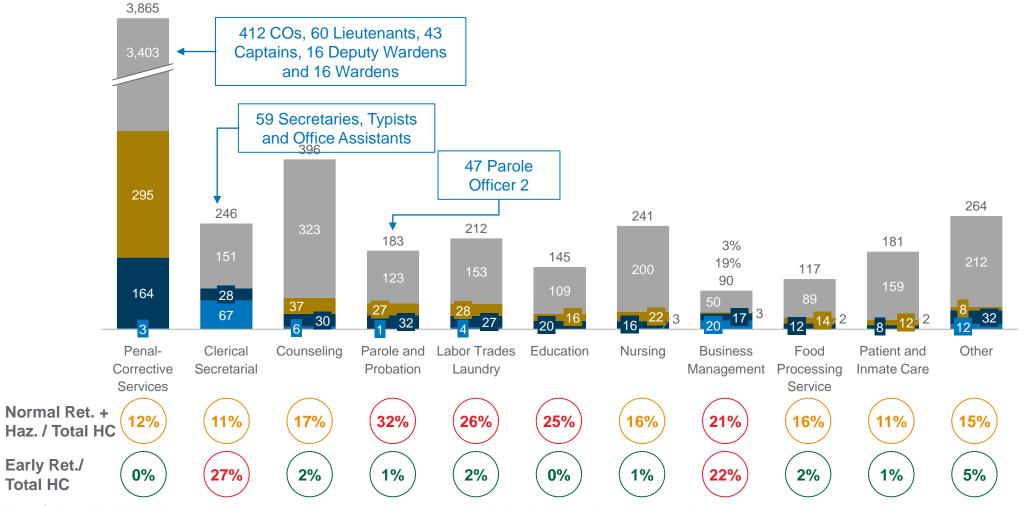
^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DOC | Penal-Corrective Services and Clerical Secretarial are most at risk of service loss



Total

Eligible



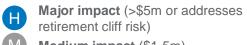
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Includes hazardous duty eligible employees. Source: CT STARS database, BCG analysis

Ineligible Hazardous Eligible Normal Eligible Early Eligible



DOC | Opportunities identified for Department of Corrections (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact		
Return corrections staffing to previous level	Custody	Accept CO retirement to return ratio of CO/inmates to pre-Covid levels	\$34m, addresses retirement risk for COs		
Re-base healthcare costs	Health and Addiction Services	 Review sourcing of health services (e.g., dental services, mental health services, primary care services) Change scheduling to reduce reliance on overtime without increasing FTE 	Depends on future prison population		
Decrease imprisoned population	Custody	 Reform bail rules (e.g., lower or end use of cash bail) to reduce jail population Increase use of recidivism and diversion programs to reduce prison population in medium term 	H Depends on degree of reform		
Lower facility costs with by reducing footprint	Custody	 Consolidate correction facilities to achieve a facility occupancy rate of ~56% 	\$3m, addresses retirement risk for maintenance staff		
Demand response for utilities	Engineering	 Utilize existing facility generators to participate and receive payment in demand response programs. 	L		
Increase EAU staffing	EAU	 Increase EAU staffing and personnel to provide timely and responsive interventions and peers support services. 	L		
Better use trades reserve	EAU	 Hire a reserve of tradespeople to draw from as critical staff retire in order to maintain essential services 	L		
Improve training for peer counselors	Cross-agency	 Enhance training opportunities for peer counselors specific to LE/correctional professionals, thereby improving efficacy of recidivism programs 	L		
DAS-FMLA dedicated staff	Cross-agency	Assign one dedicated DAS - FMLA staff to work with EAU for continuity of care- minimize duplications and increase efficiencies	L		



M Medium impact (\$1-5m)





DOC | Opportunities identified for Department of Corrections (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand videoconferencing infrastructure	Custody Health and Addiction Services	 Expand use of remote technology will reduce the need for inmate transportation and will decrease costs by reducing vehicle use and staff resources required 	L
Upgrade inmate record keeping	Custody	 Upgrade system for maintaining inmate records to save time and cost by reducing FOI complaints 	L
Electronic invoicing	Cross-agency	Automate accounts payable function through electronic invoicing	L
Direct Deposit	Health and Addiction Services	 Require state employees to have direct deposit to receive pay and petty cash payments 	L
Payroll consolidation	Cross-agency	 Centralize payroll functionality (for Department of Corrections and other agencies) into OSC or another agency 	L
Decrease imprisoned population	Custody	 Reform bail rules (e.g., lower or end use of cash bail) to reduce jail population Increase use of recidivism and diversion programs to reduce prison population in medium term 	L



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)

Four main cost drivers could lead to significant savings in Corrections

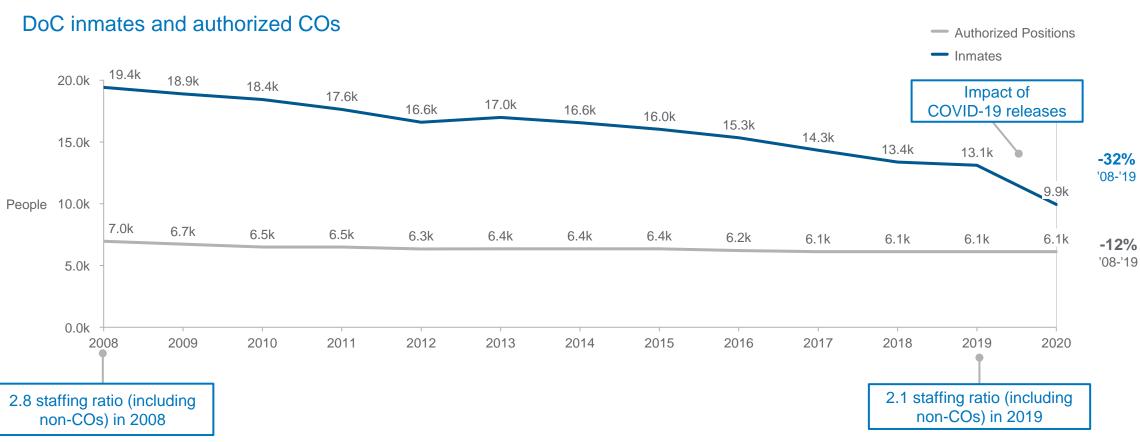
5,946 FTE, \$640m in annual costs

Cost D	rivers	Observations	Potential opportunity	Challenges			
ÛÛ	Imprisoned population	 Imprisoned population per capita higher than neighbors (252/100k vs MA 145/100k) NY, NJ recently enacted bail reform One of four integrated jail/prison systems in US 	 Change bail rules (e.g., end cash bail) Increase use of parole Reduce recidivism rate through prevention programs 	 Political capital needed to engage in crime Rate of return varies; many show results immediately or in 1-2 years 			
	Facility costs	 14 facilities total 56% total occupancy rate¹ Oldest facility dates to 1820, facility costs range from \$4-16k/inmate 	 Shut down three facilities, increasing occupancy rate Reduce facility upkeep and maintenance costs 	 Political considerations Corrections facilities are often major employers in small communities 			
	Staff costs	Staffing ratio of 2.8 inmates/CO compared to 3.6 in pre-COVID and national average of 4.0	Combine facility changes with moving staffing ratio toward national average	 High staffing ratios tied to employee safety Labour issues 			
	Healthcare costs	 Healthcare costs slowly decreased from ~\$90m in 2014 to ~\$82m in 2019 Prison population decreased by 20% from 2014 – 2019 	Change prison healthcare model to contracted-provision or hybrid				

1. Pre-COVID (2019)

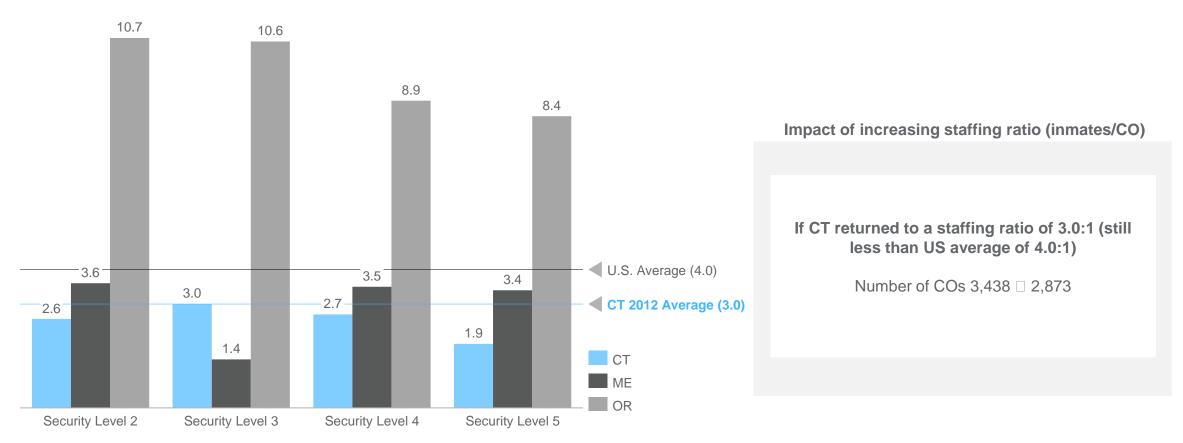
Source: Connecticut 2020-2021 Biennial Budget Program Addendum

Prison population has declined over the past decade to less than 10,000 at the end of 2020



Source: Source: OPM, Corrections Sub-Committee Report facilities tab, BCG analysis 2) 2008 and 2019 staffing ratio taken from DOC website: authorized positions/incarcerated inmates.

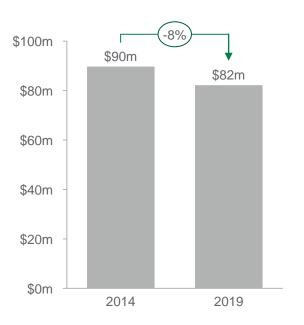
Connecticut staffing ratio lower than peers; potential to return to previous staffing ratio (still lower than national average) through accepting CO retirements



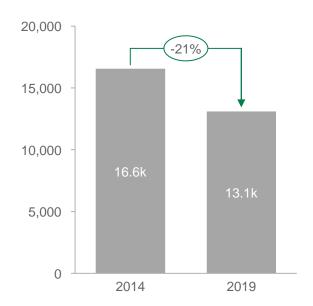
¹⁾ Staffing ratio: 2020 DOC filled staffing spreadsheet. Inmates/CO+Warden = Staffing ratio. 2) Cost savings = (Current Staffing – Proposed staffing) * average CO salary (\$64,000) Source: 1) 2019 Inmate Population taken from Subcommittee spreadsheet. All documents were provided by DOC budget analyst 10/7/2020. 2) 2008 & 2012 CO from https://www.correctionalofficeredu.org/connecticut/

Healthcare spending | Health costs declining slower than inmate population

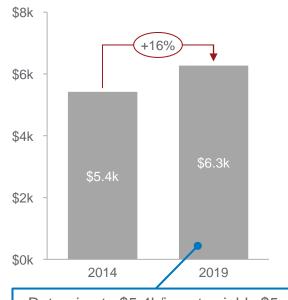
Prison healthcare costs have decreased by 8%...



...while inmate population has decreased by 21%...



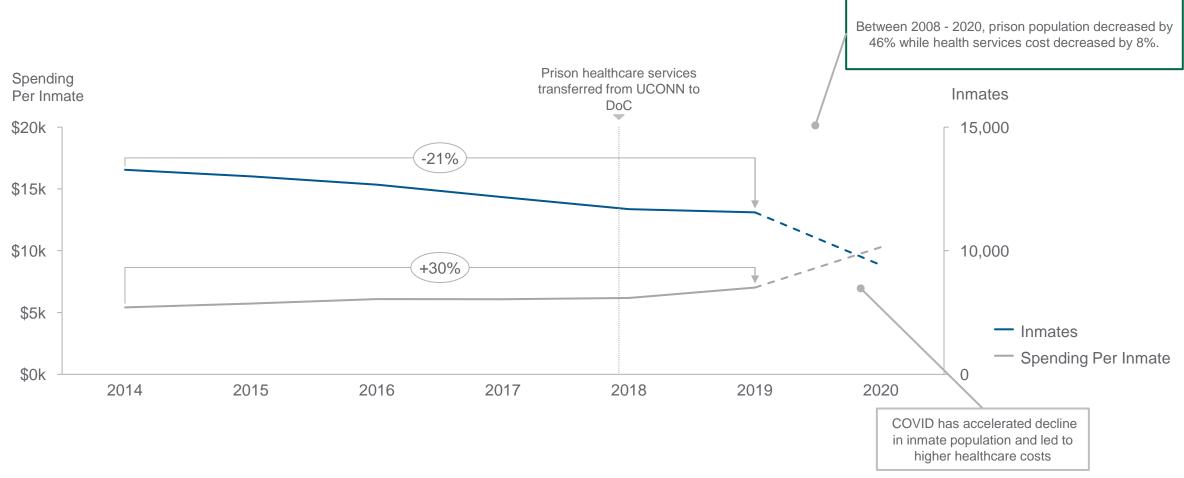
..resulting in 16% greater healthcare cost per inmate



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Returning to \$5.4k/inmate yields \$5-10m savings. If inmate numbers continue decline, savings are greater

Healthcare spending | These trends observed over past five years and potentially accelerated by COVID-19



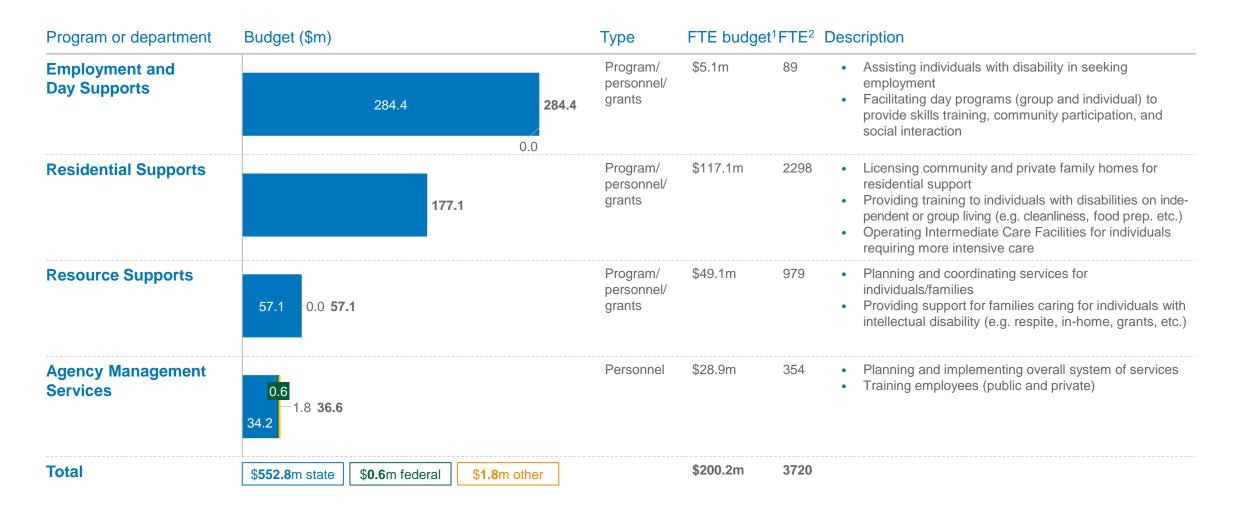
Source: 1) Inmate population taken from CT DoC website https://portal.ct.gov/DOC/Report/Number-of-Authorized-Positions, 2) Health services budget taken from CT biennial budget for respective years.

Note: Spending per inmate (health services budget/ no. of inmates)

Department of Developmental Services







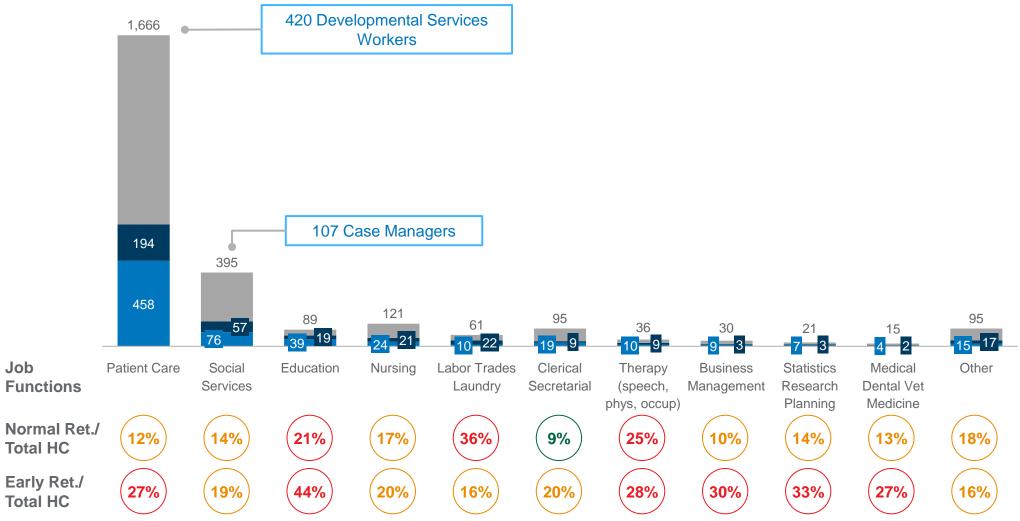
^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: FY2020-2021 Biennial Budget Program Addendum

DDS | Patient Care and Social Services are most at risk of service loss



Total

Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



DDS | COVID-related retirements and wide-ranging backfill challenges may exacerbate impact of 2022 retirement surge



COVID has accelerated departures of senior staff – retirements may continue to increase until 2022 deadline

- Some senior staff have already begun to leave due to pandemic-related concerns
- Overall, management workforce has declined significantly over multiple decades (30-40% decrease since 2002)



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



DDS experiences backfill challenges across a range of job functions

- Interest in management roles has declined, particularly from people who have been trained for the roles
- Higher private sector compensation complicates recruiting efforts for nurses and other clinical positions
- Recruiting for direct-care positions draws heavily on private providers, which often frustrates providers



DDS | Opportunities to evaluate sourcing, control overtime, streamline service provision, and pursue common platforms and digitization

Drivers		Observations	Challenges	Opportunities			
	Evaluate sourcing for services	 Majority of CT group homes are privately operated Non-profit providers operate group homes at lower cost than CT while maintaining service quality 	 Conversion to non-profit operation could disrupt resident experience Potential union resistance CT need to remain provider of last resort 	Expand non-profit operation of group homes			
ÛÛ	Control overtime costs	 DDS' overtime expenditure (as share of total employee pay) is higher than peer states DDS has already had success in reducing overtime expenditure 	 Likely union resistance to additional overtime adjustments More extreme efforts may be required to reduce costs beyond levels already achieved 	Pursue further reduction of overtime, expanding on current efforts			
\Rightarrow	Streamline service provision	 There is significant overlap between services offered by DDS and ADS Multiple programs across agencies offer similar service types 	 Need for some degree of specialization based on different needs of resident groups Potential political sensitivity 	Consolidate/jointly administer employment support and independent living programs across DDS and ADS			
	Establish common agency platforms	Functions such as grant- making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies	 Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	 Establish central grant hub for HHS agencies Utilize ImpaCT for eligibility determination Centralize program monitoring and evaluation for HHS agencies 			
	Digitize/ automate manual processes	Several frequent processes at DDS require substantial manual effort and could be digitized/automated	 Initial investment likely required Technical complexity Potential updates needed to existing data sharing agreements 	 Digitize Individual Service Plans and eligibility applications Automate payment tracking and Affirmative Action reporting 373 Digitize contact information maintenance 			



DDS | Identified opportunities (1 of 3)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand use of non-profits for group homes	Agency-wide	 Majority of CT group homes are privately operated Non-profit providers operate group homes at substantially lower costs while maintaining similar service quality Potential challenges include disruption to residents, union resistance, need for state to remain "provider of last resort", and revenue loss 	H Potential annual savings of \$8m+ and reduced need to backfill retired positions, depending on degree of privatization
Establish central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specifi number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Reduce overtime	Agency-wide	 DDS accounts for ~15% of statewide overtime spend Share as % of total pay is higher than peer states Ongoing efforts can be expanded to further reduce overtime 	M Potential savings of \$3-5m+
Consolidate employment support programs for people with disabilities within DDS Employment Opportunities and Day Services	Employment Opportunities and Day Services	 Both DDS and ADS offer wide-ranging vocational support to people with disabilities, including skills training, employer advocacy, long-term support, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	M Potential overall savings of \$2-5m+
Consolidate Independent Living Program, Individual Home Supports, and Congregate Housing Services Program within ADS	Residential Supports	 Both DDS and ADS offer a range of supportive housing services, including skills training for independent living, housekeeping, transportation, and more Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs 	Potential overall savings of \$1-3m+
3			Major impact (>\$5m or addresses

Source: DDS and OPM input; CT STARS data; CT Program Review and Investigations Committee study; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum; BCG analysis



retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)



DDS | Identified opportunities (2 of 3)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Utilize ImpaCT for DDS eligibility determination	All HHS agencies	ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs	M DDS-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DDS-specific savings depend on extent of centralization
Implement statewide background check system for hiring	All HHS agencies	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies	M
Implement online portal for Individual Service Plan	Agency-wide	 12k+ Plans a year are developed in conjunction with service providers and with input from the individual and guardian, requiring signed approvals Efficiency benefit for staff as well as improved access and usability benefit for beneficiaries, families/guardians, and providers (if applicable) Providers would see a particular benefit in licensing checks that often cite missing documentation. 	
Implement online service eligibility application	Agency-wide	 Eligibility applications received in paper and scanned into FileBound scanning system (avg. 750/year) Applicants/families/guardians cannot access information or status Online centralized application with smart prompts could generate efficiencie for staff and improved access for residents for multiple agencies, and serve as short-term solution until ImpaCT able to expand support 	

Source: DDS and OPM input; CT STARS data; BCG analysis



DDS | Identified opportunities (3 of 3)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Automate DDS payment/payment tracking system	Agency Management Services	 Monthly payments are manually entered into accounts in CORE Automated payment and payment tracking system would reduce or eliminate manual process work for agency staff while allowing provider business owners to monitor and track as well as report on payments from state 	e L
Digitize cross-agency contact information maintenance	Agency-wide	 Case Managers review contact information annually Identity information could be managed across agencies/platforms and kept better up to date 	L
Automate Affirmative Action reporting	Agency Management Services	 Creation of the Affirmative Action Plan requires extensive analysis of conditions in the employment market on annual basis Automation of Affirmative Action reporting across agencies could benefit agency staff and increase capacity within EEO offices to proactively work towards achieving goals 	L



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)

Office of Early Childhood

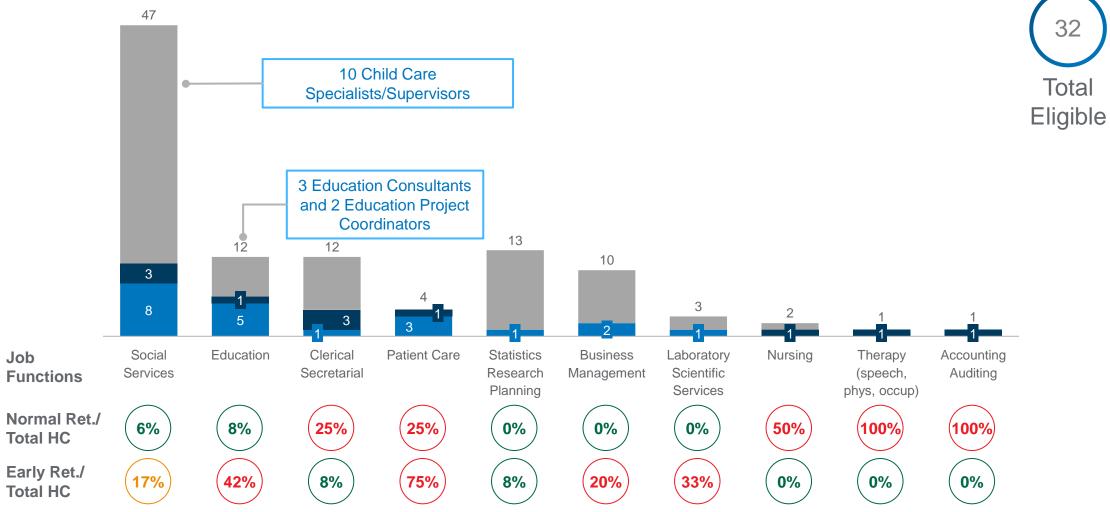




Program or department	Budget (\$m)		Type	FTE budg	get ¹ FTE ²	Description
Early Childhood Education Program	240.7	114.8 <mark>0.5</mark> 356.0	Program/ personnel/ grants	\$8.7m	141	 Facilitating access to child care and early education via community funding Providing joint education to parents and young children in new/at-risk families Licensing and monitoring child day care programs, youth camps, etc.
Total	\$240.7m state \$114.8m fe	deral \$0.5m other		\$8.7m	141	

OEC | Social Services and Education are most at risk of service disruption





Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021



OEC | 2022 retirement surge likely to lead to significant loss of institutional knowledge; coincides with anticipated increase in federal funding



OEC risks losing significant institutional knowledge due to retirements of senior staff such as:

- CCDF administrator (already retired, currently working 12 hours a week)
- Birth to Three program director
- Licensing division head
- Grants and contracting specialist



OEC is administratively lean, amplifying impact of individual retirements

- OEC utilizes staff from other HHS agencies such as DMHAS, as well as outside vendor United Way
- Grants and contracting specialist is currently responsible for ~900 contracts



Anticipated 2021 increase in federal funding likely to increase workload across OEC

- Total federal dollars for early childhood funding received by Connecticut could double
- Early childhood activities remain a key political focus



OEC | Opportunities to adopt common platforms and pursue further digitization

		Observations	Challenges	Opportunities			
	Establish common agency platforms	 Functions such as grant- making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies 	 Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	 Establish central grant hub for HHS agencies Utilize ImpaCT for eligibility determination Centralize program monitoring and evaluation for HHS agencies 			
	Digitize/ automate manual processes	OEC has successfully digitized/automated a number of manual processes, with additional initiatives in progress	Initial investment likely requiredTechnical complexity	Add live fingerprint scans for background checks			



OEC | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specifi number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Implement statewide background check system for hiring	All HHS agencies	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies	M
Further realign early childhood activities into common agency	Multiple HHS agencies	 Close collaboration between OEC and other human services agencies Further realignment of various functions could simplify and improve resident experiences, streamline provider interfaces, improve policy coordination, and generate administrative efficiencies 	
Utilize ImpaCT for eligibility determination	All HHS agencies	DSS ImpaCT platform already partially supports eligibility determination for OEC and could be scaled up to support additional programs	M OEC-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	OEC-specific savings depend on extent of centralization
Transition to quality-rating- based site regulatory system for childcare		 Currently, 100% of programs visited at least once a year. Shifting to 25% of programs being visited every 3 years, 15% being visited every two years, and 60% being visited every year and reassigning staff accordingly could result in ~10% licensing staff savings 	Major impact (>\$5m or addresses retirement cliff risk) Medium impact (\$1-5m)

Source: OEC and OPM input; CT STARS data; FY2020-2021 Biennial Budget Program Addendum; BCG analysis







OEC | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Utilize Citizen One Stop for resident call support	All	 Receiving resident calls estimated to result in ~30% reduction in call volume to United Way and simplify system for residents CCDF funds could be applied elsewhere as needed 	e L
Utilize mobile inspections	All	 Replace current paper forms and reduce travel time for licensors Potential for real-estate cost reduction due to licensers no longer needing office space to process paperwork 	L
Automate grant reporting activities	All	 Majority of OEC budget is from federal grants – meeting requirements requires significant effort Providers often produce multiple reports for different programs OEC using Preschool Development Grant to develop program reporting software and automate data reports 	L
Add live fingerprint scans for background checks	Multiple HHS agencies	 Reduce need to mail cards, re-process unusable submissions, etc. Could be incorporated into state-wide background check system 	L



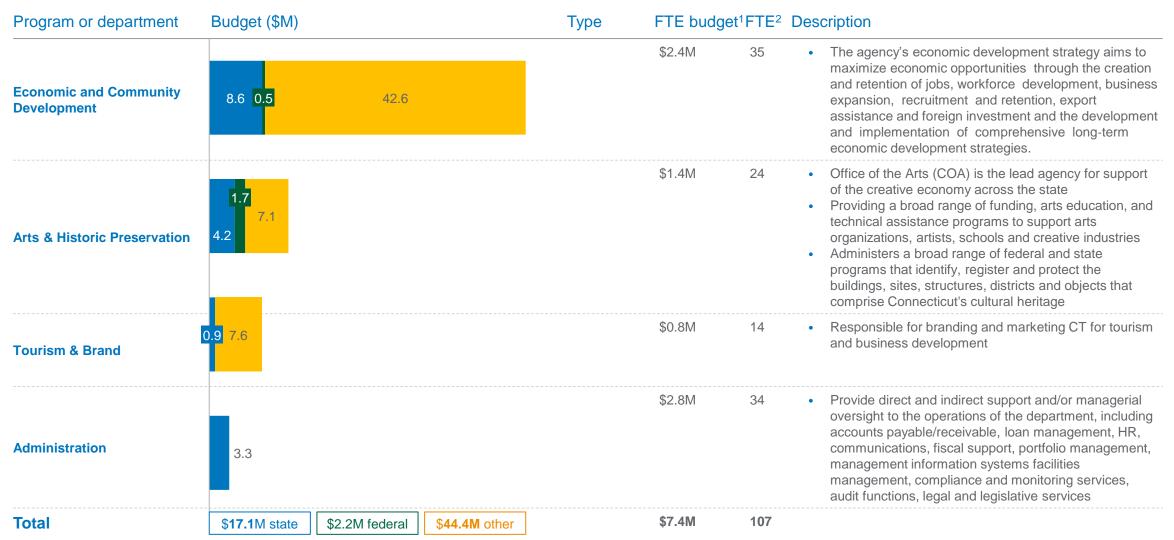




Department of Economic & Community Development

Department of Economic and Community Development | Agency profile





^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point; Source: Connecticut 2020-2021 Biennial Budget Program Addendum

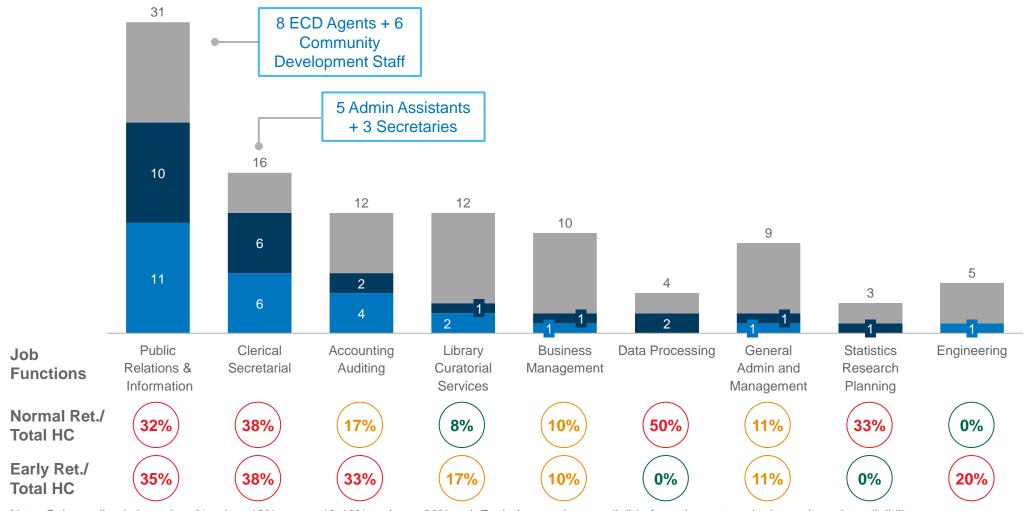
DECD | ECD Agents and Clerical Secretarial workers are most at risk of service disruption



Total

Eligible

386



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Department of Economic & Community Dev. | Operational opportunities



Department of Economic and Community Development

Program or department	Budget	FTE	ID	Hypotheses			FTE	impact	Bud	get impact
Economic & Community Development Program	\$51.8m	35		Ending Film & Digital Media Production Credits	•	In 2018, DECD awarded tax credits totaling \$128.8mm with income and sales tax return estimates of \$0.23 per dollar of credit ¹	•	TBC	•	\$157M in FY20 credits
Administration	\$3.3m	34		Digitize processes		Implementing digitization techniques (cloud storage, OCR, RPAs, self-guided dashboards, blockchain monitoring) to automate processes Integrate with DRS and DOL data to automate tracking of recipients and success/compliance (i.e., jobs created, minimum salaries, etc.)		5-10 FTEs	•	< \$1m
Economic & Community Development Program	\$51.8m	35		Centralize grant making	•	Consolidate onto a single platform to increase efficiencies and mitigate overlap	•	10% = 5 FTEs	•	< \$1M
Economic & Community Development Program	\$51.8m	35		Outsource activities to non- profits (Advance CT)		Mitigate backfilling needs (48% eligible for retirement) by outsourcing activities to non-profits, notably AdvanceCT ~50% of grants awarded to 8 recipients, 90% of grants awarded to 9% 719 of recipients	•	TBC	•	TBC
Economic & Community Development Program	\$51.8m	35		Tax incentives provided post-job creation	•	Rather than providing job upfront tax incentives, move to reimbursements of state income taxes paid post-creation	•	N/A	•	TBC
Tourism and Brand	\$8.6m	14		Right-size staff given usage of outside vendors	•	14 FTEs on Tourism and Brand program while utilizing 2 agencies, all with flat increase in perception of State	•	3-4 FTEs	•	< \$1m
Total								20+ FTEs		\$2m+

DECD | 48% of employees eligible for retirement, creating need to streamline

Program	Budget (m)	Cost/job created	State net revenue and ROI	Other outcomes
CT Aerospace Reinvestment Act (UTX/RTN)	\$400m authorized \$335m earned 2015-19	N/A (not measured) ⁴	N/A (not measured) ⁴	New HQ builtNew labs, infrastructure, R&D
Special Act (LMT)	\$220m awarded \$5.7m in 2019	1,126 new jobs \$27,000/job	\$6.4m in 2019 112% ROI	
Stranded Tax Credit/ Sales and Use Tax Offset	\$50m authorized \$6mm awarded ²	N/A	\$27.4 over 10 years ³ 55% ROI	
Urban & Industrial Site Reinvestment Tax Credit	\$950m authorized \$450m awarded since 2010	~34,000 new jobs \$13,000/job	\$284m since 2010 63% ROI	Broad array of industries benefitted
Film, TV and Digital Media Tax Credits	\$730m since 2010 \$157m awarded in 2019	3,500 jobs per year \$45,000/job	(\$680m) since 2010 (193%) ROI	Stimulated investment in education
Insurance Reinvestment Fund Tax Credit	\$170m credits issued since 2011	N/A (not focus)	\$20m since 2011 12% ROI	Broad array of industries benefited
Property Tax Abatements (Enterprise Zones)	\$3m in 2019	N/A (not focus)	~\$10m per year 333% ROI	 Investments in underdeveloped areas
Direct financial assistance	\$146m provided in 2019 \$1.4bn portfolio	6,000 jobs/year \$24,000/job	\$132m since 2010 9% ROI	\$6bn non-DECD funds (4.2x leverage)

Potential opportunities to improve outcomes

- Outsource programs/initiatives to non-profits (AdvanceCT) to avoid need to back-fill retirees onbalance sheet (48% eligible)
- Implement data sharing with DRS and DOL to automate grant recipient performance and compliance monitoring
- Ensure Abatement program does not present double-dipping with federal Opportunity Zones
- Validate value of Film, TV and Digital Media Tax Credit program, and potentially modify Insurance Reinvestment Act

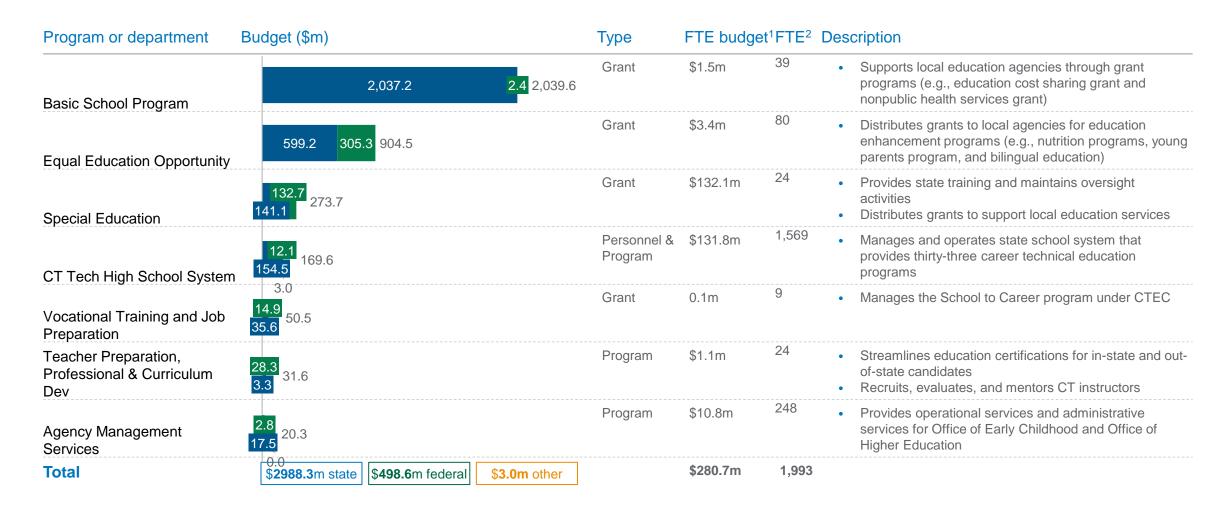
Source: 2019 DECD Annual Report

^{1.} Includes income and sales taxes 2. Program authorized to award \$50m, but only 1 application approved 3. Projected—does not have sufficient data 4. 17,000 total jobs in CT with \$1.9b total payroll

State Department of Education







^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point

Source: Connecticut 2020-2021 Biennial Budget Program Addendum

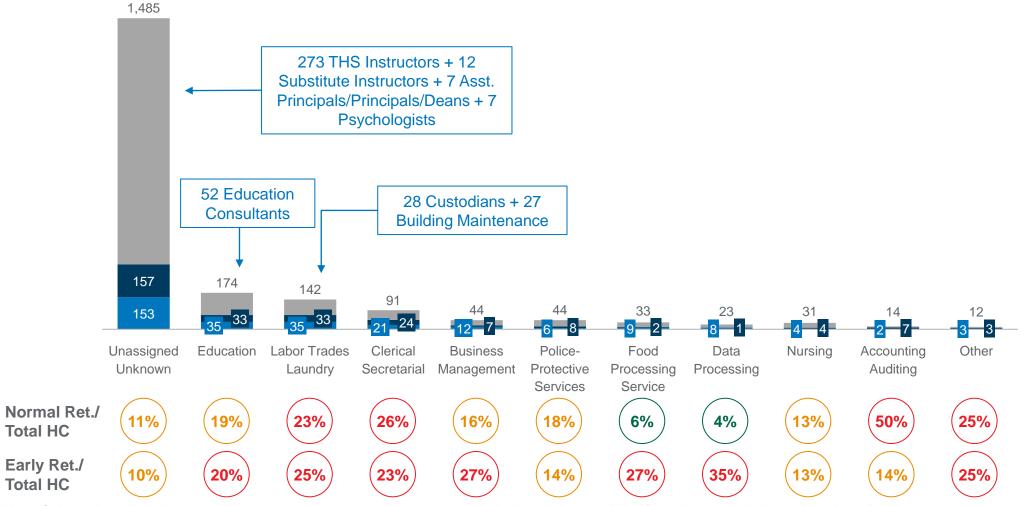
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Total

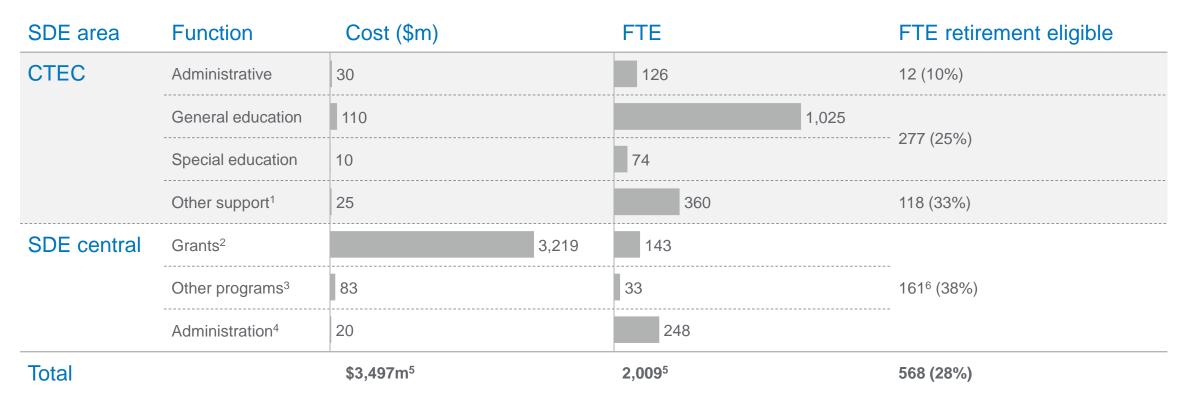
Eligible

SDE | Initial view is THS instructors, education consultants and building maintenance/custodian workers are most at risk of service loss



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database, BCG analysis

Grants are the bulk of SDE's budget, but most staff and retirements are in CTEC



^{1.} Includes functions such as guidance counselors, nurses, social workers 2. Basic School Program, Equal Education Opportunity and Special Education 3. Non-CTEC vocational training, teacher preparation 4. Agency management services 5. Number does not tie to programmatic budget (difference of \$7m and 16 FTE) due to use of CTEC actuals 6. Includes professions 'Education', 'Clerical', 'Business management', 'Data processing', 'Accounting' and 'Other' Note: Includes federal and state funding

SDE Primary Risks



CTEC instructors are state employees; limited opportunity to decrease CTEC staffing and share non-vocational instructors with municipalities



CTEC central office is lean; limited capacity to centralize CTEC administrative services for each school



SDE manages back office support for other departments (e.g., OHE and OEC); limited capacity for current administrators



Grant distribution and reporting is highly time consuming due to a lack of streamlined process; limited opportunity to decrease reporting due to policy requirements



CTEC management is highly time consuming keeping central admin from primary SDE responsibilities (e.g., grant disbursement and management); make CTEC and independent department (currently underway)

Greatest opportunity from matching benchmark class sizes and centralizing administrative functions

Drivers		Observations	Potential opportunity	Challenges
وَ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْمُوافِينِ الْم	High school instructors	 Student/teacher ratios currently at 11 students per instructor, lower than CT average With retirement surge, student/teacher ratios wing reach 12.4 (more in line with CT districts) 	by sharing staff across CTEC schools and sharing non-vocational staff (e.g., English) with	numbers and maintain program viability CTEC employees are state employees,
	Administrative costs	 Administrators represent 11% of CTEC school staffing, compared to <5% of similarly sized districts in CT 	 Centralize administrative services as a district rather than in individual schools 	Central office already lean; will require organization re-structure to increase central office capacity
	Program rationalization (covered previously)	Most programs at scale (>100 students total or >20 students at an individual site)	 At a school level, rationalize classes with student enrollment <20 At a program level, rationalize programs with student enrollment <100 Limited opportunity (<\$1m in savings) 	Program consolidation creates political complexities regarding access to education





Opportunity	Program impacted	Detail	Retirement or efficiency impact
Accept CTEC instructor retirements	CTEC	 Existing student teacher ratios greater than CT districts; allow CTEC instructor retirements without replacing educators 	\$10-15m in savings; addresses retirement risk of CTEC instructors
Centralize CTEC administrative services	CTEC	 Centralize administrative services as a district rather than in individual schools to save on cost of back office support functions 	\$5-10m in savings; addresses retirement risk of CTEC support staff
Streamline "purple sheet" document review process	Agency Management	 Administrative staff process large numbers of documents; high retirement rate expected 	M
Continue automation of certification processes	Agency Management	 Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	M
Standardize contracts and streamline online grant approval process	Agency Management	Performed by administrative staff; high retirement rate expected	L
Rationalize programs	CTEC	Rationalize programs with <100 students and classes with <20 students	L <\$1m in savings
Auto-refill CTEC positions	CTEC	 Acquire OPM approval for auto-refilling specific CTEC positions (e.g., coaches, nurses, kitchen staff) 	
Decrease telework paperwork	Cross-agency	 Decrease the telework paperwork consists of multiple pages that are required to be filed in individual personnel files. 	

Major impact (>\$5m or addresses retirement cliff risk)

M Medium impact (\$1-5m)

L Low impact (<\$1m)



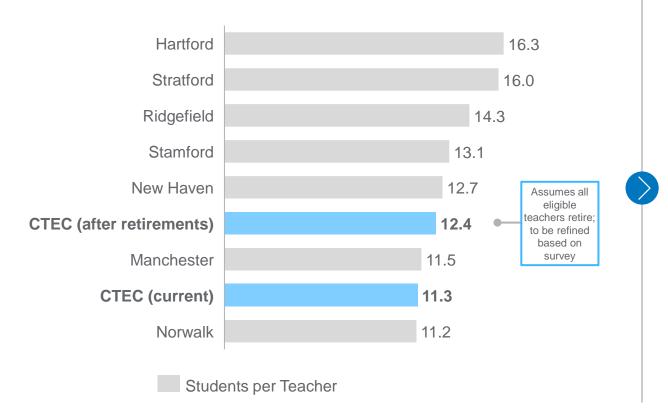


Opportunity	Program impacted	Detail	Retirement or efficiency impact
Automate Teacher Negotiation Act (TNA) supervision	Agency Management	Increases capacity of Educational Consultants, potentially reducing need for backfill	L
Digitize HR forms and integrate with CORE	Agency Management	 Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill 	L
Streamline awards scoring and program monitoring	Agency Management	 Increases capacity of Educational Consultants, potentially reducing need for backfill 	L
Automate Alliance District data monitoring	Agency Management	 Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill capacity 	L



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

Student/teacher ratios for Connecticut districts

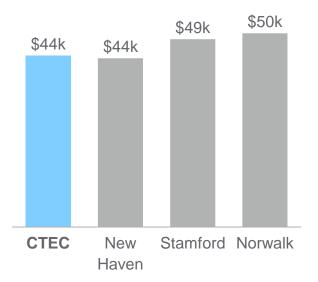


To accept instructor retirements without rehiring CTEC should consider sharing instructors

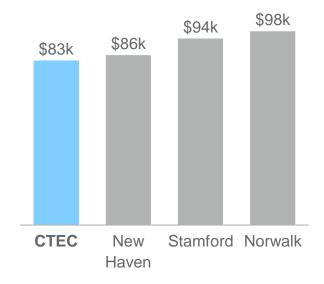
Opportunity	Considerations
Share instructors with municipalities in same geography	Financial arrangements with municipalities would be complex; CTEC teachers are state employees
Share instructors among similar programs	Program offerings vary by location; have faced challenges with inducing teachers to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

CTEC annual salary for instructors is largely in line with other CT districts

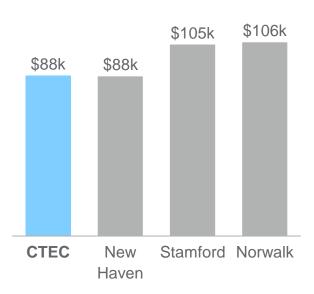




New hire – Master's degree

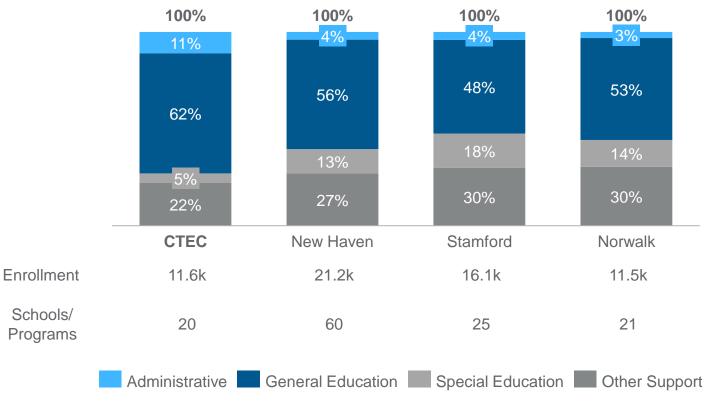


Six years experience – Master's degree



CTEC spends more on overhead than other CT districts due to decentralization

FTE breakdown by Connecticut school district



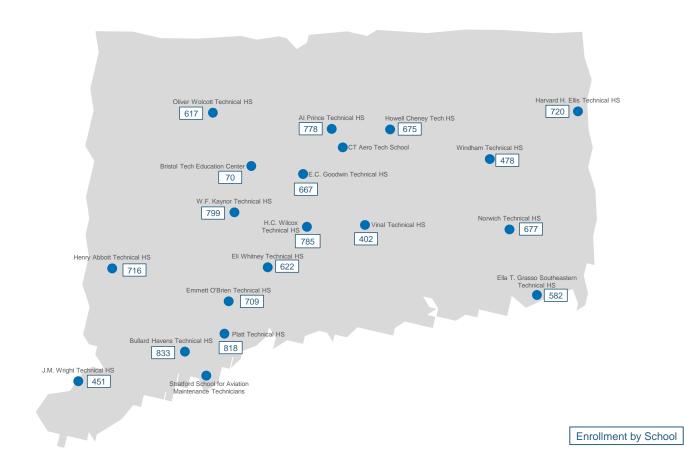
Other CT districts centralize back office support functions at a district level

Opportunity for CTEC to treat state school system as a single district; creates opportunity to centralize back office support functions (e.g. rationalize business officers and legal services)

Savings from reducing administrative personnel to 5% in line with other Connecticut districts could be \$5-10m

Backup | State provides vocational education to 11,000 students

CTEC Overview 2020					
Schools	20				
Programs offered	30				
Students enrolled	11,606				
Staff (FT + PT)	1,585				
Total Operating Expense	\$19.0m				
Total Personnel Expense	\$122.3m				



CTEC | 10 programs with less than 20 students, \$0.9m in total costs

Programs	Bristol	Bullard	Cheney	Grasso	EC Goodwin	Fli Whitne	ev Fllis	H Abbott	.JM Wright k	(avnor	Norwich	O'Brien	Platt	Prince	Vinal	Wilcox	Windham	Wolcott	Aviation	Grand Total
Architectural Technologies	<u> Dilotoi</u>	51	Onloney	0.000	000011111		70	117100011	om migner	taynor		0 2.1011	45		Viiidi	1111007	14	77010011	7111011011	180
Auto Collision Repair/Refinish				62			56			65			58	62	15	47		54		419
Automotive Technology	34	66	67	50	54	56	71	56	53	56	64	61	49	58	38	64	59	63		1019
Aviation Maint Technician																			129	129
Bio Science & Environment Tech				53										52						105
Bio-Technology											61									61
Carpentry		74	63		66	57	69	64	61	64	56	69	67	58	38	66	46	38		956
Criminal Justice & Protect Srv		35													56					91
Culinary Arts	16	76	53	43	71	55	55	57	38	87	52	63	73	67	9	69	62	58		1004
Diesel & Heavy Equip. Repair		_	65												14					79
Digital Media			51						60											111
Electrical		66	59	63	60	63	72	69	60	68	68	88	69	39	46	60	60	60		1070
Electronics					5		53			54			24			43		43		222
Graphics Technology		49				52		69			42			62		50		38		362
Hairdressing & Barbering		72		64	70	62	67	65		69	46	65	63	67	39	66		52		867
Health Technology		69				66		74	65	76	67	74		34		71	60	56		712
Hospitality & Cust Service Mgt				5					33											38
HVAC	33		69		68			64			66	59	66		53	64	56			598
Information Systems Technology		69	62	67	48	22			37	66		63	66	57	38	65	58			718
Library/Media Services				21																21
Manufacturing Technology	30		67		76	53	69	68		81		85	75	46	45	64	63	62		884
Masonry		82					68							63						213
Mechatronics	14				29								57							100
Plant Operation & Maintenance		56	54	56	56	65		67		47		64	42					37		544
Plumbing		68		63	64	62	70	63	44	66	64	18	64	68		56		56		826
Pre-Elec Eng/Appl Electronics											55									55
Sound Production														45						45
Veterinary Science															11					11
Welding & Metal Fabrication	21		65	35																121
Grand Total	148	833	675	582	667	622	720	716	451	799	677	709	818	778	402	785	478	617	129	11606

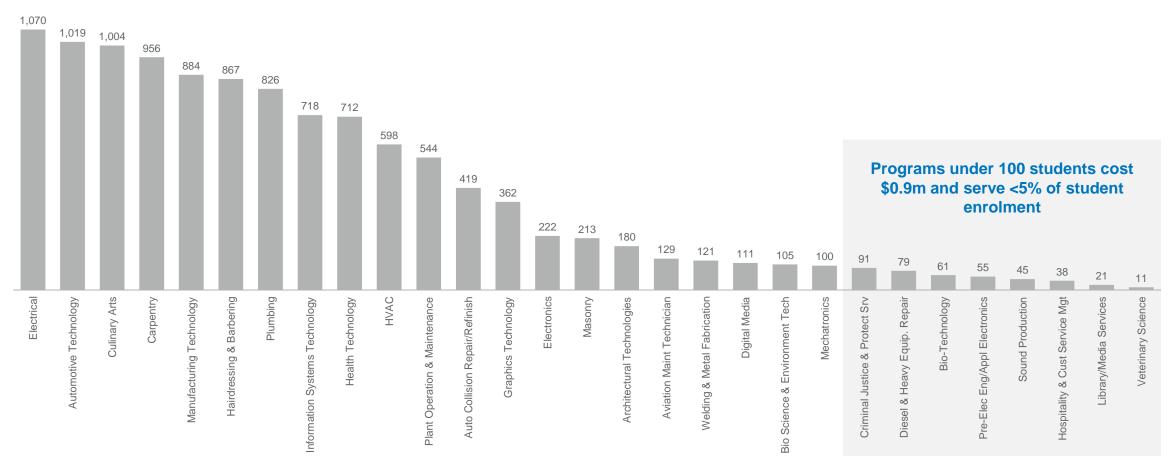
Limited opportunity to rationalize small programs into larger neighbors

Example: combining school offerings with <20 students in close proximity

Schools	Potential program integrations	Estimated savings (OE + PE, \$k)		
Vinal	Move auto collision repair from Vinal to Wilcox	\$146		
	Move culinary arts from Vinal to Wilcox	\$145	Savings from	
Bristol	Move culinary arts from Bristol to Goodwin	\$179	consolidating low enrollment	/-
Windham	Move architectural technologies from Windham to Ellis	\$165	programs likely less than \$1m	
Goodwin	Move electronics from Goodwin to Wilcox	\$62		
Bristol	Move Mechatronics from Bristol to Goodwin	TBC		
O'Brien	Move Plumbing from O'Brien to Platt	\$110		

Backup | Most programs at scale; 'long tail' does not drive significant cost

Students enrolled/program



Source: FY20ExpensesSchoolProgramEnrolStaff110420 sent by Maura Kjar.

Note: Program cost is sum of operating and personnel expense. Estimated savings is sum of total program costs for low enrollment programs (<100 student enrollment).

Most programs at scale

Program	Enrollment	Operating Expense (\$k)	Personnel Expense (\$k)	Total Program Cost
Veterinary Science	11	TBC	TBC	TBC
Library/Media Services	21	\$0.5	\$95.2	\$95.8
Hospitality & Cust Service Mgt	38	\$2.2	\$234.7	\$236.9
Sound Production	45	\$3.2	\$170.8	\$174.0
Pre-Elec Eng/Appl Electronics	55	\$3.5	\$182.3	\$185.8
Bio-Technology	61	\$5.7	\$93.9	\$99.6
Diesel & Heavy Equip. Repair	79	\$17.2	TBC	\$17.2
Criminal Justice & Protect Srv	91	\$33.5	\$155.9	\$189.4
Mechatronics	100	TBC	TBC	TBC
Bio Science & Environment Tech	105	\$6.0	\$245.0	\$251.0
Digital Media	111	\$18.8	\$159.3	\$178.0
Welding & Metal Fabrication	121	\$35.7	\$216.1	\$251.7
Aviation Maint Technician	129	\$60.5	\$444.5	\$504.9
Architectural Technologies	180	\$21.2	\$633.4	\$654.4
Masonry	213	\$16.9	\$534.3	\$551.2
Electronics	222	\$36.8	\$916.3	\$953.1
Graphics Technology	362	\$50.0	\$1,196.4	\$1,246.4
Auto Collision Repair/Refinish	419	\$48.2	\$1,340.3	\$1,388.5
Plant Operation & Maintenance	544	\$6,323.1	\$3,904.5	\$10,228.0
HVAC	598	\$101.0	\$1,466.8	\$1,567.8
Health Technology	712	\$130.5	\$2,136.6	\$2,267.0
Information Systems Technology	718	\$82.9	\$1,641.3	\$1,724.2
Plumbing	826	\$109.2	\$1,875.6	\$1,984.8
Hairdressing & Barbering	867	\$115.5	\$2,287.0	\$2,402.5
Manufacturing Technology	884	\$91.7	\$2,273.6	\$2,365.3
Carpentry	956	\$232.4	\$2,499.3	\$2,731.7
Culinary Arts	1004	\$154.9	\$3,220.3	\$3,375.2
Automotive Technology	1019	\$121.6	\$2,812.6	\$2,934.2
Electrical	1070	\$163.2	\$2,543.5	\$2,706.7
Total	11,606	\$8,067.2	\$34,113.1	\$ 42,180.2

Programs under 100 students cost \$0.9m and serve <5% of student enrolment

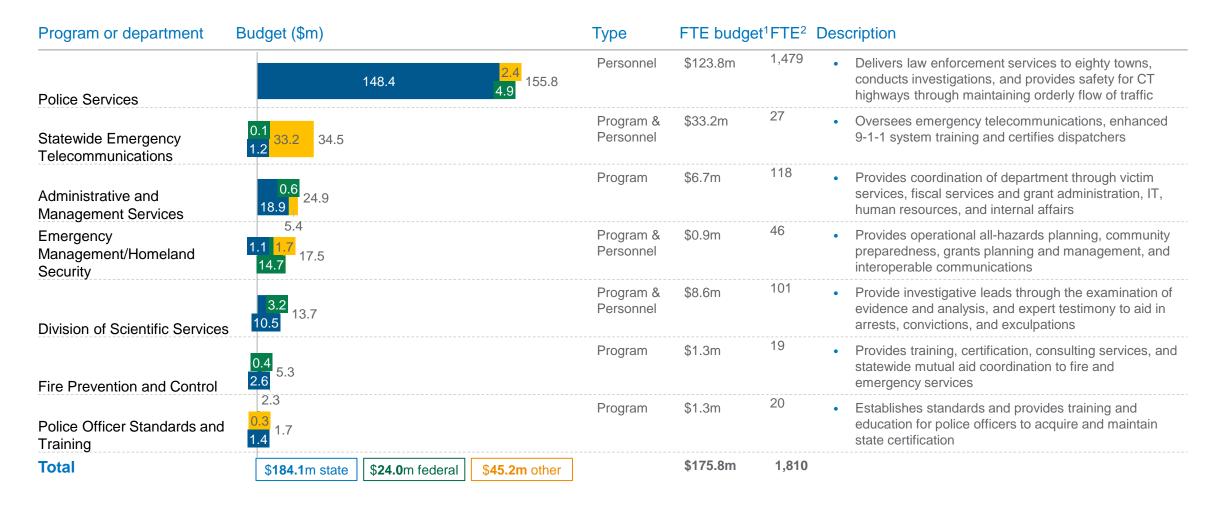
Source: FY20ExpensesSchoolProgramEnrolStaff110420 sent by Maura Kjar.

Note: Program cost is sum of operating and personnel expense. Estimated savings is sum of total program costs for low enrollment programs (<100 student enrollment).

Department of Emergency Services and Public Protection







^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point

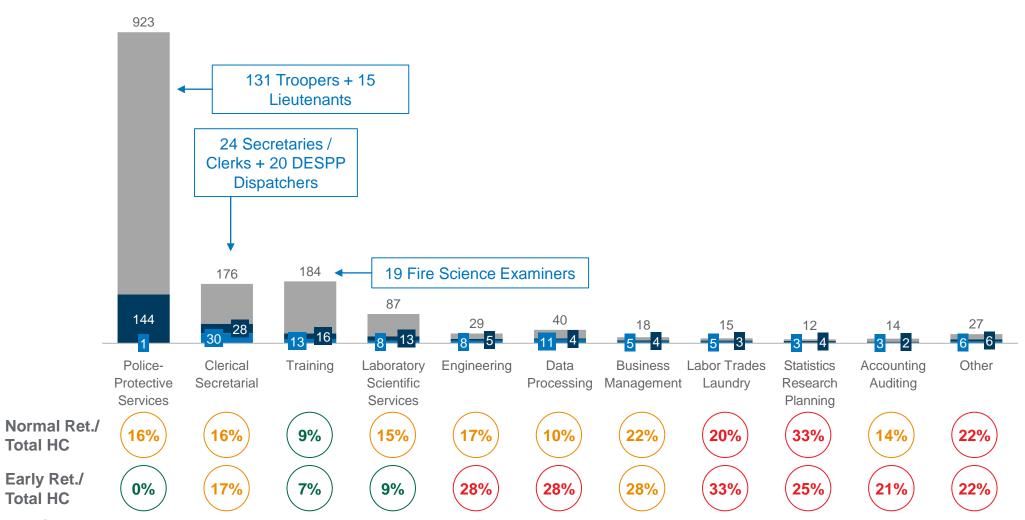
406

DESPP | Initial view is Police-Protective Services and Clerical Secretarial are most at risk of service loss



Total

Eligible



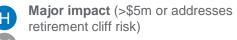
Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database, BCG analysis

407



DESPP | Opportunities identified for Emergency Services and Public Protection (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Lower CSP trooper target	State Police	 Decrease non-enforcement activities for state troopers and reach staffing target of 1,100 CSP 	Currently understaffed; maintaining CSP staffing of 1,100 instead of target goal of 1,200 could result in cost avoidance of \$8-14m
Increase cadet graduations	State Police	 Increase the number of cadets graduating from police academy to maintain trooper staffing levels 	Need academy classes in order to reach staffing of 1,100
Reform police responsibilities	State Police	 Civilianize police roles and responsibilities that can be conducted by non-sworn-in personnel to increase state trooper capacity 	Enabler for the above; increases utilization of CSP capacity
Divest dilapidated CSP barracks	State Police	 Consolidate and divest trooper barracks that are in poor condition to save on opex and capex 	M
Decrease CSP overtime	State Police	Reduce CSP overtime by increasing trooper numbers and capacity	M
Co-locate state laboratories	Forensics	 Co-locate state laboratories from different departments (e.g. DPH and DESPP) to save on opex and capex 	M
Leverage the Deferred Retirement Option Plan	State Police	 Utilize the Deferred Retirement Option Plan (DROP) to maintan CSP staffing while decreasing retirement costs 	M









DESPP | Opportunities identified for Emergency Services and Public Protection (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Transfer weigh station duties to DMV	State Police	Both DMV and CSP work in conjunction to manage weigh stations; make DMV solely responsible for weigh station duties	L
Privatize fingerprinting services	State Police	 CSP manages fingerprinting services; privatize services to increase trooper capacity 	L
Increase electronic payment methods	Cross-agency	 Increase use of electronic payment methods to streamline back office support and improve customer experience 	L
Privatize highway duty jobs	State Police	 Limited trooper capacity to provide time for private duty road jobs; privatize construction related jobs to increase trooper capacity 	L
Privatize MMA/boxing management	State Police	 Limited trooper capacity to manage MMA/boxing events in the state; privatize management to increase trooper capacity 	L
Centralize gasoline usage for state fleet	Cross-agency	 DESPP and DOT track gasoline usage for fleet; have police vehicles use DOT gasoline to save money on tracking and reporting 	L
Streamline payments for gun permits	State Police	 Gun permits do not accept credit cards for purchases; integrate digital payment systems to improve customer experience and decrease fiscal duties 	L
Automate certification applications and renewals	State Police Standards and Training	 Certification applications and renewals are currently a manual process; automate processes to increase staff capacity and improve customer experience 	L
Automate basic training reports	State Police Standards and Training	 Profile forms entry are currently a manual process; automate to increase staff capacity and standardize reporting among recruits 	L

Major impact (>\$5m or addresses retirement cliff risk)





DESPP | Primary retirement surge risks



State troopers currently perform administrative and non-police duties; limited capacity for troopers to perform enforcement related services



Decrease of troopers over the past years; challenges in increasing trooper level due to increased cadet dropouts, academy class sizes, and academy structure



Police barracks are dated and require large capex investment to renovate or maintain facilities for use

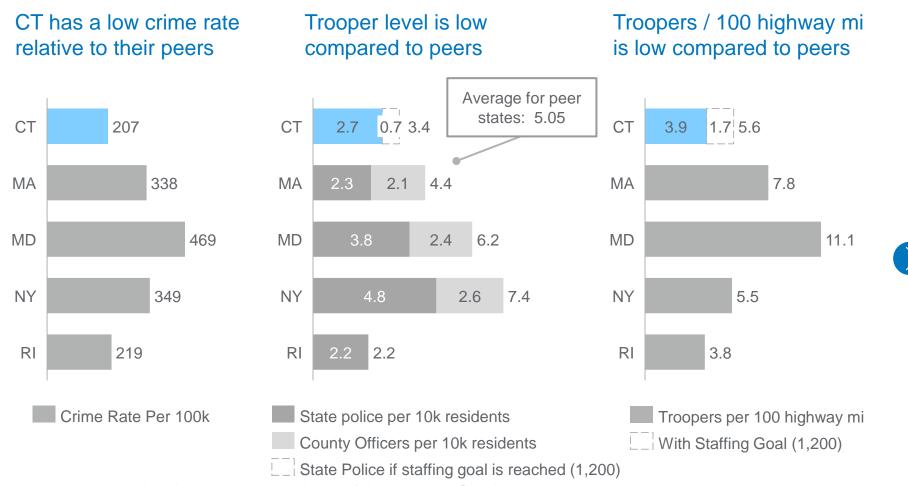


Investment needed to digitization and streamline department functions (e.g., electronic payments)

Retirements offer the opportunity to define a new target CSP staffing level

Drivers		Observations	Ideas for discussion	Challenges
	Set target staffing level	 Currently 923 troopers, down from 1,100 three years ago; CSP staffing target 1,200 (to be confirmed) Projected to further decline by ~100 due to retirement surge Police levels lower than in peer states, especially after retirements 	 Reach staffing levels based on peer benchmarks; understand where more police are needed to ensure public safety and impact of lower numbers Review drivers of OT, including non-protective work, and address through operational and labor negotiations where possible 	 Existing CSP capacity is limited due to non-enforcement and administrative responsibilities given to CSP (e.g., data entry, boxing regulation) Currently face high levels of OT (20% of total comp), which could be a sign of under-staffing
	Increase cadet graduations from academy	 Trooper levels require advance planning due to academy structure; 80- 100 new troopers after nine-month program 	Increase target academy class size if required to achieve higher staffing level	 Length of training program means personnel levels 'locked in' in advance Cadet drop-outs increase uncertainty in future trooper numbers
	Reduce admin and non-police duties given to CSP	 CSP enforce state laws (e.g., on freeways) and provide essential policing services in rural areas Role largely defined by statute but has expanded over time (e.g., sport event enforcement) 	 Explore civilianizing non-enforcement police activit e.g., responding to mental health crises 	providers (e.g. social workers, mental

Top-down benchmarking suggests that police numbers are low compared to peers



- Matching peer benchmarks would require ~1200 troopers
- Department is able to address trooper capacity challenges by achieving a CSP target of 1,100

Drawing on other alternative workforces for some responses could potentially reduce pressure on state police and help manage staff levels

State Police responsibilities	Potential alternative worker	Rationale	police time based on Rice study ¹
Non-emergency 9-11 calls pertaining to mental health	Mental health workers	Eliminates crisis intervention training for police	00/
Non-emergency 9-11 calls unrelated to mental health	Social workers	Targeted response based on civilian need (e.g. homelessness, drug abuse)	9%
Reporting on non-injury, non- DUI accidents	Private company (e.g. On Scene Services)	Routine task; does not require sworn in personnel	30%
Patrolling rural regions	Private organizations or neighborhood watch groups	Sworn officers may not be required for non- violent calls in rural areas	
Managing highway weight stations	DMV	DMV currently supports DESPP in this function and they have the tools necessary	15%
Code enforcement (e.g. cite handicapped parking violators)	Civilian police service officer	Routine task; does not require sworn in personnel	
Investigation support (e.g. online searches for case info)	Civilian police service officer	Does not require sworn in personnel	
Missing persons (e.g. phone banks and command centers)	Civilian police service officer	Does not require sworn in personnel	4%
Sex offender registries	Civilian police service officer	Highly administrative; does not require sworn in personnel	

Responses to some incidents may require multiple types of staff (e.g. social worker and police)

Current share of

Opportunity to increase CSP capacity by 25%-30% through alternative policing models

Source: NY Times, Nola, Rice University

Potential to further increase CSP capacity by civilianizing administration functions







Team	Activity which could be civilianized	Description		
Office of Field Operations	Traffic Services Unit	Safety inspections, collision analysis and reconstruction service		
Office of	Research, Development, and Planning Section	Updating and expanding policies and procedures, and automating how the agency collects, analyzes, and disseminates data		
Administrative Services ~50 FTE	Infrastructure Planning and Management Unit,	Key physical infrastructure projects are managed to improve the more than fifty facilities throughout the agency		
	Fleet Administrative Unit	Oversees the maintenance and continued development of more than 1,900 vehicle assets		
	Finger Printing	Oversees finger printing services		
Misc. ~20 FTE	Administrative Services	Provides administrative support to agency office for duties including but not limited to analysis, accounting, etc.		



Civilianizing admin functions could free up to **70 troopers** and lead to savings of ~\$1m¹

Backup | Police cost more than civilians, civilianization leads to savings

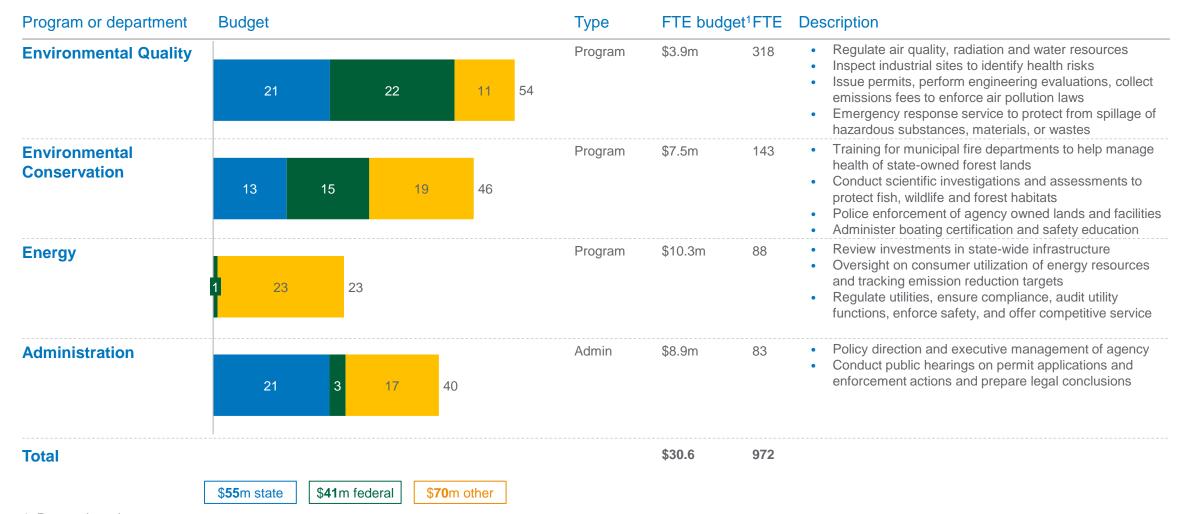
Category	Job title	Avg. Annual Rate (\$k)	Category Avg. Annual Rate (\$k) ¹
D. II	State Police (NP-1)	\$87	
Police (protective services)	State Police Lts & Captains (NP-9)	\$135	\$87
(protective services)	Protective Services (NP-5)	\$77	
Social worker	Clinical social worker	\$83	¢00
Social worker	Clinical social worker Associate	\$94	\$88
	Mental Health Assistant 1	\$54	
Mental health worker	Mental Health Assistant 2	\$64	\$57
	Mental Health Associate	\$77	
	Administrative Clerical (NP-3)	\$61	
	Admin and Residual (P-5)	\$90	
Administrative	Managerial	\$107	\$75
	Exempt/Elected/Appointed	154.3	
	Confidential	81.2	

Note: 1) Annual rate is a weighted average 415

Department of Energy and Environmental Protection



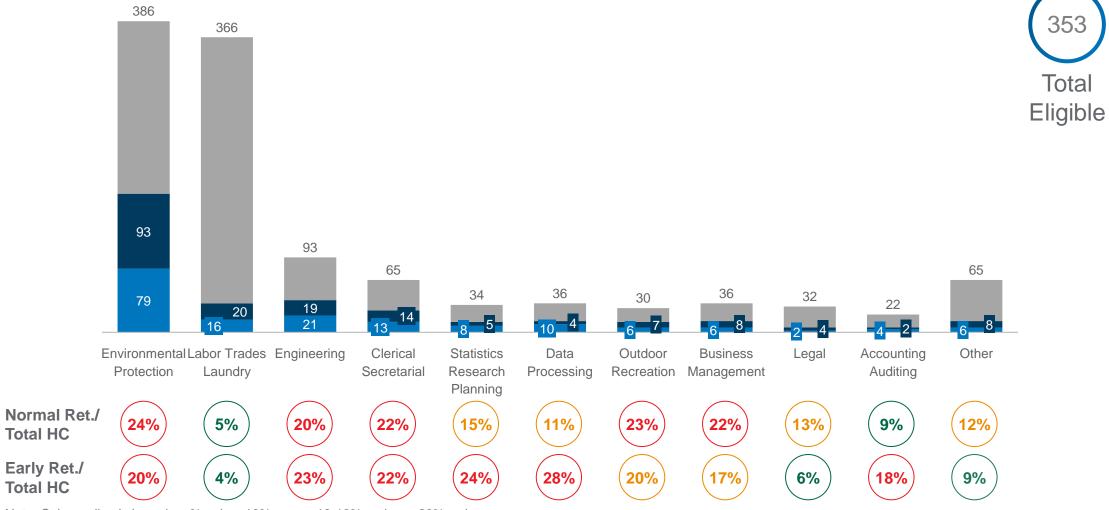
Department of Energy and Environmental Protection | Agency profile



^{1.} Personal services

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DEEP | Large number of Environmental Protection FTE eligible for retirement



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

Ineligible Normal Eligible Early Eligible

DEEP | Primary retirement surge risks





Increasing turnover for younger employees increases need to fill new positions

- High attrition rates for new hires stay <5 years and leave for private sector opportunities offering better incentives
- As a result, succession planning is a major pain-point preventing development of lean process efficiencies



Highly technical engineering teams' facing retirement risk

- E.g. 46% of the data processing teams' eligible for retirement
- Specialized field engineers supporting environmental protection efforts risking continuity of service



Gap of resources presents a public safety impact across programs

- Environmental quality branch facing largest retirement risk ~44%
- Concentrations of retirements interrupting service continuity with impact to public for protection against hazardous environmental issues

Energy and Environmental Protection | Retirement opportunities



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Combine asset maintenance functions	Environmental Conservation	Opportunity for increased cross-agency coordination of maintenance of land assets	M Decreases need for asset maintenance staff, addressing retirement risk for environmental protection
Cross-functional inspection platform	Cross-agency	Increase cross-training and consolidate inspections across cluster, including a technology-enabled platform flagging inspection status	Reduces duplicative inspections, decreasing number of inspectors and dedicated time needed to activity
Increase use of public/private partnerships	Environmental Conservation	 Increase adoption of partnerships as well as outsourcing additional services for land asset maintenance 	M
Generalize environmental permitting requirements	Cross-agency	Move permits from customized to general and utilization of third-party services by growing legal team to write regulations, compliance, and implement action	M
Reprioritize DEEP service activities	Cross-agency	Prioritize regulatory actions over enforcement for more efficient service continuity	M
Enhance customer usability for PURA interface	Energy	 Improve customer interface of PURA systems and others to simplify processes and minimize reliance on service support staff 	Reduces customer experience reducing reliance on clerical support staff



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)

Office of Higher Education





Program or department	Budget (\$m)	Type	FTE bud	get ¹ FTE ²	Description
Coordination of Higher Education	33.7	Personnel 7	\$3.4m	33	Support policy formulation, development and control of the budget, personnel, payroll, federal grant and cooperative agreements and records management
Scholarships & Fellowships	3.4	Grant	\$0m	0	 Maintains thirty-four sites throughout the state Prepare specifications for contracts with outside ven dors for minor repair projects;
Total	\$37.1m state \$0m federal \$0m other	er	\$3.4m	33	

^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum



Higher Education | Opportunities identified for Higher Education

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Streamline online grant approval process	Agency Management	Performed by administrative staff; high retirement rate expected	L
Improve access database	Agency Management	 Existing database does not provide functions required by administrative staff; improve database to increase staff capacity 	L

Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)

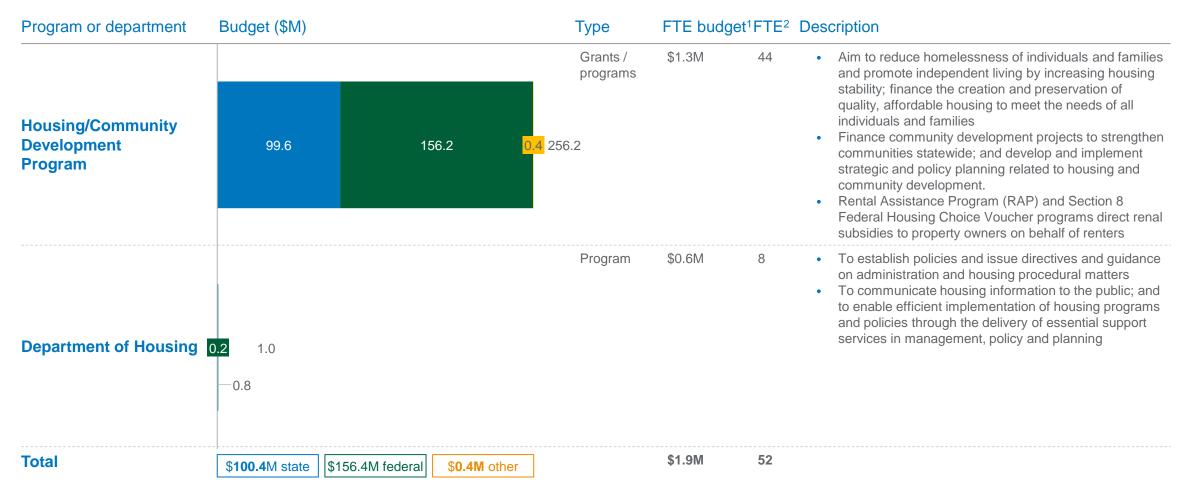


Low impact (<\$1m)

Department of Housing

Department of Housing | Agency profile

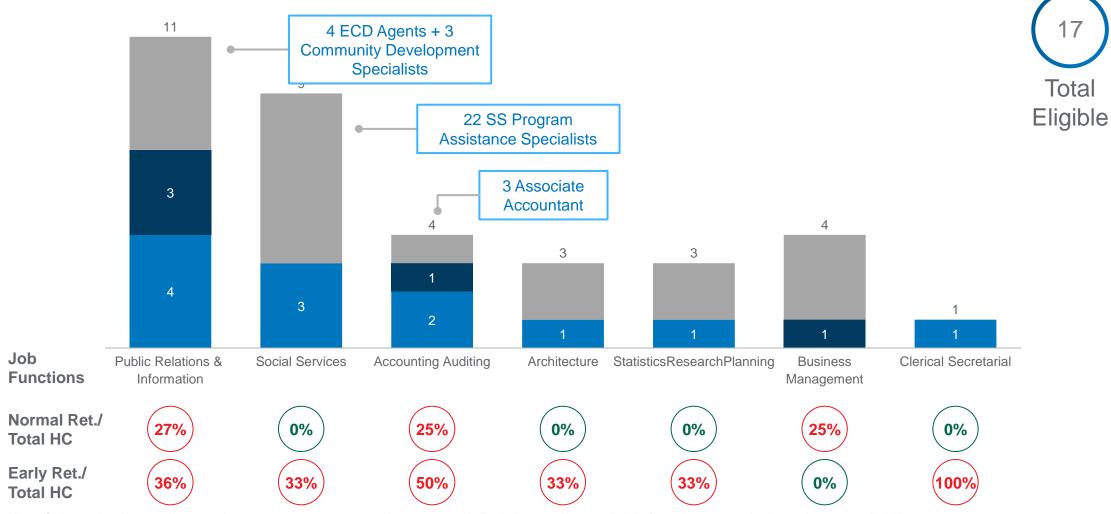




Personal services 2. Incl. General Fund and Federal Fund FTE
 Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

CONNECTICUT Department of Utusine

DOH | Development Agents and Specialists, Program Specialists & Accounting / Auditing are most at risk of service loss



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DOH | Primary retirement surge risks





Economic and Community Development Agents represent largest risk from retirement surge

 DOH leadership believes staff is already strained, so additional losses for development personnel likely to exacerbate constraints on daily operations



Clerical and secretarial staff retirements could result in significant backlogs given prevalence of manual processes

Digitizing documents, e-Signatures, robotic process automation, etc. can help mitigate impact



Department of Housing | Operational opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Centralize grant making and implement performance KPIs	Housing/Community Development Program	 Consolidate onto a single platform to increase efficiencies and mitigate overlapping programs/services Incorporate additional metrics/KPIs (e.g., share of HHs cost-burdened, housing units created, affordable units created, etc.) to monitor performance and ROI of grants based on agency's mission Integrate back-end data with DECD, DRS, DOL and social services agencies' data to automate tracking of eligibility, success and compliance – unique IT architecture of HUD requires careful initial development 	<\$1m in potential savings from attrition of 5-10 FTEs (savings may overlap with those from digitization efforts)
Digitize processes	Housing/Community Dev. Program	 Implementing digitization (cloud storage, OCR, RPAs, self-guided dashboards, blockchain monitoring) to automate processes 	<\$1m in est. potential savings from attrition of 5- 10 FTEs
Outsource additional responsibilities to non-profits, CHFA	Agency-wide	 Coordinate with non-profits, community advocates and quasi-public organizations to shift tasks away from DOH While CHFA may be capacity-constrained, State should incentivize additional outsourcing of compliance technology to CHFA where possible 	C <\$1m in est. potential savings
	Total		• ~5-10+ FTEs
	1 Otal		• \$1-5m+



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)

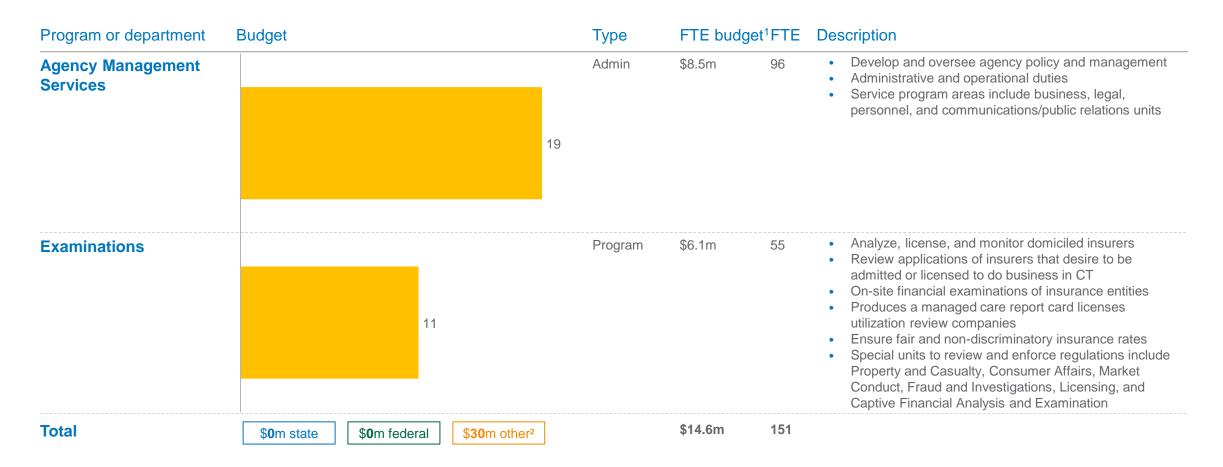


Low impact (<\$1m)

Insurance Department

Insurance Department | Agency profile





^{1.} Personal services

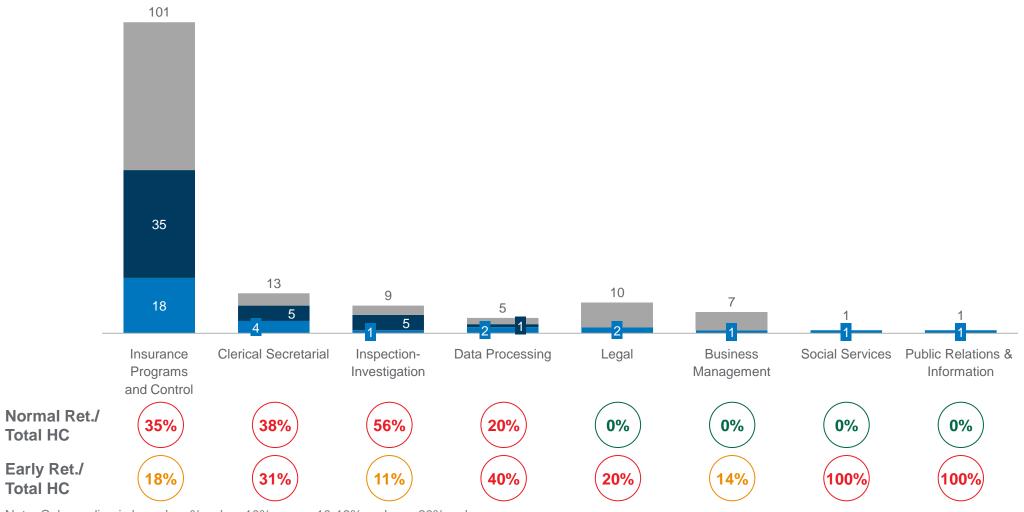
^{2. &}quot;Other" meaning the insurance fund, both banking and insurance are funded by industry
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: Connecticut 2020-2021 Biennial Budget Program Addendum

ID | Large number of Insurance Programs FTE eligible for retirement



Total

Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

Ineligible Normal Eligible Early Eligible

ID | Primary retirement surge risks





Retirement of insurance program staff leads to loss of institutional knowledge for complex insurance processing activities

 Requires insurance program processing staff, potentially having to utilize external regulators weakening quality control and cost



Highly trained social services/PR teams face significant retirement risk

• E.g., 100% of both teams are eligible for retirement



Technical data processing teams face retirement risk and are challenging to replace

- E.g., 60% of the data processing teams' eligible for retirement
- Regulation of insurance industry demands highly technical staff to process complicated filings

CONTURE DEPOSIT

Insurance Department | Retirement opportunities

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Insurance to join e-licensing platform	Examinations	Opportunity to join established CT e-licensing platform to streamline licensing services	Streamlines licensing process, decreasing number of regulators needed to support
Recognize other state's insurance licenses	Examinations	Increase acceptance of out of state licenses to minimize insurer applications to do business in Connecticut	Decreases number of audits required for multi-state banks, decreasing number of auditors needed
Prioritize insurance regulatory activity based on likelihood of noncompliance	Examinations	Targeted regulatory risk assessment approach; de-regulate business climate exp. recognizing out of state licenses	Decreases regulatory processes, freeing up time of at-risk staff like auditors to focus on high-priority activities



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Department of Labor





Program or department	Budget		Type	FTE budg	get ¹ FTE	Description
Agency Management Services	8 9 17		Admin	\$2.4m	66	 Management of activities and policy Includes various units; communications, employee and organizational development, HR, facilities/business management, IT, and performance/accountability
Job Readiness and Employment Services	54	18 72	Program	\$263k	152	 Provide job placement and financial support services American Job Centers to provide career support Programs to preserve jobs, help people with disabilities, migrant and seasonal farm works, and alien labor hiring
Unemployment Insurance		44	Program	\$44m	258	 Program providing unemployment insurance Administer two federally-funded UI benefits including disaster and trade adjustment assistance Tax Division, Employer Status, Tax Accounting, Delinquent Accounts, Audit, and Fraud Units
Regulation	7 05 12		Program	\$6.2m	93	 Regulation of wage and workplace standards, occupational safety and health, maintaining the collective bargaining relationship, and workforce job training and skill development Routine audits, investigates complaints, and enforces laws
Labor Market Information	2 2		Capital/ science	\$95k	16	 Analyze data on workforce issues and trends Lead producer of information and statistics on economy, workforce, occupations, and careers
Total	\$69m state <\$1m fede	\$78m other		\$52.9m	585	

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

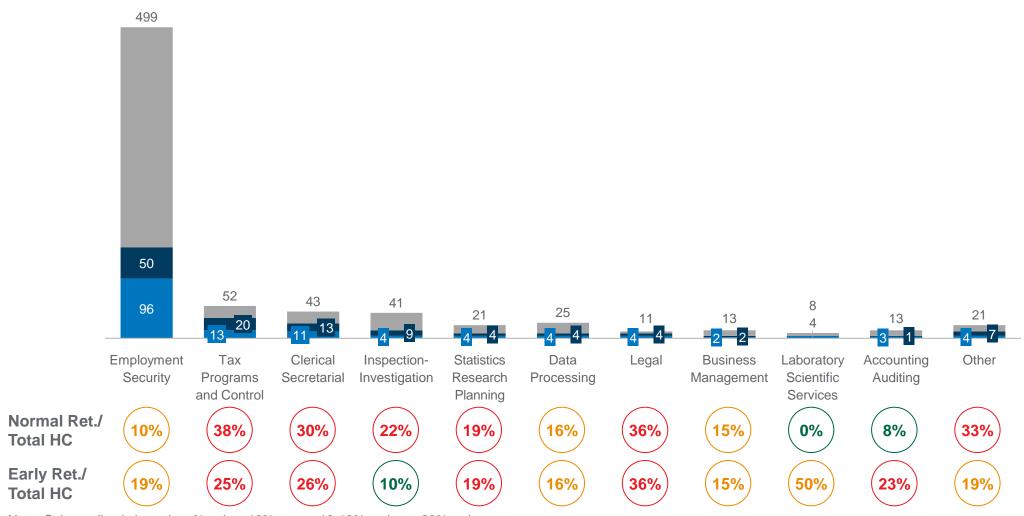
^{1.} Personal services

DoL | Large number of employment security FTE eligible for retirement



Total

Eligible



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

DoL | Primary retirement surge risks





Increasing backlogs delaying distribution of customer UI benefits due to historic demands and requirements of new policy

- Delayed resolutions and distribution of unemployment insurance
- COVID-19 further straining effort shifting critical resource infrastructure



Challenge continuing IT modernization amidst urgent priorities

- UI Modernization efforts halted as critical IT personnel shifted
- Industry dramatically changing in terms of technological needs, potential to fall behind and lose attractiveness as regulators



Highly manual tax and clerical processing teams face retirement risk

- E.g., 63% of tax programs teams; 61% of clerical/secretarial teams at risk for retirement
- Highly manual clerical processes need digital solutions to avoid service continuity break



Organizational downsizing mixed with high managerial retention creating instability

- Decreased personnel by 40% mixed with additional managerial risk reporting unfair pay and burn out
- High retention risk that others leave the department frustrated de-stabilizing organizational functioning

DoL | Retirement opportunities



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Complete Unemployment Insurance (UI) modernization	Unemployment Insurance	DOL priority efficiency project to modernize initiatives of the UI system, increasing accessibility of tax and benefits system	Decreasing UI processing time, decreasing number of employment security staff needed
Automate licensing reviews	Cross-agency	Decrease FTE headcount through automation of licensing reviews across regulatory cluster	M Streamlines licensing process, decreasing number of regulators needed to support
Prioritize labor regulatory activity based on likelihood of noncompliance	Cross-agency	Targeted regulatory risk assessment approach; de-regulate business climate exp. recognizing out of state licenses	Decreases regulatory processes, freeing up time of at-risk staff like auditors to focus on high-priority activities
Integrate labor and social service client information	Job Readiness and Employment Services	 Better integrate Social Service Agencies and DOL through consolidated client information system and similar data fields 	More efficient customer facing system will decrease processing time, decreasing time burden on employment security staff
Consolidate workforce registry systems	Job Readiness and Employment Services	Combine workforce development services into a single platform readily accessible to any citizen utilizing government service	Single digital platform will streamline processes, cutting down time inefficiencies for at risk employment security personnel
Invest in employment data system improvement	Labor Market Information	 Establish single database of employment information tracking statistics and trends across programs as a data integration hub 	
Refine targeting of workforce training programs	Job Readiness and Employment Services	Identify overlap in training services across programs to realize cost reduction opportunities (Skill-Up CT, ETC, etc.)	



Major impact (>\$5m or addresses retirement cliff risk)



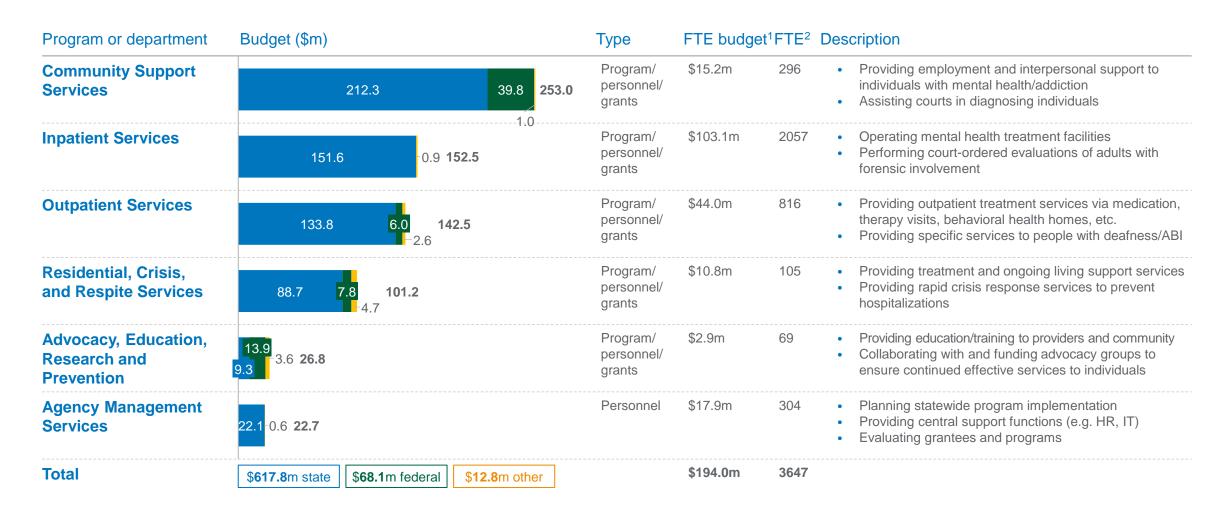
Medium impact (\$1-5m)



Department of Mental Health and Addiction Services

Department of Mental Health and Addiction Services | Agency profile

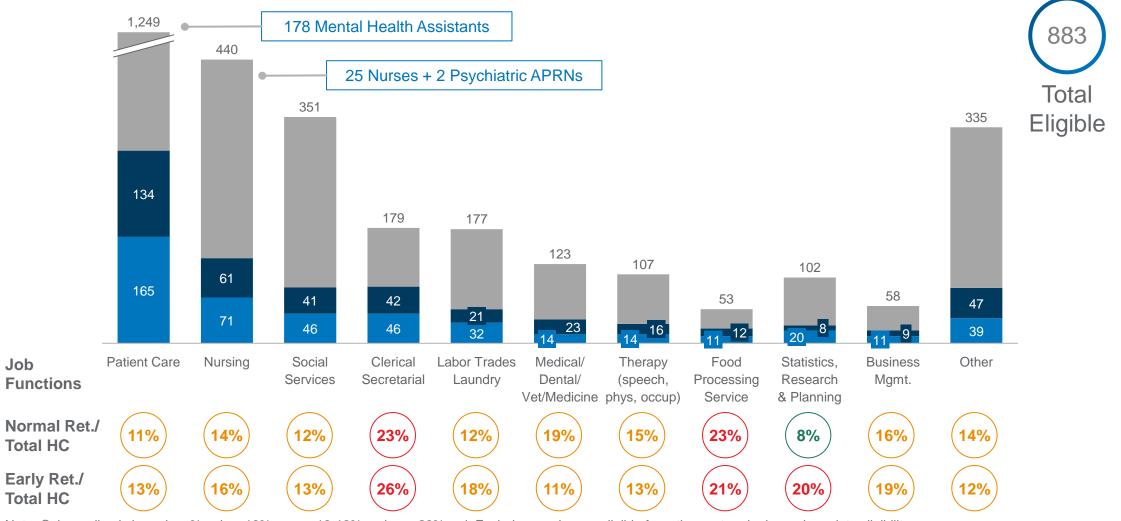




^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: FY2020-2021 Biennial Budget Program Addendum

DMHAS | Patient Care and Nursing are most at risk of service disruption





Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

Ineligible Normal Eligible Early Eligible

DMHAS | High retirement eligibility of nurses and mental health assistants dmhas creates risk to service continuity; additional potential for operational disruption



Significant number of nurses and mental health assistants eligible for retirement

- Failure to backfill could result in significant service disruption to residents, as well as increased overtime expenditure
- Backfill challenges anticipated due to advanced training required and high intensity of the work (see below)
- Large-scale hiring initiative from non-profit providers could disrupt provider operations
- Potential backfill alternatives include expanding non-profit operation of LMHAs



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Intense nature of resident-facing positions may complicate backfill efforts

- Positions involve high stress and liability
- Private-sector compensation higher for nurses and other clinical positions



DMHAS | Opportunities to evaluate sourcing, implement an EHR, control overtime, and pursue common platforms and digitization

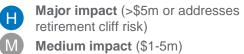
Drivers		Observations	Challenges	Opportunities
	Evaluate sourcing for services	 State-operated LMHAs serve ~14k clients a year Non-profit providers operate LMHAs at lower cost while maintaining service quality 	 Conversion to non-profit operation could disrupt resident experience Potential union resistance CT need to remain provider of last resort 	
•=	Implement an Electronic Health Record (EHR)	 Chart management, medication administration, inventory control, and more are not standardized across DMHAS- operated facilities DMHAS has initiated conversations with DAS re. implementing an EHR 	 Significant initial investment required High level of technological, operational, and administrative complexity involved ir implementation 	Implement an EHR
	Control overtime costs	DMHAS' overtime expenditure (as share of total employee pay) is higher than peer states	Likely union resistance to overtime adjustments	Reduce overtime expenditure using DDS efforts as potential roadmap
	Establish common agency platforms	Functions such as grant- making/administration, eligibility determination, program monitoring/evaluation and background checks are often manual and duplicated across HHS agencies	 Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	 Establish central grant hub for HHS agencies Utilize ImpaCT for eligibility determination Centralize program monitoring and evaluation for HHS agencies
	Digitize/ automate manual processes	Several frequent processes at DMHAS require substantial manual effort and could be digitized/automated	 Initial investment likely required Technical complexity Potential updates needed to existing data sharing agreements 	 Automate facility shift staffing Centralize/automate Affirmative Action reporting Digitize cross-agency data-sharing

dmhas

DMHAS | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Expand non-profit operation of LMHAs	Agency-wide	 State-operated LMHAs serve ~14k clients per year Non-profit providers operate LMHAs at substantially lower costs while maintaining similar service quality Potential challenges include disruption to residents, union resistance, need for state to remain "provider of last resort", and revenue loss 	H Potential annual savings of \$50-75m+ and reduced need to backfill retired positions, depending on degree of privatization
Implement Electronic Health Record (EHR)	Inpatient Services	 Electronic health record would streamline chart management, medication administration, inventory control, and activities at DMHAS facilities and reduce central IT workload Increased staff efficiency would result in improved patient outcomes Improved intake, billing, and reporting processes would reduce lost revenue 	Potential annual savings of \$15-20m+ and 50-60k+ employee hours, reducing need to backfill retiring facility workers
Central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specifi number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Reduce overtime	Agency-wide	 DMHAS accounts for ~22% of statewide overtime spend Share as % of total pay is higher than peer states Optimizing shift schedule could reduce cost while maintaining coverage DDS efforts can serve as roadmap 	M Potential savings of \$4-5m+
Utilize ImpaCT for eligibility determination	All HHS agencies	ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs	M DMHAS-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity

Source: DMHAS and OPM input; CT STARS data; CT and provider cost data; CT Nonprofit Alliance analysis; FY2020-2021 Biennial Budget Program Addendum; BCG analysis



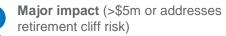


dmhas

DMHAS | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DMHAS-specific savings depend on extent of centralization
Implement statewide background check system for hiring	All HHS agencies	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies	M
Automate DMHAS shift staffing via KRONOS	Inpatient Services	 Implementing KRONOS would increase facility worker capacity by reducing manual effort currently required to organize staffing Lean HR resources limit ability to implement KRONOS Would require seed money and/or resource allocation 	L
Centralize and automate Affirmative Action reporting	Agency Management Services	 Affirmative Action reporting currently requires year-round staff and generates thousands of hard-copy pages Centralization and automation would reduce manual effort 	L
Digitize data-sharing across agencies	Agency-wide	 Cross-agency data sharing is a major component of Behavioral Health Homes, Targeted Case Management; Medicaid initiatives of CHESS, 500 Familiar Faces, and the 1115 waiver DMHAS works with two Administrative Services Organizations: Advanced Behavioral Health and Beacon Health Options 	L











Military Department

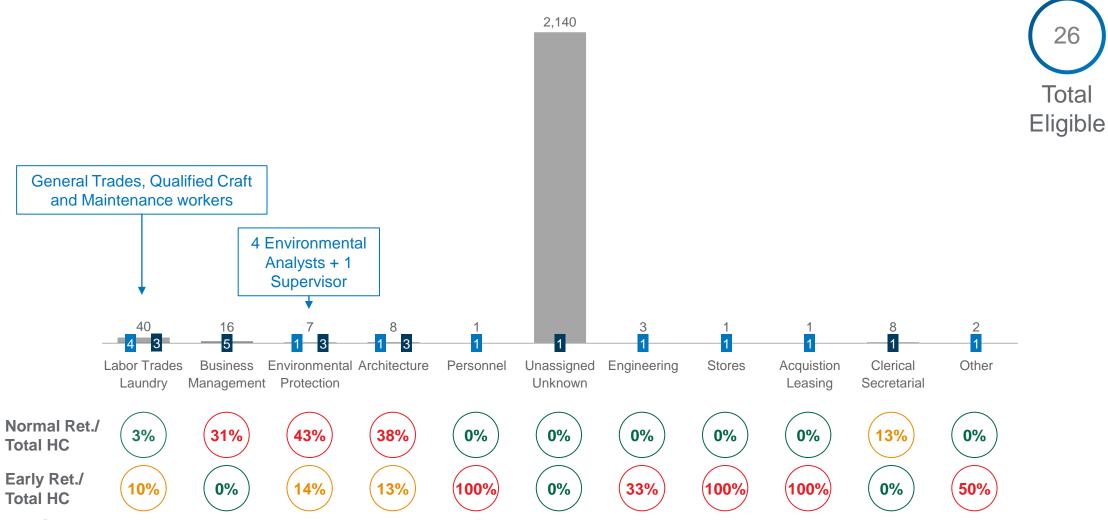




Program or department	Budget (\$m)			Type	FTE budg	jet ¹ FTE ²	Description
Facilities Management	3.1	21.3	<mark>0.4</mark> 24.8	Personnel	\$1.1m	95	Support policy formulation, development and control of budget, personnel, payroll, federal grant, and cooperative agreements and record management
Management Services	0.5 1.8			Program	\$1.7m	24	 Maintains thirty-four sites throughout the state Prepares specifications for contracts with outside vendors for minor repair projects
Operation of Militia Units	0.3 0.6			Program	\$0.01m	2	Responds to emergency situations and responds to state civil emergencies or natural disasters
Total	\$ 5.5 m state	\$22.1 m federal	\$0.6m other		\$2.8m	121	

^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE. Note: Budget and FTE figures are FY 2020 Baseline figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

Military Department | Initial view is Labor Trades Laundry and Business Management & Environmental Protection are most at risk of service loss



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database, BCG analysis



Military Department | Opportunities identified for Military

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Consolidate National Guard facilities	Facilities Management	 Consolidate facilities used by National Guards with other state departments (e.g. state police) 	M
Centralize facility management	Facilities Management	 State facilities are managed by respective departments; centralize and privatize facilities management to increase state staff capacity 	L
Consolidate military and veteran services	Management Services	 Reorganize state provided programs and services for military and veterans under one agency 	L
Rationalize state vehicles and equipment	Management Services	 Decrease state's vehicle fleet and increase use of GSA, MTOE, and CTA equipment 	L
Centralize consumable purchases	Cross-agency	Centralize consumable purchases (e.g. office supplies) to save on costs	L
Centralize HR/LR	Management Services	 Centralize HR/LR to standardize processes and increase department staff capacity 	L
Firefighter conversion	Operation of Militia Units	 ANG Firefighter conversion to Title 5. Federal initiative; convert federally reimbursed state employees to federal T5 employees 	L

Major impact (>\$5m or addresses retirement cliff risk)





Department of Motor Vehicles

Department of Motor Vehicles | Agency profile



Program or department	Budget (\$m)	Type	FTE budge	t ¹ FTE ²	Description
Customer Service	32.4 0.0 32.4	Program / personnel	\$28.4m	473	 Delivery of in-person customer services including issuance of vehicle registrations, driving tests, operator licenses, titles, vessel registrations for DEEP, etc. Collects sales & use taxes on vehicles bought out of CT DMV's Copy Records - Telephone Center
Support Services	19.7	Program / personnel / grants	\$10.9m	108	 Providing fiscal and logistical support to all operations Support mail and in-person transactions Enhance effectiveness through IT accessibility/sharing Provide maintenance and upkeep of buildings / grounds
Regulation of Motor Vehicles & Their Use	11.4 2.5	Program / personnel	\$8.1m	139	 Establishes standards, audits license credentials & files while maintaining driver violation records Manages registration renewals received via mail / web Works with Handicapped Driver Training program Inspects and licenses commercial driver schools, motor vehicle dealers, repairers and junkyards
Auto Emissions Inspections	0.0 6.4 7.3	Program / Personnel	\$0.9m	79	Monitor vehicle emission inspection operations in compliance with state and federal standards
Management Services	3.6	Program / personnel	\$3.3m	37	 Provides executive oversight and formulates policy Upkeep of both interior and grounds of DMV HQ and state-owned branch offices Houses Corporate and PR, Affirmative Action & Legal
Total	\$67.9m STF \$2.5m federal \$6.9m other		\$51.7m	836 ³	

^{1.} Personal services 2. Incl. STF, Private, Emissions Enterprise Fund and Federal Fund FTEs 3. Incl. 24 FTE from Federal Funds Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DMV | Initial view is vehicle examiners, processing technicians and inspectors are most at-risk workers

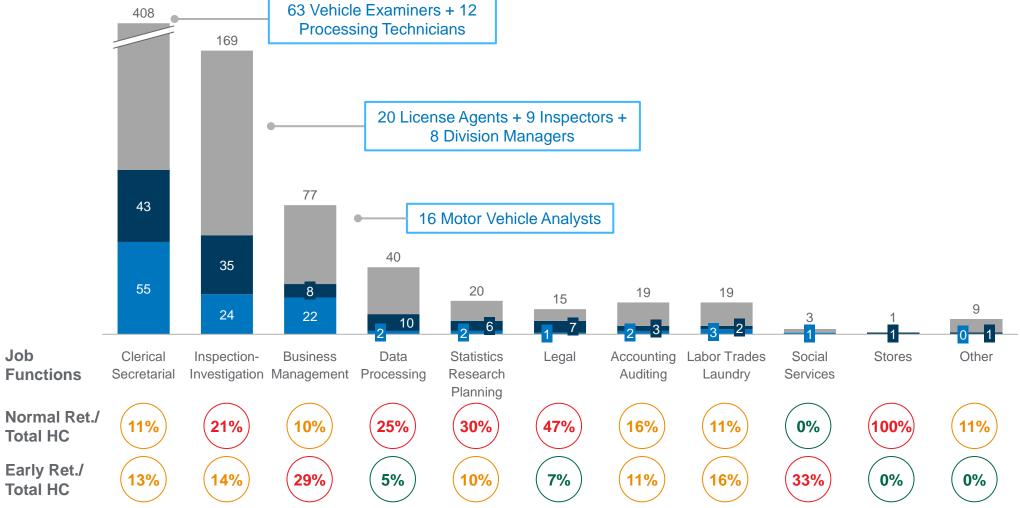


228

Total

Eligible

452



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DMV | Primary retirement surge risks





Significant share of customer-facing workforce eligible for retirement

 Potential to cause reversal in recent wait-time declines as residents return to branches with backlog of transactions while REAL ID deadline simultaneously nears



Back-office workers also at risk of high retirements, producing building backlogs

 In addition to disgruntled residents, backlogs also have potential for real-world consequences and significant PR backlash



Significant lack of IT resources has led agency to being a digital laggard today, while further retirements present further risks and loss of experience – urgent need to begin addressing today

 While attrition represents opportunity to bring in new talent, approved DMV job classifications are not necessarily relevant for future agency needsation with DOT



Backlogs could result in significant delays to cash inflows at time when STF is expected to become insolvent within 2-3 years



Managerial level losses represent further risk to already strained project management capabilities

Managers often involved in everything from high level strategic decisions to proofreading letters to residents

DMV must overcome several structural challenges before it can begin its transformation towards a best-in-class motor vehicle agency

fit into approved programs



	Talent management	Labor constraints	Legislative constraints	Organizational structure
Current obstacles	 Existing workforce lacks capabilities to handle modernized/digital efforts (i.e., no IT architects) Ability to fill new roles hindered by outdated job classifications, complex hiring process and noncompetitive pay 	 Hurdles to staff taking on new roles not explicitly allowed for in labor contracts (e.g., holding check-in tablets) Lack of performance management system may result in productivity limits 	 Restrictions on what transactions can be handles by partners Resistance to use of self-service tools (e.g., kiosks) Statutes mandate significant scope of responsibilities (e.g., mandating tax lists for all towns, not completing transactions if property taxes are owed, etc.) 	Current sense that command-and-control model results in siloed work force and sub-optimal cross-trained employees
Recommendations	Update job classifications for future-ready DMV, enabling agencies to hire new job types that broadly fit into approved programs.	Grade-up job titles to provide managers with more flexibility on deployment of workforce to most evolving peeds.	 Work with legislators to update and codify DMV responsibilities Enable agency to onboard 	Evaluate benefits of moving to matrix org structure

meet evolving needs

 Negotiate as needed to implement performance

management program

new partners and expand

variety of permitted

transactions

Opportunity to DMV to digitize transactions and back-office processes

Drivers		Observations	Challenges	Potential opportunity
	DMV center operations	Limited performance data available for DMV sitesLimited productivity incentives	 Resistance to implementation of performance management Labor skills and restrictions impede necessary changes 	 Track and incentivize retail employee productivity Modernize job classes Further triage customers in-line
\$	Transaction channel	CT offers residents fewer services online than other states	 May require statutory changes to allow partners to handle additional activities Insufficient internal project management capabilities 	 Increase transactions completed online or through partners Decrease yearly hours by 70k+ Potential \$10-15m savings combined with above
<u> </u>	Back-office processes	 Current DMV system highly manual Operating across two IT systems 	 Partially addressed by current DMV IT modernization project, but long timelines and insufficient resources Necessary IT jobs not approved 	 Target 25% digital intake Use OCR/NLU and upload docs to single storage location Pull data from other agencies Potential savings of \$2-4m
	Optimize Existing Fees	Other states indexing fees to CPI to offset gas tax declines	 Requires legislative action May require rebates for low-income residents 	 Legislate periodic fee-increases indexed to CPI Potential revenue uplift of \$2-8m
	New revenue sources	 CT does not require safety inspections 28 of 50 states now have EV/hybrid vehicle fees¹ 	 Requires political capital – eased by implementation in other environmentally friendly states (e.g., CA, HI, OR, WA) 	 Require safety inspections, performed by dealerships Assess fee for fuel-efficient vehicles to offset gas tax² Potential revenue of \$2-5m

National Conference of State Legislatures, EV Club of Connecticut

Department of Motor Vehicles | Operational opportunities (I/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
DMV Center Operations	Agency-wide	 Modernize and expand job classes permitted within DMV to refresh workforce based on future DMV needs (i.e., similar jobs required to those in place at DRS, DOT) Work to broaden job classification work to ensure existing workforce can continue servicing residents with new tools and technology 	H See below
Shift transaction channel mix online and to third-party partners	Customer services	 Accelerate shift of transactions from in-store to online and do-it-yourself with user-friendly web interface, fees/incentives/convenience for doing online, optimizing web-design, installing kiosks on state-owned properties, etc. Further develop pre-visit documentation upload capabilities and optimize appointment scheduling along with upfront payment collection Seek statutory approval to shift more transactions to third-party partners Develop more project management capabilities to manage digitization initiatives and ensure projects are properly executed 	\$10-15m in potential annual savings combined with above opportunity - Inc. est. potential savings of \$5-15m from ~100 FTEs reductions by bringing FTEs/capita in-line with benchmark state DMVs
Automate / digitize documentation & repetitive processes	Agency-wide	 Implement chatbots/voicebots to answer questions and reduce call-volume seek software cost-sharing with other resident-facing agencies Use Robotic Process Automation and Optical Character Recognition to accelerate tasks, move all documentation into digital/cloud storage, and increase FTE capacity (target 25% minimum digital intake) 	\$2-4m in potential annual savings by reducing FTE hours



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Department of Motor Vehicles | Operational opportunities (II/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Index fees to inflation	Agency-wide	Several states now index fees to inflation by statute (CA, NC)	\$2-8m+ per year from indexing fees to inflation
New revenue sources	Agency-wide	 Require safety inspections, performed by dealerships Assess fee for fuel-efficient vehicles to offset gas tax (28 of 50 states now implement EV fees of \$50-250) Monetize opt-in resident database 	\$2-5m+ in potential revenue per year from safety inspections and EV fees today, with upside if EV adoption meets DEEP targets
	Total		• 100+ FTEs
	Total		• \$20-\$40m+



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Office of Policy and Management

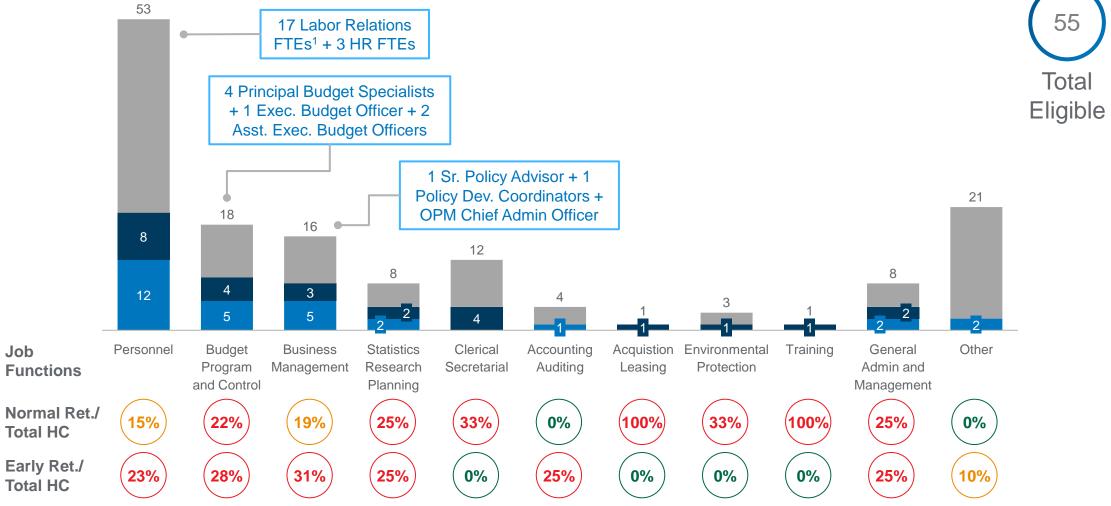
Office of Policy and Management | Agency profile



Program or department	Budget (\$M)	٦	Гуре	FTE budg	et ¹ FTE ²	Description
Intergovernmental Policy	301.6		Grants / program	\$1.2M	14	 To initiate and support state policy development with regard to municipalities and regional councils of governments (COGs) Administer state tax relief programs and formula grant programs that benefit municipalities, firms & individuals Certify assessors and revaluation companies and their personnel; collect, analyze, and publish municipal data; and coordinate statewide planning to insure the effective use of state resources
Policy Development, Coordination and Implementation	0.1 13.6 18.2 4.5			\$7.5M	91	 To assist the Governor, Secretary and state agencies in making policy decisions and in effectively deploying current and future financial and other resources by planning, formulating, coordinating, implementing and evaluating programs and policies that address state needs
Office of the Secretary and Administrative Support	2.3			\$2.2M	27	 As chief financial and policy advisor to the Governor, Secretary assists and advises the Governor on policy and financial issues and advocates for implementation Attain OPM's objectives by directing and coordinating its programs and providing operational support services Directs development and implementation of CT's biennial operating and capital budget Responsible for long-range planning and use of stateowned or leased property
Total	\$316.9 M state \$4.5M federa	\$50.7M other ³		\$10.9M	132	

^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE 3. Includes ~\$50M from Mashantucket Pequot and Mohegan Fund Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point; Source: Connecticut 2020-2021 Biennial Budget Program Addendum

OPM | Initial view is labor relations staff, budget specialists and senior leadership are most at risk of service loss

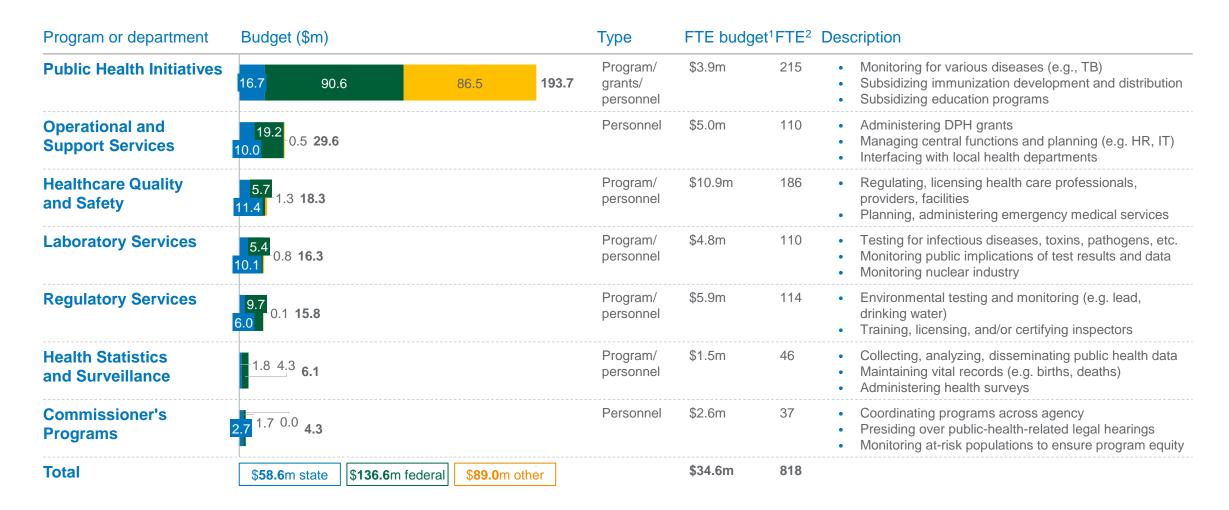


^{1.} Includes 12 Agency Labor Relations Specialists

Department of Public Health

Department of Public Health | Agency profile

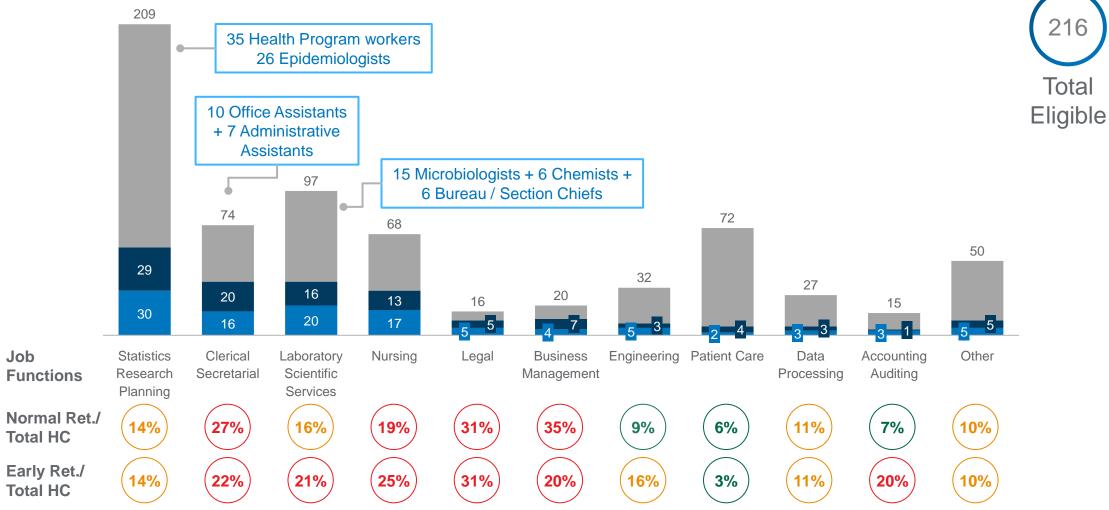




^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: FY2020-2021 Biennial Budget Program Addendum

Total

DPH | Statistics Research Planning and Clerical Secretarial are most at risk of service disruption



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

463



DPH | COVID may exacerbate impact of 2022 retirement surge and complicate backfill efforts



Intense working environment due to COVID may accelerate/increase retirements and complicate backfill efforts

- Strain on DPH staff has increased dramatically
- Job openings likely to be less appealing to candidates in current climate
- Compensation is not competitive relative to private sector for many positions, e.g. clinical



Clerical and secretarial retirements could disrupt day-to-day operations

- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Responsibilities for DPH clerical/secretarial staff often more similar to executive assistants or paralegals
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Staff lack of familiarity with new systems may complicate efforts to backfill internally

 Heavy reliance on outdated operational procedures, Cobalt, faxing, etc. may make assuming new roles challenging for certain staff



DPH | Opportunities to streamline service provision and adopt common platforms across HHS agencies

Drivers		Observations		allenges	Op	Opportunities	
\Rightarrow	Streamline service provision	 There is significant overlap between services offered by DPH and DCF / DSS Multiple programs across agencies offer similar service types 	•	Need for some degree of specialization based on different needs of resident groups Potential political sensitivity Different funding sources could complicate consolidation efforts	•	Consolidate administration of WIC, Healthy Choices for Women and Children with DCF Save Haven Act for Newborns Coordinate administration of Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home	



Establish common agency platforms

- Functions such as grantmaking/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies
- Creating common platforms requires rigorous data sharing agreements between agencies
- Technical and governance complexity
- Need for agency-specific insight in certain processes
- Establish central grant hub for HHS agencies

Streamline adolescent pregnancy prevention programs in collaboration

Initiative in DCF's Medical Health and

 Utilize ImpaCT for eligibility determination

Wellbeing Services

with DSS

 Centralize program monitoring and evaluation for HHS agencies

DPH | Identified opportunities (1 of 2)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Utilize ImpaCT for DPH eligibility determination	All HHS agencies	ImpaCT platform supports eligibility determination for DSS and OEC and could be scaled up to support additional programs	DPH-specific savings depend on extent of utilization – expansion not feasible before 2022 due to technical and governance complexity
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	M DPH-specific savings depend on extent of centralization
Implement statewide background check system for hiring	All HHS agencies	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies	M
Coordinate administration of Children and Youth with Special Health Care Needs (CYSHCN) and Medical Home Initiative in DCF's Medical Health and Wellbeing Services		Housing CYSHCN in DCF's Medical Health and Wellbeing Services could improve coordination and resident outcomes while reducing administrative and program costs overall	
			Major impact (>\$5m or addresses

Source: DPH and OPM input; CT STARS data; FY2020-2021 Biennial Budget Program Addendum; BCG analysis







DPH | Identified opportunities (2 of 2)



Opportunity

Program impacted Detail

Retirement or efficiency impact

Consolidate administration of DCF's Save Haven Act for Newborns with DPH support programs for at-risk pregnant women and new mothers

Public Health Initiatives

- DPH administers multiple support programs for at-risk pregnant women and new mothers:
 - Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides food, healthcare referrals, nutrition education, and breastfeeding support for low-income pregnant, breastfeeding, and postpartum women, infants, and children up to age five at nutritional risk
 - Healthy Choices for Women and Children provides visits, need assessments, education, and service referrals for pregnant/postpartum women residing in Waterbury who use or are at risk of using substances
- Consolidating administration of these programs with that of DCF's Save Haven Act for Newborns could improve coordination and resident outcomes while reducing administrative costs

De-duplicate educational programming in PREP and Teen Pregnancy Prevention Initiative and jointly administer within DSS

Public Health Initiatives

- Both DPH's Personal Responsibility Education Program (PREP) and DSS' Teen Pregnancy Prevention Initiative are intended to prevent adolescent pregnancy and contain educational components
- De-duplicating the educational components and jointly administering the programs within DSS could improve policy coordination, simplify resident experiences, and reduce administrative costs





Major impact (>\$5m or addresses retirement cliff risk)



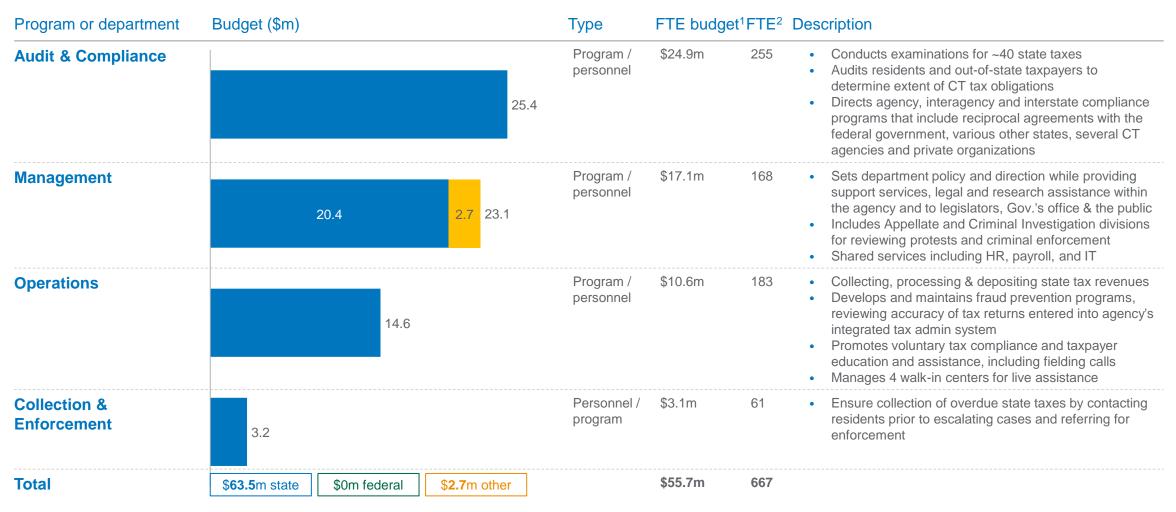
Medium impact (\$1-5m)



Department of Revenue Services

Department of Revenue Services | Agency profile





^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: Connecticut 2020-2021 Biennial Budget Program Addendum

ents

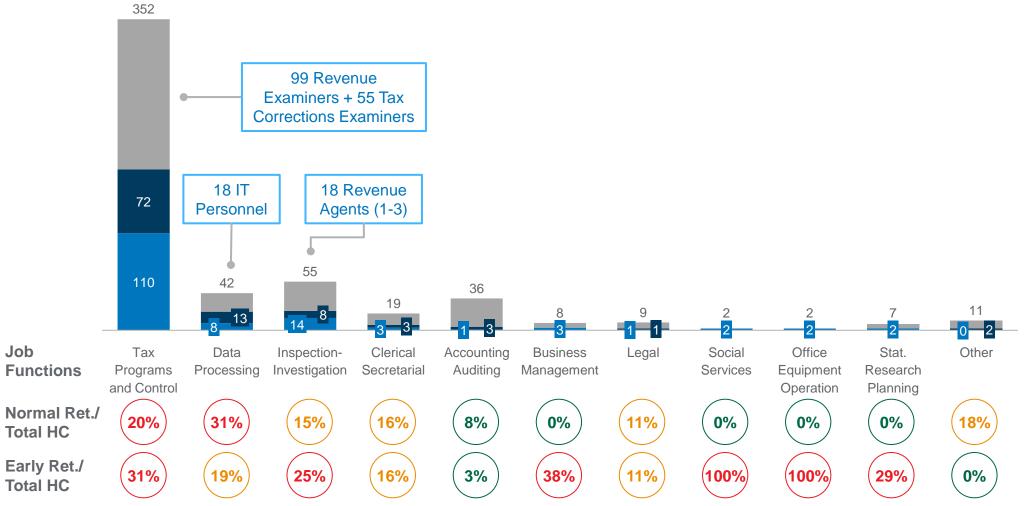
248

Total

Eligible

470

DRS | Revenue and Tax Examiners, IT personnel and Revenue Agents are most at risk of service loss



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DRS | Primary retirement surge risks





Revenue and tax examiners represent largest risk from retirement surge

- DRS already implementing cross-training to ensure workers can cover gaps in each position
- Expectation of being able to reduce Tax Examiner FTEs by 25% from not backfilling retirees



Most experienced auditors difficult to replace given complex filings require years of experience to successfully navigate

Agency documenting processes, conducting succession planning workshops, etc.



COVID-induced closure of walk-in centers did not result in additional filing issues or calls for assistance

 Opportunity to reduce live tax prep assistance personnel and call-center representatives through use of online tutorials/webinars, chatbots, voicebots, etc.



IT modernization initiative already underway with significant progress expected before retirement surge, but loss of IT personnel presents risk to continuity and progress

Biggest recurring DRS opportunities are completing modernization program and optimizing tax compliance

Drivers	(Observations	Challenges	Potential opportunity
	Increase tax compliance	 Estimated CT tax gap of \$1bn+ Gap driven by 40-50% of filers 	 Requires significant resources (e.g., personnel, time, capital) Requires assessment of internal capabilities vs. best practices 	 Invest in data-driven analytics to identify fraud & underpayments Disincentivize underreporting Potential uplift of \$100-200m+
<u> </u>	Complete filing / IT digitization program	DRS in midst of multi-year IT modernization program	 IT modernization programs often encounter significant hurdles and roadblocks Requires strong project management 	 Accelerate re-design of do-it-yourself tax portal Incentivize e-Filing and electronic payments/refunds Potential uplift of \$95m p.a.
	Block DMV transactions	 Several states prohibit residents from completing DMV transactions if DQ taxes exist Similar process in place for municipal property tax payments 	 Must avoid unnecessary burden Requires data integration, but DMV already a digital laggard Likely to encounter pushback for scope-expansion 	 Block residents from scheduling/completing DMV transactions if taxes are owed Provide temporary license/IDs to mitigate impact Potential uplift of \$150m (recurring benefits likely to reduce over time)
	Block vendor payments	Many vendors statewide owe the State back-taxes	May encounter political and business community pushback	 Pay vendors once debt is cured Potential uplift of \$50m+ (recurring benefits likely to reduce over time)
(\$)	Uncollectable debt	 DRS has \$700m in debt considered uncollectable 	 Uncertain capital market appetite for long-term delinquent state tax debts 	 Securitize and market debt in tranches Potential non-recurring uplift of \$100m+
	Tax corrections examiners attrition	 46% of revenue and tax corrections examiners eligible for retirement Cross-training and succession planning plans in place 	May encounter labor pushback	 Avoid backfilling 25% of examiners as digital filings reduce upfront errors Cross-train revenue & tax examiners Potential savings of \$2-6m

Department of Revenue Services | Operational opportunities (I/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact		
Increase tax compliance	Agency-wide	 Re-design of state tax filing processes to increase overall tax compliance Systematically engage stakeholders (e.g., preparers, accountants, etc.) to streamline filing process and reduce unintended fraud Increase usage of data analytics and AI to identify advertent and inadverten fraud while targeting highest expected value filings for further audits, and targeting suspicious tax preparers Automation of audits for simple filings Ensure proper mechanisms in place to incentivize residents to cure prior delinquencies/taxes owed (e.g., blocked DMV transactions such as in MA, NY, RI; increased fines and shame lists; blocked business licenses) Optimized communication with filers to drive awareness of back taxes owed 	- Savings may require ramp-up period before full-run rate achieved		
Digitize filing and payments	Agency-wide	 Continue progress and accelerate (where possible) re-design of do-it-yourself tax portal for residents and businesses Incentivize e-Filing and electronic payments/refunds 	\$95m+ per year in estimated revenue uplift upon full implementation		
Blocked DMV transactions	Collection and Enforcement	 Inhibit delinquent tax payers from completing DMV transactions until back- payments are cured –utilize temporary transactions vs. complete blocks (e.g., done already in several states, include NY, ME, CA) 	\$150m+ potential opportunity, though uplift may decline over time with behavioral changes		
Vendor payments	Collection and Enforcement	Blocking payments to various state vendors/contractors who also have outstanding tax payments owed to DRS	### \$50-60m (upside of \$90-100m)		
Cross-train Revenue and Tax Examiners to reduce FTE needs	Audit and Compliance	 Cross-training for multiple jobs enables remaining employees to fulfill duties of either position Expand knowledge sharing initiative to auditors to ensure complex audit capabilities are capably handled by remaining staff post-retirement surge 	 + **4-6m in potential savings from 50-70 FTEs (25% of Revenue and Tax Examiners) - 24 FTEs and \$2m in Tax Corrections Examiners only 		
			Major impact (>\$5m or addresses retirement cliff risk) Medium impact (\$1-5m)		

Low impact (<\$1m)

Department of Revenue Services | Operational opportunities (II/II)



Opportunity	Program impacted	Detail	Retirement or efficiency impact		
Sell "uncollectable" debt	Collection and enforcement	State has \$700m in outstanding payments currently considered "uncollectable", which can be securitized and sold as receivables	TBC non-recurring uplift based on capital markets environment		
Increase shared services and centralized functions	Management	 Elimination of redundant support functions (e.g., hearings, call center, etc.) Leverage DRS's best-in-state technologies/practices across additional agencies to reduce expenses through cost-sharing (e.g., collections, scanning technology, chatbots, etc.) Merge DOL and DRS data and filings 	5-15% savings shared services = \$2M+		
Close four walk-in centers	Operations	Enhanced online support functionality to reduce need for in-person interactions (i.e., webinars, chatbots, live virtual help sessions)	\$1-5m potential opex and (indirect) lease savings plus ~10 FTEs (50+ across centers)		
"Skunk works" team	Agency-wide	 Create a team of skilled personnel with experience in data analytics and strategy to develop forecasting models, develop new algorithms to reduce workforce processes and increase revenue generation, model cost-benefit analyses on new ideas, etc. 	\$1-5m in potential upside to be refined with additional analysis		
Single-line audits for sales and business tax	Audit and compliance	DRS can conduct single-line audits on individuals but not on businesses, leading to delays in initiating audits for fear of missing bigger value issues	L TBC		
Consolidate print & mail operations	Operations	 Multiple agencies have their own print & mail centers (DRS largest); merge or outsource 	C <\$1m in potential savings		
Transferring non-related activities to other agencies		 Transfer responsibility for plastic bottle and bag fees to DEEP Transfer licensing of tax preparers to DCP 	Minimal (<2 FTEs across various activities)		
	Total		• 60-80 FTEs		
			• \$350-400m+		
			Major impact (>\$5m or addresses retirement cliff risk)		

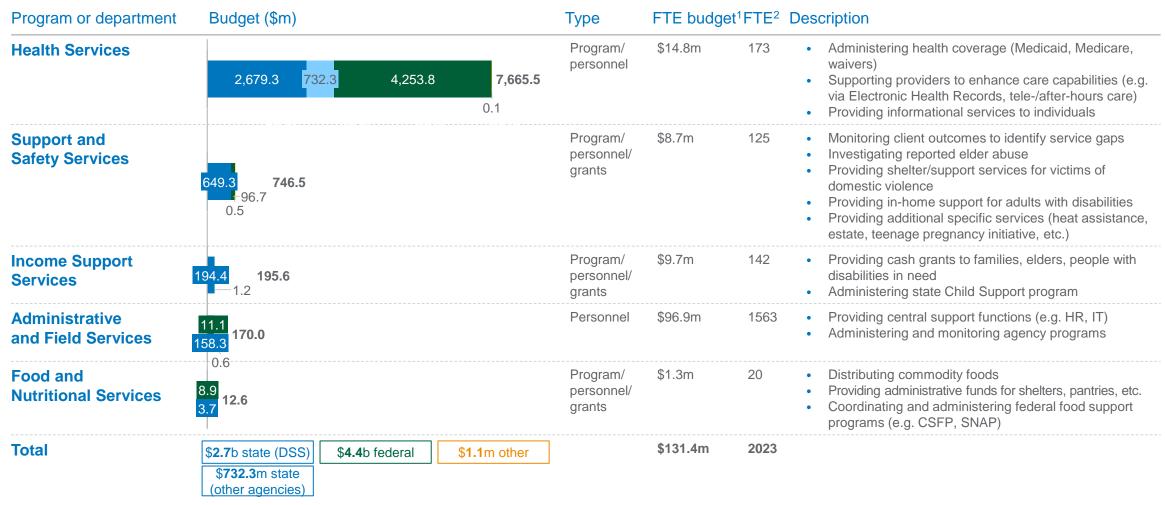
Medium impact (\$1-5m)

Low impact (<\$1m)

Department of Social Services



Department of Social Services | Agency profile



^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: FY2020-2021 Biennial Budget Program Addendum

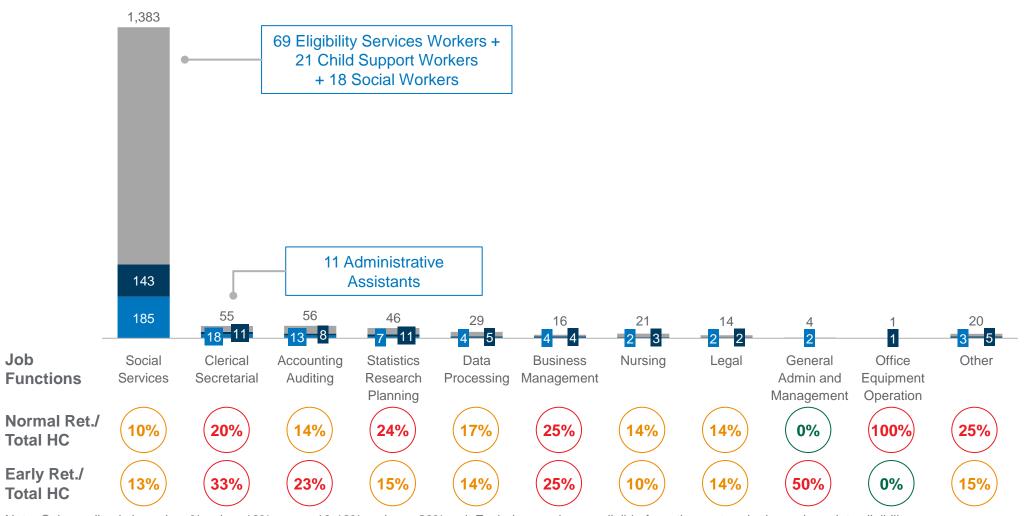


477

Total

Eligible

DSS | Social Services and Clerical Secretarial functions are most at risk of service disruption



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

DSS | Risk of institutional knowledge loss due to widespread 2022 retirement eligibility among leadership; day-to-day ops may also be disrupted



Majority of DSS leadership is eligible for retirement, creating risk for significant loss of institutional knowledge

- Logical successors not always present
- Ambitious reform efforts for HUSKY program likely to require substantial leadership



Clerical and secretarial retirements could disrupt day-to-day operations

- DSS traditionally lean on clerks and secretaries eligibility workers take on extra work as a result
- Clerical and secretarial positions often accrue responsibilities beyond standard job description over time
- Potential backfill alternatives include further centralization of common functions (e.g. grant-making, eligibility determination)



Intense nature of resident-facing positions (social workers and others) may complicate backfill efforts

Positions involve high stress and liability



DSS | Opportunities to adopt common platforms, streamline service provision, and pursue further digitization

Drivers		Observations	Challenges	Opportunities
	Establish common agency platforms	 Functions such as grant- making/administration, eligibility determination, program monitoring/evaluation, and background checks are often manual and duplicated across HHS agencies 	 Creating common platforms requires rigorous data sharing agreements between agencies Technical and governance complexity Need for agency-specific insight in certain processes 	 Establish central grant hub for HHS agencies Centralize program monitoring and evaluation for HHS agencies
\rightarrow	Streamline service provision	There is significant overlap in services provided between DSS and other agency programs	Different funding sources could complicate consolidation effortsPotential political sensitivity	 Further realign early childhood activities into a common agency
	Digitize/ automate manual processes	A number of frequent processes at DSS are heavily manual and require significant administrative effort	 Technical and governance complexity Initial investment likely required Personal interactions important to many DSS services, e.g. eligibility 	 Streamline Affirmative Action data processing Convert case visit documentation system to Salesforce platform Further automate call centers and eligibility processes



DSS | Identified opportunities (1 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Central grant hub	All HHS agencies	 Grant-making processes and administration are often manual, duplicated across agencies, and not standardized – e.g. DCF pays providers by specific number of children and days while OEC can pay for use of building itself Central hub would improve rigor, generate savings through automation, and free up staff to engage closely with partners and seek additional funding 	centralization, further analysis pending
Centralize program monitoring and evaluation	All HHS agencies	 Program monitoring currently conducted by individual agencies Centralization could improve impartiality and sharpen focus on low-performing programs 	DSS-specific savings depend on extent of centralization
Implement statewide background check system for DSS hires	All HHS agencies	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies	M
Reduce incorrect reports of abuse to DSS	Support and Safety Services	 Improving community training and resources and screening processes to reduce time/resources deployed to investigate "false alarms" for elder abuse domestic violence, etc. would increase staff capacity and reduce administrative costs 	, L
Reduce overtime	Agency-wide	 Optimizing shift schedule could reduce cost while maintaining coverage DDS efforts can serve as roadmap 	L



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)



DSS | Identified opportunities (2 of 2)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Consolidate administration of federally-funded nutritional assistance programs	Food and Nutritional Services	 Consolidating administration of SNAP, CSFP, and TEFAP could improve policy coordination and ultimate outcomes, simplify resident experiences, and reduce administrative costs 	L
De-duplicate educational programming in PREP and Teen Pregnancy Prevention Initiative and jointly administer within DSS	Support and Safety Services	 Both DPH's Personal Responsibility Education Program (PREP) and DSS' Teen Pregnancy Prevention Initiative are intended to prevent adolescent pregnancy and contain educational components De-duplicating the educational components and jointly administering the programs within DSS could improve policy coordination, simplify resident experiences, and reduce administrative costs 	
Streamline Affirmative Action data download from CoreCT	Administrative and Field Services	Current data extracts are not consistently compatible with state requirements and Tableau usage, generating additional manual effort	
Convert case visit documentation system to Salesforce	Agency-wide	Pending further input	L
Further automate DSS call centers	Agency-wide	Pending further input	L
Further automate eligibility document approval process	Agency-wide	Pending further input	L

Major impact (>\$5m or addresses retirement cliff risk)

Medium impact (\$1-5m)

Low impact (<\$1m)

Teachers' Retirement Board

Teachers' Retirement Board | Agency profile



Program or department	Budget (\$M)		Type	FTE budget	t ¹ FTE ² D	escription
Funding of System		1,2	Grants / programs 240.3	\$0	0	 Administers retirement and health benefit plans for career public school teachers and eligible dependents Pensions funded by member contributions, state contributions and investment income FY ending June 30, 2018 saw pension benefits of \$1.9 billion vs. \$325 million in active member contributions
Management Services	2.1		Program	\$1.6M	27	 Delegates daily management and administration of the retirement system to the administrator Activities include accounting for receivables and payables, account reconciliation, application procession for various types of benefits, determination and initiation of eligibility, etc. As of June 30, 2018, there were 50,692 active members, 37,260 retired members, 301 disabled members and 16,442 inactive members
Total	\$1,242.4M state \$0.0M fede	ral \$0.0M other		\$1.6M	27	

^{1.} Personal services 2. Incl. General Fund and Federal Fund FTE

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point
Source: Connecticut 2020-2021 Biennial Budget Program Addendum

Teachers' Retirement Board | Operational opportunities



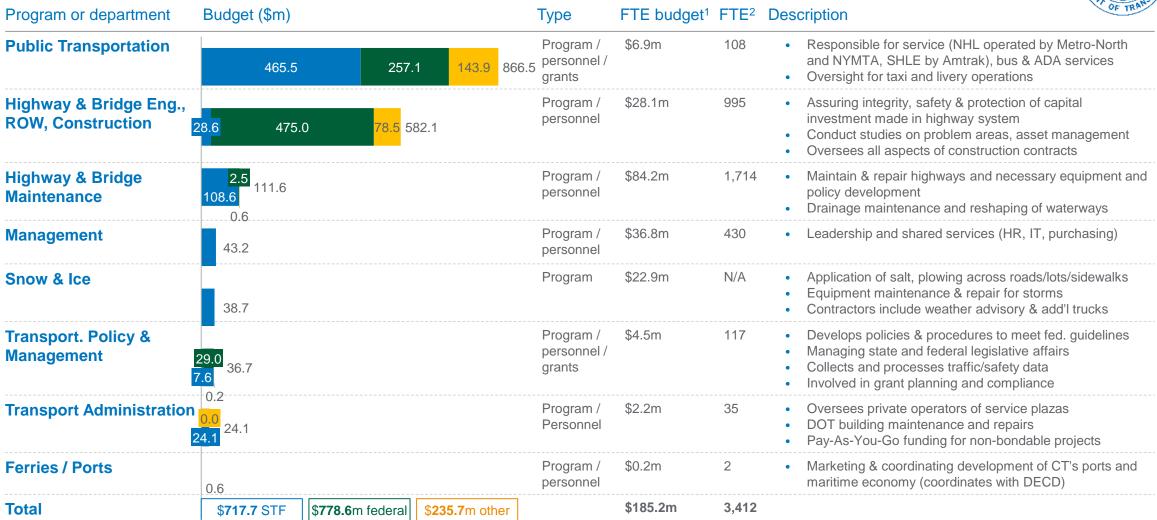
Program or department	Budget	FTE	ID	Hypotheses			FTE	impact	Bud	get impact
Funding of System	N/A	0		Increase cost- sharing from municipalities	•	State is responsible for pension obligations for teachers hired by municipalities	•	N/A	•	TBC
Funding of System	N/A	0		Incentivize retirees to remain on Municipal Retiree Health Insurance	•	State reimbursed \$110 per month for retirees who remain on municipalities' health plans	•	N/A	•	TBC
Agency-wide	\$1.6m	27		Consolidate operations	•	Consolidate operations with State treasurer or State Comptroller's Office given substantial overlap	•	TBC	•	TBC
Agency-wide	\$1.6m	27		IT integration with CORE-CT		Risk from having one IT employee writing code for a bespoke platform	•	1	•	Low

Total Low TBC

Department of Transportation

Department of Transportation | Agency profile





^{1.} Personal services 2. Incl. STF, Private, Special Non-Appropriated and Federal Fund FTEs

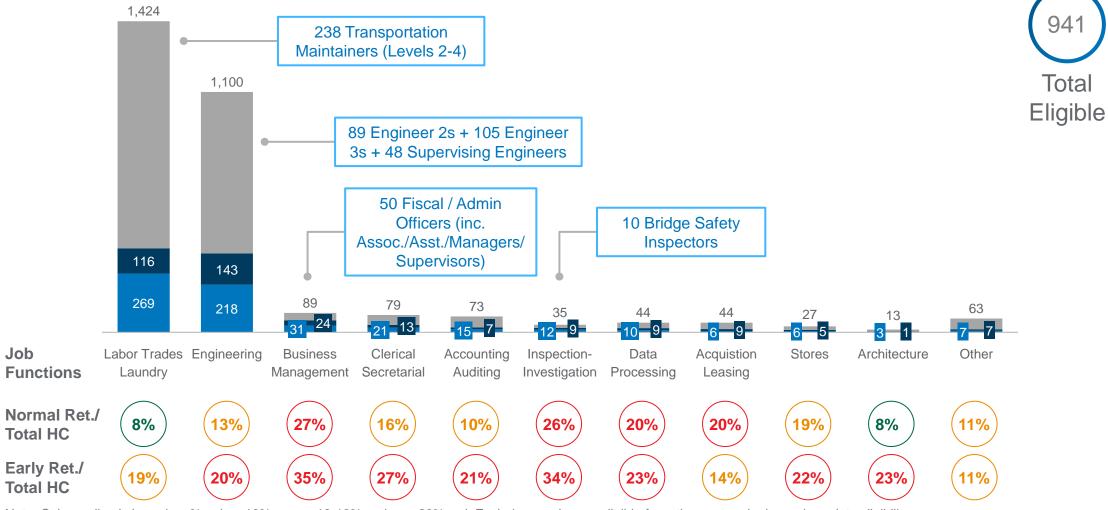
Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point. Figures exclude capital budget;

Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DOT | Transportation Engineers, Fiscal/Admin Officers and Bridge Safety Inspectors are most at risk of service loss



Total



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red. Excludes employees eligible for retirement under hazardous duty eligibility. Source: CT STARS database as of 1/5/2021

487

DOT | Primary retirement surge risks





Retirement of high-skilled and difficult to attract/retain engineers

- E.g., Engineer 3s, Principal and Supervising Engineers
- Requires job-specific degrees and years of experience, difficult to compete with private sector



Significant number of transportation maintainers eligible for retirement, creating risk to improving or even maintaining the condition of CT roads that remain below targets

Backfilling alternatives include outsourcing & creating new job classifications with reduced requirements



Deploying new tools, technologies and materials requires investment as well as skillsets not currently in place within DOT

- Requires adapting job classifications to modernized needs
- E.g., drones for bridge inspections and surveying, durable roads, road sensors, etc.



Significant risk of lost institutional knowledge throughout the organizational structure, including management (57% eligible) and clerical workers (44%)



Limited ability to outsource work based on existing labor rules

I.e., arduous process required in order to outsource work currently done only in-house

CONNECTICAL ROLLING

Biggest DoT opportunities are modernizing tools and right-sizing capacity

Drivers		Observations	Challenges	Potential opportunity		
	Transit capacity	 Commuter rail ridership remains 70-90% < pre-COVID, while bus remains down 25% 	 Likely to encounter political pushback (softened with resident input & by similar peer actions) 	Reduce service on low-rider linesUse shuttles for high-subsidy rail		
	Organization structure	 Transportation maintainers and engineers among top 10 jobs eligible for retirement Appetite for implementing regional-based outsourcing 	 Requires full buy-in from agency leadership Potential labor resistance Statutory and labor hurdles to outsourcing work (4e-16) 	 Re-classify and update job titles Outsource more existing work Right-size job mix, spans/layers 		
	Rail, bus and material contracting	 Low recovery rates vs. comps High light rail operating costs adj. for passenger miles Bus operations not coordinated across operators and systems Budget not performance based 	 Fixed-route bus litigation, ARSA contract negotiation loss hinder appetite for re-bidding Sec. 13b-80 (bus certificates) Best value provider may face "outsider" arguments 	 Re-bid transit operation contracts Pass legislation to allow competitive bids for bus services Benchmark procurement of materials to best-in-class 		
	New inspection, maintenance and bridge tools	 Many bridge inspectors and maintainers retirement-eligible States expanding usage of drones for DOT use-cases Drawbridges staffed 24/7/365 	 Requires investment in new capabilities (i.e., OPM approval) and new jobs that meet future needs (i.e., AVs, UAS) Capital to automate drawbridges 	 Build a leaner, tech-driven agency to avoid full back-filling Invest in drones and sensors Use more durable materials^{2,3} 		
	Revenues (existing and new)	 Broad range of opportunities new & existing revenue sources Better monetize rest areas 	 Political backlash likely on fares and rest area privatization & may require FHA clearance 13b-14b hinders studies of fees 	 Monetize ROW (e.g., solar) Encourage retained revenue Require minimum recovery rates Outsource rest area mgmt. 		

Department of Transportation | Operational opportunities (I/III)



Opportunity	Program impacted	Detail	Retirement or efficiency impact		
Reduce rail and bus service levels	Public Transport	 Reduce New Haven Line service by 37% capacity Reduce SLE operations with fewer runs and/or cars, or consider replacing stops with shuttle bus services Consolidate, eliminate and amend express bus service levels Soften pushback and optimize planning via direct resident input 	\$45m+: \$35m potential annual savings from ~37° service level reduction on New Haven Line, \$5m-potential savings from 50% SLE service level cut (vs. budgeted operations) and \$3m+ from expres bus service efficiencies.		
Organizational structure review	Agency-wide	 Re-classify and update job titles, including more flexibility to meet needs of modernized agency and align jobs-skills matching (e.g., not requiring CDL for all Maintainer 1s, creating TSE Admin title) 	\$5-35m+: 5-20% outsourcing of Maintainer jobs, regional outsourcing, etc. (~980 Maintainers + ~800 Maintainer Managers/Supervisors)		
		 Outsource more existing work (i.e., KPI-based contracts covering regions) Right-size job mix, spans/layers Partner with DOC/non-profits to expand opportunities for inmate population for low-skill work (e.g., ROW clearance) to reduce recidivism (e.g., CA) 	 Additional analysis needed to refine savings estimates, including current in- house/outsource maintenance spend mix 		
Bid out public transit service operations	Public Transport	 Modify statute 13b-80 to clarify bus operators do not require a certificate Package several rail lines and bid out in competitive process given low operating ratio on Shore Line East and high Amtrak costs Open re-negotiations on Metro-North and Amtrak deals to reduce operational costs and drive contractor efficiencies Consider divesting physical assets / rolling stock if outsourcing operations 	\$10-25m+: 5-10% estimated reduction in \$250m+ annual train subsidies; potential savings by leveraging TASI vs. Amtrak costs on Hartford Line for re-negotiations or competitive RFP: - SLE + Harford subsidy = \$60M p.a. - Bus subsidy = \$125M p.a. at MTN% ratio		
Replace rail service with more cost-effective shuttles	Public Transport	Replace commuter rail services with low farebox recovery rates with more cost-effective bus/shuttle services	# \$10-15m+ in operating subsidy savings assuming full service levels maintained		
Inspection and maintenance tools, advanced materials	Agency-wide	 Roll-out usage of Ultra High-Performance Concrete and explore additional more durable materials (e.g., self-healing concrete) Build a leaner, tech-driven agency to avoid full back-filling Expand usage of drones (beyond DESPP, e.g., inspection and surveyance) 	\$5-10m+ potential savings from using drones to conduct bridge inspections and advanced (more durable) materials to reduce maintenance needs		
		and sensors (early detection of roads to fix while in good/fair status)	Major impact (>\$5m or addresses retirement cliff risk) Medium impact (\$1-5m)		

Low impact (<\$1m)

Department of Transportation | Operational opportunities (II/III)



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Monetization opportunities	Agency-wide	 Optimize advertising and sponsorship across transit, including naming rights (e.g., onboard, at stations / on platforms, mobile apps, etc.) Monetize ROW, rest areas and real estate (e.g., solar PVs, cell towers, sponsorships, etc.) and audit of existing agreements for full collections Enable agency to convert Blue Sign advertising to recurring revenue leases Encourage retained revenue activities (i.e., scrap metal programs) Evaluate minimum fare recovery rates set by statute Outsource rest area mgmt. Repeal Sec. 13b-14b to allow DOT to study cost-benefit analysis of new fees 	by private contractors, \$5-10m in potential advertising optimization, \$1-5m from wireless leasing program, <\$1-2m from fully outsourcing rest areas (30 FTEs)
Remote drawbridge operations	Agency-wide	 Move to remote operation of drawbridges vs. current model of 24/7/365 in- person staffing 	\$3m+ in potential annual savings for 25 FTEs (required upfront investment to be refined by DOT)
Mainstream ADA paratransit and increase use of third-party TNC services	Paratransit	 Better outreach and education to direct certain segments to free bus services. Increase use of third-party TNCs to provide select trips. Unify state paratransit systems. Evaluate ways to ensure better quality of service does not lead to abuse of ridership by those who do not require paratransit services. 	 *\$1-2m savings per year MBTA saw average per trip cost fall from \$46 to \$13, offset by substantial increase in volume of trips. Capping subsidies produced net 6% savings
Reduce restraints on PPP opportunities and maximize federal funding	Highway & Bridge Maint.	 Amend Statute Sec. 13b-14b to allow DOT to study the cost-benefit of usage-based fees, which may be partially funded by federal grants (e.g., Surface Transportation System Funding Alternatives [STSFA]) Amend statutes to allow usage of lease operations for availability payments Optimize federal funding with dedicated staff focused on identifying grants and exploring all viable options for eligibility (e.g., TIF, CPAQ, TIFIA, etc.) 	M Several million dollars received by various states for RUC studies (e.g., WA, DE, OR, NH), though current legislative restrictions have prohibited DOT from studying potential benefits



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)

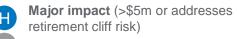


Low impact (<\$1m)



Department of Transportation | Operational opportunities (III/III)

Opportunity	Program impacted	Detail	Retirement or efficiency impact
Transit District consolidation	on Agency-wide	 Shared reservation and dispatching systems: more efficient trip planning and improved purchasing power with vendors Strategic partnerships – leveraging economies of scale, improve ability to attract and retain transit managers, avoid duplicative CapEx 	d L \$0.8m in potential annual savings
MPO Consolidation	Agency-wide	 Consolidation to either 3 or a single MPO allow for possible integration of the COG Coordination and STIP units into one cohesive unit Intermodal team would be potentially freed from their current support services to the MPO studies and could be redirected toward supporting true intermodal planning needs within the Department. Aligns well with anticipated retirements in both units in 2022 and would bette allow us to repurpose position refills into other identified planning needs 	
Reduce staff fleet size by 15%	Admin / Management	 Cut DOT fleet by at least 15% (19 vehicles) Post-pandemic, evaluate opportunity to further reduce light-duty fleet once teleworking policy stabilizes for long-term usage analysis 	C <\$1m per year in annual savings
Offload Welcome Center		Welcome Center is underutilized and not core to DOT mission	< \$1m potential salary savings
	Total		• 195-225+ FTEs
	Total		• \$95-\$145m+



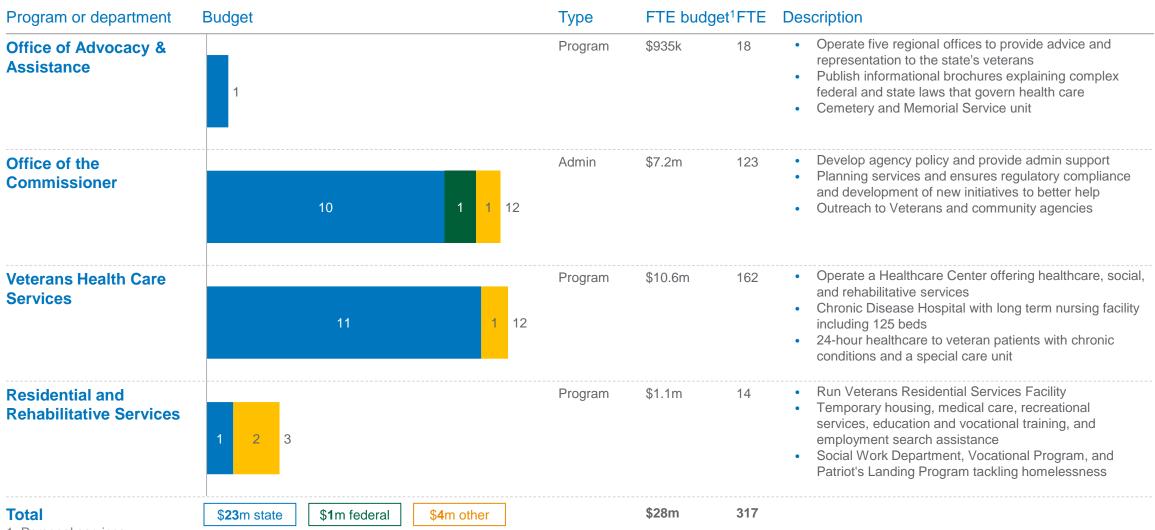




Department of Veterans Affairs







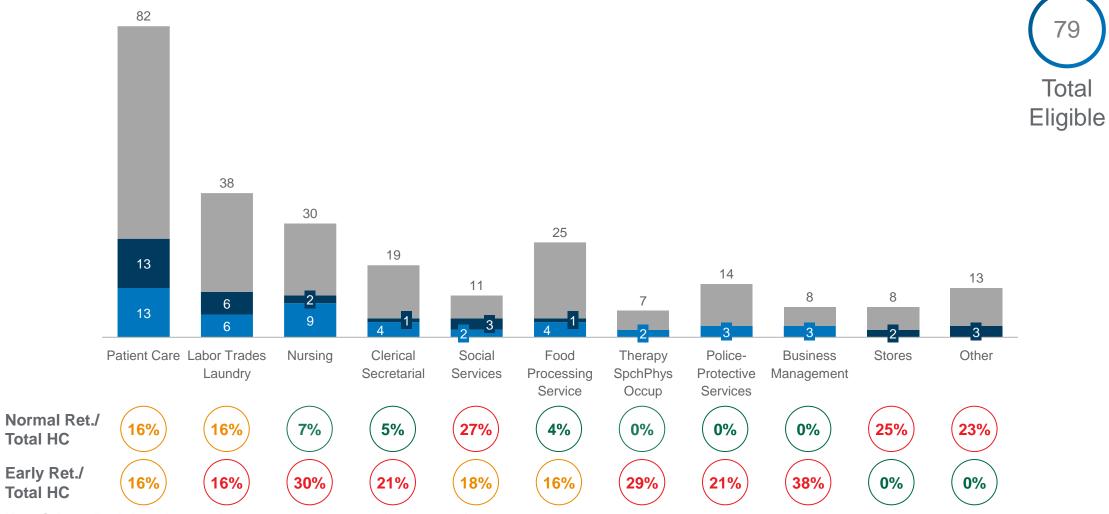
^{1.} Personal services

Note: Budget and FTE figures are FY 2020 Recommended figures and vary slightly from agency headcount at any point Source: Connecticut 2020-2021 Biennial Budget Program Addendum

DVA | Large number of medical staff eligible for retirement



Total



Note: Color coding is based on % only, <10% green, 10-19% amber, >20% red Source: CT STARS database, BCG analysis

Ineligible Normal Eligible Early Eligible

DVA | Primary retirement surge risks





Retirement of skilled healthcare workers leads to loss of institutional knowledge

- 50% of personnel dedicated to a skilled healthcare facility position eligible for retirement
- Positions are tough to re-fill due to level of expertise threatening service continuity for veterans



Difficult-to-recruit social services capabilities facing retirement risk

- E.g., 50% of the social services staff eligible for retirement
- Potential loss of service continuity



COVID-19 creates persistent challenges for care delivery and potential employee burnout

- Loss of medical professional such as nurses presents unique risk
- Potential to increase reliance on supplemental pool staff with chance of contracting virus, cascading damages of overtime and expenses



Lack of technology support to achieve operational objectives

- Risk of clerical staff retiring
- Do not have an electronic payment platform necessary to sustain continuity with lack of manual processing support

Department of Veterans Affairs | Retirement opportunities



Opportunity	Program impacted	Detail	Retirement or efficiency impact
Contract out convalescent care operations	Cross-agency	Engage a nursing provider to operate veterans convalescent care operations, following model in other states	Potential savings of \$4-5m based on benchmarks from other states, but would incur meaningful transition cost
Implementation of digital health services	Cross-agency	Improve registrations and claims filings to improve service to veterans and cut down time and resources needed to process submissions	Decreases number of manual filing processes required for veterans' access to benefits, decreasing number of clerical staff needed
Increase census of nursing homes	Veterans Health Care Services	Ensure right staffing and types of care to best aid veteran patients and improve overall service quality	L



Major impact (>\$5m or addresses retirement cliff risk)



Medium impact (\$1-5m)



Low impact (<\$1m)

Appendix Full list of recommendations by agency

Identified opportunities by agency (1 of 10)

Agency	√	Opportunity	Description
ADS		Consolidate ILP, HIS and CHSP within ADS	Consolidating/jointly administering programs could improve policy coordination, simplify resident experiences, and reduce costs
Cross-agency		Develop common grant platform	Digitize and streamline grant-making processes across agencies via a common platform in order to reduce administrative costs, increase agency employee capacity, and simplify provider interfaces
		Streamline human service programs/functions	Consolidate or jointly administer programs housed in separate agencies that are providing similar services and/or directed towards common resident groups to simplify resident experience and reduce administrative costs
		Improve manager value proposition and retention	Make becoming a manager in state workforce more attractive in order to better compete with private sector and encourage upward mobility
		Manage overtime/absences	Reduce 1.5x overtime expenses by optimizing staffing and scheduling as well as reducing avoidable absenteeism
		Manage workers comp expense	Reduce workers' compensation expenses by bringing benefits in-line with peer states, mitigating fraud, increasing safety and incentivizing return-to-work programs
		Consolidate employment support administration	Consolidating the administration, procurement and oversight functions for employment supports and reducing overhead on contracted services
DAS		Digitize performance management	HR documents, records, and workflows to be automated via People-Doc (HR software) subscription
		Digitize account/lien notices	Relevant documentation is sent via certified mail or fax due to email security concerns, resulting in only ~20% of potential liens being processed
		Digitize invoice processing and Purchasing Card receipts	Invoice and P-card receipt processing currently requires heavy manual entry from associates, accountants, and supervisors
		Automate Probate Application processing	Probate Applications are received by mail and processed by Technicians-required to be processed within 30 days of mailing date
		Automate Workers' Compensation calculations and audits	Remove manual processes in calculating WC payments
		Streamline payroll review of completeness	Majority of payroll process already digitized-exception is chasing down employees who haven't submitted timesheets
		Automate check processing	Checks currently received via mail and entered in multiple systems, often being "touched" 4 or more times

Identified opportunities by agency (2 of 10)

Agency	✓	Opportunity	Description
DAS/cross agency		Common payment platform	Digitize document management via a common platform across agencies and standardize payment processes statewide (e.g., acceptance of credit cards)
		Common document management platform	Collection of initiatives to roll out common document management/signature collection software across agencies
		Automate Affirmative Action reporting	Automating data pull from personnel systems to accelerate the creation of agency-level AA reports
		Centralize business management (incl. AR/AP)	Centralize various business management functions from across agencies into DAS, including AR/AP processing
		Streamline hiring process	Reduce time needed to obtain hiring approvals, identify top clients, interview candidates and onboarding new hires
		Increase office co-location	Share office space between multiple departments to save on office costs
		Consolidate specialized assets	Manage non-office real estate (e.g., barracks, garages, laboratories) in a cross-government
		Contract facility maintenance	Share facility maintenance operations across all state buildings
DCF		Reduce incorrect reports of abuse	Improving community training and resources to equip reporters (e.g. teachers) to better identify potentially abusive situations could reduce time/resources deployed to investigate "false alarms" and increase case worker capacity
		Automate cross-agency referral system	Cross-agency systems would help case workers better understand opportunities for referrals and streamline process, creating additional capacity
DCP		Expand common professional credentialing platform	Expand credentialing and enforcement resourcing to take on more activity. Credentialing duplication across the state which would be better housed at DCP
		De-credential low-risk professions	Identify creative ways to minimize industry resistance for de-credentialing initiatives
		Strategically target inspection activity	Target inspections based on likelihood of non-compliance pushing against legislative barriers
DDS		Expand non-profits for group homes	Outsource operation of DDS-run group homes to lower-cost non-profit providers
		Implement state-wide background check system for DDS hiring	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
		Implement online portal for Individual Service Plan	12k+ Plans a year are developed in conjunction with service providers and with input from the individual and guardian, requiring signed approvals
		Implement online service eligibility application	Eligibility applications received in paper and scanned into FileBound scanning system (avg. 750/year)

Identified opportunities by agency (3 of 10)

Agency	✓ Opportunity	Description
DDS	 Automate DDS payment/payment tracking system 	Automated payment and payment tracking system would reduce or eliminate manual process work for agency staff while allowing provider business owners to monitor and track as well as report on payments from state
	☐ Digitize cross-agency contact information maintenance	Case Managers review contact information annually
DECD	☐ Cut low-ROI film/tax programs	Eliminate tax credit programs with low return on investment
	☐ Expand DECD contracting to AdvanceCT	Mitigate backfilling needs (48% eligible for retirement) by outsourcing activities to non-profits, notably AdvanceCT
	☐ Right-size tourism staff	14 FTEs on Tourism and Brand program while utilizing 2 external agencies indicates potential to downsize slightly
DEEP	☐ Combine asset maintenance functions	Opportunity for increased cross-agency coordination of maintenance of land assets
	 Migrate pesticide licensing to ELMS eLicensing system 	8-month projected expected to go live by EoY 2020 for 7k licenses/year
	☐ Enhance and expand e-permitting via EZ File	E-permitting would automate quality control for customers as well, saving effort for both state and customers and improving customer experience by reducing need for re-work on improperly filled-out forms
	 Further automate/digitize municipal grant process 	50 projects currently under management; existing contract with DocuSign to streamline signature process
	☐ Cross-functional inspection platform	Increase cross-training and consolidate inspections across cluster, including a technology-enabled platform flagging inspection status
	☐ Increase use of public/private partnerships	Increase adoption of partnerships as well as outsourcing additional services for land asset maintenance
	☐ Generalize environmental permitting requirements	Move permits from customized to general and utilization of third-party services by growing legal team to write regulations, compliance, and implement action
	☐ Reprioritise DEEP service activities	Prioritize regulatory actions over enforcement for more efficient service continuity
	 Enhance customer usability for PURA interface 	Improve customer interface of PURA systems and others to simplify processes and minimize reliance on service support staff
	☐ Digitize site case management	Implement Release Based approach to site remediation (activities that occur after a spill or other incident)
	☐ DEEP paper record digitization	Digitization of materials in progress—hazardous waste manifests already online, spill reports in progress (1.3M pages)
	☐ Digitization/scanning of incoming DEEP mail	Would need to be compatible with general records digitization initiative to ensure proper sorting of incoming documents

Identified opportunities by agency (4 of 10)

Agency	\checkmark	Opportunity	Description
DESPP		Lower CSP trooper target, civilianize admin	Decrease non-enforcement activities for state troopers and reach staffing target of 1,100 CSP
		Deferred retirement option plan for state police	Leverage the Deferred Retirement Option Plan (DROP) to maintain CSP staffing while decreasing retirement costs
		Streamline case reporting and review for Div Sci Svcs	Includes redaction and review of case discovery material, sample status queries, paperwork reconciliation, etc.
		Implement grant management system at DEMHS	DEMHS oversees typically oversees 140 subgrants with number recently doubling due to supplemental funding, in addition to other programs
		Digitize DESPP quality control activities	Includes inventory monitoring, reagent quality control, process review required by accreditation, instrument/equipment maintenance
		Digitize officer and instructor certification processes and documents	Includes initial certification for new officers, recertification, cross-state certification
		Automate basic training data entry, maintenance and planning/logistics	Significant manual data entry, with oversight required for 6 satellite academies
		Fully digitize CLESP-related data for accreditation	Data storage inconsistent across agencies—some are digitized, others require hand searches of files
		Transfer weight station duties to DMV	Both DMV and CSP work in conjunction to manage weigh stations; shift weigh station duties to managed solely by DMV
		Privatize fingerprinting services	CSP manages fingerprinting services; privatize services to increase trooper capacity
		Increase electronic payment acceptance for DESPP	Increase use of electronic payment methods to streamline back office support and improve customer experience
		Eliminate MMA/boxing management	Limited trooper capacity to manage MMA/boxing events in the state; privatize management to increase trooper capacity
		Centralize gasoline management for state fleet	DESPP and DOT track gasoline usage for fleet; have trooper vehicles use DOT gasoline to save money on tracking and reporting
		Streamline payments for gun permits	Gun permits do not accept credit cards for purchases; integrate digital payment systems to improve customer experience and decrease fiscal duties
		Automate certification applications and renewals	Certification applications and renewals are currently a manual process; automate processes to increase staff capacity and improve customer experience
		Automate basic training reports	Profile form entries are currently a manual process; automate to increase staff capacity and standardize reporting among recruits

Identified opportunities by agency (5 of 10)

Agency	✓ Opportunity	Description
DMHAS	☐ Digitize DMHAS patient record	Implement an Electronic Health Record (EHR) to streamline and standardize data capture and operational processes across DMHAS-operated facilities, increasing employee capacity and reducing administrative and operational costs
	□ Expand non-profits for LMHAs	Outsource operation of DMHAS-run LMHAs to lower-cost non-profit providers
	☐ Implement state-wide background check system for DMHAS hiring	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
	☐ Automate DMHAS shift staffing via KRONOS	Implementing KRONOS would increase facility worker capacity by reducing manual effort currently required to organize staffing
DMV	☐ Digitize DMV transactions	Enhance ability for customers to pre-upload documents, reducing failed transactions, cutting transaction times and accelerating back-office digitization efforts
	☐ Clear DMV backlog	Completing lodged transactions to realize revenue and meet resident needs
	☐ Automate/digitize DMV documentation	Implement chatbots/voicebots to answer questions and reduce call-volume—seek software cost-sharing with other resident-facing agencies
	 Automate Ignition Interlock Device (IID) removal authorization 	Automated notice to customer and IID vendor that IID requirement is complete would free analysts to do other work
	☐ Automate Divers History Requests	Typically requires multiple examiners
	☐ Fully digitize registration renewals	~85% of renewals conducted through mail-in lockbox system or online—remaining 15 % will visit branch
	☐ Digitize billing process	Billing process currently manual and includes: sending invoice letters to customers, manual QuickBooks tracking, processing flags/restrictions on customer accounts, collection enforcement actions, and cashiering payments
	 Automate DMV call centre resident support where feasible 	~45 calls received daily
	☐ Fully automate customer refund request processing	Requests received from customers, branches, and contact centre (email)
	☐ Digitize title duplications	Process currently requires manual intervention
	☐ Registration duplications	DMV's online system can already service this transaction
	☐ Streamline Medical Reporting schedule	Single process with single notice would replace 3 separate processes (establishing due date, notifying driver, and suspending for non-compliance)
	☐ Implement portal for medical professionals to complete DMV medical reports	Online form would force medical professionals to complete and answer all required sections/questions, eliminating incomplete/unreadable forms that need to be handled multiple times

Identified opportunities by agency (6 of 10)

Agency	✓ Opportunity	Description
DMV	☐ Index DMV fees to inflation	Several states now index fees to inflation by statute (CA, NC)
	☐ Digitize boat registration renewals	DMV has previously worked on a venture with CT Dealers and Marine Trade Assoc to allow renewals online using Dealer Online System
	☐ Implement Web Pay for Passenger Insurance Compliance	Currently must be done on other systems
	☐ Boat cancellations	Multiple employees may be required depending on season
	☐ New DMV revenue sources	Require safety inspections, performed by dealerships, assess fee for fuel-efficient vehicles to offset gas tax (28 of 50 states now implement EV fees of \$50-250), monetize opt-in resident database
	☐ Further digitize new auto registrations	Online dealers already perform ~30% of new registrations; DMV recently deployed Out of State Dealer Registration and Pre Registration portals
	☐ Further digitize registration cancellation	DMV already allows online cancellation if plate has not expired; seeking to fully digitize
	 Automate DMV check payment processing for services 	In-person staff currently required to receive checks by mail, apply payments to customer accounts, and prepare bank deposits
	☐ Complete digitization of Drivers' License renewals	Currently being digitized via SalesForce project
	☐ Digitize Driver's License duplicates	DMV seeking to digitize via SalesForce project as well—duplicates currently processed in-person
	☐ Digitize DMV address updates	Current process requires manual intervention
DoAG	☐ Dog license requirement	Digital registration platform would streamline manual processes and create a new revenue stream for the state
DoB	☐ Recognize other states' licenses	Increase acceptance of out of state licenses to minimize banking applications to do business in Connecticut
	☐ Migrate to Case Point from Concordance	Eliminate personnel processing time and ensure document accuracy in preparation of legal cases
	☐ Pilot State Examination Systems	Provide solution for document management, scheduling, billing and processing through piloting of examination program and electronic module
	☐ Increase banking examination coordination	Coordinate examinations with both state and federal regulators to minimize regulatory burden and cost
DoC	□ Return corrections staffing to previous level	Accept CO retirement to return ratio of CO/inmates to pre-Covid levels
	☐ Match prison footprint to population	Divest prisons with high operating costs to match facility footprint to existing prison population
	□ Demand response for utilities	Utilize existing facility generators to participate and receive payment in demand response programs.
	☐ Increase EAU staffing	Increase EAU staffing and personnel to provide timely and responsive interventions and peers support services.

Identified opportunities by agency (7 of 10)

Agency	✓ Opportunity	Description
DoC	☐ Better use trades reserve	Hire a reserve of tradespeople to draw from as critical staff retire in order to maintain essential services
	☐ Improve training for peer counsellors	Enhance training opportunities for peer counsellors specific to LE/correctional professionals, thereby improving efficacy of recidivism programs
	☐ Expand videoconferencing infrastructure	Expand use of remote technology will reduce the need for inmate transportation and will decrease costs by reducing vehicle use and staff resources required
	□ Upgrade inmate recordkeeping	Upgrade system for maintaining inmate records to save time and cost by reducing FOI complaints
	□ Electronic invoicing for DoC	Automate accounts payable function through electronic invoicing
	□ Direct deposit for DoC	Require state employees to have direct deposit to receive pay and petty cash payments
DoH	 Contract non-profits/CHFA for further responsibilities 	Coordinate with non-profits, community advocates and quasi-public organizations to shift tasks away from DOH; while CHFA may be capacity-constrained, State should incentivize additional outsourcing of compliance technology to CHFA where possible
DoL	☐ Complete unemployment modernization	Finalize deployment of new UI platform, allowed for smaller long-term staffing level
	☐ Automate licensing reviews	Decrease FTE headcount through automation of licensing reviews across regulatory cluster
	 Prioritize labour regulatory activity based on likelihood of noncompliance 	Targeted regulatory risk assessment approach; de-regulate business climate exp. recognizing out of state licenses
	 Integrate labour and social service client information 	Better integrate Social Service Agencies and DOL through consolidated client information system and similar data fields
	☐ Consolidate workforce registry systems	Combine workforce development services into a single platform readily accessible to any citizen utilizing government service
	 Invest in employment data system improvement 	Establish single database of employment information tracking statistics and trends across programs as a data integration hub
	☐ Refine targeting of workforce training programs	Identify overlap in training services across programs to realize cost reduction opportunities (Skill-Up CT, ETC, etc.)
	☐ Modernize initial labour claims processing	Customer service representatives currently review claims for completeness and transfer from Salesforce Standard Claim Queue to TICS (Telephone Initial Claims System) and IBM (processing, payment, etc.)
	☐ Implement DocuSign for UI Reemployment Services and Eligibility Assessment	Would reduce time spent on intake processes and allow for more efficient direct service provision
DoT	 New tools for transport inspections and projects 	Modernize DOT equipment to help extend durability of infrastructure, reduce costs and prioritize highest priority projects

Identified opportunities by agency (8 of 10)

Agency	✓	Opportunity	Description
DoT		Bid out public transit service operations	Competitively bid rail contracts to reduce costs and improve performance
		Review transport structure and maintenance contracting	Outsource maintenance work to vendors based on geographic regions to reduce costs
		Align rail/bus service to resident needs	Reduce transit service levels in-line with declines in ridership and replace rail with shuttles where more cost-effective
		New non-service transportation revenues	Tap new recurring and non-recurring revenue sources to increase cash flows while simultaneously achieving broader policy goals
		10% reduction in garage footprint	Sell off 10% of existing footprint (currently have at least 25 garages totaling 294k sq. ft.)
		Reduce staff fleet size by 25%	Cut DOT fleet from 100-125 staff vehicles with no standardization (\$11M+ cost p.a.)
		Reduce restraints on PPP opportunities and max fed funding	Leads operations for Availability Payments to reduce near-term capital
		Eliminate Welcome Center	Welcome Center is underutilized and not core to DoT mission
		Consolidate MPOs	Consolidate MPOs to realize cost savings and planning efficiencies
DPH		Implement state-wide background check system for hiring	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
DRS		Complete tax digitization program	Improve ability of residents to conduct full lifecycle of tax filings online (e.g., virtual assistance, complete filings, submit payments)
		Improve tax compliance	Increase revenue from existing tax base by improving audit and collections, as well as reducing fraudulent behaviour
		Cross-train Revenue and Tax Examiners to reduce FTE needs	Expand knowledge sharing initiative to auditors to ensure complex audit capabilities are capably handled by remaining staff post-retirement surge
		Close four walk-in centres	Enhanced online support functionality to reduce need for in-person interactions (i.e., webinars, chatbots, live virtual help sessions)
		Consolidate print and mail operations	Multiple agencies have their own print and mail centres (DRS largest); merge or outsource
		Transfer non-related tax activities to other agencies	Transfer responsibility for plastic bottle and bag fees to DEEP; transfer licensing of tax preparers to DCP
DSS		Near-term changes to Medicaid eligibility and benefits	Set of opportunities identified by DSS/OPM to realize savings for FY23 budget
		Longer-term transition of Medicaid to value-based payments	TBC following end-to-end review of Medicaid payments

Identified opportunities by agency (9 of 10)

Agency	✓	Opportunity	Description
DSS		Implement state-wide background check for DSS hires	A common background check system would improve hiring practices to better ensure resident safety and reduce duplicative and manual administrative efforts across individual agencies
		Reduce incorrect reports of abuse to DSS	Improve community training and resources and screening processes to reduce time/resources deployed to investigate "false alarms" for elder abuse, domestic violence, etc. would increase staff capacity and reduce administrative costs
		Convert case visit documentation system to Salesforce	DSS currently utilizes an internal, homegrown case visit system; conversion to a cloud-based Salesforce platform could streamline processes for social workers and improve data accessibility
		Further automate DSS call centres	DSS could expand use of client chat and voice functions for call centers to properly route clients, particularly during high-volume times, and further implement bots to process document changes.
		Further automate eligibility document approvals	When eligibility documents are scanned into ImpaCT, approval is still required by an eligibility worker—this process could be consolidated to automate approval at the time of scan or otherwise coded such that certain documents not requiring further review (e.g., simple address updates) are automatically approved.
DVA		Contract veterans convalescent care operations	Privatize operations of veterans' convalescent care facility to reduce costs while maintaining service quality
		Digitize DVA registrations and claims filings	Improve registrations and claims filings to improve service to veterans and cut down time and resources needed to process submissions
		Increase census of nursing homes	Ensure right staffing and types of care to best aid veteran patients and improve overall service quality
ID		Insurance joins e-licensing platform	Opportunity to join established CT e-licensing platform to streamline licensing services
		Recognize other state's insurance licenses	Increase acceptance of out of state licenses to minimize insurer applications to do business in Connecticut
		Further prioritize insurance regulatory activity based on likelihood of noncompliance	Targeted regulatory risk assessment approach; de-regulate business climate exp. Recognizing out of state licenses
Military		Consolidate National Guard facilities	Consolidate facilities used by National Guards with other state departments (e.g., state police)
		Centralize facility management	State facilities are managed by respective departments; centralize and privatize facilities management to increase state staff capacity
		Rationalize state vehicles and equipment	Decrease state's vehicle fleet and increase use of GSA, MTOE, and CTA equipment
		Centralize consumable purchase	Centralize consumable purchases (e.g. office supplies) to save on costs
		Firefighter conversion	ANG Firefighter conversion to Title 5. Federal initiative; convert federally reimbursed state employees to federal T5 employees

Identified opportunities by agency (10 of 10)

Agency	✓	Opportunity	Description
OEC		Transition to quality-rating-based regulatory system for childcare	Shifting to 25% of programs being visited every 3 years, 15% being visited every two years, and 60% being visited every year and reassigning staff accordingly could result in ~10% licensing staff savings
		Utilize Citizen One Stop for resident call support	Receiving resident calls estimated to result in ~30% reduction in call volume to United Way and simplify system for residents
		Utilize mobile inspections	Replace current paper forms and reduce travel time for licensors
		Add live fingerprint scans for background checks	Fingerprint recording is currently a highly manual process; reduce need to mail cards, re-process unusable submissions, etc.
OHE		Streamline online grant approval process	Performed by administrative staff; high retirement rate expected
		Improve Access database	Existing database does not provide functions required by administrative staff; improve database to increase staff capacity
OPM		Automate grant reporting	Grant reporting performed by several divisions within OPM; centralizing could create standard forms and reduce administrative effort
osc		Centralize payroll processes	Centralize payroll functions from agencies to OSC
SDE		Optimize CTEC admin and teacher levels	Accept CTEC teacher retirements and centralize CTEC admin for each state school
		Streamline "purple sheet" document review process	Administrative staff process large numbers of documents; high retirement rate expected
		Continue automation of certification process	Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill
		Standardize contracts and streamline online grant approval	Performed by administrative staff; high retirement rate expected
		Auto-refill CTEC positions	Acquire OPM approval for auto-refilling specific CTEC positions (e.g., coaches, nurses, kitchen staff)
		Decrease telework paperwork	Decrease the telework paperwork consists of multiple pages that are required to be filed in individual personnel files.
		Automate Teacher Negotiation Act (TNA) supervision	Increases capacity of Educational Consultants, potentially reducing need for backfill
		Digitize HR forms and integrate with CORE	Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill
		Streamline awards scoring and program monitoring	Increases capacity of Educational Consultants, potentially reducing need for backfill
		Automate Alliance District data monitoring	Increases capacity of both Educational Consultants and administrative staff, potentially reducing need for backfill capacity

