## PROCESS IMPROVEMENT





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#### BACKGROUND

On a day-to-day basis, City government delivers a broad range of services to Hartford residents and businesses through each of its operating departments, using multiple technology platforms and software. Keeping those pieces of software, hardware, and processes up to date requires constant monitoring, prioritization, and investment.

In recent years, the City has made substantial investments to upgrade both public-facing and internal digital infrastructure, and this report highlights some of the most significant initiatives pursued in recent years to improve the efficiency and quality of City services, including initiatives currently underway.



#### **MODERNIZING CITY OPERATIONS**

#### INTERNAL PLATFORM MIGRATIONS AND

**IMPROVEMENTS:** The City and HPS use dozens of software platforms to support service delivery, organization, and collaboration – everything from mobile apps that help the City collect information on blighted properties in the field to the Police Department's internal scheduling software. MHIS services all of those platforms, and over the last eight years it has upgraded many of them, including: migrating time clock management software to a new platform; offering a new payment method to city vendors; implementing two-factor authentication to secure user accounts for employees and the City's financial management systems; migrating case management software for the Civilian Police Review Board's Inspector General; launching Hartford 311's public interface; developing GIS websites for the planning division; developing a mobile app for Health Department inspections; integrating the Police Department's body camera system into the City's network; and more.

ACCELA PLATFORM IMPLEMENTATION: In late 2023, the City completed the rollout of a major new software platform for multiple City departments, shifting a number of key City internal- and external-facing services to the Accela platform.

This new software will improve the online customer experience for Hartford residents looking to obtain a wide variety of City permits and licenses, as well as for those reporting a pothole to Hartford 311 or filing a complaint about a housing code violation. On the back end of the software, the Accela platform makes it much easier for multiple City staff across different departments to share information and collaborate to quickly address resident needs. The platform upgrade will benefit many City departments, including: Health & Human Services, the Development Services (including Building Code and Licenses & Inspections), Public Works and Hartford 311.

• Funding: The Accela upgrade cost \$1.2 million for both software and implementation and it was funded in FY20 and FY21 with General Fund dollars.

#### COMPUTER-AIDED DISPATCH (CAD), RECORDS MANAGEMENT SYSTEM (RMS), AND RADIO UPGRADE:

The City's prior CAD and RMS systems were installed about 40 years ago, and the radio systems used by public safety departments were reaching the end of their life. ES&T, working with the Police and Fire Departments, recently completed the CAD/RMS project, and anticipates the new radio infrastructure will go live in early 2025.

• Funding: The CAD/RMS project upgrade cost \$8 million, with \$5 million from the State Office of Policy and Management and \$3 million from the City's General Fund. The separate radio infrastructure upgrade project costs approximately \$6 million, funded exclusively with City dollars.

**UPGRADED CYBERSECURITY SYSTEMS:** In 2020, the City experienced a significant cyber attack. Before the attack, MHIS had made cyber-security-related investments that allowed most of the data lost to be recovered. Since then, the City has continued to strengthen its cyber defenses, including by getting external assessments of its cybersecurity. Specifically, MHIS has rolled out multi-factor authentication for all employees, servers have received additional fortifications, and threat intelligence monitoring and endpoint protection has been strengthened.

• Funding: The City has spent approximately \$1.4 million since 2019 to further increase cybersecurity defenses.

**STREAMLINING REAL ESTATE TRANSACTIONS:** In October 2023, the City began using Just Appraised, a machine learning application that simplifies the real estate transaction process by scanning deeds and other relevant paperwork, extracting the relevant title information, and then inserting that information directly into the assessor's office software. That allows the assessors to accurately process real estate transactions significantly faster — because they don't have to spend the same amount of time combing through deeds.

• **Funding:** The Just Appraised software is a subscription service that costs about \$20,000 per year.

**CAR TAX ENFORCEMENT:** Between 2019 and 2022, the City contracted with Municipal Tax Services (MTS) to improve compliance with car tax collection. MTS has worked with a number of municipalities in Connecticut, including Stamford. MTS uses an automated license plate recognition system to determine if there are unregistered or improperly registered cars within a municipality, allowing municipalities to assess the appropriate taxes. Their analysis identified approximately \$4.9 million in unassessed car taxes owed by Hartford residents, and the City has collected about \$2.6 million of that outstanding revenue.

• Funding: MTS was funded by a \$50 fee per transaction, and also collected 50% of the overdue tax revenue the City received. Even with that split, the City had collected millions in taxes owed that would otherwise have gone uncollected. The City is no longer using MTS.

**CITY COUNCIL iCOMPASS TRANSITION:** The City Council began moving its public-facing meeting interface to a new platform called iCompass in 2022, which was designed for local government. This platform makes it easier for residents to access City Council and Committee meeting agendas, to access the minutes of meetings and see a convenient calendar of all upcoming civic events. The transition process to this new system is ongoing, with the Planning & Zoning Commission soon to adopt the new platform.

• **Funding:** The recurring \$25,000 yearly cost for this software is funded by the Clerk's Office.





#### IMPROVING THE CUSTOMER EXPERIENCE

**ONLINE PERSONAL PROPERTY DECLARATION:** In 2023, the City began allowing commercial taxpayers to file their personal property declarations online. Previously, personal property declarations had to be mailed in or physically dropped off at City Hall. The upgraded system allows taxpayers to register and create an account on the declaration platform, which is available through the City website, using a unique code that is mailed to them, and then enter their information into the system directly. The system is voluntary, and taxpayers who want to file using the hard copy method can still do so. As of December 2023, 615 taxpayers had used the new system, ranging from small mom and pop businesses to large financial institutions.

• Funding: There was no additional cost to set up this system. It is an extension of the City's existing tax software.

**BIRTH CERTIFICATES & VITAL RECORDS:** As part of the City's effort to offer additional online services in the wake of COVID-19, the City now offers online ordering of birth certificates and other vital records, like marriage licenses, with the assistance of new IQS software. This software also facilitates the indexing of land records by the Town Clerk's office.

• Funding: Processing fees for the system cost approximately \$80,000 per year.

**UPGRADING ONLINE PROPERTY TAX PAYMENT:** In 2020, the City upgraded its online property tax payment system using a new platform called InvoiceCloud, which accepted a much wider range of payment options. From 2020 to 2021, online tax collection increased by about 60%, and revenue from online tax collection has more than doubled since adoption of the system.

• Funding: The platform is almost entirely supported by user fees that taxpayers pay when they complete transactions. The City pays a \$45 monthly subscription fee.

**CITY WEBSITE UPGRADES:** In 2019 and 2020, the City went through a redesign process for the overall City website, www.hartfordct.gov, to provide a more modern and intuitive design for visitors. The design focuses on making content easy to find and engaging residents as much as possible, while also being accessible for more users. The entire site can be translated with only two clicks into any of one hundred languages.

• Funding: This site redesign was supported with an \$81,000 General Fund expenditure.

**NEW FOI MANAGEMENT SYSTEM:** The City upgraded to new Freedom of Information Act (FOIA) management software called GovQA that tracks information requests in real time and directs them to appropriate City personnel to enhance compliance. The software is widely used by local and state governments around the country.

• Funding: This software costs the city \$36,000 per year.

**ENHANCING MYREC SOFTWARE:** The City's Recreation Division uses MyRec, a web-based platform, to schedule all of its programming and allow residents and organizations to reserve recreational facilities. The Division is in the process of introducing a scanner system that will work in conjunction with MyRec to help gather data on usage and attendance.

The scanner system will also help during emergencies because it will provide data on who's at any given facility at any given time. The system will primarily be used at the Arroyo Recreation Center and the Parker Community Center, and implementation is planned for early 2024.

#### **CLOSING THE DIGITAL DIVIDE**

**CITYWIDE FREE WI-FI PROGRAM:** In 2020, the City began building a free, citywide Wi-Fi network available to all residents, using funding from Dalio Education and the Hartford Foundation for Public Giving. Unlike many free public Wi-Fi networks, which aim only to provide internet access in public spaces, Hartford's network seeks to provide free internet services in residential neighborhoods and commercial areas, informed by a 2017 citywide survey conducted by the Hartford Public Library, which found that 42% of Hartford's population did not have home internet service.

With the emergence of COVID-19 and the resulting necessity of at-home work and schooling, the City's Wi-Fi initiative took on an added urgency and importance. As of September 2023, Hartford's free Wi-Fi network is online and available in six neighborhoods: the Northeast Neighborhood, Frog Hollow, Clay Arsenal, Asylum Hill, Blue Hills and in Bushnell Park. On an average day, 12,907 unique clients utilize the network, drawing down an average of 1.79 gigabytes of data. The City aims to continue expanding this free Wi-Fi network as additional funds become available, including by pursuing grants through the ARPA CPF Program and IIJA BEAD Program, two federal initiatives administered by the State of Connecticut.

• Funding: Initial phases of the project were supported by \$1.5 million grants each from Dalio Education and the Hartford Foundation. The City planned to fund the balance of the project and recurring annual costs of approximately \$100,000. State and federal grants are being pursued to finish buildout of the network in all Hartford neighborhoods, which will cost an estimated \$30.1 million.

**FIBER INSTALLATION ON NORTH MAIN:** For many years, businesses located along North Main Street and Windsor Street in Hartford's North End faced high barriers to obtaining affordable broadband internet connections. To bring high-speed fiber internet lines to these businesses in the Northeast neighborhood, the City issued an RFP and ultimately partnered with Comcast, splitting the \$1.5 million project cost 50/50 to bring broadband service to this essential business corridor. Work was completed in late 2023, and the installed fiber will permanently support the future growth and competitiveness of businesses in the Northeast neighborhood.

• **Funding:** This project was funded with approximately \$750,000 from the City's Capital Improvement Plan in FY 22.



### RECOMMENDATIONS

- → PROPERTY TAX PAYMENT KIOSKS: The City has had an online tax payment portal for several years, but it is currently exploring setting up tax payment kiosks that could accept any type of payment (cash, card, or check) and reduce the burden of tax compliance. The City has two proposals it is currently reviewing. Kiosks can cost about \$30,000 each. The new administration should strongly consider moving forward with this project, as it will create a more convenient and accessible tax payment option for Hartford residents.
- → EXPAND CITY-OWNED FIBER INFRASTRUCTURE: By continuing to build out fiber infrastructure that the City owns across Hartford, additional programs and priorities including Hartford's free public Wi-Fi project and the Hartford Police Department's C4 camera system can also be supported.
- → MAINTAIN AND STRENGTHEN CYBERSECURITY AWARENESS AND TRAINING: While the City was able to recover from the severe cyber attack it suffered in 2020, it will be critical to continue implementing best practices when it comes to cybersecurity. That includes continuing to invest in systems-level software, training and awareness, and user-level tools like multi-factor authentication, which the City has already installed.
- → ASSESS HOW AI CAN IMPROVE CITY SERVICES: As the City continues its digital transformation, AI presents an opportunity to streamline workstreams and potentially improve customer service. Like every other sector and organization, the City should assess how AI can support City services.

→ CONTINUE TO MIGRATE SOFTWARE PLATFORMS TO CLOUD-BASED SERVICES: The City has made a great deal of progress modernizing its IT infrastructure, but there are still legacy systems used in many City departments. The incoming administration should continue to assess the costs and benefits of software migration.



#### **RECOMMENDATIONS CONT.**

→ ACQUIRE IMPROVED PROCUREMENT SOFTWARE: The city currently conducts electronic bidding through Planet Bids. Acquiring software with additional features, such as adding other Procurement Office functions like contract compliance and contract management, could improve efficiency and reduce processing time for new procurements of all kinds.

#### ightarrow complete the rollout of samara software for city vehicles:

The Department of Public Works has conducted a trial run of software called Samara, which can monitor the operation of City vehicles to detect any violation of driving laws, track when City equipment is and is not active, and much more. The software holds significant potential to improve efficiency of City operations. The trial conducted to date was funded from the contingency account. A full rollout of the software across all City vehicles would cost \$300,000.

