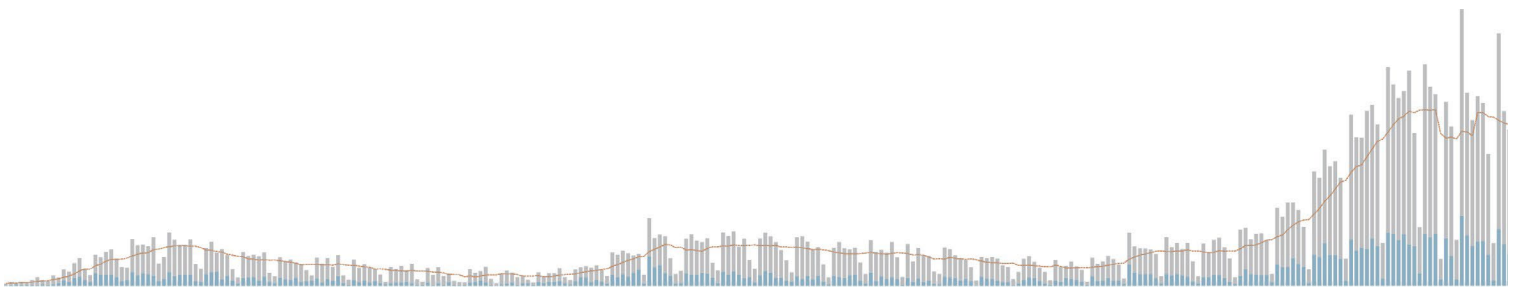




City of Seattle

COVID-19 AFTER ACTION REPORT

FEBRUARY 2022



COVID-19 cases from March to December 2020 showing City of Seattle, King County, and a rolling 7-day average for King County.

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The image shown on the cover is excerpted from an event timeline contained in Appendix C.



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City of Seattle COVID-19 After Action Report

February 2022

- Executive Summary** i
- Introduction** 1
 - Purpose of this Report..... 3
 - The Unique Nature of this Emergency..... 3
 - A Brief Summary of Events..... 5
 - Focus and Organization of this Report 8
- Section 1: Policy Setting and Operational Coordination**..... 11
 - Background 11
 - Analysis..... 17
 - Findings and Recommendations..... 26
- Section 2: Continuity of Operations** 30
 - Background 30
 - Analysis..... 31
 - Findings and Recommendations..... 36
- Section 3: Logistics and Supply Chain Management** 38
 - Analysis..... 38
 - Findings and Recommendations..... 40
- Section 4: Public Information** 42
 - Background 42
 - Analysis..... 43
 - Findings and Recommendations..... 45

Section 5: Testing and Vaccination	48
Analysis.....	48
Findings and Recommendations.....	56
Section 6: Social and Human Services	59
Analysis.....	59
Findings and Recommendations.....	66
Section 7: Support for Businesses and Economic Recovery	68
Analysis.....	68
Findings and Recommendations.....	78
Section 8: Staff Redeployment	81
Analysis.....	81
Findings and Recommendations.....	84
Improvement Plan	85
Improvement Plan: Summary Matrix	86
Appendix A. Members of AAR Committee	87
Appendix B. Interviewees	88
Appendix C. Timeline of Events and Actions	91

Executive Summary

The COVID-19 pandemic, an emergency unique in scope and duration, has had a profound impact on City of Seattle operations. As a public health emergency, it is unlike any incident the City has previously experienced. **Despite ongoing challenges, the City and the broader region have responded extremely effectively as evidenced by fundamental public health outcomes.** Seattle was the first US city to fully vaccinate 70% of residents 12 and older and has fared significantly better than other large cities in terms of cases and deaths per 1,000 residents.

In addition to these measurable topline public health outcomes, notable successful aspects of the City's response include the following, many of which this report expands upon:

- Direct involvement by the Mayor's Office allowed for a rapid decision-making process. A sense of urgency and personal commitment contributed to innovations and creative problem solving, as evidenced by the City's pioneering testing and vaccination campaigns.
- The reshaping of existing partnerships and tools allowed the City to rapidly implement new, radically changed, or scaled up programs without the time-consuming processes more typical of program development. One example of this was the partnership with Swedish and First and Goal, Inc. to launch the Lumen Field vaccination site in just six weeks.
- A strong focus on equity and the use of data facilitated the effective targeting of these resources to those with the greatest need.
 - Despite national trends to the contrary, the City successfully reached Black, Indigenous, and People of Color (BIPOC) communities through its vaccination clinics, with more than 45% of those vaccinated at City sites identifying as BIPOC.
 - The use of data and targeted distribution methods helped channel the majority of Small Business Stabilization funds to BIPOC-owned businesses.
 - Grocery vouchers were prioritized for recipients of other needs-based programs.
- Interdepartmental collaborations were used to tackle large and multi-pronged efforts like public communications, support for businesses, and testing and vaccination efforts.
- Adaptation by departments ensured that City bureaucracy and past practices did not inhibit the City's ability to deliver services to individuals and organizations in need of assistance.
- Early emphasis by the Fire Department on mobile delivery and direct visits to skilled nursing facilities, adult family homes, and assisted living facilities increased access to testing and vaccines.
- The City made significant advances in its logistics capabilities, including the establishment of the Department of Finance and Administrative Services' (FAS) Logistics and Emergency Management Division, which led logistics for the City's test and vaccination sites and stood up and operated the City's centralized PPE warehouse.
- The City responded rapidly and effectively to adapt personnel policies to protect worker safety and maintain delivery of essential services by:
 - Rapidly developing HR policies and facilitating six memoranda of understanding signed with labor representatives.

- Developing safety protocols for staff reporting onsite for safe in-person delivery, including an Employee Ambassador program, temperature screenings and health checks, distribution of PPE, and HVAC system improvements.
 - Deploying technology to shift a portion of the workforce to a virtual/remote work setting.
- The City tapped significant private sector resources, including contributions by Amazon, Boeing, Microsoft, and others, and successfully lobbied for extended deadlines for spending federal funds.

The Unique Nature of this Emergency

The novel coronavirus and the disease it causes (COVID-19) presented many unique challenges to the City of Seattle.

- **Seattle was among the first cities in the nation to respond to the outbreak.**
- **The cause of the emergency is a novel coronavirus**, meaning City policymakers and emergency management professionals were reliant on public health experts for guidance, and yet the nature of how the virus spreads and effective protective measures were unknown for many months, with incomplete, inconsistent, and frequently changing “best practices.”
- **The rapidly evolving understanding of the disease by public health experts challenged consistent public information messaging.** While pandemic planning asserts that it is essential for all levels of government to have the same public information messaging, this did not happen, particularly at the national level.
- **The pandemic’s impact on all aspects of normal life required the development of significant new policies and programs** designed to protect public health, individual and community well-being, and economic activity.
- **Similarly, the pandemic’s impact on the City workforce required rapid policymaking to protect employee health and maintain essential operations.** Demand for some City functions surged, some could be fulfilled remotely, and some required significant adaptations for safe in-person delivery.
- **The nature of the pandemic meant that the City’s emergency operations could not be relocated to a safe physical location**, but had to be delivered via a virtual platform, which had never been done before.
- **The global scale of the emergency meant that just as local resources were depleted, national and international supplies for personal protective equipment (PPE), vaccines, and other essential supplies were exhausted as well.** All levels of the US government – local, regional, state, and national – were overtaxed simultaneously, meaning that outside aid and the established systems design to request and prioritize that aid were overwhelmed or unable to be delivered for a time. When outside aid did come, much of it arrived in the form of federal funding, which the City acted quickly to disperse.

The above factors have been compounded by the duration of the pandemic. Policymakers and staff have been coping with impacts of the emergency for more than 18 months as this report is published, working long and stressful hours. Exhaustion, burnout, and staff turnover complicate the response and tax the resilience of both individuals and organizations.

While the features of the COVID-19 pandemic listed above make it the most challenging emergency the City of Seattle has ever responded to, it is important to note that future disasters could be significantly more catastrophic in terms of physical destruction, loss of life, and disruption of community and City functioning. The City's successes in navigating the challenges of the pandemic amplify the need to continue to prepare for future emergencies which will come with their own – and perhaps greater – challenges. Application of successes and recommendations identified in this After Action Report (AAR) should be considered for future planning given the region's vulnerability to a massive earthquake and other largescale catastrophic disasters.

Purpose and Structure of this Report

This AAR began in 2020 and finished in December 2021, while the pandemic and the City's response continues. It provides an opportunity to identify what contributed to these positive outcomes, and to identify how some processes might have been smoother, more effective, more efficient, and more equitable. **The purpose of an AAR is to analyze the response to a preparatory exercise or actual emergency by identifying strengths to be maintained and built upon, as well as lessons learned and areas for improvement.** The goal of an AAR is to make future incident responses more effective. This after action effort was funded primarily by an Emergency Management Performance Grant administered by the Federal Emergency Management Agency.

The City's response to the COVID-19 pandemic has been massive, encompassing much, though certainly not all, of the City's efforts for the past 18 months. An important first step in the work was to identify discrete and bounded topics of interest to focus the analysis. An AAR Committee with cross-departmental representation met in April 2021 to review BERK's recommended areas of focus for the full report. Eight Deep Dive topics, summarized on the pages below, were selected by the Committee from a longer list of potential topics. The selection of the eight Deep Dives has focused our efforts and limited the range of topics we can address. Of particular note, this AAR does not include an in-depth study of the federal financing that was received by the City and how those funds and other resources were allocated to a myriad of programs and priorities. Some general comments about financing are included in this document when appropriate to accent the activities of individual departments.

The AAR Committee also had the opportunity to comment on the BERK's team proposal to focus its evaluation around three core criteria:

- **Effectiveness:** *Did the City's response contribute to desired outcomes?*

The City's response has been irrefutably effective, as evidenced by comparative public health outcomes. Additional consideration within Deep Dives is given to the effectiveness of the City's response particular to the functional areas covered in each topic.

- **Efficiency:** *Did the City's response make efficient use of resources, including staff and partner time?*

Emergencies may create both a need to act quickly, leveraging all available resources, and to prioritize limited resources. Deep Dive considerations of efficiency identify ways in which the City successfully marshalled and dispersed resources, and ways in which the response could have been implemented more smoothly, with less unproductive effort.

- **Equity:** *Did the City's response play out equitably for City staff, residents, and other stakeholders?*

Analysis considers how limited resources were successfully targeted to prioritize those with the greatest needs, as well as the fair consideration of City staff.

The common analytic methods applied across multiple topic areas include document review, interviews with City of Seattle staff and representatives of key partner organizations, review of existing data, targeted original data collection and analysis, and targeted review of practices in other communities.

Section 1: Policy Setting and Operational Coordination

This section addresses how the City set policy, coordinated operational responses and implementation efforts, and shared information, both within the City organization and with external partners.

Summary Successes

- The Mayor's Office has served as the policy setting body for the City throughout the pandemic. This is consistent with the role of the office and the articulation of the Mayor's role in the City's emergency management plans. The nature of this emergency required significant policy development related to the City workforce, continuation of City services, and pandemic response; and rapid and effective decision-making, and policy development are notable strengths of this response.
 - An insistence on following the science by the Mayor and her peers meant the City, County, and State maintained alignment around this fundamental issue.
 - The pandemic required the rapid creation of new personnel policies that affected the City's workforce. In one example, the decision to provide pandemic leave to older and vulnerable employees saved lives and – because the City is self-insured – financial resources. In a mid-point analysis of expenses tracked by Aetna, the City's underwriter, COVID-19-related costs accounted for about 2.6% of the City's total healthcare costs between March 1, 2020 and September 19, 2021, while COVID-19-related costs constituted just less than 7% of Aetna's costs nationwide between August 2020 and August 2021.
 - A strong policy focus on equity and social justice directed departments to focus their efforts and resources on populations that would most benefit from the assistance. Departments directly engaged representative community leaders and quickly adapted existing programs, data sets, and tools to prioritize resources for those communities and businesses that most needed support.
- The extension of the Mayor's Office into operational decision-making and implementation greatly enhanced the speed by which policy setting was put into action. With the City's senior leadership staff participating in daily cabinet calls, the Mayor's Office could consult them on policy setting and direct them in implementation, enabling more immediate action on decisions.
- The Mayor's Office was active in reaching out to other levels of government. This enabled alignment with communications and decision making by King County and State of Washington executive leadership and facilitated City access to County, State, and federal resources.

Recommendations¹

Emergencies are by definition challenging, and significant disasters such as the COVID-19 pandemic occur rarely. As a foundational step in preparing City departments and the individuals who make them up to be ready to respond in an effective and efficient manner, the City’s emergency management plans can be made more accessible and easier to use. They must also be socialized, trained upon, and practiced in exercises and small activations.

PSOC.1. Increase the accessibility of emergency planning documents.

PSOC.2. Increase familiarity with the City’s emergency plans and procedures.

PSOC.3. Establish plans for rapid decision making, ensuring the EOC policy-decision model aligns with Mayor’s Office procedures.

The Incident Command System (ICS) is designed to clarify roles and provide a disciplined and resourced response. The recommendations below are designed to marry the discipline of ICS with the creative and immediate problem-solving strengths exhibited by the City in its COVID-19 response.

PSOC.4. Clarify who should be consulted and who should be informed and practice the iterative development of policy and operationally feasible solutions.

PSOC.5. Strengthen the selection, authority, and visibility of departmental EOC representatives.

The effective and efficient sharing of information is difficult outside of emergencies and challenges with information sharing are the most common issues to arise in after action reports given the compounding factors present during an incident. The virtual nature of the pandemic and the inability to have people all in one place to coordinate the response as had been planned for and practiced made communications and coordination even more difficult to achieve.

PSOC.6. Review and revise internal information-sharing protocols, adopting a combination of written and verbal information-sharing to maintain situational awareness, including what is happening nationally, regionally, and locally.

PSOC.7. Strengthen and practice project management tools and practices, using simple tools that work in a virtual environment.

PSOC.8. Expand on the City’s use of Microsoft Teams and programs other than email for coordination and information-sharing.

Reliance on external partners in a major disaster requires clarity of roles and efficient information sharing and coordination. The COVID-19 experience elevates the importance of sharing general situational awareness among local, regional, and state partners, and – more pointedly – of updating the City’s relationship with its key regional partner in this event, Public Health – Seattle & King County (PHSKC).

PSOC.9. Share daily Situation Reports (or equivalent) with regional partners and the State Emergency Management Division/EOC.

PSOC.10. Continue to advocate for increased national, State, and local investment in public health.

¹ Recommendations are given an acronym and sequential numbering for each Deep Dive.

- PSOC.11.** Collaborate with the State and County to create a matrix of roles and responsibilities aligned with statutory authority.
- PSOC.12.** Update the relationship between the City and PHSKC with a particular focus on roles and responsibilities of each party during a public health emergency.
- PSOC.13.** Participate as a key stakeholder during the County’s update to the King County Infectious Disease Response Plan and update City pandemic planning and procedures to align with the updated countywide plan and reflect the City’s organizational and operational needs.
- PSOC.14.** Conduct regional planning sessions and tabletop discussions with PHSKC.
- PSOC.15.** During an emergency, consolidate City information requests for PHSKC and use the Health and Medical Area Command liaison to the EOC to collect and distribute information flow between the City and PHSKC.

Section 2: Continuity of Operations

This section offers a deep dive into the City of Seattle’s continuity of operations (COOP) during the COVID-19 pandemic. In emergency management, COOP refers to an organization’s efforts to ensure that it continues to perform its mission essential functions during an emergency.

Summary Successes

- In early 2020, Office of Emergency Management (OEM) staff, with support from other departments, led an effort to update departmental COOPs to include pandemic response elements.
- The rapid deployment of technology, quick pivots by departmental staff, and the lack of impacts to physical infrastructure (in contrast to what the City might see during an earthquake, for example) meant that the City was able to continue to provide essential services to residents and customers.
- FAS and the Seattle Department of Human Resources (SDHR) led a cross-departmental initiative in summer 2020 in which 70 staff from 12 departments met to make recommendations on how to return City staff to worksites as the risk from the pandemic abated.
- Seattle Information Technology (IT) rapidly deployed a large number of laptops at the start of the pandemic, facilitating a transition to remote work by many City staff and helping to preserve high levels of service for City residents.
- FAS developed a number of safety protocols and facility enhancements to protect onsite workers, including installing protective barriers, distributing PPE, providing for daily health checks and temperature screening protocols, and upgrading ventilation in core facilities with MERV 13 or higher air filters.
- The City introduced a series of new programs and policies to support employees during the pandemic.
- The Seattle Department of Human Resources developed several tools intended to optimize the City’s approach to staffing during the pandemic.

Recommendations

Department directors were not always familiar with the content of their departments' COOP plans because, in many cases, they had not been involved in the writing of the COOP plan. In some cases, departmental COOP plans were not socialized with department staff. Existing City and departmental plans were not written with an extended pandemic in mind, so extensive plan updates were required at the start of the pandemic.

COOP.1. Department directors need to be involved in the writing, approval, and training of their departmental COOP plans. Directors should ensure all their department staff are fundamentally aware of the COOP and how the department will function during emergencies.

COOP.2. Schedule regular review and discussion of the Citywide COG plan by department leadership and staff to ensure everyone is familiar with the plan.

COOP.3. Codify pandemic-driven changes to departmental COOP plans, including them in an updated plan to be written by someone knowledgeable in emergency management and continuity of operations planning.

Deployment of new technological tools allows the City more flexibility with its workforce than ever before, improving both efficiency and resilience. However, such changes do not always come easily. Outdated thinking and entrenched positions can be barriers to change. Effective adaptation requires training, policy changes, and socialization of new technology and remote work strategies.

Seattle IT had a number of laptops in inventory that enabled them to get critical staff up and running quickly in a virtual environment. Their ability to convert most of the City's personnel to remote work in such a short time is a real credit to their leadership and dedication and contributed immensely to the City's ability to maintain acceptable service levels in most departments.

COOP.4. Continue expanding the Cisco WebEx soft phone system.

COOP.5. Schedule quarterly seminars with department heads to demonstrate existing capabilities, introduce new technologies, and support use of the technologies in their departments.

COVID-19 highlighted the City's ability to operate efficiently with a remote workforce to maintain many of its mission essential functions. Departments that had previously not entertained the concept of working from home or taking work equipment home to do their jobs have realized the value in having employees working virtually and many will continue the practice. In addition, due to COVID-19 COOP actions, many City departments have improved their ability to serve their customers, as they can now provide more services remotely, offer better language access, and offer greater availability to customers who work during normal office hours. As a note of caution, it should be noted that while COVID-19 allowed remote working, a catastrophic earthquake may require more in-person response and remote work may not be possible given disruptions to IT and communications infrastructure.

COOP.6. As more City services move online, the City should continue with its plan to concentrate in-person services at service centers, where computer stations and technological assistance are available to allow residents without computers and/or internet service to access online service portals.

City policy created a flexible workspace for employees working from home, accepting that home life would inevitably affect work life, allowing for flexible work hours, and accepting that children and pets may occasionally interrupt a video conference. Generally, interviewed department leaders felt that the shift to remote work has made their employees more efficient with time. Several interviewees

also noted eliminating long commutes has positive social and health benefits for employees and positive environmental impacts, all without impacting service levels to City residents and customers.

COOP.7. Continue to offer employees “grace” and flexibility to balance their home lives with work, where possible, such as allowing for flexible work hours or understanding that household activities may occasionally interrupt video calls.

Communications with departmental staff were not always as clear and timely as they could have been.

COOP.8. Whenever possible, present curated information with changes highlighted and develop more multi-media messaging and central repositories of continuously updated information to avoid email fatigue.

COOP.9. Align staff communication strategies with best practices for operational coordination (see Section 1: Policy Setting and Operational Coordination).

Section 3: Logistics and Supply Chain Management

This section covers how the City requested, ordered, purchased, tracked, stored, and distributed critical supplies during the COVID-19 pandemic.

Summary Successes

- By mid-March 2020, Finance and Administrative Services (FAS) had implemented policy and protocols for centralized ordering and distributing supplies which allowed for more favorable purchasing power by consolidating requests to make larger purchases and avoided departments competing against each other with suppliers. Moving to a centralized purchasing system for supplies allowed for greater situational awareness of the number of supplies being ordered and stronger financial accounting for the purchases. The distribution of supplies could be prioritized based on operational needs across all the departments.
- By the end of March 2020, the City had established several new logistics management mechanisms, including a logistics dashboard and a PPE task force led by FAS and with representatives from Fire, Police, and OEM. Also, by the end of March, the City had launched a centralized, 30,000-square-foot warehouse space at the site of a former Value Village in Crown Hill.
- FAS led the creation of the Pacific Purchasing Exchange (PPE), a collaborative effort of large West Coast jurisdictions formed to share best practices, identify purchasing trends, address common needs and exchange vendor contacts to assist in the procurement of critical PPE during the pandemic. The exchange included government officials and representatives from San Diego, San Francisco, Los Angeles, Seattle, Bellevue, Spokane, Yakima, Everett, Salem and Portland, and the group met regularly to share information and resources, including vendor lists, lessons learned in the procurement of PPE.
- FAS and its new Logistics and Emergency Management Division were intensely involved in the set-up and operations of the City’s mass testing and vaccination sites, including Lumen Field.

Recommendations

Early in the pandemic response, the City recognized that the normal process of each department ordering its own PPE and other items would not be functional when there was a dearth of supplies worldwide. The City centralized and consolidated the purchasing and warehousing of critical items of supply. This process has now been normalized, enabled the City to more easily establish a mass vaccination site at Lumen Field, and will serve the City well in future disaster operations.

LOGS.1. Senior emergency management leaders at the City, County, and State, along with their logistics staff, should meet to reconcile the challenges encountered over the course of the pandemic.

LOGS.2. Retain centralized purchasing and warehousing functions for key supplies in future emergency events.

With the establishment of a warehouse function for the City's response to a pandemic, a future challenge will be to preserve sufficient budget to maintain the supply of equipment and materials as their shelf life expires. The supply problems with the National Strategic Stockpile highlighted the lack of rotation and replacement of stock as the national need outstripped the supply of materials. The State of Washington should be encouraged to also have a state-managed warehouse stockpile of supplies that were critical to the pandemic response.

LOGS.3. Identify critical emergency supplies and establish a process and budget for maintaining an appropriate level of materials.

The lack of coordination between the purchasing function and finance function occurred, in part, because the City has not fully built out the WebEOC system to capture the financial side. While WebEOC can document needs and requests, logistics staff reported in interviews that it is lacking the ability to provide insight into the financing side. One logistics staffer noted that, in ordinary times, departments are expected to have the funds to pay for items they order, but the nature of the pandemic necessitated a more flexible approach to expenditure.

LOGS.4. Engage the Central Budget Office in identifying solutions for providing transparency and connection to departmental budgets while not unnecessarily slowing acquisition of goods during an emergency. Explore options for integrating a financial tracking system with WebEOC and clarify authority for resource expenditure.

Section 4: Public Information

This Deep Dive covers how the City communicated information, including incident updates, policy decisions, and service-related information, to the public during the COVID-19 pandemic.

Summary Successes

- The coordination between the major governmental players, including the Governor's Office, King County Executive's Office, City of Seattle Mayor's Office, and PHSKC was exemplary. PHSKC and its public health experts took the lead on developing the messaging on public health measures and these messages were amplified by the County and the City.
- There was a concerted effort by all parties to outreach to BIPOC and non-English speaking communities.

- Recognizing the PHSKC Joint Information Center’s (JIC’s) need for additional personnel, some assistance was provided by the City to assist PHSKC in staffing their JIC.

Recommendations

During the pandemic, the communications system that evolved within the City was a Joint Information System (JIS), whereby communications staff from the City of Seattle and PHSKC coordinated with one another and their respective decision-makers/elected officials to understand what the messaging would be for decisions. While the coordination between the levels of government communications functions worked well, a more formalized procedure for the trading of physical liaisons between major governmental JICs is needed. The procedures suggested below could be very general in nature or more detailed depending on the desires of the respective parties. Establishing these in advance of a disaster and then practicing them for larger scale exercises that multiple jurisdictions will be playing in will keep people familiar with the process and procedures.

- PI.1. In coordination with the City’s major partners (PHSKC, King County, and Washington State), establish a more formalized function with procedures and protocols for the sharing of information.
- PI.2. Establish a procedure for JICs to exchange liaisons during major emergencies and disasters.

While the City was able to operate without a 24/7 JIC during the COVID-19 pandemic, this will not be the case for all future emergencies and the City should enhance its plans for coordinating information through the JIC. For instance, should there be a major oil spill in Puget Sound that contaminates waters, fish, and wildlife, the United States Coast Guard will establish a Unified Command with the Responsible Party. An oil spill JIC will be established, and it would be appropriate for the City to send a public information officer/JIC liaison to their JIC to have a close working relationship in what may be a very dynamic and rapidly changing environment. When oil spill exercises or other disaster exercises are conducted by partner jurisdictions and agencies, it would be appropriate for Seattle JIC staff to participate as a City JIC liaison.

- PI.3. Integrate the JIC and staffing of the JIC function by City departments.
- PI.4. Identify additional JIC supervisory staff to augment Mayor’s Office communications staff.
- PI.5. During an event, ensure the activation and closing of the JIC function is clearly communicated to departments.

Throughout the COVID-19 pandemic, the City showed a strong cultural orientation towards incorporating equity into decision-making and public outreach efforts. The City’s early outreach efforts focused on reaching the most vulnerable communities in Seattle, including limited English proficiency (LEP) communities, immigrants and refugees, small business owners, grocers, rideshare drivers, and gig workers. One staff member working on public outreach noted in an interview that City staff drew on their existing community relationships to reach these communities and that “champions of linguistic access,” many of them frontline workers, advanced this work across many City departments.

- PI.6. Involve staff with expertise in accessible communications and equitable public outreach in strategy meetings about public information.
- PI.7. Require departments to write, implement, socialize, and practice language access plans as part of their emergency planning work.

In addition to media, the City used its Customer Service Bureau and Customer Service Centers to provide COVID-19 information. FAS, which operates the City’s Customer Service Bureau, operated a COVID hotline which was able to shift focus from general COVID-19 information to testing to vaccination as information needs evolved. This hotline sometimes received 1,000 calls a day.

Section 5: Testing and Vaccination

Summary Successes

- The City of Seattle stepped up to conduct testing operations, a role that had not been anticipated in previous flu and pandemic planning but would prove to be an example of the City’s agility and effectiveness in the face of unforeseen circumstances.
- Within five months, the City program expanded from first responders only, to nursing homes, to mobile test teams, to community scale drive-thru testing. The City of Seattle’s testing system has been a model for others regionally and nationally.
- The City leveraged lessons learned in testing to rapidly stand up vaccine clinics. In total, with the mobile vaccination teams, pop-up clinics, in-home vaccinations, and fixed sites, the City administered 260,000 vaccinations to 134,000 individuals over seven months. Of this total, over 102,000 vaccines were provided at Lumen Field.

Recommendations

The City of Seattle’s adaptability, coupled with a strong operational system in Seattle Fire Department first responders and FAS, allowed the City to make testing and vaccination quickly and widely available and free to Seattle residents. Partnership with University of Washington was also crucial. The pandemic showed a gap in existing logistical planning for testing and vaccination operations. It is now apparent that communities cannot rely on the existing health care infrastructure to be universally available during a communicable disease emergency. There were no plans in place for how to administer tests and deliver vaccines when the health care infrastructure was overwhelmed with sick and dying patients. Those involved in developing this new process were creative, flexible, and willing to try different approaches to accomplish their goal of serving City employees and residents. Key recommendations will formalize the lessons learned from the operations for testing and vaccination, and the role of first responders in pandemic emergencies.

- TV.1.** Maintain a state of readiness among first responders approved by the State to deliver tests and available to deploy as soon as possible.
- TV.2.** Maintain and periodically refresh an inventory of at least 12 weeks supply of personal protective equipment.
- TV.3.** Advocate for state legislative changes to quicken the approval process for first responders to provide testing and vaccination.
- TV.4.** Regularly train and simulate deployment with first responders.
- TV.5.** Develop local funding plans in anticipation of the need to deploy operations before funding is available from state and federal authorities

While much about the next pandemic is unknown, it will likely feature testing and vaccines. Some aspects of the delivery of these services can be planned for and improved upon from the City's experience with COVID-19.

- TV.6. Explore alternative drive-through testing infrastructure, such as unused or underused pharmacies, banks, and fast food and coffee kiosks.
- TV.7. Stockpile and regularly refresh generic testing materials, including swabs, testing strips, and reagents.
- TV.8. Develop plans for priority setting and logistics for vaccine delivery once doses are in the City's hands.
- TV.9. Formalize partner roles in emergency pandemic response and engage them in planning.
- TV.10. Involve clinical, operational, and public health experts in planning and policy decisions.
- TV.11. Integrate streamlined contracts, purchasing, and other processes to regular operations.
- TV.12. Explore ways to improve testing and vaccine support for frontline City personnel.

The Seattle testing and vaccination effort reached high numbers of BIPOC individuals of all ages and locations across the city. Many lessons were learned along the way about delivering these services equitably, considering variables such race, income, geography, transportation access, and disability. These lessons included: partnering with the county to launch a free shuttle to and from the site, having up to 35 in-person interpreters on hand at any time to assist patients, providing portable devices capable of interpreting in over 200 languages, and translating nearly all printed materials and signage into the City's top eight languages. Enshrining these lessons in planning for communications as well as service delivery can improve future pandemic response.

- TV.13. Establish a parallel messaging system that includes online information and participation opportunities as well as direct delivery to populations not connected to high-tech systems.
- TV.14. Engage with ADA compliance resources within FAS to enhance accessibility of sites, including site visits from people with disabilities to pre-test the operations.
- TV.15. Continue investments in community navigation using successful models from the Office of Immigrant and Refugee Affairs, the Department of Neighborhoods, PHSKC, and community-based organizations.
- TV.16. Partner with the PHSKC to post a single phone number for residents to call for key information.
- TV.17. Invest in public education and trust-building to combat vaccine hesitancy and create a stronger foundation of trust and knowledge before the next pandemic.
- TV.18. Maintain the three-pronged model deployed by the City: mobile teams to reach people with the highest vulnerability and risk; community hubs, such as West Seattle and Rainier Beach, accessible at the neighborhood scale; and high-volume sites, such as the drive-through sites and Lumen Field.

Section 6: Social and Human Services

Our review of Social and Human Services covers services for the aging and disabled populations; mass shelter and hygiene services for the population experiencing homelessness in Seattle, including the effort to de-concentrate shelters; and emergency child care and feeding.

Summary Successes

- The City rapidly coordinated a de-intensification of shelters and deployed hygiene resources across the community.
- Between March 2020 and March 2021, the City supported 14,000 households through a voucher program, served over one million meals to individuals experiencing or transitioning out of homelessness, and delivered an additional one million meals served to older adults
- The Department of Early Learning has completed an internal after action review of the Emergency Childcare Program with recommendations and a newly designed Emergency Child Care Plan.

Recommendations

The delivery of social and human services is a highly labor-intensive effort that relies on many contracted community partners and volunteers. Services were impacted from both the demand and supply side, as the need for social and human services increased by multiples in a very short period of time, just as staff and volunteers were harder to find. In some case, partner agencies, providers, and companies lacked access to emergency management information, training, and input to emergency plans to be able to effectively partner with staff. Several departments involved in social and human services have taken on their own reflection exercises to document and learn from the COVID-19 pandemic.

- SHS.1.** Include lessons from departmental after action reviews in future pandemic planning and exercises.
- SHS.2.** Include community partners in purchasing and logistics, for example, allowing them to access PPE through City channels to continue to play their essential roles.
- SHS.3.** Develop plans and tools for accessing resources such as the National Guard to support more sustainable levels of emergency operation.

A public health emergency requires greater flexibility in contracting and financing to allow outside providers to be responsive to community needs. As a strength, the City erred on the side of being generous and taking care of Seattle's residents rather than putting up eligibility barriers for feeding and child care programs. Community providers play a significant role in supporting the cultural relevance of emergency programs. The City also struggled to define its role and provide concrete guidance to outside providers who deliver many direct services. These providers are often also accountable to other funders and regulatory structures and were constrained by the rules of government funded programs and the additional layers of guidance from the state and federal governments.

- SHS.4.** Include community partners in the multicultural aspects of emergency planning and exercises.
- SHS.5.** Review contracting changes made and consider continued flexibility and mechanisms to quickly adjust scope and clarify roles and expectations in an emergency.

Social and human services have historically been chronically underfunded and understaffed. In an emergency, the lack of strong preexisting infrastructure and resources hampered the City's ability to scale programs, despite the availability of models known to work and a major influx of funding. Seattle received more than \$300 million in American Rescue Plan Act funds and some of these investments are already going to building assets related to social and human services including digital equity, child care, and housing and homeless services.

- SHS.6. Continue to invest in foundational infrastructure, including equitable, reliable internet connections, device availability, language support, and digital literacy for recipients of social services.
- SHS.7. Strengthen City capacity to guard against fraud.

Section 7: Support for Businesses and Economic Recovery

The analysis that follows is organized in four sections, with the recognition that support for small businesses and workers extends from the initial response phase through recovery efforts: providing information, small business supports, support for workers, and economic recovery.

Summary Successes

- Information provision for businesses featured strong collaboration by City departments and participation by PHSKC and used multiple messaging strategies to distribute information.
- As a response to COVID-19 impacting small businesses, the City of Seattle’s Small Business Stabilization Fund (SBSF) was repurposed in March 2020 to provide \$10,000 grants to support businesses with 25 or fewer employees, as well as workers in the hospitality industry. In line with the City’s overarching policy to target limited resources to those who need it the most, people of color own 66% of the businesses awarded in Rounds 1 to 5 and the round for restaurants and bars.
- The City’s existing Paid Sick and Safe Time benefits were important to individuals who continued to work and new ordinances were rapidly enacted to protect gig workers.
- Strong interdepartmental coordination provided flexibility and technical assistance for small businesses, including allowing restaurants and other small businesses to adapt to social distancing and capacity limitations by operating in the public right of way.
- To keep businesses informed and empowered around changing public health requirements, the City conducted outreach to businesses and provided flyers and materials on requirements in multiple languages.
- Public space activations, including Welcome Back Weeks, and creative approaches to address crime and provide resources for individuals in crisis were deployed to support recovery of Downtown Seattle.

Recommendations

Clarity of mission was essential to effectively targeting the City’s limited resources. By asking “who needs our help the most” and identifying gaps in other programs, the City clarified its mission and priority as helping small and BIPOC-owned businesses. This enabled the City to focus programs and target its limited resources to provide huge benefit to a sector of the City’s economy that likely would have been most more negatively impacted. While not deserving of direct funding and technical assistance, the needs of large employers should not be lost in this focus. It is important that the City listen to the interests of large employers and share at least information that can be helpful as large employers position themselves for pending policy changes.

- SBEV.1. Capture the lessons learned from this pandemic about the importance of establishing clarity of mission and aiding business owners unlikely to be supported through state or federal programs.

SBEV.2. Following the pandemic, hold listening sessions with large employers to build relationships and explore how best to support them in future emergencies, including feasible and equitable means of information sharing.

The City was highly successful in scaling up the SBSF and using existing data sets to target resources to businesses with the greatest needs. These wins should be consolidated for application in future emergencies.

SBEV.3. Institutionalize lessons learned from expansion of the SBSF, including how to receive and process applications at scale; the ability for Office of Economic Development staff to access relevant business financial data; and the confirmation that it is acceptable to target resources based on race and other criteria.

SBEV.4. Maintain the Race and Social Justice Index, Displacement Risk Index, and other data sets and conduct an in-depth study of how best to use them to target limited resources.

Interdepartmental efforts and both collaborative and contracted partnerships with community-based organizations were essential to sharing information and delivering direct support to businesses, workers, and others. This collaboration expanded the City's resources, reach, capacity, and intelligence, particularly in how to serve vulnerable populations. Contracting flexibility is addressed in recommendation SHS.5.

SBEV.5. Document the extensive interdepartmental efforts focused on information sharing and resource provision to understand the interconnections among departments that deal with businesses, labor, housing, food security, child care, and other disciplines.

Communications and technical assistance for business owners who speak languages other than English was a priority and more could be done to bolster resources in this area. Translations would lag behind the first communication in English during a time when access to the most current information was essential to business preparations for pending changes. This issue is addressed by recommendation PI.7.

Workforce development and retraining is essential to individual, family, and community financial wellbeing and to overall economic recovery. Additional expertise, resources, and collaboration is needed in this area.

SBEV.6. Prepare emergency staffing, creating an ability to scale up staff capacity more rapidly, and establishing maximum thresholds within which departments can plan.

The time required to expand staff capacity in OED and the Office of Labor Standards slowed the City's response to some degree.

SBEV.7. Prepare emergency staffing, creating an ability to scale up staff capacity more rapidly, and establishing maximum thresholds within which departments can plan.

Many advances were accomplished during the pandemic that could be incorporated in ongoing City operations.

SBEV.8. Establish greater flexibility for private use of the right-of-way.

SBEV.9. Continue to leverage interdepartmental collaborations and community partners to understand community needs and communicate the availability of public resources.

SBEV.10. Continue to institutionalize expanded support for workers and small and BIPOC-owned businesses.

SBEV.11. Continue to build connections with large regional employers and business organizations, exploring how the City can support business needs as well as how private sector capabilities and resources can be leveraged for the good of the region during emergencies.

Section 8: Staff Redeployment

This section focusses on the shifting of staff resources across the City organization to meet emergency needs during the pandemic.

Summary Successes

- Early in the pandemic, requests for interdepartmental staff redeployment were personal, issued by an individual, conveyed a sense of urgency, and contributed to a culture of shared commitment and collaboration; departments were responsive, and redeployments happened.
- As the pandemic persisted, agreements were signed by the City and labor representatives giving the City unprecedented flexibility to redeploy staff across departments and classifications. Additionally, a technology platform was developed by Seattle IT to support largescale redeployment of staff.

Recommendations

The City successfully redeployed some staff during the pandemic, which was of great value to receiving departments and the communities they serve. It is critical to capture the mission-driven sense of service that motivated these redeployments for future emergencies.

SR.1. Ensure that the full City organization, including the Mayor, department directors, and individual employees have a shared understanding that redeployments will be a critical element of future emergency responses.

The labor agreements and redeployment platform developed in this emergency are advances in foundational infrastructure that should be leveraged to prepare for and respond to future emergencies.

SR.2. Engage with labor to reflect on redeployment successes and challenges and to establish template agreements that can be rapidly deployed as starting points in future emergencies.

SR.3. Augment the technology platform developed during the pandemic and use it to inventory staff skillsets and define skillsets in areas where additional capacity may be needed.

SR.4. Practice redeployments using the platform during emergency management exercises and through ongoing small tests.

SR.5. Continue to explore equity issues surrounding which City staff are required to report in person during emergencies.

The City was described by stakeholders as a “federated system,” with departments operating on different, independent technology systems and HR policies, and with largely separate HR procedures and labor relations. The pandemic highlighted that the City worked best when it leveraged the full

expertise and capacity of the City workforce. Investments in updated, interoperable enterprise systems and a stronger “one City” culture would enable this benefit during and outside of emergencies.

SR.6. Update antiquated enterprise systems and centralize more HR functions to enable City departments to work more seamlessly, efficiently, and nimbly as an integrated system.

Improvement Plan

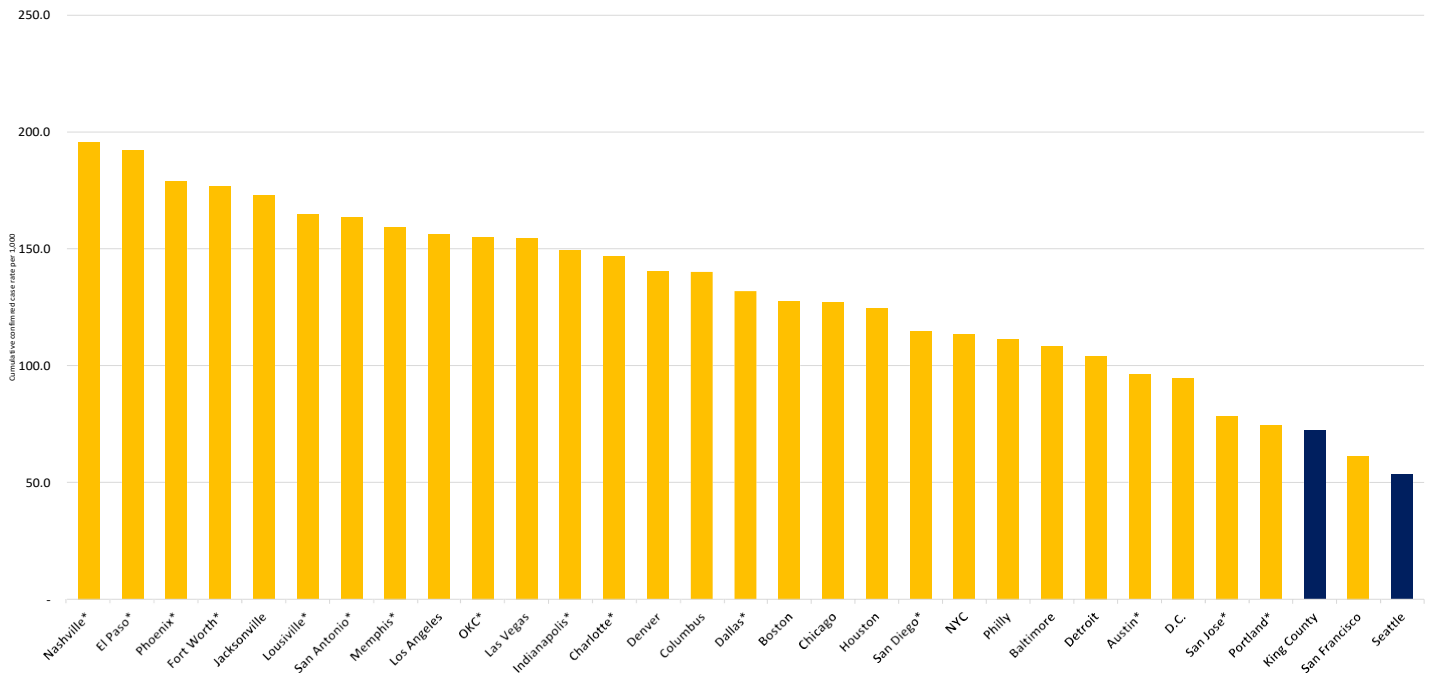
The City Office of Emergency Management will work with its emergency management partners to develop an actionable Improvement Plan based on the recommendations from each chapter of this report in 2022. The table on the following page provides an example of what information will be included, such as specific action steps, responsible parties, and a timeline for completion.

Introduction

The COVID-19 pandemic, an emergency unique in scope and duration, has had a profound impact on City of Seattle operations. As a public health emergency, it is unlike any incident the City has previously experienced. **Despite ongoing challenges, the City and the broader region have responded extremely effectively as evidenced by fundamental public health outcomes:**

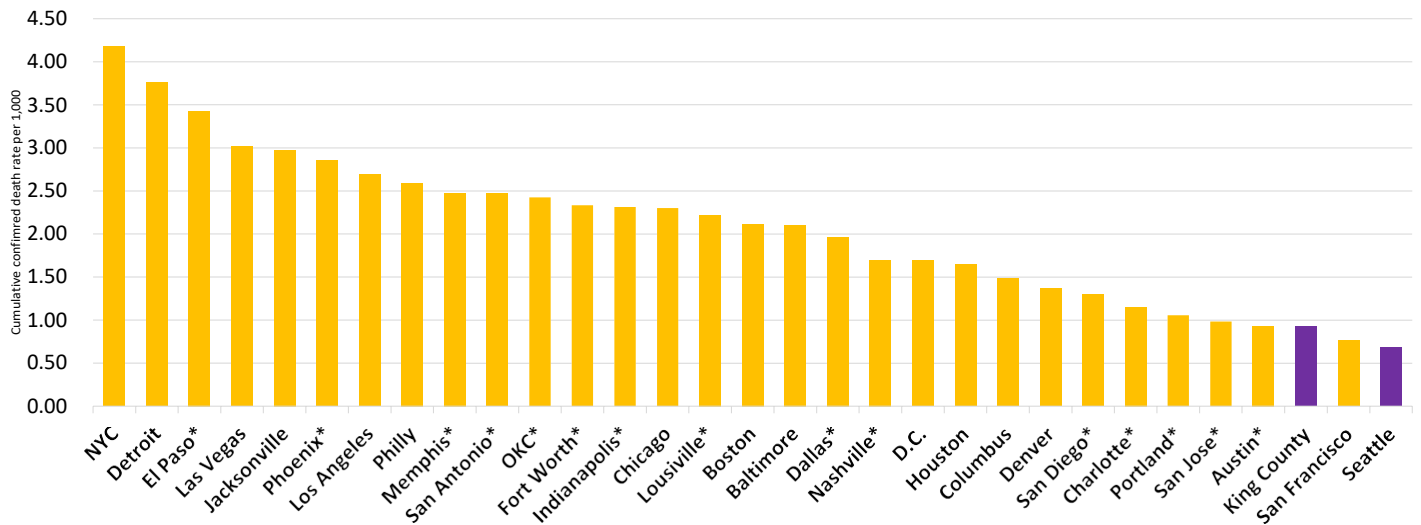
- Seattle was the first US city to fully vaccinate 70% of residents 12 and older.
- Seattle has fared significantly better than other large cities terms of cases and deaths per thousand, as shown in Exhibit 1 and Exhibit 2.

Exhibit 1. Cumulative COVID-19 Cases per 1,000 Residents (largest 30 cities by population)



Note: *indicates county-level data.
Source: City of Seattle, 2021.

Exhibit 2. Cumulative COVID-19 Deaths per 1,000 Residents (largest 30 cities by population)



Note: *indicates county-level data.
Source: City of Seattle, 2021.

In addition to these measurable topline public health outcomes, a sampling of notable successful aspects of the City’s response includes the following, many of which this report expands upon:

- Direct involvement by the Mayor’s Office allowed for a rapid decision-making process. A sense of urgency and personal commitment contributed to innovations and creative problem-solving as evidenced by the City’s pioneering testing and vaccination campaigns.
- The reshaping of existing partnerships and tools allowed the City to rapidly implement new, radically changed, or scaled up programs without the time-consuming processes more typical of program development.

“We moved very quickly relative to other cities in determining how to get the flexible Coronavirus State and Local Fiscal Recovery Funds out.”

Departmental stakeholder

- A strong focus on equity and the use of data facilitated the effective targeting of these resources to those with the greatest need.
 - Despite national trends to the contrary, the City successfully reached Black, Indigenous, and People of Color (BIPOC) communities through its vaccination clinics, with more than 45% of those vaccinated at City sites identifying as BIPOC.
 - The use of data and targeted distribution methods helped channel the majority of Small Business Stabilization funds to BIPOC-owned businesses.
 - Grocery vouchers were prioritized for recipients of other needs-based programs.

- Interdepartmental collaborations were used to tackle large and multi-pronged efforts like public communications, support for businesses, and testing and vaccination efforts.
- Adaptation by departments ensured that City bureaucracy and past practices did not inhibit the City’s ability to deliver services to individuals and organizations in need of assistance.
- Early emphasis by the Fire Department on mobile delivery and direct visits to skilled nursing facilities, adult family homes, and assisted living facilities increased access to testing and vaccines.
- The City made significant advances in its logistics capabilities.
- The City responded rapidly and effectively to adapt personnel policies to protect worker safety and maintain delivery of essential services by:
 - Rapidly developing HR policies and facilitating six memoranda of understanding signed with labor representatives.
 - Deploying technology to shift a portion of the workforce to a virtual/remote work setting.
- The City tapped significant private sector resources, including contributions by Amazon, Boeing, Microsoft, and others, and successfully lobbied for extended deadlines for spending federal funds.

Purpose of this Report

This After Action Report (AAR), drafted and finalized in 2020 and 2021 while the pandemic and the City’s response continues, provides an opportunity to identify what contributed to these positive outcomes and to identify how some processes might have been smoother, more effective, more efficient, and more equitable.

The purpose of an AAR is to analyze the response to a preparatory exercise or actual emergency by identifying strengths to be maintained and built upon and lessons learned and areas for improvement. The goal of an AAR is to make future incident response more effective. AARs are intended to be used as a tool for continuous improvement for all agencies and organizations involved in a response. An AAR provides objective analysis of what happened, identifying both successes and opportunities for improvement, and a summary of recommendations to enhance resilience and prepare for effective future emergency responses. Emergency managers leverage both successes and lessons learned to update relevant plans, policies, and procedures and to inform ongoing planning, training, and exercise development.

The Unique Nature of this Emergency

Effective emergency response relies on a core focus on planning, training, and exercising to ensure that key stakeholders are ready when disaster strikes. Some planning is general, taking an “all hazards” approach to address the broad spectrum of disasters that can impact a jurisdiction, region, or state. Other plans are more specific to the contours of a particular site or hazard. Following pandemic flu threats in 2007, many jurisdictions prepared pandemic flu plans that considered many different aspects of such a disease outbreak. The 1918 flu pandemic killed approximately 675,000 Americans and was generally regarded as a worst-case disaster. Public health and emergency management agencies in Washington State at the local and state levels used the 1918 pandemic as a starting point for their planning efforts for this pandemic.

Despite pandemic plans, the novel coronavirus and the disease it causes (COVID-19) presented many unique challenges to the City of Seattle that were beyond the scope of existing plans:

- **The cause of the emergency is a novel coronavirus**, meaning City policymakers and emergency management professionals were reliant on public health experts for guidance, and yet the nature of how the disease spreads and effective protective measures were unknown for many months, with incomplete, inconsistent, and frequently changing “best practices.”
- **Seattle was among the first in the nation to respond to the outbreak**, taking protective measures when deaths at the Life Care Center in Kirkland on February 27, 2020 increased concerns in Washington State and at the national command levels. In the intervening months, public health experts labored to determine what their protective action messaging should be. The initial decision was that it was not needed or beneficial for the public to wear masks. When it was determined that the transmission was by aerosol droplets, that decision was reversed.
- **The rapidly evolving understanding of the disease by public health experts challenged consistent public information messaging.** While pandemic planning asserts that it is essential for all levels of government to have the same public information messaging, this did not happen, particularly at the national level. The mixed messaging led to a political divide over how the public should protect themselves. This divide has led to active disinformation campaigns by political operatives seeking to cause divisions among US residents. The wearing of masks, safety of vaccines, validity of masking, or even the existence of the virus has not been accepted by millions of Americans.
- **The pandemic’s impact on all aspects of normal life required the development of significant new policies and programs** designed to protect public health, individual and community wellbeing, and economic activity. These policies and programs had not been previously planned and required significant improvisation by City policymakers and staff.
- **Similarly, the pandemic's impact on the City workforce required rapid policymaking to protect employee health and maintain essential operations.** Some City functions experienced surges in demand, some could be fulfilled remotely, and some required significant adaptations for safe in-person delivery.
- **The nature of the pandemic meant that the City’s emergency operations could not be relocated to a safe physical location**, but had to be delivered via a virtual platform, which had never been done before.
- **The global scale of the emergency meant that just as local resources were depleted, national and international supplies for personal protective equipment, vaccines, and other essential supplies were exhausted as well.** All levels of the US government – local, regional, state, and national – were overtaxed simultaneously, meaning that outside aid and the established systems designed to request and prioritize that aid were overwhelmed or unable to deliver for a time. When outside aid did come, much of it arrived as federal funding which the City acted quickly to disperse.
- **The above factors have been compounded by the duration of the pandemic.** Policymakers and staff have been coping with impacts of the emergency for more than 21 months as this report is published, working long and stressful hours. Exhaustion, burnout, and staff turnover complicate the

response and tax the resilience of both individuals and organizations. The social impacts of the pandemic will continue to reverberate throughout our society for a long time to come. Beyond the duration and medical impacts of the virus, much has changed about how and where people work, further complicating the definitions of recovery.

“Many of us suffered a failure of imagination, failing to understand the true extent of the emergency we faced in terms of scope, scale, and duration. We need to build more ‘worst case’ thinking into not just planning, but also response efforts in the future.”

Strategic Workgroup Member

While the above listed features of the COVID-19 pandemic make it the most challenging emergency the City of Seattle has ever responded to, it is important to note that future disasters could be significantly more catastrophic in terms of physical destruction, loss of life, and disruption of community and City functioning. The City’s successes in navigating the challenges of the pandemic amplify the need to continue to prepare for future emergencies which will come with their own – and perhaps greater – challenges. Application of successes and opportunities for improvement identified in this AAR should be considered for future planning given the region’s vulnerability to a massive earthquake and other largescale catastrophic disasters.

A Brief Summary of Events

Pandemics are not an unexpected hazard. They are naturally occurring events that should be anticipated. In past planning for a pandemic, most plans centered on the 1918 flu pandemic model, an event studied extensively and considered a worst-case scenario. In the case of the SARS-CoV-2 coronavirus, early detection of the virus in China sounded warning bells in some public health sectors. China was not forthcoming with information on what was labeled a novel coronavirus. Even today, the origin of the disease has not been pinpointed to a specific cause, with several probabilities suggested by different agencies and nations.

The first detected emergence of COVID-19 (the disease caused by the SARS-CoV-2 virus) in the United States occurred in Snohomish County in January 2020, followed by the first US deaths from the virus in Kirkland. The proximity of Kirkland to the city of Seattle brought the issue home very quickly. While some planning by City departments was already occurring, the discovery of the virus in the Puget Sound region immediately intensified planning activities. The City of Seattle took quick action to launch a coordinated response to the possibility of the virus spreading throughout the region, including the city proper.

Almost overnight, communities everywhere sent employees home to comply with social distancing requirements and to lessen the spread of the disease. Continuity of Operations plans had always envisioned that pre-designated “essential personnel” would be required to report to work. With the advent of widespread internet connectivity and the development of online government services, many more employees were able to work from home, given they had the hardware and internet connectivity necessary to be productive. Every City department had to determine how to provide services under these conditions, with operational departments needing a segment of their workforce to report in-person and provide direct services to community members. A surge in information technology support was needed to

manage staff working remotely. This included furnishing laptop computers, strengthening security for remote operations, and dealing with the complexities of staff needing technical assistance from a technology help desk as they dealt with a new operational environment they had not been individually prepared to operate from.

Additional safety protocols were needed to protect those frontline workers who needed to report to worksites. The City installed protective barriers, deployed mask and hand sanitation stations, supported temperature screenings and health checks, implemented social distancing, revised facility occupancy limits, and improved ventilation in core facilities.

Significant federal funding has been provided directly to states and local communities to support their pandemic response activities and as a means to pass through funding to individuals and businesses. The administration of those funds has been time-consuming and with each program there have been additional federal requirements.

Throughout the pandemic there have been multiple waves of infections throughout the nation, with a surge caused by the Delta variant being the latest. Fortunately, through the City of Seattle's quick action and coordination with other levels of government, the number of cases and deaths in the city proper has been significantly limited in comparison to other metropolitan areas. Additionally, a robust vaccination program that included outreach to BIPOC, immigrant, refugee, and other marginalized communities allowed the city to reach a 70% vaccination rate before other similarly-sized urban areas nationally.

It is important to note that during the pandemic response by the City, there was also a period of national outrage over the deaths of Ahmaud Arbery, Breonna Taylor, George Floyd, and other Black Americans. Universal condemnation for Floyd's unnecessary death led to widespread protests calling for racial justice for people of color, particularly for Black people. These events were commonly labeled as Black Lives Matter protests. Demonstrations and protest marches began on May 30, 2020 and extended into June and July. These events drew policy-level time and resources away from the pandemic to respond to disruptions occurring in the community. This After Action Report will not directly address the City's response to the demonstrations and property damage that ensued following the response to the death of George Floyd. The majority of the City's resources not directly engaged in the response to the protests remained committed to the pandemic response.

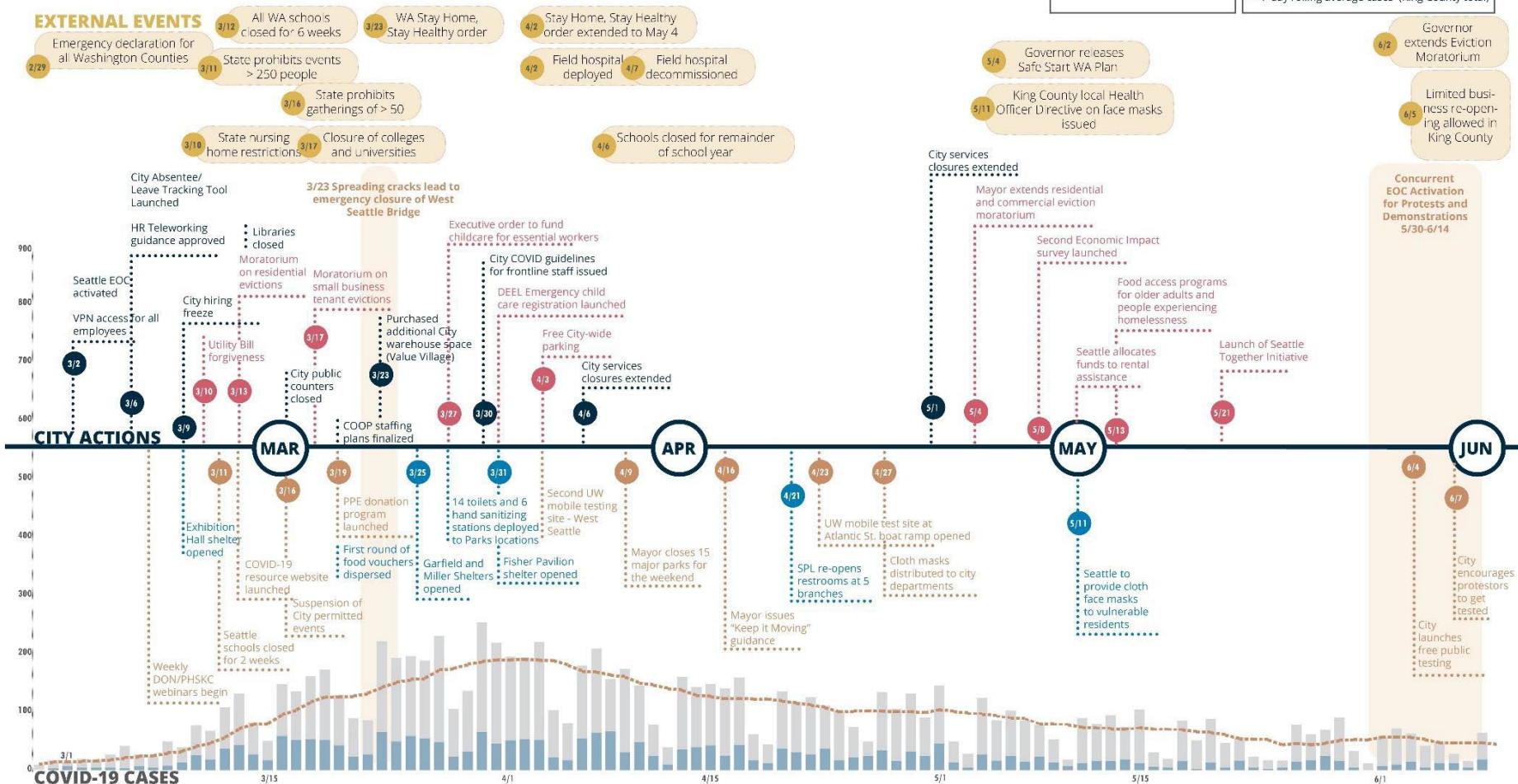
The event timeline in Exhibit 3 identifies key milestones in the emergency, as well as the COVID-19 case count for Seattle and King County, from March to June 2020. A timeline that extends to November 2021 can be found in Appendix C. Timeline of Events and Actions. Since the onset of the COVID-19 pandemic, what has emerged is a pandemic response that is now, as of the publication of this report, over two years long. There have been numerous twists and turns brought on by this new virus and its mutations. Prior pandemic planning had not envisioned a need to do extensive viral testing; a national surge in the need for personal protective equipment; or the rapid development of a vaccine in a matter of months versus the possibility of it taking years. With the initial rollout of vaccines, the idea that vaccine and vaccination hesitancy would extend to 70 million Americans was unfathomable.

Finally, it must be noted that COVID-19 remains a pandemic. Continued vigilance is required by national, state, and local authorities to ensure that any change in the virus going forward is met with the same level of effort, energy, and responsiveness that has characterized the City of Seattle's response to date.

Exhibit 3. Event Timeline, March – June 2020

Seattle COVID-19 Response: Summary of Major Milestones

March - June 2020 | Last Updated December 22, 2021 | Note: Some, but not all external events and actions are hyperlinked.



Sources: City of Seattle, 2020 and 2021; BERK, 2021.

Focus and Organization of this Report

This review of the City’s response to the COVID-19 pandemic is intended to strengthen planning and responses to future emergencies, both pandemic and otherwise. Learnings may be garnered from both successes and challenges encountered and it is important to maintain an objective focus on continual improvement. Specific opportunities for improvement are offered not as a critique of the City, which performed admirably during a time of extreme distress, but constructive considerations for the future.

Study Timeline and Methodology

The City engaged the BERK team in late September 2020 to conduct this AAR. By mid-November, BERK issued a “Wave 1 Rapid Assessment” focusing on the operational period from March 2 to June 8, 2020, corresponding to the Emergency Operations Center activation and de-activation dates for the first wave of the pandemic. The assessment included recommendations aimed at improving City information-sharing and coordination during an anticipated second COVID-19 wave in winter 2020-2021. This brief assessment was informed by document review and targeted interviews with seven interviewees in the Mayor’s Office, three interviews with Office of Emergency Management (OEM) staff, and one interview with a representative of Public Health – Seattle & King County.

Following issuance of the Wave 1 Rapid Assessment, focus on the AAR diminished while City staff prepared to respond to an anticipated increase in intensity of the emergency during the winter months. BERK helped OEM conduct a regular “pulse survey” during this period, which was designed to identify potential gaps in information-sharing and coordination, and specific response challenges and opportunities. This survey effort provided initial input and individual reflections on the City’s response from various City staff, with participation trailing off in the succeeding weeks and months.

Work on the AAR resumed in spring 2021 as City staff recovered additional capacity to focus on non-emergent tasks. An AAR Committee with cross-departmental representation was formed to guide the work. Members of the AAR Committee are listed in [Appendix A](#).

Deep Dives and Evaluative Criteria

The City’s response to the COVID-19 pandemic has been massive, encompassing much, though certainly not all, of the City’s efforts for the past two years. An important first step in the work was to identify discrete and bounded topics of interest to focus the analysis. The AAR Committee met in April 2021 to review BERK’s recommended areas of focus for the full report. The following eight Deep Dive topics were selected by the Committee from a longer list of potential topics:

1. Policy Setting and Operational Coordination
2. Continuity of Operations
3. Logistics and Supply Chain Management
4. Public Information
5. Testing and Vaccination
6. Social and Human Services
7. Support for Businesses and Economic Recovery
8. Staff Redeployment

The AAR Committee also had the opportunity to comment on the BERK team’s proposal to focus its evaluation around three core criteria:

- **Effectiveness:** *Did the City’s response contribute to desired outcomes?*

As noted in the introduction, the City’s response has been irrefutably effective, as evidenced by comparative public health outcomes. Additional consideration within Deep Dives is given to the effectiveness of the City’s response particular to the functional areas covered in each topic.

- **Efficiency:** *Did the City’s response make efficient use of resources, including staff and partner time?*

Emergencies may create both a need to act quickly, leveraging all available resources, and to prioritize limited resources. Deep Dive considerations of efficiency identify ways in which the City successfully marshalled and dispersed resources and ways in which the response could have been implemented more smoothly, with less unproductive effort.

- **Equity:** *Did the City’s response play out equitably for City staff, residents, and other stakeholders?*

Analysis considers how limited resources were successfully targeted to prioritize those with the greatest needs, as well as the fair consideration of City staff.

These criteria serve as the basis for our consideration of each Deep Dive and the City’s response overall, serving to identify both successes and opportunities for improvement. Several distinctions are important to note:

- **Application of these criteria necessarily varies by Deep Dive.**
- **Successes and opportunities for improvement are nuanced and intertwined.** As noted previously, the City’s response to the pandemic has been overwhelmingly effective. Opportunities for improvement are by and large related to process and method, identifying ways in which future responses could conceivably be smoother. We readily acknowledge that such observations are easy to make in retrospect, and much harder to identify in the midst of a crisis. It is for such a reason that we reiterate that “opportunities for improvement” are not intended as critiques of the City’s past actions but as constructive considerations for the future.

General Methodology

While the specific inputs for each Deep Dive are described in the introductory text of the sections that follow, the common analytic methods applied across multiple topic areas include:

- Document review.
- Interviews with City of Seattle staff and representatives of key partner organizations. See [Appendix B](#) for a list of interviewees.
- Review of existing data and targeted original data collection and analysis.
- Targeted review of practices in other communities.

Structure of this Report

The remainder of this document is organized around the Deep Dive topics selected by the AAR Committee. Each section defines the topic, describes the variety of inputs and methods implemented in our

analysis, and describes our findings and recommendations. A concluding chapter summarizes our findings and recommendations.

What is Not Covered

The City's experience in responding to the COVID-19 pandemic has been massive, affecting every part of the organization in some way, impacting many existing programs, and requiring countless service delivery adaptations and program development. Not all of these stories can be told in this report. The selection of the eight Deep Dives listed on page 8 has focused our efforts and limited the range of topics we can address.

Of particular note, this AAR does not include an in-depth study of the federal financing that was received by the City and how those funds and other resources were allocated to myriad programs and priorities. We include some general comments about financing in this document when appropriate to add context to the activities of individual departments.

This after action effort was funded primarily by an Emergency Management Performance Grant administered by the Federal Emergency Management Agency.

Section 1: Policy Setting and Operational Coordination

This section addresses how the City set policy, coordinated operational responses and implementation efforts, and shared information, both within the City organization and with external partners. Inputs to this Deep Dive included:

- **Plan review**, including the City of Seattle’s Comprehensive Emergency Management Plan (CEMP) and relevant annexes.
- **Document analysis**, including situation reports, Snapshot reports, director briefs, pre-planning documents, and consolidated action plans.
- **Stakeholder interviews** with staff from the OEM, Mayor’s Office, Seattle City Light, Seattle Department of Construction and Inspections, Seattle Department of Human Resources, and Seattle Information Technology Department.

Background

Prior to the pandemic, the City of Seattle had several approved plans in place that were applicable to the pandemic disaster. This included a Comprehensive Emergency Management Plan (CEMP) with the following annexes:

- A Seattle community profile and description of Seattle-specific hazards.
- Preparedness.
- Mitigation.
- Response and emergency support functions, including the City’s Emergency Operations Plan which describes the role and function of the Emergency Operations Center (EOC).
- Recovery.
- Continuity of Government and Continuity of Operations.

As noted in Section 2: Continuity of Operations, plans for maintaining City services during a disaster were created at the departmental level, with coordinating support from Office of Emergency Management (OEM). In addition to the CEMP and its annexes, the City has a Seattle Disaster Recovery Framework, a Training and Exercise Plan, and department-level emergency plans. Prior to the COVID-19 pandemic, the City did not have an updated pandemic flu plan in place (the City’s previous pandemic flu plan was written in 2009), but [referenced the King County plan](#). Seattle’s emergency plans are available on the OEM website at: www.seattle.gov/emergency-management/plans

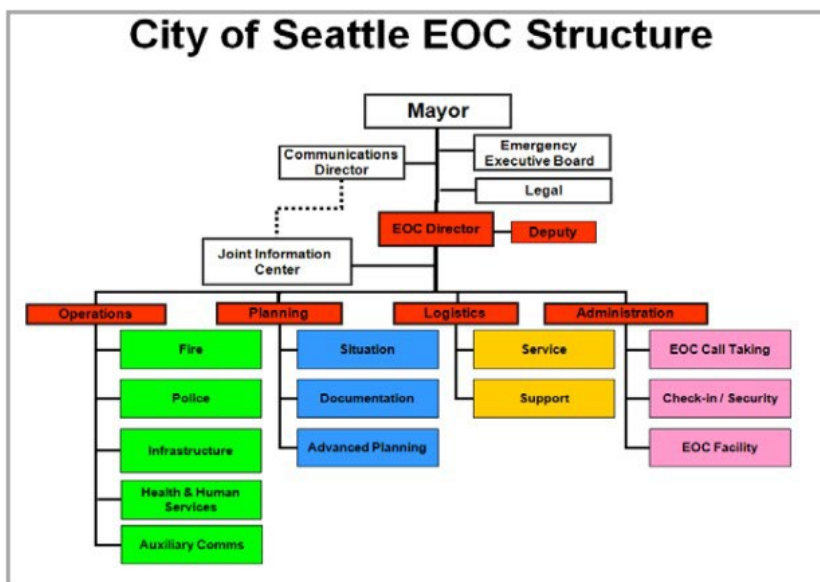
The City’s emergency planning calls for use of an Incident Command System (ICS)-based structure to coordinate decision-making and information flow during an emergency. This response framework describes the following roles:

- **Mayor:** policymaker, with direct authority over City departments as head of the executive branch.
- **Council:** holds budget-setting authority.

- **Emergency Executive Board:** comprised of key department directors, provides support for Mayor in setting policy and providing direction for implementation of new policies.
- **Joint Information Center (JIC):** hub for public information.
- **Emergency Operations Center (EOC) Director:** through the work of the EOC, coordinates with City department representatives to develop Citywide situational awareness and courses of action.
- **City Departments:** staff the EOC and implement policy direction set by Mayor.

The initial response to the arrival of the pandemic was to use the emergency management coordination measures as described in the CEMP. This included activating the City’s EOC; assembling senior policymakers to promote rapid decision-making; and using the JIC to handle media requests that were coming from all over the world, providing coordination and a distribution system for public information messaging. The EOC’s organizational chart is shown in Exhibit 4.

Exhibit 4. EOC Organizational Chart



Source: *City of Seattle EOC Leadership Guide, 2015.*

The City’s EOC was activated for the COVID-19 response on March 2, 2020. Activation occurred in several steps:

- The EOC started as an in-person activation. By March 6, the EOC was using a previously untried “hybrid” model, with most department representatives remote to allow social distancing.
- On March 12, people were then brought back into the EOC, in a more traditional activation, with departmental EOC representatives in the Operations Room and Mayor’s Office staff in the Policy Room with JIC staff also present in the EOC.
- Stay-at-home orders and two positive cases within the EOC necessitated returning to a virtual EOC on March 16 as it was recognized that the social distancing measures needed to protect the community also applied to people responding to the pandemic.

The idea of a virtual EOC had been considered by many organizations, but the City of Seattle had not trained for nor practiced this approach. The dispersal of people, now working from individual offices or from their homes, created significant challenges for coordination. A virtual activation had never been done before and required significant information technology infrastructure development and adjustments to traditional EOC processes. The Seattle EOC also had to adjust and update the procedures used in an activation to accommodate virtual operations.

At the onset of the EOC activation, four operational branches under the EOC Operations Section were established in the EOC Consolidated Action Plan developed by OEM staff and approved by the Mayor's Office:

1. **Community Needs**, with primary focus on food, housing and rental assistance, and small business assistance.
2. **Homelessness and Human Services**, with a focus on shelters and public hygiene.
3. **Public Health and Safety**, including the involvement of the Seattle Police Department and Seattle Fire Department.
4. **City Operations and Infrastructure**, including Human Resources, Finance and Administrative Services, and the City's infrastructure departments and utilities.

This structure has formed the framework around which the City's response efforts have been organized, with some evolution over time, particularly as a greater focus was put on recovery in early 2021 as described below. Each operational area is overseen by a Deputy Mayor and managed by an Operations Manager within the Mayor's Office. Department directors have been organized in topic-specific subcabinets, and Operations Managers have held regular topic-specific calls, as often as daily during the height of the pandemic response. These calls and response coordination included department directors and key staff.

In addition to these topical breakdowns, two layers of coordination occurred on a regular basis, including:

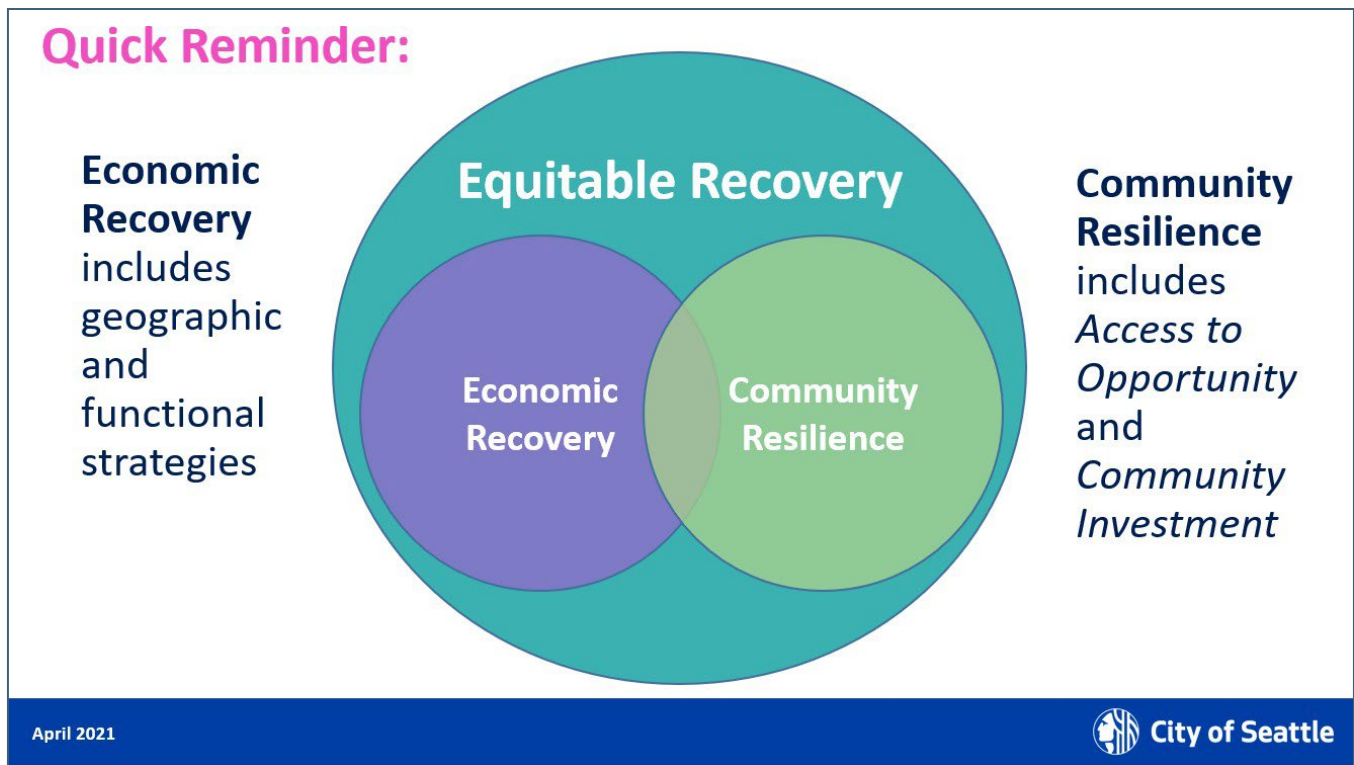
- The Mayor held coordinating calls with select members of her cabinet who were directly involved in the response.
- The EOC Deputy Director facilitated calls with broader participation by department staff.

The frequency of these calls has varied over the course of the pandemic, depending on the intensity of the response. During periods of heightened activity, both calls happened daily.

Layering on top of these response-focused efforts, the City began to consider reopening and recovery early in 2021:

- **Reopening efforts** focused on vaccine distribution and leveraging input from a public health advisory group to pivot from responding to the pandemic and seeking to limit the spread of infection to allowing less restricted community and economic activity.
- **Recovery efforts** focused on the two themes of Economic Recovery and Community Resilience as shown in Exhibit 5. The [Support for Business and Economic Recovery Deep Dive](#) later in this report details economic recovery efforts and the portion of Community Resilience support workforce development.

Exhibit 5. Seattle Recovery Framework



Source: City of Seattle, 2021.

Recovery efforts were organized across three broad timeframes:

- **Immediate strategies.** Strategies the City could implement before widespread vaccination to restore confidence in neighborhoods and business communities.
- **Near-term strategies.** Strategies the City planned to roll out once it achieved widespread vaccination to coordinate returning to a new normal.
- **Long-term strategies.** Multi-year strategies to address the lasting impacts of COVID-19 on communities and the changing nature of office work.

An iterative series of frameworks and funding plans leveraged federal funds and reallocated City resources, philanthropy, and public-private partnerships to fund the City’s recovery efforts.

Federal funding was critical to the City’s efforts, including funds distributed to municipalities nationwide through the \$1.9 trillion American Rescue Plan Act (ARPA). The \$350 billion in Coronavirus Local Fiscal Recovery (CLFR) funds gave recipient local governments great flexibility in how the funds could best be used. The Seattle Rescue Plan, announced in May 2021, outlined how the City’s nearly \$300 million in ARPA funding would be allocated. The first two phases of the plan (Seattle Rescue Plan 1 and 2) included support for housing and homelessness, small business recovery, community assistance and programming, reopening City programs and services, funding for transit, and support for older adults. In fall 2021, the Seattle Rescue Plan 3 allocated the City’s second \$116 million CLFR tranche through the City’s standard budget setting process.

The Seattle Rescue Plan was jointly developed by the City Council and Mayor Durkan and informed by:

- Resolution 31999, outlining Council’s principles and priorities for use of federal funds, as shown in Exhibit 6.
- Input from stakeholders during listening sessions and walking tours organized by the Mayor that focused on downtown businesses, small businesses, unions, community organizations, nonprofits, and City staff.
- A committee panel with community organizations and other cities.
- A Council Public Hearing on May 4, 2021 and public comment in committee meetings in April and May.

Exhibit 6. Guiding Principles and Priorities for Use of Recovery Funds per Resolution 31999

Guiding Principles	Priorities
<ul style="list-style-type: none"> ▪ Equity (prioritizing investments for those most impacted by COVID) ▪ Coordination (ensuring that investments are coordinated with other entities to address gaps in service provision) ▪ Flexibility (being nimble and prepared to respond as needed) ▪ Resilience (guarding against future uncertainty and positioning the City to make new investments as per Resolution 31957 – Jump Start Spending Plan) 	<ul style="list-style-type: none"> ▪ Vaccines and testing ▪ Food assistance ▪ Homelessness and housing services, including rental assistance ▪ Immigrant and refugee support ▪ Child care ▪ Small businesses, worker assistance, and workforce recovery ▪ Community wellness ▪ Transportation ▪ Revenue replacement and financial resilience

Source: City of Seattle, 2021; BERK, 2021.

Funding plans were developed with the intent of aligning with State and County funding and programmatic areas of focus. Not all ideas considered in plans were funded and implemented. Exhibit 7 presents a summary of the three phases of the Seattle Rescue Plan.

Exhibit 7. Summary of Seattle Rescue Plan Funding and Programming Focus

Seattle Rescue Plan 1		Sources	
\$49.2 M	Housing and Homelessness	\$116.0 M	CLFR (Tranche 1)
\$23.5 M	Community and Small Business Recovery	\$12.2 M	ARPA HOME Investment Partnerships Program
\$41.0 M	Community Well-Being		
\$7.0 M	Community Assistance and Programming		
\$7.6 M	Reopening City Programs and Services		
\$128.3 M			
Seattle Rescue Plan 2			
\$28.7 M	Housing and Homelessness	\$49.5 M	ARPA Funds
\$7.8 M	Support for Seniors	\$2.6 M	CRRSA Funds
\$10.9 M	Madison BRT Line		
\$1.8 M	Monorail Operations & Maintenance Support		
\$0.8 M	Seattle Streetcar Operations & Maintenance Support		
\$2.2 M	McCaw Hall		
\$52.2 M			
Seattle Rescue Plan 3			
\$72.8 M	Housing and Homelessness	\$116.0 M	CLFR (Tranche 2)
\$18.3 M	Community and Small Business Recovery		
\$13.9 M	Community Well-Being		
\$11.6 M	City Services and Reopening		
\$116.7 M			
\$297.2 M TOTAL			

Sources: City of Seattle, 2021; BERK, 2021.

Analysis

Our analysis is presented around three functions, with a summary of findings and recommendations contained [in the next section](#):

1. Policy Setting
 2. Operational Coordination and Information Sharing
 3. Information Sharing with External Partners

Policy Setting

The Mayor's Office has served as the policy-setting body for the City throughout the pandemic. This is consistent with the role of the office and the articulation of the Mayor's role in the City's emergency management plans. The nature of this emergency required significant policy development related to the City workforce, continuation of City services, and pandemic response. Rapid and effective decision-making and policy development are notable strengths of this response.

The Mayor was aided in policymaking efforts by an assembled panel of public health experts who contributed to Seattle's response as a major metropolitan area at the forefront of the emergency. The Mayor's direct access to this panel augmented information and guidance issued by the State Department of Health (DOH) and Public Health – Seattle & King County (PHSKC), particularly when these public health agencies were not comfortable or able to provide specific directives. Even so, because of the dynamic nature of the event, the Mayor's Office sometimes reversed decisions based on new information. This is to be expected in an emergency when decisionmakers can't wait for perfect information.

"Decisions also flowed out very quickly. Mayor Durkan is very decisive. We did a good job triaging to do more emergent stuff faster."

Departmental stakeholder

While specific issues are considered in more detail later in this report, the following thumbnail examples illustrate key pieces of policy-setting that directed an effective and equitable response:

- A commitment by the Mayor and her peers in other levels of government to following guidance from scientific experts meant the City, County, and State maintained alignment around this foundational principle. Stakeholders noted there was "no gap" on this front, which many said was essential to the region's excellent public health outcomes. A member of the Mayor's Office stated, "The discipline of the Mayor, County Executive, and Governor to focus on science has been fundamental and essential to our success." This alignment was not true across the nation. This local steadfastness to coordinated and consistent messaging likely saved lives in the Puget Sound region.
- The pandemic required the rapid creation of new personnel policies that affected the City's workforce. In one example, the decision to provide pandemic leave to older and vulnerable employees likely saved lives and – because the City is self-insured – financial resources. In a mid-point analysis of expenses tracked by Aetna, the City's underwriter, COVID-19-related costs accounted for about 2.6% of the City's total healthcare costs between March 1, 2020 and

September 19, 2021, while COVID-19-related costs constituted nearly 7% of Aetna's costs nationwide between August 2020 and August 2021.

A strong policy focus on equity and social justice directed departments to focus their efforts and resources on populations that would most benefit from the assistance. Departments directly engaged representative community leaders and quickly adapted existing programs, datasets, and tools to prioritize resources for those communities and businesses that most needed support. The City's focus on equity is considered in multiple Deep Dives, including Section 5: Testing and Vaccination, Section 7: Support for Businesses and Economic Recovery, and others.

The Mayor's Office rose to the challenging nature of this emergency, which required significant and rapid policy-setting. At the same time, our review shows that the policymaking role of the Mayor is not well defined in the City's core emergency plans described above. The City's Emergency Operations Plan (Annex IV of the CEMP) notes that the Mayor or their designee authorizes activation of the EOC, holds primary responsibility for maintaining "peace and order," and is a policymaker and decision-maker, but little direct description is provided as to where and how this occurs. Moreover, emergency management plans and procedures can be confusing and inaccessible for those who do not reference them in their day-to-day work and have not been exposed to them via multiple trainings and disaster simulations.

Each planning documents referenced on page 11 had sections that could have been helpful in directing the City's response to the pandemic. None of the above plans had a specific and direct correlation to the circumstances being experienced in the COVID-19 pandemic. However, this is the nature of plans, as they are a jumping-off point for organizing and coordinating a disaster response and recovery. Because some of the plans were completed years ago and under different City administrations, the full extent of the benefits of those plans and the planning effort they represented was not recognized.

On a procedural level, stakeholders noted that the methods by which each mayoral administration makes policy decisions typically become standardized prior to an emergency. As operations staff identify policy questions that need a response from the Mayor's Office, it is helpful if these issues are elevated to the Mayor's Office in a format that is aligned with the administration's practices and decision-making flow. One stakeholder noted that "Everyone adjusted to the way the Mayor's Office wanted to operate.... A template came out of the Mayor's Office that established how the information should be provided. It was like a decision paper."

Operational Coordination and Information Sharing

In addition to setting policy, the Mayor's Office became the operational lead for the City, coordinating implementation through the four policy workgroups described on page 13 and through direct relationships with department directors. The Mayor's Office became active in coordinating the City's response to the pandemic in a pattern that was seen in other states, counties, and cities across the country as elected officials recognized the significant risks brought about by the pandemic and the possibility of mass hospitalizations and deaths. The line between policy decisions and operational decisions can be difficult to ascertain and the public accountability of being an elected official encourages this level of decision-making.

“The Mayor’s Office became the operational arm for the City. It was organic and just evolved. Because there was so much policy focus, they wanted a very active role in response.”

“The big story is we began to recognize that the Mayor’s Office was not limiting themselves to the policy level. They started to take a directional role after they left the EOC. One of the challenges of not being able to be in the EOC was an issue because the rooms help define roles.”

Departmental stakeholder

Mayor’s Office staff worked their relationships with department directors and staff to take immediate actions to counter the disease, prepare for its potential consequences, and pre-position policies, personnel, and services to meet the coming challenges that were not always easily identified. As noted previously, the City’s emergency management plans and precedent set in previous, smaller emergencies indicated these functions would be executed by departmental EOC representatives acting on behalf of their department, at the direction of the Mayor and coordinated by the EOC Director.

Timebound Period of Confusion

There was an initial and temporary “period of confusion” experienced by City staff, especially departmental EOC representatives, who expected a traditional response with operational coordination managed through the EOC. The use of the Mayor’s Office Operations Managers for direct coordination with departments was not explicitly stated, leading to inefficiencies and duplication of effort due to a lack of visibility across concurrent efforts.

While roles and decision-making patterns were ultimately clarified, staff within OEM and throughout the City who plan, train, and exercise found this period particularly challenging as the response model was significantly different than what had been practiced and used in previous incidents. One stakeholder called this a “period of confusion,” noting that, “The EOC reps, who we’ve used for many events, were no longer in play. It became more the Directors leveraging their full department to do the work rather than EOC reps and Emergency Managers.” Other stakeholders described this period as inefficient, with some duplication of effort as different portions of the City organization were tasked to work on parallel tasks through the EOC and Mayor’s Office.

As an example of this duplication of effort, in late summer to late fall 2020, a large group of cabinet members developed a proposal to rebuild the city’s economy and community after the COVID-19 pandemic. Subtitled “a framework to reimagine Seattle to be a just and equitable city,” the plan acknowledges that the disruption of the pandemic has impacted communities of color the most and has exacerbated existing inequalities. The plan identified strategies and actions to address entrenched inequities through climate justice, building community wealth, health and housing, internet access and more. The plan was never implemented as the City established a separate recovery framework out of the Mayor’s Office.

It is important to note that the confusion of this period was time-limited: a “battle rhythm” was established and coordination and information-sharing improved as people became more aware of the direct leadership and operational coordination being asserted by the Mayor’s Office. Stakeholders noted that navigation of this phase would have been accomplished more smoothly with the explicit communication of roles.

There were both benefits and challenges associated with this extension of the Mayor's Office role:

- 1) **The Mayor was able to align with communications and decision making by her peers at King County and State of Washington.** This contributed to a reliance on science-based decision making and coordinated resource deployment.
- 2) **The extension of the Mayor's Office into operational decision-making and implementation greatly enhanced the speed by which policy-setting was put into action.** With the City's senior leadership staff participating in daily cabinet calls, the Mayor's Office could consult with them on policy-setting and direct them in implementation, enabling more immediate action on decisions. Mayor's Office staff worked exceedingly hard to manage the coordination with the departments and those with whom they had a direct working relationship prior to the onset of the pandemic. Long days, nights, and weekends were common as the City strove to put in place measures that had never been conceived of, even with the previous pandemic flu planning.

A voice from the Mayor's Office described the energy and creative problem-solving that occurred as follows: "We stopped being a government and started being human beings, asking what do people need and who needs it most? A typical program design process includes stakeholder engagement, assessment of options, and the development of a program over six to eight months. Instead, we asked how we can take our best programs that meet needs and scale them, taking something more like four weeks to accomplish the task." This level of effectiveness and high performance is remarkable and allowed the City to rapidly disperse federal resources to meet local needs.

Another example of rapid and effective policy-setting and implementation is found in the [Testing and Vaccination Deep Dive](#), describing the City's rapid mobilization and success with testing and vaccination.

Stakeholders describe the Mayor's Office as having brought greater authority and commanding more immediate responses than may have been the case with coordination relayed through an EOC representative in the more traditional EOC-coordinated response. This is particularly likely in departments where the relationship between the department director and the department's EOC representative is not strong. While not true for all departments, this is a weakness of the EOC-coordinated response model that was mitigated through the direct connection that Mayor's Office staff have with department directors.

"The strength was that the directives got done on time. When the EOC does the coordination, people are not as responsive as it is more of an information-sharing relationship. Mayor's Office staff have a lot of authority."

"The strength of the Mayor's Office leadership is that they had the lead and whatever they wanted done got done. You could get cooperation from the other departments easier because of the Mayor's Office leadership."

Departmental stakeholders

- 3) **In a challenge directly associated with the strength described above, the reliance of the executive-led implementation model on direct relationships with department directors and key staff may limit participation in decision-making to a smaller circle.** The balance between the expediency of action and extending participation and information sharing is a difficult measure and rather than stating this as a failure, we raise it as an invitation to continue to strive for the right balance. One stakeholder acknowledged this tension by saying, “A strength of the executive-led model is that they have the relationships, and they were able to execute, while being policy people they were sometimes blind to operational impacts.”

Some stakeholders described cases where decision-making didn’t include operational-level staff or, in some instances, department directors who may have brought additional subject matter expertise or important operational considerations to the table. A department director noted that, “There were some cases where we were moving so quickly that some subject matter experts were not kept abreast and people with positional authority made decisions that were more complex. I wish in hindsight there was more collaboration.” Another department director expressed a need for greater consultation in personnel issues, noting that some centrally-decided policies were impractical to implement at the department level. Finally, subject matter experts in some areas, such as access and functional needs, were not always involved in the first round of decision-making.

- 4) **The direct relationship between the Mayor’s Office and department directors meant that executive-level information-sharing was excellent, particularly with leadership of those departments directly engaged in the response, while those departments and staff further from policy setting and direct implementation were less likely to report having access to the information they needed.**

There was a reliance on verbal calls, with less focus on written information consolidation in daily reports. This contributed to information gaps for those who weren’t on a particular call as noted in the quotes below. Email communication was found by some to be overwhelming, as it could be difficult to identify which messages had been superseded by more current communications. The logging of daily reports would have created an accessible repository of information that could be more quickly reviewed to find current information.

Some stakeholders noted that greater awareness of broader context, including international, national, and regional conditions, would have contributed to a more robust situational awareness.

“There was a problem to solve, and they would assign a group to work on it, usually by going directly to the department, without the EOC. This broke down the horizontal spread of information. Vertical flow was always good.”

“Information sharing was uneven, with critical information not shared with those not in some meetings.”

“The daily phone calls were good to have since there was so much change. There is a situation assessment and reporting structure that needs to be improved. We need to know the international and national picture.”

“If you weren’t there, it was a game of telephone to find out what happened.”

Departmental stakeholders

5) Project management tools did not provide clarity and transparency of roles and project status, particularly for those a step removed from the effort. In general, project management tools provide clarity and tracking capabilities for a number of parties, including the delegator, the delegate, and others who need transparency into project roles. Stakeholder interviews indicated that the tools deployed by the City were challenging for at least the delegator (the Mayor’s Office) and staff of departments whose responsibilities or expertise indirectly intersected with the topic. WebEOC, a standard emergency management platform, is difficult for staff who are not frequent users, though it performed well for the logistics function. The City created or adopted a variety of other tools to track and communicate project status, but they were not durable or accessible to all who could have benefited from visibility into project roles. The quotes below describe this from the perspective of the Mayor’s Office and a staff member indirectly associated with tasks that had been delegated to another department.

“We need a framework for issues... something like a RACI project management framework or tool. We didn’t have a solid project management tool to track what we were doing. We would create Excel or Word tools that would last for a week.”

Mayor’s Office staff member

“Sometimes it took days to identify the areas I even needed to work in and who to contact for more information. I had little ability to determine who was doing what, even for efforts directly related to my area of responsibility.”

Departmental stakeholder

6) The concentrated operational coordination role played by the Mayor’s Office taxed the capacity of a relatively small number of City staff. On one hand, limited bandwidth constrained focus to one or two priority issues at a time; one interviewee described this as a focus “first on testing, then vaccination, and now on recovery.” While the simultaneous consideration of multiple dimensions associated with the pandemic response, as well as the concurrent challenges created by the CHOP (Capitol Hill Organized or Occupied Protest) incident and related social movements that would have stretched an organization of any size, the relatively small size of the Mayor’s Office meant its staff was particularly taxed.

There were also some concerns expressed about sustainability for key individual staff members who were working long and stressful hours over an extended period without reprieve. This challenge could be magnified and unsustainable in a catastrophic event such as an earthquake. It was fortunate that when the Black Lives Matter protests began and the City turned some of its efforts to these events, the City had turned a corner on the pandemic with cases dropping as summer approached.

Coordination and Information-Sharing with External Partners

The Mayor’s Office was active in reaching out to other levels of government and leveraging relationships and influence with King County, Washington State, and federal governments. The City of Seattle is larger in some functions than comparable functions at King County or the State of Washington. While the City is often perceived and self-describes itself as its “own island,” the challenges of the pandemic necessitated

some coordination that may be beneficial in the future, particularly regarding public health, which is treated separately below. The City’s experience coordinating with King County and the State of Washington around supply chain issues is covered in Section 3: Logistics and Supply Chain Management.

The City’s sharing of information with regional and state partners was generally more limited than in past emergencies. Due to concerns about deliberative information being shared prematurely, the City did not share consolidated information to all internal and external EOC distribution groups. Snapshot reports were limited to a smaller distribution list than typical emergency responses.

Coordination with Public Health – Seattle & King County

Consideration of the City’s relationship with Public Health – Seattle & King County (PHSKC) should be informed by a broader consideration of the role and position of public health in general. While it is true that the City, County, and State aligned around a desire to let science lead and inform an evidence-based response to the pandemic, the national public health community was often reluctant to give guidance without scientific certainty. This reluctance created challenges for implementing strategies in a timely manner. The public health community’s posture was described by some as cautious, saying that the public health community’s focus on science-based decision-making meant that it was slow to act on imperfect or uncertain data. This reticence, and the compounding fact that many public health directives were issued and later retracted or refined, certainly made it difficult for leaders who had committed to following the lead set by public health agencies.

Going into this emergency, public health was grossly underfunded at the federal, State, and local level, resulting in limited capacity. A 2018 study found a \$225 million funding gap among the Washington State Department of Health and 35 local health jurisdictions for the provision of “foundational public health services” (a subset of all public health services).² Every report indicates that PHSKC was grossly overtaxed by the pandemic, with individual staff and departments operating under tremendous pressure and with resources far insufficient for the demands placed upon them.

At a local level, PHSKC is a combined city and county health department that serves residents of all cities in King County, including Seattle, and residents of unincorporated King County. The department’s structure is determined by an interlocal agreement established in 1951 and last updated in 2011 ([Ordinance 123668](#)). While the City has a “strong advisory influence” on policies that impact Seattle, with health policy advisory leaders appointed by the Mayor and City Council, the County has “ultimate policy and statutory responsibility for the delivery of public health services throughout the county, including in the city.”

In addition to tax payments made by Seattle residents and businesses, which support the County General Fund and its obligation to provide core public health services countywide, the City makes an additional voluntary direct payment to PHSKC that is categorical in nature and dedicated to the enhancement of direct services that City of Seattle residents receive. The City “establishes programmatic priorities and direction of the funds that the City provides to the Department.” These categorical enhancement funds are typically used to support community health and mother and child programs. Emergency preparedness, data analysis and reporting, and PHSKC leadership and administration have previously never been enhanced through this direct funding. Reflecting additional demands on PHSKC leadership,

² [Washington State Public Health Transformation Assessment Report for State and Local Public Agencies](#), BERK, 2018.

\$53,371 was allocated to "Public Health Leadership" in the 2021 contract. Exhibit 8 summarizes direct City contributions to PHSKC, which constitute about 6% of PHSKC operating funds each year.

Exhibit 8 – PHSKC Funding, including Payments by City for Enhanced Services

	2020 Actuals*	2021 Adopted*	2022 Adopted*
Department Support			
King County General Fund Support	\$72.5M (15%)	\$76.4M (16%)	\$77.4M (16%)
Other Funding - Operating	\$376.7M (79%)	\$335.4M (70%)	\$325.1M (68%)
City of Seattle**	\$28.0M (6%)	\$28.1M (6%)	\$28.5M (6%)
Total Operations	\$477.2M	\$440.0M	\$431.0M

* The 2021/22 adopted biennial budget above does not include the majority of appropriations for the COVID-19 responses, which were added in supplemental processes. 2020 Actuals include COVID-19 funding.

** City of Seattle dollars primarily purchase direct services, not core public health functions like communicable disease response, within the City of Seattle.

Sources: PHSKC, 2021; BERK, 2021.

Coordination at the executive level was very strong, with the PHSKC Director, who serves on the Mayor’s cabinet, in regular contact with the Mayor and her staff. One PHSKC stakeholder said, “We were happy [the Mayor] wanted to lean on us more, but we didn’t have the nature of that relationship fully ironed out.” Similarly, a representative from the Mayor’s Office stated that it would be beneficial for both sides to refresh the relationship and clarify what can be expected of one another during an emergency.

PHSKC and City of Seattle have produced plans to guide the response to a flu pandemic emergency: the countywide [Pandemic Influenza Response Plan](#) published in 2013. The plan lists the responsibilities of various relevant organizations, including a “Multi-agency Coordinating Group.” It also lists some of the powers and responsibilities of local agencies and leaders, including the Mayor of Seattle. Its plan for PHSKC’s preparedness and response is detailed (pages 8 through 36 of the plan), but it does not go into specifics about how the City would coordinate with PHSKC during a pandemic event because it is a countywide plan.

While coordination was excellent at the executive level, information requests of PHSKC were not coordinated. One representative of PHSKC noted that, “The City has very high information needs,” saying PHSKC staff were overwhelmed by the magnitude of requests, duplicate requests, and requests of wrong staff. Another stated, “We were getting a lot of requests from many parts of the City, not just the Mayor’s Office, but also departments, and not just via liaisons but through other channels.”

The presence of a Health and Medical Area Command (HMAC) Liaison in the EOC-facilitated information-sharing with PHSKC and could have been used to consolidate data requests.

On an operational level, the City’s vaccination model was adopted by PHSKC and the City loaned staff to support PHSKC operations. Other City and PHSKC operations occurred in parallel, without significant collaboration.

Findings and Recommendations³

Emergencies are by definition challenging, and significant disasters such as the COVID-19 pandemic occur rarely. As a foundational step in preparing City departments and the individuals who comprise them to respond in an effective and efficient manner, the City's emergency management plans can be made more accessible and easier to use. They must also be socialized, trained upon, and practiced in exercises and small activations.

PSOC.1. Increase the accessibility of emergency planning documents. Use plain English and less complex document structure. Use hyperlinks and user guides to facilitate access. Provide significant additional guidance around the policy-setting role of the Mayor's Office through a policy playbook or other mechanism.

PSOC.2. Increase familiarity with the City's emergency plans and procedures. Train and exercise at all levels of City government on a regular basis to provide repeat exposure to operational concepts and address staff turnover. Training should be followed by exercises and small activations to build memory. Require EOC representative training for all department directors and senior staff in the Mayor's Office. Increase the frequency of engagement with the Emergency Executive Board to include meetings, training, and tabletop exercises with various scenarios.

- **Conduct disaster training for senior staff early in a new mayoral administration.** This includes an orientation to EOC operations and a discussion seminar on the relationship between policymaking and operations. The discussion seminar should include multiple scenarios to help clarify roles and responsibilities.

"There I was trying to work within the system, but not really understanding it. We have been in an emergency for more than 18 months, but I still don't know who the EOC reps are and that's not right."

Mayor's Office staff member

PSOC.3. Establish plans for rapid decision making, ensuring the EOC policy-decision model aligns with Mayor's Office procedures. This should be reviewed and updated for every Mayoral administration, tailoring the tools and process for raising policy issues to align with the current administration's practices.

The ICS-based EOC structure is designed to clarify roles and provide a disciplined and resourced response. The recommendations below are designed to integrate the discipline of ICS with the creative and immediate problem-solving strengths exhibited by the City in its COVID-19 response.

PSOC.4. Clarify who should be consulted and who should be informed and practice the iterative development of policy and operationally feasible solutions. Clarity is needed for all levels of a disaster response as to the line between policy and operations. There is a natural tendency for policymakers to extend their decision-making into directly affecting policy implementation. It is

³ Recommendations are given an acronym and sequential numbering for each Deep Dive.

important that the City practice iterative policy- and operations-level decision-making. Policy-setting should be validated by operations-level input to ensure policy direction is operationally feasible. In this model, policymakers establish high-level policy direction and give operational staff a timebound window within which they must provide recommendations for how to implement. In doing so, operations-level staff consult subject matter experts at all levels in the organization and flag questions and choices that need resolution at the policy level.

It is worth noting that this iterative consultation is significantly easier in in-person activations of the EOC, with physical presence in a Policy Room and an Operations Room. Practice is needed to execute this effectively and efficiently in both physical and virtual settings.

Theoretical Example of Policy- and Operations-Level Coordination

The Mayor and other senior leaders operating at the policy level determine that there is a need for a mass vaccination site to maximize the number vaccinations being given. They proscribe the major considerations they want to have accomplished, such as:

- The site should be easily accessible by the maximum number of people using car or mass transit;
- They want to prioritize access for the BIPOC population;
- They want to commence operations as soon as vaccines become available.

Operations staff are then charged with coming back with a briefing the next day that identifies options for where the mass vaccination site can be established; important considerations around executing the mission; and what resources are needed to make this happen, along with a timeline for its accomplishment. The next day, key operational personnel from the impacted departments, who have coordinated with their department directors, provide a briefing to the policy team that is coordinated by the EOC Director. The briefing starts with a mission statement, planning assumptions made to accomplish the mission, and alternative site locations for consideration. The pros and cons for each site are enumerated, including operational impacts and ability to accomplish the stated mission. The briefing identifies the departments and resources needed to accomplish the mission. Finally, a timeline is established using backward planning itemizing the steps in the process to execute the mission of establishing a mass vaccination site.

At the briefing, the Mayor and her policy team asks questions and chooses an alternative. The go-ahead to execute is made with a requirement to provide a daily update to the policy team on the progress being made to put the site in operation.

PSOC.5. Strengthen the selection, authority, and visibility of departmental EOC representatives.

Explicitly state that EOC representatives are acting on behalf of their department directors and executing their mission assignments in line with the Mayor's policy directives. Select individuals appropriate to the task and ensure they have strong connections to their department director. This could be accomplished through training and exercise, as well as delegating EOC representatives with budget authority that is significant for the department.

Considerations for Selection of a Departmental EOC Representative

An effective departmental EOC representative:

- Is likely a manager or a division director, with knowledge of the department as a whole.
- Has the ability to commit department resources and has guidance from their department director on when consultation with the director is required.
- Periodically briefs the department director on the status of the response as a whole and on the performance and mission status of actions being performed by the department.
- Regularly attends EOC meetings, trainings, and exercises outside of an emergency.

Note: A minimum of four individuals needs to be designated per department to provide for 24/7 coverage at the EOC and to accommodate personnel not being available to serve due to unforeseen circumstances.

Effective and efficient sharing of information is difficult *outside* of emergencies. Challenges with information-sharing are absolutely the most common issues to arise in After Action Reports given the compounding factors present during an incident. The virtual nature of work during the pandemic and the inability to have people all in one place to coordinate the response as had been planned and practiced made communication and coordination even more difficult.

PSOC.6. Review and revise internal information-sharing protocols, adopting a combination of written and verbal information-sharing to maintain situational awareness, including what is happening nationally, regionally, and locally. Prioritize creating shared situational awareness, including contextual information, policies and priorities, and operational status (who is doing what). The production of daily written Situation Reports is a best practice, and the use of Consolidated Action Plans or the equivalent is highly recommended.

PSOC.7. Strengthen and practice project management tools and practices, using simple tools that work in a virtual environment. Identify actions; roles, including who is leading and supporting a given effort; and who will be consulted on and informed of decisions. Make this documentation broadly available so departments and individuals further from the action have visibility into the response and can at least determine who is leading projects so they can reach out proactively with insight, information, or support.

PSOC.8. Expand on the City's use of Microsoft Teams and programs other than email for coordination and information-sharing. Email is a poor tool for sharing frequently updated information as recipients can become overwhelmed and can have difficulty ascertaining which messages contain current information and which are outdated. While WebEOC contains functionality to support situational awareness, the pervasive adoption of Microsoft Teams may make it a better choice as it can be easily used and referenced by staff across the City.

Information Systems

Communities across the United States struggled to find information systems that supported a virtual EOC and general virtual operations. While WebEOC is a common tool, many jurisdictions looked to find and use other systems. Just as the City of Seattle adopted Microsoft Teams during the pandemic for general coordination due to the virtual workforce, EOCs found alternative systems, including Microsoft Teams, to replace WebEOC. At least one major city adopted the Global Entity Management system (GEMS) to manage their pandemic response.

Reliance on external partners in a major disaster requires clarity of roles and efficient information-sharing and coordination. The COVID-19 experience elevates the importance of sharing general situational awareness among local, regional, and state partners, and – more pointedly – of updating the City’s relationship with its key regional partner in this event, PHSKC.

PSOC.9. Share daily Situation Reports (or equivalent) with regional partners and the State Emergency Management Division/EOC.

PSOC.10. Continue to advocate for increased national, state, and local investment in public health.

PSOC.11. Collaborate with the State and County to create a matrix of roles and responsibilities aligned with statutory authority. Resolve any conflicts via discussion and role clarification.

PSOC.12. Update the relationship between City and PHSKC with a particular focus on roles and responsibilities of each party during a public health emergency. Jointly clarify intergovernmental roles and responsibilities during an emergency. Evaluate the City's non-categorical funding for PHSKC to ensure it is commensurate with City preparedness and response demands on the agency.

PSOC.13. Participate as a key stakeholder during the County’s update to the King County Infectious Disease Response Plan and update City pandemic planning and procedures to align with the updated countywide plan and reflect the City’s organizational and operational needs.

PSOC.14. Conduct regional planning sessions and tabletop discussions with PHSKC to:

- Demonstrate and practice the need for operational departments to act with or without guidance from PHSKC.
- Seek to reconcile that while the City's focus on equity largely seeks to concentrate resources in South Seattle, PHSKC's equity focus may prioritize South King County.

PSOC.15. During an emergency, consolidate City information requests for PHSKC and use the Health and Medical Area Command liaison to the EOC to collect and distribute information between the City and PHSKC.

Section 2: Continuity of Operations

This section offers a deep dive into the City of Seattle’s continuity of operations (COOP) during the COVID-19 pandemic. In emergency management, COOP refers to an organization’s efforts to ensure that it continues to perform its mission essential functions during an emergency.

Information gathering methods for this Deep Dive included:

- **Document analysis**, including review of situation reports, Snapshot reports, director briefs, pre-planning documents, consolidated action plans, the COVID-19 COOP plan, surveys of City staff, and other miscellaneous documents from the period between March 2020 and May 2021.
- **Stakeholder interviews** with staff from the Office of Emergency Management (OEM), Mayor’s Office, Seattle City Light (SCL), Seattle Department of Construction and Inspections (SDCI), Seattle Information Technology Department (IT), and Seattle Department of Human Resources (SDHR).
- A **survey** of departmental COOP Coordinators from across the City.

Background

The City of Seattle’s Continuity of Government (COG) and departmental COOP plans are an annex within the City’s [Comprehensive Emergency Management Plan \(CEMP\)](#). The Citywide COG plan makes several assumptions about emergency planning at the departmental level. First, it assumes that select City departments will maintain their own COOP plans “in order to maintain essential services as soon as possible” during an emergency. These departments are those that support overall City continuity of government and operations, including key internal service departments and departments with a major role in responding to a wide variety of emergencies. In December 2018, Mayor Durkan stated that every City department should have a COOP plan, and departments across the City undertook a substantial effort in early 2019 to develop plans.

Departmental COOP plans are required to include the elements listed in Exhibit 9, at minimum.

Exhibit 9. Required Components for Departmental COOP Plans

COOP Plan Components	
<ul style="list-style-type: none">▪ Purpose and scope or goals and objectives▪ Authority▪ Situation and assumptions▪ Functional roles and responsibilities▪ Logistics support and resource requirements necessary to implement the plan▪ Concept of operations▪ Method and schedule for evaluation, maintenance, and revision (including training/exercise process)▪ Authority signature requirement▪ Formal process involving stakeholders▪ Addresses all hazards identified by the program	<ul style="list-style-type: none">▪ Essential processes and functions▪ Describe how functions will be continued and recovered▪ Essential positions▪ Lines of succession▪ How critical applications and vital records will be safeguarded (including recovery time objectives)▪ Communication resources▪ Priorities for recovery of processes, functions, critical applications, vital records▪ Alternate operating capability and facilities▪ Family emergency planning▪ ADA elements

Source: City of Seattle CEMP, 2021.

The Citywide COG plan assumes that all departments will periodically review their “exposure and vulnerability” to disruptions resulting from an emergency. Each City department is also required to identify one or more individuals as their departmental COOP Coordinator.⁴

The COG plan also covers a range of topics relevant to the continued provision of services during an emergency, including lines of succession for City leaders; temporary closures of City facilities and alternative locations; preservation of records; technology services; and emergency expenditures.

Analysis

COOP Planning

Prior to the COVID-19 pandemic, levels of COOP preparedness varied across departments. Some departments had solid COOP plans that were well socialized and practiced regularly, while others had plans that had not been updated in some time and/or limited staff experience in emergency management. According to interviews with department directors, not all directors were familiar with the content of their department’s COOP plan. Several department directors also noted that lack of socialization of COOP plans among department staff made their existing COOP plans mostly irrelevant in the pandemic. As one director put it, “Staff need muscle memory of how to act in emergencies.” This was particularly true for departments that have minimal roles in more regular, smaller-scale emergency activations, such as winter storms. Several departmental COOP Coordinators noted via survey that their existing COOP plans were too focused on short-term emergencies and/or lacked sufficient detail to be useful tools during the pandemic.

⁴ City of Seattle, 2021. “CEMP - Annex VI Documentation: Continuity of Government Plan,” p. 2-1.

While each department had at least one designated COOP Coordinator, in most cases these COOP Coordinators were not the individuals with the authority to lead the actions described in the plans. For departments without a specified and experienced emergency manager or COOP manager in the department, department directors and managers had to manage COOP activities along with their normal workload. In the beginning of the pandemic, departments grappled with how to reduce service levels, given projected budget shortfalls and decreases in staffing. With the systemwide shift to remote work and the IT details worked out, the conversation switched to “If we can do it all, should we?” This created confusion. Previous COOP planning assumptions were that facilities and equipment would be affected. However, in this case, equipment was fine, but staffing was the problem. This scenario was not covered in most COOP plans.

The initial activation of COOP plans was further delayed by the lack of guidance coming from key departments, including HR and IT, to operational departments. Some departments forged their own path, while others waited for guidance. This discrepancy created an unequal distribution of workload and slowed the recovery of some service levels.

In early 2020, OEM staff, with support from other departments, led an effort to update departmental COOPs to include pandemic response elements. OEM requested that all departments complete worksheets to review how they could deliver mission essential functions within pandemic conditions. As an operational department with significant experience in operating during emergencies, SCL supported OEM staff with the Citywide COOP planning effort, including ensuring that all departmental COOP plans met common standards. Structural differences between operational departments, like City Light, and non-operational departments created some challenges in the planning process – several interviewees noted that some non-operational departments felt that the COOP planning process didn’t make sense for their departments.

The City’s Pandemic Influenza Plan had not been updated since 2009, and required significant updates, particularly regarding technology and human resources policies. The 2009 Pandemic Influenza Plan did not anticipate a prolonged state of emergency in the case of a pandemic. While it did include discussion of remote work, it operated under the assumption of short-term, limited-scale remote work by City employees. The technology section dedicated significant discussion to now-obsolete technologies that did not support virtual work to the extent it is currently possible and needed. Seattle IT was initially challenged to help City leadership to understand the full scope of advances and possibilities available for remote work.

Technology Deployment

IT rapidly deployed hundreds of laptops at the start of the pandemic, facilitating a transition to remote work by many City staff and helping to preserve high levels of service for City residents. IT had 650 laptops in inventory at the start of the pandemic, which enabled the department to rapidly provide critical staff with necessary equipment to work remotely. Seattle IT purchased and distributed 2,000 additional devices by September 2020.

While the distribution of this equipment was critical for continuity of operations, the process was chaotic. IT turned over responsibility for dispersing and tracking the equipment to departmental staff, who were instructed to fill out tracking forms and return those to IT. This did not happen in many cases. As a result, some laptops remain unaccounted for, despite significant time spent by IT staff to track down distributed

devices. While the rapid distribution of laptops solved the immediate problems of remote work, it created downtime problems for inventory accounting and lifecycle replacements.

IT acted proactively in rapidly expanding the City's virtual private network (VPN) to give every employee access, rather than going through a lengthy process of determining who did or did not need it. Moving all City departments to Microsoft Office 365 helped with collaboration as it allowed staff to access work documents from anywhere with an internet connection. Multiple survey respondents and interviewees identified Microsoft Teams, which IT rolled out on an accelerated schedule as the pandemic began, as an improvement over Microsoft Skype for collaborative work and video conferencing.

Mission Essential Functions

The City's COVID-19 COOP plan, developed early in 2020, organized mission essential functions into four tiers of priority:

- **Tier 1: Activities that must remain interrupted and cannot be deferred in an emergency.** This includes fire suppression, law enforcement, EMS operations, certain criminal court proceedings, utility services, building access control and physical security, and roadway access, among others.
- **Tier 2: Activities that can be disrupted temporarily but must be restored within a defined period of time.** This includes payroll, financial transactions, accounting, benefits payments, City Council meetings to provide policy decisions, emergency procurements, recovery assistance, time-sensitive inspections and utility connections, billing and customer service for utilities, and issuing certain building and street permits, among others.
- **Tier 3: Activities that can be disrupted temporarily but must be reestablished before the pandemic wave is over (less than three months).** This includes collective bargaining, license renewals, hiring, general inspections, project management, and grant and contract management, among others.
- **Tier 4: Activities that can be disrupted for the duration of a pandemic wave (six-to-eight weeks).** This includes training, general maintenance, public disclosure request responses, reception desks, internal audit, education and outreach, and crime and fire prevention, among others.

With the introduction of new equipment and new technologies, the IT service desk was working at capacity while also trying to move their own functions out of City facilities and into virtual settings. Despite some initial hiccups, the virtual service center was established and has worked so well that IT plans to permanently continue a portion of its work remotely in a hybrid work model.

Prior to the pandemic, some departments had been slowly transitioning to a remote-enabled workforce by replacing desktop computers with laptops as devices reached the end of their lifecycle. These departments generally were able to restore their service levels more quickly, as they transitioned staff to

remote work without waiting for additional devices to become available or requiring staff to use their personal devices.

However, many of the processes for working from home had to be developed on the fly. For example, lack of access to hardwired City phones was problematic for those working with customers from home. Staff did not want to call customers on their personal phones, so some teams had to purchase cell phones. Where access to a City phone number was needed, departments made the transition to a soft phone service system (Cisco WebEx) that allowed staff to make phone calls through their computers. Even when equipment functioned well, there were disparities in the quality of internet connections at employees' homes. One tactic the City used for mitigating the impacts of varying internet service quality was the COVID-19 telework stipend, which employees could use to upgrade internet service. While upgrading internet service couldn't address all service quality issues for all employees, it did serve as a mitigation measure for some.

Service Provision

Staff from across City departments noted in interviews that the rapid deployment of technology, quick pivots by departmental staff, and the lack of impacts to physical infrastructure (in contrast to what the City might see during an earthquake, for example) meant that the City was able to continue to provide essential services to residents and customers.

In interviews and surveys, departmental leaders and COOP Coordinators noted that rapid deployment of technology allowed employees that could work remotely (due to the nature of their work) to maintain a high level of productivity and service. While there were some initial challenges to overcome, such as ensuring employees had access to adequate hardware at home, impacts to service were relatively minor. In particular, staff noted that the pandemic created opportunities for deployment of better technologies (particularly software), such as Microsoft Teams, which was noted as a significant improvement over Microsoft Skype.

One exception to this finding was the Seattle Police Department (SPD). One departmental COOP Coordinator noted that the use of personal protective equipment (PPE) and social distancing efforts added a layer of challenges to their interactions with the public and ability to provide policing services. Staffing shortages, exacerbated by the need for some employees to take sick leave and/or quarantine, also led to operational challenges for SPD. The difficulty of working in PPE for sustained periods of time, lack of staffing overall, and having support staff out of the office all contributed to SPD staff feeling like they were working below full capacity.

For all the challenges, City employees worked incredibly hard to maintain City services. Some successes were immediate, and others came more slowly, but at the core, everyone's intent was to serve the residents of Seattle to the best of their abilities.

"[One of the biggest challenges we faced was] frontline staff managing the crisis with ever-changing situations and sometimes not clear directions and improvising along the way. These critical workers take the risk every day while at work to be exposed to this infectious virus."

COOP Coordinator Survey

Staffing and Human Resources

Some operational departments, such as Finance and Administrative Services (FAS), have a multitude of mission essential functions that require in-person presence, many of those Tier 1 and 2, while other departments have few, if any, high-level functions. Additionally, departments vary widely in how many of their functions must be performed in-person rather than remote, and a function's priority level is not necessarily related to its ability to be performed remotely. This created widely varying experiences between employees required to report to work in person, employees who could work from home, and employees whose jobs were put on hold.

Across the interviews of department directors, the survey of COOP coordinators, and the pulse survey, multiple staff expressed concern about the safety of frontline City workers who could not do their jobs remotely. As one departmental COOP Coordinator put it, "Critical workers take the risk every day while at work to be exposed to this infectious virus." Respondents to the pulse survey expressed a desire to see more recognition of all frontline workers in internal communications and prioritization of frontline workers for certain services, such as COVID-19 testing and vaccinations.

"We normalized life – we recognized that kids, animals, etc. – will pop up on calls. That's life. It wasn't perfect, because culture is hard to change, but we did focus on it."

Departmental stakeholder

The City introduced a series of new programs and policies to support employees during the pandemic. These included providing stipends to employees that supported their ability to work remotely by contributing to extra costs of working from home, such as additional electricity, internet, and cell phone usage. In addition to this support, the City offered resources for families providing caregiving and remote schooling at home, suspended "Needs Improvement" performance ratings for the year, and continued paying salaries even for staff who were not performing a service for the City to relieve stress over food insecurity and potential homelessness. While not a formal City policy, several department directors noted that they created a "flexible" workspace for employees working remotely, accepting that home life would inevitably affect work life, such as accepting that children and pets may occasionally interrupt a video call. In addition, City policy allows for flexible work hours for salaried staff, which mitigated impacts of the pandemic to these employees, as they managed caregiving and other home responsibilities along with their work.

First responders were among the first exposed to the virus and the City took steps to prevent spread of the virus by finding safe accommodations for first responder quarantine and isolation. At the direction of the Mayor's Office, FAS secured 155 rooms including housekeeping and food service worked with SPD, SFD and MO to develop safety protocols for check-in, stay and check-out. In January 2021, FAS shifted contracting efforts and secured hotels for people experiencing homelessness.

SDHR developed several tools intended to optimize the City's approach to staffing during the pandemic, including a database of employee skills that was intended to facilitate redeployment of staff to mission essential functions. In interviews, department leaders noted that the database included helpful information but was underutilized. One possible explanation an interviewee offered was that managers were reluctant to indicate that their staff were available for redeployment elsewhere. SDHR also

developed a tool for analyzing the differential race and gender impacts of specific furloughing and layoff plans. The City did not use this tool in this response as it did not furlough any staff, but the tool may be employed in future events to consider the equity implications of staffing decisions.

Best practices and expert advice regarding social distancing and sanitization changed many times, creating confusion in departments where public contact was required by departmental essential functions. Frequent complaints were voiced in the pulse survey that personnel did not have updated information or that the information changed constantly. While communications among departments, outside agencies, county and federal government could have been better, information that is inadequately timely, accurate, and consistent is inherent in all emergencies, and this pandemic was no different.

Findings and Recommendations

Department directors were not always familiar with the content of their departments' COOP plans because, in many cases, they had not been involved in the writing of the plan. In some cases, departmental COOP plans were not socialized with department staff. Existing City and departmental plans were not written with an extended pandemic in mind, so extensive plan updates were required at the start of the pandemic.

COOP.1. Department directors need to be involved in the writing, approval, and training of their departmental COOP plans. The onboarding process for new department directors should include a review of the purpose of departmental COOP plans and the process for approving them. Directors should ensure all their department staff are fundamentally aware of the COOP and how the department will function during emergencies.

COOP.2. Schedule regular review and discussion of the Citywide COG plan by department leadership and staff to ensure everyone is familiar with the plan.

COOP.3. Codify pandemic-driven changes to departmental COOP plans, including them in an updated plan to be written by someone knowledgeable in emergency management and continuity of operations planning.

Deployment of new technological tools allows the City more flexibility with its workforce than ever before, improving both efficiency and resilience. However, such changes do not always come easily. Outdated thinking and entrenched positions can be barriers to change. Effective adaptation requires training, policy changes, and socialization of new technology and remote work strategies.

IT had over 600 laptops in inventory that enabled them to get critical staff up and running quickly in a virtual environment. Their ability to convert most of the City's personnel to remote work in such a short time is a real credit to their leadership and dedication and contributed immensely to the City's ability to maintain acceptable service levels in most departments.

Need drove a faster, streamlined deployment of new technologies (e.g., Microsoft Office 365, Microsoft Teams, and the Cisco WebEx soft phone system) that helped improve service delivery throughout the City during the pandemic and may continue to improve service delivery into the future.

COOP.4. Continue expanding the Cisco WebEx soft phone system.

COOP.5. Schedule quarterly seminars with department heads to demonstrate existing capabilities, introduce new technologies, and support use of the technologies in their departments.

COVID-19 highlighted the City’s ability to operate efficiently with a remote workforce to maintain many of its mission essential functions. Departments that had previously not entertained the concept of remote work or taking work equipment home to do their jobs have realized the value in offering remote work and many will continue the practice. In addition, due to COVID-19 COOP actions, many City departments have improved their ability to serve their customers as they can now provide more services remotely, offer better language access, and offer greater availability to customers who work during normal office hours. As a note of caution, while COVID-19 allowed remote working, a catastrophic earthquake may require more in-person response and remote work may not be possible given disruptions to IT and communications infrastructure.

COOP.6. As more City services move online, the City should continue with its plan to concentrate in-person services at service centers, where computer stations and technological assistance are available to allow residents without computers and/or internet service to access online service portals.

City practice created a flexible work environment for employees working from home, allowing for flexible work hours and accepting that children and pets may occasionally interrupt a video conference. Generally, interviewed department leaders felt that the shift to remote work has made their employees more efficient with time. Several interviewees also noted that eliminating long commutes has positive social and health benefits for employees and positive environmental impacts, all without impacting service levels to City residents and customers.

COOP.7. Continue to offer employees “grace” and flexibility to balance their home lives with work, where possible, such as allowing for flexible work hours or understanding that household activities may occasionally interrupt video calls. While this effort has been supported by developments in culture and practice thus far, the City could consider policies to institutionalize these practices. If the City considers such policies, it will need to analyze differential impacts on employees who can work remotely and those who work in person.

Communications with departmental staff were not always as clear and timely as they could have been. In pulse surveys administered in 2020 and 2021, staff reported challenges around the dissemination of information to department staff below the director level, including concerns that they were not receiving updated information or that information constantly changed.

COOP.8. Whenever possible, present curated information with changes highlighted and develop more multi-media messaging and central repositories of continuously updated information to avoid email fatigue.

COOP.9. Align staff communication strategies with best practices for operational coordination (see Section 1: Policy Setting and Operational Coordination).

Section 3: Logistics and Supply Chain Management

This section covers how the City requested, ordered, purchased, tracked, stored, and distributed critical supplies during the COVID-19 pandemic.*

* For additional information on the City's logistical response, please see [FAS COVID-19 Response and Recovery Summary](#)

Information-gathering methods for this Deep Dive included:

- **Document analysis**, including review of situation reports, Snapshot reports, director briefs, pre-planning documents, consolidated action plans, the COVID-19 Continuity of Operations Plan, results from pulse surveys of City staff, and other miscellaneous documents from the period between March 2020 and May 2021.
- **Stakeholder interviews** with staff from Finance and Administrative Services (FAS), the City of Seattle Office of Emergency Management (OEM), and staff at King County and Washington State who worked on the logistics function for the pandemic.
- **A review of insights from peer jurisdictions**, including the City and County of Denver's After Action Report.

Analysis

Resource Conservation and Logistics Planning

The City's pre-planning efforts for a potential coronavirus pandemic in the Seattle area began in late January 2020. After the confirmation of a coronavirus outbreak at a long-term care facility in neighboring Kirkland at the end of February, the City quickly ramped up its planning efforts. Initial logistics efforts focused on evaluating the City's existing stock of personal protective equipment (PPE) and cleaning supplies, as well as planning for procurement and warehousing in the event of future scarcity of these items.

Early in the pandemic, every jurisdiction in the United States believed that they could access the Strategic National Stockpile maintained by the federal Department of Health and Human Services (HHS). However, the National Stockpile had been depleted over time with many commodities expiring, and the quantities required were not available given the national scope of the pandemic. Moreover, in the interim years since the pandemic flu planning that occurred nationally in 2007-2010, the nature of manufacturing and offshoring of many items of PPE meant that the United States did not have control of its supply chain and was primarily dependent on China's manufacturing base.

The Federal Emergency Management Agency (FEMA) was activated to help HHS with the procurement and distribution of PPE. This then brought state and local emergency management agencies into the logistics of requesting and distributing limited quantities of PPE being furnished by the federal government. States and individual cities and counties, including Seattle, ramped up their own procurement operations by going directly to companies to obtain the PPE that was desperately needed. This led to cities, counties, states, and the federal government all competing against one another, chasing a limited supply of PPE.

By early March 2020, FAS had prepared a resource conservation plan, with a focus on 10 key items, including masks, wipes, hand soap, Tyvek suits, and disposable gowns. FAS identified and secured

additional warehouse space and stocked up on high-use supplies. Front-line departments, including Seattle Fire Department (SFD) and Seattle Police Department (SPD), began tracking their burn rates of PPE.

In May 2020, FAS established a new group – the Logistics and Emergency Management (LEM) Division – to centralize citywide purchasing and warehousing efforts. This Division has 45 permanent staff consolidated from elsewhere in the FAS organization and will remain part of the Department’s structure post-pandemic. This division was responsible for citywide efforts to purchase PPE and other pandemic related supplies, store and distribute these items to departments, and track usage.

Procurement Systems and Supplies Tracking

Early challenges included vendors’ cancellation of orders and a need for backordered items. The Mayor’s Office sent a request to the White House (with the Washington State EMD serving as the point of contact) for PPE. City staff made other attempts to directly obtain supplies from federal authorities.

FAS elevated certain orders to the County and State to try to leverage federal or other resources. When the City of Seattle contacted the State of Washington’s Emergency Management Division (EMD) and made direct requests for PPE and other supplies, the EMD directed the City to submit all requests through the King County Office of Emergency Management. Multiple emergency management and logistics staff characterized the request systems through the County and State as “broken,” with requests sitting idle or unacknowledged for weeks.

“The [State’s process for requesting supplies] was chaotic and not consistent. A constant change.”

“[This system] is not scalable [for a large-scale disaster like an earthquake]. It would be a mad scramble. The State would not be prepared to help the local governments.... No one is putting a priority on it.”

Departmental stakeholders

By mid-March 2020, FAS had implemented policy and protocols for centralized ordering and distribution of the 10 key items. Prior to the COVID-19 pandemic, individual departments were responsible for ordering their own supplies. With the new policy and protocols, departments could seek out and contact vendors about items but submitted all purchase requests to FAS via the WebEOC Tracker Board so the logistics team could place all orders. This improvement minimized competition among departments to order from suppliers; allowed for more favorable purchasing power by consolidating requests to make larger purchases; allowed for greater situational awareness of the number of supplies being ordered; enabled stronger financial accounting for the purchases; and allowed the City to prioritize distribution of supplies based on operational needs across all the departments.

The WebEOC system had the advantage of providing a record of all orders, which proved critical to ensuring the City received reimbursements from FEMA for COVID-19-related purchases. However, in a pulse survey of City staff conducted in early December 2020, at least one respondent described challenges with the ordering and distribution of PPE via the WebEOC system, including untimely or

disorganized delivery of supplies and lack of availability of requested supplies through the centralized system.

Key Learning

Consolidating supply orders across departments gave the City more favorable purchasing power and prevented departments from competing against each other for scarce supplies.

By the end of March 2020, the City had established several new logistics management mechanisms, including a logistics dashboard and a PPE task force led by FAS with representatives from SFD, SPD, and OEM. At the same time, the City had also launched a centralized, 30,000-square-foot warehouse space at the site of a former Value Village in Crown Hill. This site was set up to centralize all the incoming pandemic-related supply orders. By early June 2020, the usage rate and supply of PPE and cleaning supplies had largely stabilized.

Under the Mayor's direction, FAS helped to create the Pacific Purchasing Exchange (PPE), a consortium of cities in Washington, Oregon, and California that met regularly to share information, resources, and vendor leads.

FAS and LEM were intensely involved in setting up and operating the City's mass COVID-19 testing and vaccination sites, including Lumen Field. Their roles included procuring spaces; ordering and warehousing supplies; setting up spaces, equipment, and supplies; and staffing the vaccination site at Lumen Field. The centralized ordering and warehousing system established by the LEM Division proved highly valuable to the City's ability to stand up the mass vaccination site at Lumen Field.

Several staff noted lack of clarity around purchasing authority for needed response items as an overall challenge. One logistics staffer observed that, in ordinary times, departments are expected to have funds to pay for items they order, but the nature of the pandemic necessitated a more flexible approach. The scale of the emergency also meant that it was difficult for departments to get clarity around what emergency purchasing authority they had for a range of items, from PPE to contracts and supplies for human service functions, like setting up sheltering and feeding sites. Without close coordination between ordering staff and the finance function, some conflicts and challenges arose. This included both challenges around reconciling purchases and financing after funds were expended, and hesitation to purchase necessary items because of concerns about lack of available funding. In a pulse survey of City staff conducted in May 2021, one respondent expressed a desire for an ordering and tracking system that "integrates with the City's financial management system."

Findings and Recommendations

Early in the pandemic response, the City recognized that the previously normal process of each department ordering its own PPE and other items would not be functional when there was a worldwide dearth of supplies. The City centralized and consolidated the purchasing and warehousing of critical items of supply. This process enabled the City to more easily launch the mass vaccination site at Lumen Field and now that it has been normalized as the process for declared emergencies, will serve the City well in future disaster operations.

LOGS.1. Senior emergency management leaders at the City, County, and State, along with their logistics staff, should meet to reconcile the challenges encountered over the course of the pandemic. An effective logistics function must be in place to coordinate orders of supplies and other disaster-related equipment, but this pandemic and the challenges in ordering and distributing PPE highlighted the nonfunctional status of the logistics system in Washington State, which has been a known shortfall for years. While the COVID-19 pandemic and the need for PPE were unusual, this event showed the disfunction in how the various levels of government – City, County, State, and federal – interface with one another logistically during a disaster. Respective staff and representatives must develop solutions and report back to a joint meeting of the senior representatives on the solutions and processes that have been instituted for future disasters. The solution needs to account for the fact that King County OEM works with 39 cities and towns, and that the State supports 39 counties.

LOGS.2. Retain centralized purchasing and warehousing functions for key supplies in future emergency events. FAS expanded its staffing to procure and store the key supplies needed by the City. Additionally, the department director moved to establish the new LEM Division. This reorganization is now permanent, providing the City with a much more robust supply and logistics function that should be further institutionalized for ordering key scarce supplies and equipment during a declared emergency. This approach will allow the City to avoid having departments compete for the same key supplies. In a localized incident or for specialized supplies only needed by a few departments, existing relationships between departments and suppliers may be more effective for procuring items than a centralized approach. Future emergency planning by the City should include guidelines for when to centralize and when to decentralize supply ordering.

With the establishment of a warehouse function for the City's response to a pandemic, a future challenge will be to preserve sufficient budget to maintain the supply of equipment and materials as their shelf lives expire. The supply problems with the National Strategic Stockpile highlighted the lack of rotation and replacement of stock as the national need outstripped the supply of materials. The State of Washington should be encouraged to also have a state-managed warehouse stockpile of supplies that have been critical to the pandemic response.

LOGS.3. Identify critical emergency supplies and establish a process and budget for maintaining an appropriate level of materials.

Significant funds were expended without close coordination with departmental budget analysts. Once FAS became aware of the actual costs of purchasing supplies, FAS exerted its authority to constrain and qualify purchases based on finance staff perceptions of what was appropriate. The role of finance should be to account for the expenditure of funds needed for an emergency or disaster, not to control the expenditure of funds which is a policy decision that should be elevated to the policy level if there is a specific concern raised by staff in a finance function. The lack of coordination between the purchasing function and finance function occurred, in part, because the City has not fully built out the WebEOC system to capture finances. While WebEOC can document needs and requests, logistics staff reported in interviews that it lacks the ability to provide insight into finances.

LOGS.4. Engage the Central Budget Office in identifying solutions for providing transparency and connection to departmental budgets while not unnecessarily slowing acquisition of goods

during an emergency. Explore options for integrating a financial tracking system with WebEOC and clarify authority for resource expenditure.

Section 4: Public Information

This Deep Dive covers how the City communicated information, including incident updates, policy decisions, and service-related information, to the public during the COVID-19 pandemic. Information gathering methods for this functional Deep Dive included:

- **Document analysis**, including review of situation reports, Snapshot reports, director briefs, pre-planning documents, consolidated action plans, the COVID-19 Continuity of Operations Plan, results from surveys of City staff, and other miscellaneous documents from the period between March 2020 and May 2021.
- **Stakeholder interviews** with staff from the Mayor’s Office, the Office of Emergency Management (OEM), the Office of Immigrant and Refugee Affairs (OIRA), Seattle City Light, and Seattle Public Utilities; and external partners including King County OEM, the King County Executive’s Office, and Public Health – Seattle and King County (PHSKC) communications staff.

Background

Emergency management best practices dictate that public information should be coordinated and delivered via a Joint Information Center (JIC) during an emergency. The JIC is an element of an Emergency Operations Center (EOC) and is staffed with communications staff from the jurisdiction’s various departments. Generally, leadership of the JIC and policy-level direction is provided by the executive’s communications director, which is the plan in Seattle as shown in Exhibit 4. The JIC becomes “joint” when operated by staff representing multiple jurisdictions or agencies. The JIC’s purpose is to understand the current operational situation and actions being taken by the jurisdiction and to provide information to the media, residents, and others via news releases, news conferences, and social media. The JIC is the primary tool used by the executive and the EOC to provide information to the public.

In addition to staying informed about the current situation via updates from the EOC, the JIC should monitor media outlets such as newspapers, television, and radio to understand how the jurisdiction is being represented and to correct any misinformation. The JIC should also monitor social media and distribute verified information as a way to control rumors. This function is more critical than ever in this era of rampant misinformation and outright disinformation.

A Joint Information System (JIS) coordinates the public information functions of different jurisdictions and their information releases. The JIS may facilitate sharing final media products after they have been released or coordinating documents and information events prior to release.

Analysis

Public Outreach

The City formed an outreach team in the first week of March 2020 to coordinate outreach to key community members and groups. The team met weekly throughout 2021 and continues to meet every other week. The team includes:

- Department of Neighborhoods (DON) – the lead department.
- Department of Education and Early Learning (DEEL).
- Office for Civil Rights (OCR).
- Office of Economic Development (OED).
- Office of Immigrant and Refugee Affairs (OIRA).
- Office of Labor Standards (OLS).
- Office of Emergency Management (OEM).

This team focuses on proactive outreach, including public-facing webinars, conference calls with community members and organizations, website pages, flyers, and FAQ documents. Specific tactics include:

- Weekly public webinars, which began the first week of March 2020 and were offered in a variety of languages, including Amharic, Korean, Mandarin, Portuguese, and Somali.
- Conference calls and webinars for target outreach groups, including small business owners, immigrants and refugees, grocers, rideshare drivers, and other gig workers.
- Working with [Community Liaisons](#)⁵ to disseminate messages to target communities and gather community concerns and questions.
- Creating one-page “report-out” documents to share with community-based organizations (CBOs), [emergency hubs](#), and [Block Watch](#) captains.
- Launching the [Seattle Together](#) campaign encouraging residents to share stories of resilience and good work. This included a social media hashtag (#SeattleTogether) and a website.
- Development of the “[Hello Neighbor](#)” tool to encourage community to safely help their neighbors.
- Launching an anti-hate campaign designed to prevent incidents of bias, hate, and harassment against Asian Americans.
- Using outreach efforts to encourage residents to sign up for [AlertSeattle](#), the City’s emergency alert system.

⁵ The Community Liaison program is a program through which the City of Seattle hires community leaders from immigrant and refugee communities, communities of color, disability communities, and senior and youth communities as contractors for projects including community outreach, community engagement and feedback, translation, and advisory work.

- Working with [Community Safety Ambassadors](#) to disseminate face coverings to workers at small BIPOC-owned grocery stores.

Traditional Media and Social Media

Staff in the JIC, Mayor’s Office, and at PHSKC focused on traditional media and social media related activities, which included:

- **Twitter.** PHSKC shared facts about the coronavirus and COVID-19 and provided daily updates of case counts via Twitter. Early in the incident (March 2020), the City of Seattle JIC retweeted many of these tweets.
- **Press conferences.** The Mayor’s Office, King County, and PHSKC held press conferences, together and separately, at several points throughout the early months of the pandemic, particularly when major announcements were made (e.g., the announcement of the temporary closure of Seattle parks).
- **Press releases.** The [Mayor's Office](#) and [PHSKC](#) both issued daily or near-daily press releases throughout the early months of the pandemic, providing case updates, guidance on reducing transmission, emergency orders, and details on the City’s response and the public health response. PHSKC also maintained a blog with daily updates.
- **Responding to media inquiries.** The Mayor’s Office and JIC coordinated to responded to media requests. The City received a great deal of interest from both local and national media beginning in early March. The most frequent media inquiry topics were:
 - **Homelessness**, including COVID-19 cases among those experiencing homelessness, hygiene/sanitation stations, and shelters.
 - Impacts on **crime** and **domestic violence** rates.
 - Usage, availability, and closures of **public parks** and golf courses.
 - **PPE**, including regulations around wearing PPE and supply and disposal of PPE items.
 - **Testing** and **contact tracing**.
 - **Social distancing** rules and enforcement.

Operation of the JIC

When the City activated its EOC, it also activated the JIC, with Mayor’s Office communications staff leading the function and departments staffing it. When the City made the decision to close the physical operation of the EOC, the JIC also stopped operating from the EOC. Public information activities by the JIC continued into June 2020, but soon thereafter the Mayor’s Office communications team became the center point for the communications function and the JIC did not function as a separate entity for most of the pandemic response. It should be noted that King County operated without a robust JIC function. PHSKC had a functioning, in-person JIC which expanded from seven people to over 30. They became the center point for developing public health messages regarding the pandemic. Both King County and the Mayor’s Office assisted in messaging based on the content developed by PHSKC. There was some limited staff augmentation from City and County departments during the continued activation of the PHSKC JIC. The PHSKC JIC was operational for many months, seven days a week, 24 hours a day.

Findings and Recommendations

Coordination was exemplary between jurisdictional leadership, including the Governor's Office, King County Executive's Office, City of Seattle Mayor's Office, and PHSKC. All major public health announcements such as closures, mask mandates, and operations of government were well coordinated in advance of the announcements. Messaging was unified between the organizations.

Major successes of the public information function in Seattle were:

- The above coordination has been maintained and strengthened as the pandemic has continued.
- PHSKC and its public health experts took the lead on developing the messaging on public health measures and these messages were amplified by the County and the City.
- There was a concerted effort by City staff to reach out to BIPOC and non-English speaking communities.
- Recognizing the PHSKC JIC's need for additional personnel, some assistance was provided by the City to assist PHSKC in staffing their JIC.

During the pandemic, the communications system that evolved within the City was a Joint Information System (JIS), whereby communications staff from the City of Seattle and PHSKC coordinated with one another and their respective decision-makers/elected officials on the messaging of City and County policy decisions. While the coordination between the levels of government communications functions worked well, a more formalized procedure for the trading of staff liaisons between major governmental JICs is needed.

The City and its major jurisdictional partners should establish the procedures below in advance of a disaster and practice them for larger scale disasters to keep staff familiar with the process and procedures.

PI.1. In coordination with the City's major partners (PHSKC, King County, and Washington State), establish a more formalized function with procedures and protocols for the sharing of information. This might include:

- Exchanging liaisons.
- Providing draft news releases to the City's partner agencies ahead of publication.
- Coordinating proposed news conference dates and times with other governments to eliminate dueling news conferences.

PI.2. Establish a procedure for JICs to exchange liaisons during major emergencies and disasters.

While the City was able to operate without a 24/7 JIC during the COVID-19 pandemic, this will not necessarily be the case for future emergencies and the City should enhance its plans for coordinating information through the JIC. For instance, should there be a major oil spill in Puget Sound that contaminates waters, fish, and wildlife, the United States Coast Guard will establish a Unified Command with the Responsible Party. An oil spill JIC will be established, and it would be appropriate for the City to send a public information officer/JIC liaison to their JIC to have a close working relationship in what may be a very dynamic and rapidly changing environment. When oil spill exercises or other disaster exercises

are conducted by partner jurisdictions and agencies, it would be appropriate for Seattle JIC staff to participate as a City JIC liaison.

PI.3. Integrate the JIC and staffing of the JIC function by City departments.

- The JIC, like the EOC, must be able to function 24/7 for long periods of time. One interviewee noted that there are over 100 City staff who have the type of experience needed to assist in staffing the JIC function. Identify these personnel resources who can support the functioning of the JIC during emergencies and disasters and maintain the list with frequent updates to account for staff turnover.
- Departments should release these personnel, like their EOC departmental representatives, to staff the JIC, which becomes the center point for all public information activities for the City in emergencies.
- All potential JIC staff should complete orientation, training, and exercises so they are familiar with the different roles and responsibilities they may be assigned in a functioning JIC. Disaster exercises conducted by the EOC must always include the JIC function.

PI.4. Identify additional JIC supervisory staff to augment Mayor's Office communications staff.

These staff need to receive additional leadership training on the functions of the JIC and how it relates to the EOC and the policy level.

PI.5. During an event, ensure the activation and closing of the JIC function is clearly communicated to departments.

Throughout the COVID-19 pandemic, the City showed a strong cultural orientation towards incorporating equity into decision-making and public outreach efforts. The City's early outreach efforts focused on reaching the most vulnerable communities in Seattle, including limited English proficiency (LEP) communities, immigrants and refugees, small business owners, grocers, rideshare drivers, and gig workers. One staff member working on public outreach noted in an interview that City staff drew on their existing community relationships to reach these communities and that dozens of staff, many of them frontline workers, advanced this work across many City departments.

Key Learning

Staff across the City, particularly frontline staff, played a critical role in the City's public information efforts by championing linguistic access within their departments. This meant advocating for translation and interpretation of communications into languages other than English, leveraging and building relationships with community-based organizations, and designing programs and documents to be inclusive across cultures.

Several interviewees from across City departments noted that some equity and accessibility challenges arose around the point in time at which accessibility planning was incorporated. For example, multiple interviewees gave the example of translating pandemic-related City documents. Plans for translating such documents were not always made at the earliest juncture, leading to delays in issuing versions in languages other than English. These interviewees noted that incorporating language access planning from

the very beginning of a plan to create a public document would allow the documents to be translated and then published simultaneously alongside the English versions, reducing the information gap for LEP communities.

The same held true for making communications accessible to residents with disabilities. One interviewee noted that, early on in the pandemic, City staff organizing a press conference did not proactively request a sign language interpreter and accessibility staff had to ask if one was needed. This posed a challenge, as it is not always easy to find an interpreter that is trusted within the Deaf community on short notice.

“A lot of departments have been saying for years that they’ve been meaning to have a language access plan, but they just haven’t done so, and it really came to the forefront in the pandemic.”

Departmental stakeholder

- PI.6. Involve staff with expertise in accessible communications and equitable public outreach in strategy meetings about public information.**
- PI.7. Require departments to write, implement, socialize, and practice language access plans as part of their emergency planning work.** Departmental plans should be reviewed collectively to coordinate efforts and ensure City- and community-based language resources are sufficient to meet the sum of demands that may be placed upon them.

Section 5: Testing and Vaccination

BERK conducted seven interviews with representatives of the Seattle Fire Department (SFD), Finance and Administrative Services (FAS), and Public Health – Seattle & King County (PHSKC). We also reviewed situation report documents and analyzed publicly available data from PHSKC and survey data collected as part of the after action review.

Analysis

Testing

Prior planning did not anticipate the global scale of the pandemic. PHSKC's pandemic plan was created in response to the global SARS-CoV-1 outbreak in 2003 and last updated in 2009. Testing technology has evolved significantly since then, making the plan outdated when considering the scale of the 2020 event. Previous pandemic flu planning did not foresee the widespread use of test kits. The SFD also had a departmental infection protocol and plan developed in 2013. Thanks to this foresight, the department had a cache of PPE in storage, but many of the other elements of this plan were not relevant to COVID-19. Existing plans also relied heavily on the existing health care infrastructure which was overwhelmed during the COVID-19 pandemic.

In response to these conditions, the City of Seattle stepped up to conduct testing operations, a role that had not been anticipated in previous flu and pandemic planning but would prove to be an example of the City's agility and effectiveness in the face of unforeseen circumstances. Due to the need to keep first responders healthy during the pandemic and the lack of capacity in the conventional healthcare system, SFD took on new responsibilities to perform COVID-19 tests on first responders. SFD's first responder-led testing program was the first in the country and a model for many other communities across the nation. In the coming five months, the SFD program expanded from first responders only, to nursing and long term care homes, mobile test teams, and community scale drive-through testing.

The City made the decision for SFD to take on testing in March 2020 and SFD received approval from the Washington State Department of Health (DOH) to conduct testing by the end of March. SFD and Seattle were the first fire department and the first city to be granted provider status from the State. For efficiency, SFD began building the logistical support system they needed while awaiting approval from DOH. They sourced swabs, partnered with the University of Washington (UW) virology lab, and developed policies, processes, and training documents. SFD conducted training ahead of DOH approval and began testing the day after receiving it. They created a notification process, to inform police and fire responders when and where testing would be available. The process was successful, and SFD expanded training offerings to King County and other first responder agencies in April.

Mobile testing operations were key to providing equitable access to testing. They were initially created for surveillance testing in skilled nursing facilities which were home to concentrated high-risk populations who could not easily access other testing. SFD first partnered with PHSKC on limited mobile testing operations focused on these facilities from April to July 2020 and trained nursing staff to continue testing, because testing in long-term care facilities needs to be regular and sustained. Mobile testing teams then continued to strategically work in known hot spots and areas with relatively limited access to medical resources, such as South Seattle.

By May 2020, it became obvious that the City needed testing sites to serve communities at scale in addition to the mobile teams. There were not enough resources to conduct wider community testing, so SFD stepped up by training more people to fill those roles. With the recent closures of the State’s drive-through vehicle emissions testing sites, these vacant facilities presented a unique opportunity to create sites that were centrally located, efficient at scale, and easily accessible.

For the City of Seattle, there were many challenges to overcome in getting the testing workflow up to scale, including **access to testing supplies, lab capacity and workflow, and staffing.** The Centers for Disease Control (CDC) initially developed a COVID-19 test kit to be used nationally. With only one source for the kit, there was an inadequate supply of test kits. The CDC also prohibited the medical community within the US from using their own self-developed test kits. The CDC test kits were then found to be highly inaccurate in determining if an individual was infected with the virus. The CDC had to start over with the development of a new test kit which was then in short supply. Supply was also channeled through PHSKC, creating limits to what the City could access. Physical swabs, viral transport media, and reagent were in high demand and hard to source internationally. Supply chains of these products were especially disrupted by the COVID-19 crisis in Italy at the time. Sourcing supplies was made more challenging when the marketplace was flooded with vendors and products of questionable quality. SFD’s Medical Director played a crucial role in providing clinical understanding of the testing process and vetting the quality of labs, supplies, and types of tests. The City’s Office of Intergovernmental Affairs connected with a South Korean company to source swabs and viral transport media needed by testing centers. Finance and Administrative Services (FAS) secured a warehouse to organize and store the supplies.

In tandem with disruption in the conventional health care system, major testing laboratories such as LabCorp and Quest Diagnostics were also incapacitated. Research labs such as the Seattle Flu Study had the capacity to run PCR tests, but regulations prohibited sharing results with patients. Ultimately, partnership with UW labs was crucial in building testing capacity in Seattle. UW scaled their processing capacity in step with the testing sites’ capacity and the sites collected insurance billing information to cover costs. SFD shouldered the operational costs of collecting samples, and UW processed all the tests and billed insurance if possible. The Seattle and UW partnership also provided free testing to uninsured individuals. This partnership evolved immensely over the course of the pandemic from a paper-based system requiring an individually stamped piece of paperwork with every sample, to an Excel-based system, to a paperless software solution with Solv and QR codes to bring testing to the necessary scale.

SFD initially worked with redeployed City staff to scale up the testing program, but that resource was very piecemeal in that redeployed staff availability was often limited to short blocks of hours and challenging to coordinate. They quickly pivoted to hiring full-time civilians to fill non-clinical roles and eventually contracted with AMR for supplemental staff.

Key Learning

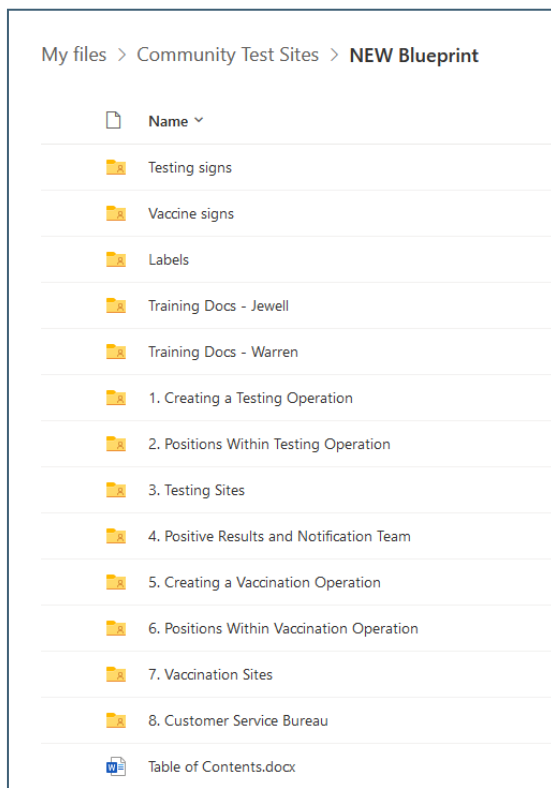
Collaboration between agencies is essential. Many new partnerships were formed. Maintaining contacts with these partners, including UW and software vendors, will streamline the response to future events.

Through partnership with FAS, the first drive-through site, located on Aurora Avenue, was under contract, cleaned, and opened by June 5, 2020. The SODO drive-through site opened a few weeks later. The model was hugely effective. At peak volumes, these two sites alone tested 7,000 visitors a day. SFD utilized an existing contract with a private ambulance service to hire 120 emergency medical technicians to work as registration techs at the drive-through sites and with the mobile teams (see Section 8: Staff Redeployment for more discussion). In additions to the drive-through sites operating at capacity, mobile test teams continued to deploy to hot spots as needed. A core City team developed and used Tableau dashboards to monitor rates of death and other key metrics at the zip code level to deploy testing resources to the most vulnerable areas.

The City’s testing program also reached low-income older adult housing. Testing access was limited to Seattle Housing Authority (SHA) properties where the City had purview, potentially creating an equity gap for other low-income older adults in the City. Still, the operation was an efficient and effective example of partnership between SFD and SHA, using clear protocols and in-building social worker relationships to serve the low-income older adult population.

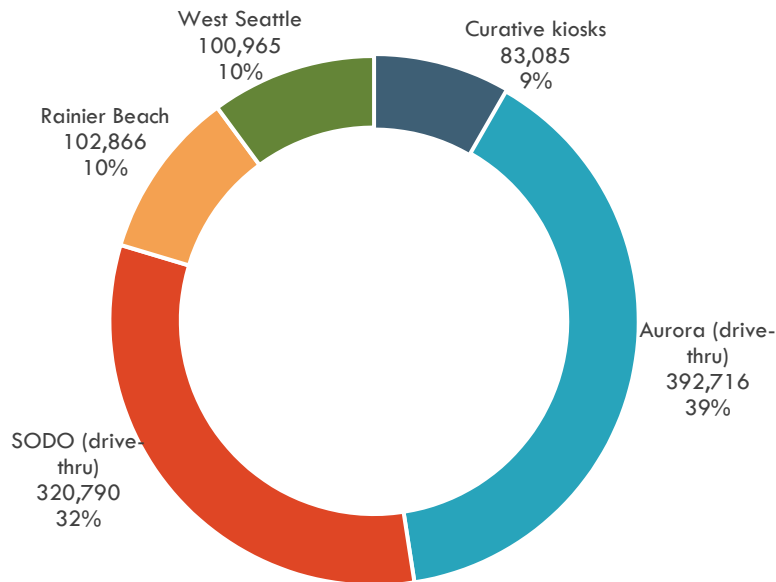
The City of Seattle’s testing system has been a model for other jurisdictions. In August 2020, Seattle loaned a key staff member responsible for setting up SFD’s testing program to PHSKC. Staff from the Office of Innovation and Performance helped the County adopt SFD’s protocols. The Seattle testing system has also been a model for many other communities in the US. A Seattle “Blueprint” folder contains protocols, staffing plans, example collateral, and many other resources to be able to quickly deploy a successful site for both testing and vaccination. As of September 2021, the City had administered over one million COVID-19 tests and largely discontinued its role as a testing provider. UW Medicine took over operations of the City’s fixed testing sites in August 2021.

Exhibit 10. Screenshot of Seattle Testing and Vaccination Blueprint (as of December 22, 2021)



Source: City of Seattle, 2021.

Exhibit 11. Distribution of City-administered COVID-19 Tests (as of September 14, 2021)



Note: Does not include tests from mobile operations.

Source: City of Seattle, 2021.

High-throughput testing sites, such as the drive-through centers, accomplished a high volume of tests, but did not meet the needs of all communities, especially those without easy access to a vehicle or the ability to take time away from work. The West Seattle and Rainier Beach locations were created in direct response to data showing low testing rates in those communities. They were fully operational by August 2020 and helped increase equity of access to testing as did seven walk-up kiosks and mobile testing. While their total numbers were smaller, these delivery mechanisms represented a much more equitable distribution of tests and, later, of vaccines, than the earlier larger-scale sites.

Equity and efficiency were sometimes at odds in the testing process. For example, testing appointments and information relied heavily on online systems which could reach many people efficiently. However, communities facing technology and connectivity barriers were left out of that message stream. The City and County had to take a step back and look for ways to connect with and inform those communities.

Key Learning

While high-tech messaging and appointment systems work well for some, they were not effective in serving the most vulnerable populations. Multiple communication methods are necessary to reach the whole community.

The testing registration software was sourced via the Office of Innovation and Performance's participation in the US Digital Response Team matching program. The program connected the City with Solv, a local vendor with experience developing clinic registration software. Over time, the City of Seattle Innovation and Performance team accessed donated iPads continued to develop a more efficient registration process in partnership with SFD. However, the testing registration system could be further strengthened. The system only collected name, date of birth, and drop-off date, without sufficient data on race and ethnicity and other dimensions of equity. The limitations of the software made the prospect of collecting more data costly in terms of time. Better software, with support for multiple languages and robust data entry fields, could allow the system to maintain throughput while collecting more nuanced data. Many of the lessons learned in this experience were brought to the partnership with Signetic around software for the vaccination effort.

Considerations of compliance with the Americans with Disabilities Act (ADA) and of accessibility at the testing sites came too late to be efficient and equitable, though lessons learned were applied to later vaccination sites. A portion of this gap was a result of the chaos and unpredictability of the time. There also was no clarity on whether the City testing sites were subject to ADA compliance as a city "program, service, or activity."⁶ The gap can also be explained to some degree by a lack of inclusion of departmental ADA coordinators and subject matter experts who could have made the necessary connections at the operational decision-making level.

To assist residents who sought appointments at the City's test sites, the City established a COVID-19 Testing Hotline. FAS added a COVID-19 hotline to its remote call center, the Customer Service Bureau (CSB). Over the course of the pandemic, CSB staff fielded thousands of calls though the purpose of the hotline shifted from general COVID-19 related calls, to testing site information and scheduling, to County-wide non-medical COVID-19 and vaccination questions.

Vaccines

The City-led administration of a new vaccine was not considered in previously developed pandemic flu plans and mass vaccination sites were developed ad hoc. Prior to the advent of mRNA vaccines, the typical timeline for the development of a vaccine was four to seven years. Two new mRNA vaccines cut that development timeline from years to months.

As vaccines became available in the fall of 2020, hospitals and the conventional healthcare system were still too overtaxed to manage vaccine operation. First responders could fill yet another role. SFD opted to build on the efficient systems and processes they had put in place for testing to help deliver the vaccine. This included preparation, systems development, equipment sources, and training well in advance of SFD's formal approval to administer vaccines, which came on January 13, 2021. Within the first 90 days of vaccine planning, the City reached out to community leaders to discuss specific strategies for uptake among BIPOC communities. This prework allowed vaccine teams to begin operations the day after

⁶ Title II of the Americans with Disabilities Act (ADA), 42 U.S.C. § 35.130 states "No qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity." § 35.150 requires a public entity to "operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities." The ADA does not include definitions for services, programs, or activities and there is a body of case law interpreting this clause. Many interpret the broad language to mean virtually "anything a public entity does." *Barden v. City of Sacramento* (9th Cir.2002).

approval. A key equity strategy was preserving appointments for community-based organizations to book before they opened to the public, and continued mobile operations.

A number of challenges had to be overcome:

- Some vaccines had to be stored at -80° Fahrenheit. The few freezers capable of these temperatures were at hospitals which were overwhelmed. The City installed a freezer at the Finance and Administration Services COVID-19 warehouse.
- SFD worked to get firefighters to the front of the line for vaccinations so they could carry on their testing and vaccine duties with greater protection.
- The fixed testing sites at Rainier Beach and West Seattle and the SODO drive-through testing sites were adapted to provide vaccinations. A new logistical challenge at these sites was accommodating the 15-minute waiting period for vaccinations that was not previously an issue for testing.

There were also huge inefficiencies related to the lack of crucial information and supply from federal and state representatives. For example, significant effort was expended anticipating the vaccine and trying to determine how it would be paid for. The vaccinations themselves were free, but the City thought it would have to cover the operational costs of vaccine delivery and did not have capacity to bill insurance. The Federal Emergency Management Agency (FEMA) ultimately covered most of the operational costs, but they did not make that clear until nearly the day the vaccine was released. At the state level, DOH's method for allocating vaccines by region and by week made it very difficult to plan effectively as the City could not know in advance how many vaccines were available. The supply almost always fell short of demand in the Seattle area especially in early weeks.

There continued to be challenges related to software to collect and report the correct information for vaccines. This was further complicated by the need to integrate with the State Immunization System (SIS). There was no software available that could do this, and the software recommended by the State did not work. A local firm, Signetic, had to be contracted to develop a new system that could report to the SIS based on previous work they had done for the Seattle Visiting Nurses Group for flu vaccines. Stakeholders working to support access were sometimes frustrated with the multiple access points and differences between City and County vaccination approaches. Alignment and coordination of patient appointments required multiple spreadsheets and time-consuming data workarounds. For example, identifying home bound older adults and people with disabilities who needed in-home vaccinations, and employing home health care providers to deliver the vaccine to them, required a tedious coordination spreadsheet with multiple users from many agencies.

The centrally located vaccination center at Lumen Field was operational from March to June 2021 and provided more than 102,000 vaccines.

Seattle was deemed ineligible for FEMA resources for a mass vaccination site, so the City moved ahead on its own and FAS was charged with launching and operating the site at Lumen Field with Swedish/Providence Health & Services on the clinical side. The site was a major contributor to Seattle's high vaccination rate—with nearly half of all vaccines provided by the City coming from the FAS-led site. While the site was designed to accommodate up to 20,000 shots a day, vaccine supply was a limiting factor. At the end of the three months of operation, a total of 102,414 vaccines had been delivered, and 44 percent of those served BIPOC residents.

Key Learnings

Bigger is not necessarily better. Although Lumen Field could accommodate 20,000 people, due to vaccine supply limitations it never achieved its full potential. Smaller and mobile venues may not have efficiency of scale, but they have advantages in equitable reach and efficiency in being able to quickly adapt to changing circumstances.

Leverage existing partnerships and create new ones. The FAS led site launched in just under six weeks and would not have been possible without leveraging existing partnerships, like that with Swedish, and forging new ones such as with First and Goal, Inc.

As software was still in development, predicting which computer hardware would be necessary to purchase at scale was difficult and resulted in costly missteps. The State’s system of weekly vaccine allocations and the unpredictability of turn-out resulted in overstaffing. More positively, the Lumen Field site was a model of ADA compliance, building on lessons learned from operating testing centers. FAS staff proactively engaged experts and community partners to ensure ADA accessibility and interpretation translation services. More than 35 interpreters were on site at times and portable devices capable of interpreting up to 200 languages were available to patients. Additionally, videos, printed flyers and signs were all translated and prominently displayed. An ADA specialist architect inspected the site, and accommodations were made for video remote interpreting and in-person interpretation. The Deaf-Blind Service Center partnered with the ADA team and FAS staff to simulate visits from disabled customers on days the clinic was not operating.

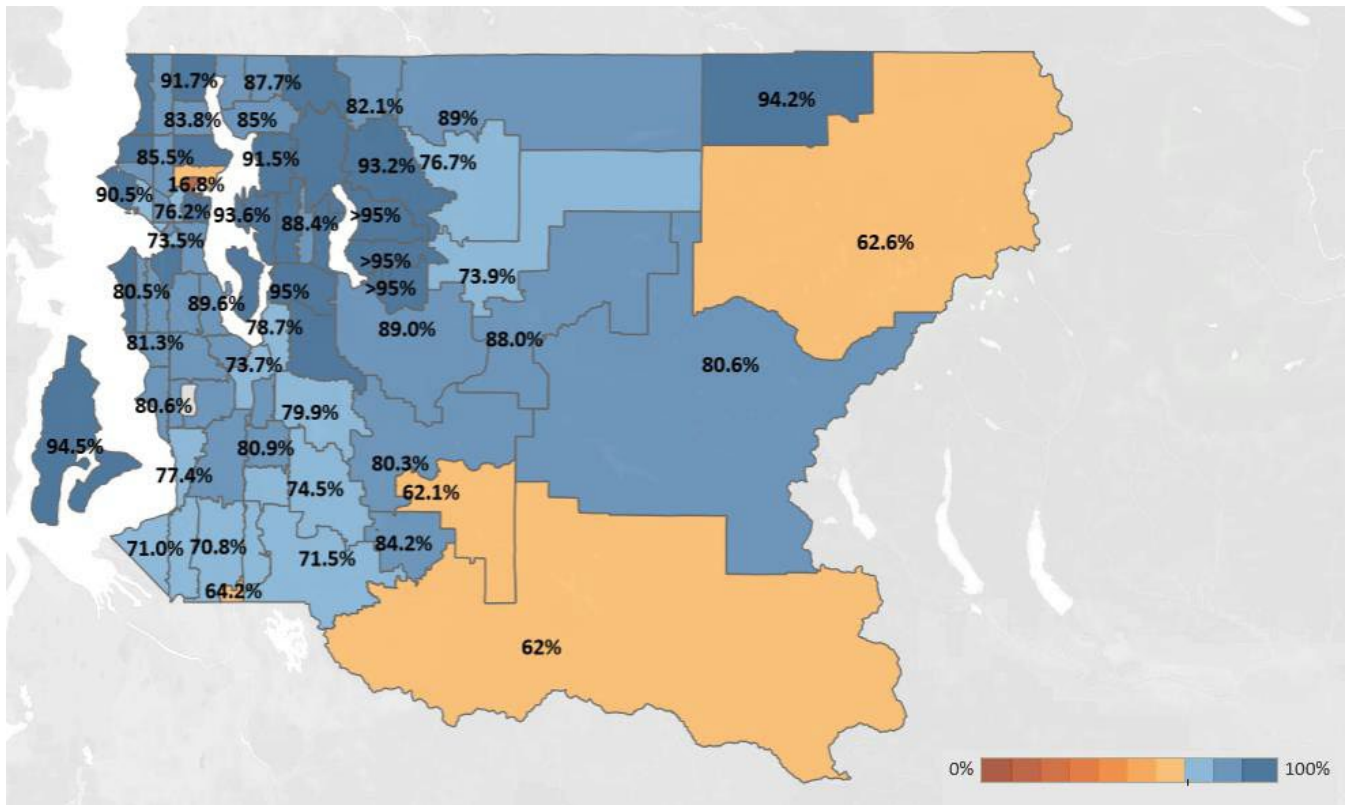
The City administered a total of 260,000 vaccinations to 134,000 individuals over seven months at mobile vaccination teams, pop-up clinics, in-home vaccinations, and fixed sites.

Exhibit 12. King County residents with at least one vaccination dose, by region and age.

Region	All ages 12+	Age 12-19	Age 20-29	Age 30-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79	Age 80+
North Seattle, Shoreline	84.0%	70.2%	68.4%	87.0%	>95%	85.3%	90.6%	>95%	85.2%
Central Seattle	83.2%	69.8%	76.4%	94.1%	85.0%	83.8%	72.3%	93.8%	87.0%
West & South Seattle, Delridge, Highline	88.4%	75.7%	73.0%	89.7%	>95%	94.6%	93.3%	>95%	80.0%

Source: PHSKC COVID-19 Dashboard, 2021. Accessed August 2021.

Exhibit 13. King County residents age 12+ with at least one vaccination dose, by ZIP code.



Source: PHSKC COVID-19 Dashboard, 2021. Accessed August 2021.

Exhibit 14. King County residents age 12+ with at least one vaccination dose, by region and race/ethnicity.

Region	All	White	Asian American	Black/African American	Hispanic/Latinx	American Indian/Alaska Native	Native Hawaiian/Pacific Islander
North Seattle, Shoreline	84.0%	81.0%	78.0%	80.6%	74.0%	>95%	>95%
Central Seattle	83.2%	76.2%	>95%	53.5%	72.8%	82.2%	>95%
West & South Seattle, Delridge, Highline	88.4%	>95%	76.5%	68.5%	71.3%	>95%	>95%

Source: PHSKC COVID-19 Dashboard, 2021. Accessed August 2021.

Maintaining situational awareness and communications were key to efficient and effective operations. The City also credits having a small core team involved in decision-making. This team included Mayor’s Office staff, the SFD Chief, the SFD Medical Director, an Operational Lead on the clinical side, the FAS Department Director and an Operational Lead on the technology, data and public-facing side. The core team met frequently and used COVID-19 data and analytics to target the response. The data was sometimes limited in recency or necessary granularity, especially in the initial

stages of the pandemic. For example, demographic data from the Social Vulnerability Index (SVI) was used to identify neighborhoods where residents likely needed direct messaging and mobile kiosks for testing and vaccines. However, the data underlying the SVI was outdated, and many times led teams to target recently gentrified areas where the identified vulnerable populations no longer lived. There was also frustration with the quality of the data available from PHSKC early on. The core team eventually landed on a Tableau dashboard developed by the Medical Director and the Office of Innovation and Performance that continues to be in use today. SFD used the Microsoft Teams platform and held weekly meetings to keep all firefighters up to date. All meetings were recorded, and protocols were recorded and organized to allow sharing with PHSKC and other jurisdictions across the nation. To help ensure better coordination citywide, FAS started a Vaccination Administration weekly meeting in November 2020 that included the Mayor's Office and Seattle Fire Department to discuss their vaccination operations, including the walk-up sites, mobile sites and future plans for high-volume vaccination clinics.

Frequent and timely press conferences and social media posts kept the public informed. However, distribution of vaccine information was hindered by increasing vaccine hesitancy, high distrust in the government, and inconsistent and unconvincing messaging about the safety and efficacy of the COVID-19 vaccines from public authorities across all levels of government. The City's Office of Immigrant and Refugee Affairs and Department of Neighborhoods initiated contracts with community-based organizations working to combat vaccine hesitancy among under-vaccinated groups. In-language phone helplines answered questions and helped assist immigrants and refugees with limited English proficiency or limited access to the internet to access vaccination opportunities.

Testing and vaccination operations at the City naturally abutted the work of PHSKC. At times there was duplication in efforts between the County and City, and tension arose regarding the appropriate role of each party. However, the County was unequivocal in its gratitude to Seattle for sharing its early experience and learnings about testing operations. Specific areas for increased coordination in this relationship include public information, such as standing up a testing and vaccination call center and aligning on metrics for the prioritization of limited testing and vaccination resources. Applying for state and federal funding could be better coordinated between the City and County to avoid duplicating efforts or creating conflicts.

Findings and Recommendations

Key findings and areas for improvement build on three functions at the core of the City's delivery of tests and vaccines. First, we highlight strategies to strengthen the innovative role of first responders. Second, we note opportunities to plan and streamline the infrastructure and operational aspects of test and vaccine delivery. The final opportunity area focuses on lessons learned about delivering these services equitably.

The City of Seattle's adaptability, coupled with SFD's and FAS's strong operational systems, enabled the City to quickly provide testing and vaccination to Seattle residents. Partnership with University of Washington was also crucial. The pandemic revealed a gap in existing logistical planning for testing and vaccination operations. It is now apparent that communities cannot rely on the existing health care infrastructure to be universally available during a communicable disease emergency. There were no plans in place to administer tests and deliver vaccines when the health care infrastructure was overwhelmed with sick and dying patients. Those involved in developing this new process were creative, flexible, and willing to try different approaches to accomplish their goal of serving City employees and

residents. Key opportunities for improvement will formalize the lessons learned from the operations for testing and vaccination, and the role of first responders in pandemic emergencies.

- TV.1. Maintain a state of readiness among first responders approved by the State to deliver tests and available to deploy as soon as possible.**
- TV.2. Maintain and periodically refresh an inventory of at least 12 weeks supply of personal protective equipment.** Seattle Fire Department had supplies which gave them the time they needed to source replacements while still operating at full capacity. However, staff found that some older supplies had deteriorated, for example the rubber bands on masks.
- TV.3. Advocate for state legislative changes to quicken the approval process for first responders to provide testing and vaccination.**
- TV.4. Regularly train and simulate deployment with first responders.**
- TV.5. Develop local funding plans in anticipation of the need to deploy operations before funding is available from state and federal authorities.** This includes discussion of criteria for emergency uses of the General Fund.

While much about the next pandemic is unknown, it will likely feature testing and vaccines. The City's experience with COVID-19 offers lessons for planning and improving the delivery of these services.

- TV.6. Explore alternative drive-through testing infrastructure, such as unused or underused pharmacies, banks, and fast food and coffee kiosks.** Drive-through testing sites were highly successful for their convenience and ability to safely administer a high volume of tests. It was also fortunate that the State emissions testing program ended three months before the pandemic hit, making these sites available. However these testing sites might be redeveloped and repurposed before the next pandemic, so they cannot be counted upon.
- TV.7. Stockpile and regularly refresh generic testing materials, including swabs, testing strips, and reagents.**
- TV.8. Develop plans for priority setting and logistics for vaccine delivery once doses are in the City's hands.** While the vaccine supply was constrained by problems that were outside the City's control, local vaccine storage capacity can be developed and monitored, including understanding capacity that may be available within the health care system and private pharmacy networks.
- TV.9. Formalize partner roles in emergency pandemic response and engage them in planning.** Partnerships were essential to the success of this effort. Contracts or memoranda of understanding with hospitals for vaccine storage capacity and labs for testing capacity may be possible to maintain a state of readiness. These agreements should cover the operations as well as the funding scenarios for more efficient decision-making.
- TV.10. Involve clinical, operational, and public health experts in planning and policy decisions.** The Mayor's public health advisory group provided invaluable guidance. The City vetted vendors and made supply decisions based on an understanding of the long-term trajectory of the disease informed by clinical and public health expertise. Operational expertise is also needed at the policy level to understand resourcing and delivery implications.
- TV.11. Integrate streamlined contracts, purchasing, and other processes to regular operations.** Interviewees noted that some administrative processes such as hiring and contracting were

streamlined out of necessity during the pandemic and that these changes should be sustained beyond the emergency.

TV.12. Explore ways to improve testing and vaccine support for frontline City personnel. City vaccination sites based their vaccine prioritization and eligibility on Federal and state guidance. This guidance included eligibility based on profession. Many frontline City staff noted dissatisfaction with communications and support from the City on accessing vaccinations once eligible.

The Seattle testing and vaccination effort was successful in reaching BIPOC individuals of all ages and locations across the city. Many lessons were learned along the way about delivering these services equitably, considering variables such race, income, geography, transportation access, and disability. Applying these lessons to planning for communications and service delivery can improve future pandemic response.

TV.13. Establish a parallel messaging system that includes online information and participation opportunities as well as direct delivery to populations not connected to high-tech systems. The initial reliance on technology for communications and appointments hampered outreach and impact among populations with lower technology access and technology literacy, including older adults and lower-income households.

TV.14. Engage with ADA compliance resources within FAS to enhance accessibility of sites, including site visits from people with disabilities to pre-test the operations.

TV.15. Continue investments in community navigation using successful models from the Office of Immigrant and Refugee Affairs (OIRA), the Department of Neighborhoods (DON), PHSKC, and community-based organizations (CBOs). This includes cultivating relationships with CBOs and diverse community partners who are trusted messengers among vulnerable populations. As one SFD interviewee put it, “DON, OIRA, and the CBOs did the heavy lifting, we just had to show up.”

TV.16. Partner with the PHSKC to post a single phone number for residents to call for key information. The City and the County initially set up their own call centers and information hubs for residents to get information on COVID-19 resources. Ultimately, they joined forces, streamlining and improving call center operations for a “one stop” source for regional testing and vaccination information. This model also aligned well with how people search for information.

TV.17. Invest in public education and trust-building to combat vaccine hesitancy and create a stronger foundation of trust and knowledge before the next pandemic. The rapid development of vaccines and misinformation/disinformation campaigns has sown widespread suspicion of the vaccines, their safety, efficacy, impacts to pregnant women, and long-term impacts to children. The anti-vaccine community has been emboldened and remains a major obstacle to achieving a higher level of vaccinations.

TV.18. Maintain the three-pronged model deployed by the City: mobile teams to reach people with the highest vulnerability and risk; community hubs, such as West Seattle and Rainier Beach, accessible at the neighborhood scale; and high-volume sites, such as the drive-through sites and Lumen Field. This mix was successful in reaching testing and vaccination coverage quickly and equitably.

Section 6: Social and Human Services

This review of Social and Human Services covers services for the aging and disabled populations; mass shelter and hygiene services for the population experiencing homelessness in Seattle, including the effort to de-concentrate shelters; and emergency child care and feeding. We reviewed data from online publications released by the City of Seattle and Public Health – Seattle & King County (PHSKC) and department-level after action review reports. We conducted interviews with representatives of Seattle Parks and Recreation (SPR), the Human Services Department (HSD), and the Department of Education and Early Learning (DEEL), as well as staff at PHSKC.

Analysis

Aging and Disabled Population

Seattle HSD's Aging and Disability Services (ADS) Division serves as the area agency on aging, covering all of King County for aging and disability services. This scope of coverage was unique among human services and supported greater alignment with activities occurring at PHSKC. Normal operations include in-home visiting and case management for individuals who need services to continue living at home. These services are mostly delivered by subcontracted providers. As in other functional areas, ADS had a Continuity of Operations Plan in place prior to the pandemic, and emergency plans were required of subcontractors, but these proved inadequate given the duration and compounding effects of the crisis.

ADS priorities included securing personal protective equipment (PPE) and issuing public health protocols and guidelines to providers. Assessment services, case management, and well-being checks pivoted to telephone operations until July 2021 when the State authorized a return to in-home services.

Senior center buildings (adult day care) were shut down during the pandemic, but many facilities redirected their resources to reach their client population. Several saw their client bases expand via referral, such as through 2-1-1 or the City information line, even though their physical location was not available. SPR also focused their virtual offerings on the older adult and special needs populations they knew typically relied on community centers which were closed for normal programming.

The demand for home-delivered meals and safely delivered congregate meals increased dramatically. Older adults who normally obtain their own food were increasingly homebound and isolated due to their elevated COVID-19 risk. On May 13, 2020, the City of Seattle invested more than \$7 million in assistance via the federal Coronavirus Aid, Relief, and Economic Security Act and Families First Coronavirus Act. This funded food access and nutrition for older adults and people experiencing homelessness. Food distribution efforts attracted significant outside interest from philanthropists and volunteers wanting to help. The need was great, as were the resources, but the infrastructure was inadequate to quickly scale these efforts, missing some opportunities for effective and efficient response and contributing to staff burnout. Without a system in place, and no time to build one, some staff and providers found themselves working 20 hours a day, 6 or 7 days a week.

Sheltering/Homelessness

Seattle HSD operates basic and enhanced shelters in partnership with provider agencies serving over 10,000 unique households a year. When the COVID-19 pandemic hit, the City needed to temporarily de-intensify⁷ these congregate shelter operations. On March 8, 2020, PHSKC delivered updated guidance for safe shelter operations during the pandemic. On March 9, the Exhibition Hall at Seattle Center was activated to de-intensify the Downtown Emergency Services Center Main Shelter and Queen Anne Shelter, which together shelter up to 360 people at a time.

By late March and early April, additional Seattle community resources were activated to expand shelter capacity by a total of 525 spaces. These included Fisher Pavilion at the Seattle Center, Garfield Community Center, Miller Community Center, SW Teen Life Center (SWTLC), and Loyal Heights Community Center. These new spaces and operations accommodated 6-foot distancing between beds, non-congregate feeding, enhanced ventilation, enhanced hygiene access, PPE needs, and staff safety protocols.

In September 2020, the temporarily de-intensifying shelters at Garfield, Miller, and SWTLC community centers were relocated to new spaces to make room for child care and teen learning programs at the community centers. The Loyal Heights facility was made available as a de-intensifying shelter but it was not ultimately staffed during the pandemic due in part to a lack of available shelter providers. Over the period of operations, Garfield, Miller, and SWTLC served approximately 256 unique individuals. Bitter Lake and Garfield Community Centers were then activated in February of 2021 for the winter storm during the pandemic. The Seattle Center shelter at Exhibition Hall closed over the summer of 2021.

Through these efforts, the City did not increase total shelter capacity, which was already strained prior to the pandemic and in fact, the total number of available shelter beds decreased between December 2019 and December 2020. Homeless service providers were stretched incredibly thin in terms of staffing to bring new spaces online while coping with a labor shortage.

One strength of the de-intensification effort was that it built upon existing infrastructure, partnerships, and plans to augment the crisis response system. Staff and providers knew the fundamentals of shelter operations and had defined roles from operations during normal times. However, the de-intensification effort required resource deployment at much greater speed and scale than they were accustomed to. FAS provided logistical support for the sheltering effort, procuring sanitation, PPE and bedding supplies and distributing 1,306 cots, 170 bariatric cots and 1,532 blankets from the emergency shelter caches over 15 months.

SPR was relatively new to the operation of community centers as shelters. While staff had trained and operated emergency cold shelters before, staff had little experience with, for example, appropriately triaging the medical needs of shelter guests. At the same time, homeless service providers were not used to operating in these new spaces. SPR and its partners had to figure out how to apply health guidelines, new protocols, transportation, and roles together in an emergent situation.

FAS was tasked at this time with procuring one of several non-congregate housing properties for possible purchase by the City, King County or the state for overflow relief for hospital patients or Isolation and Quarantine (I/Q) for persons experiencing homelessness. FAS identified a former

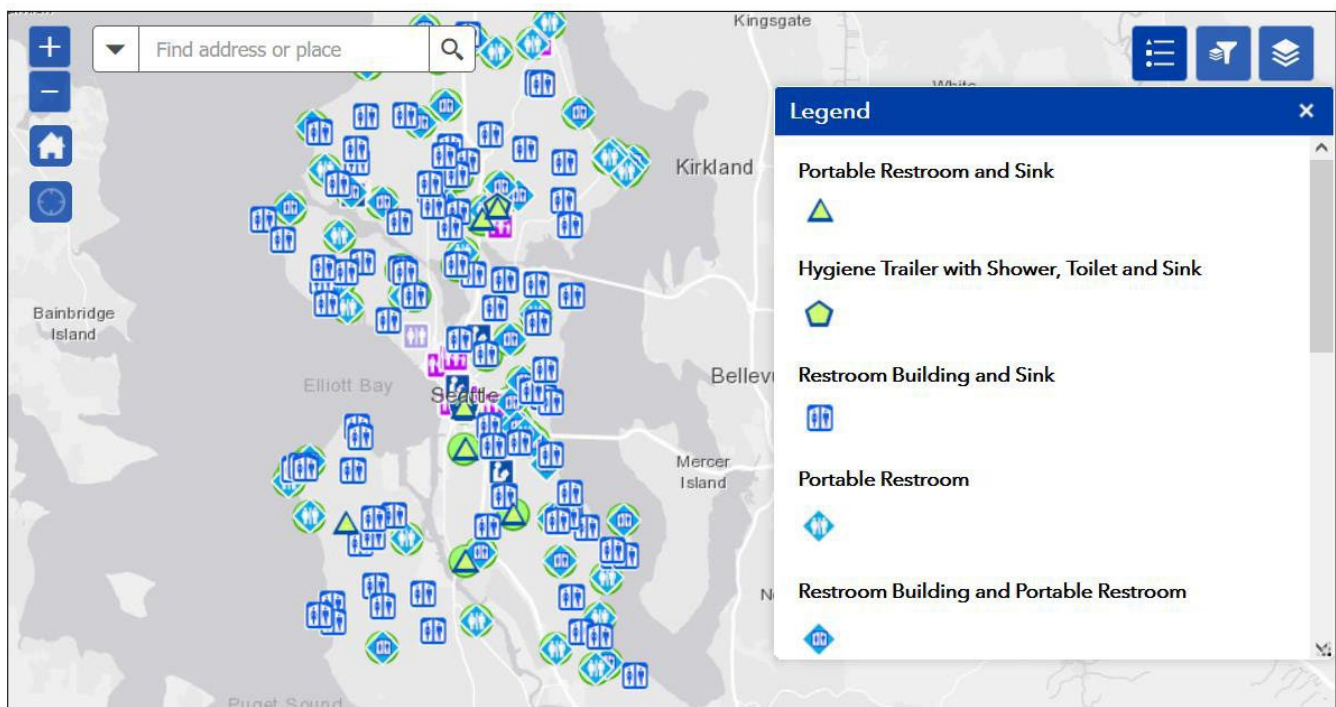
⁷ De-intensification reduces the concentration of people in congregate shelters to reduce the risk of virus transmission.

nursing home with 126 rooms suited to single-room occupancy that was in court-ordered receivership near downtown Seattle. At the direction of the MO, FAS property negotiations with the receiver and owner were fast-tracked. A purchase and sale agreement was drafted and the facility was successfully purchased by the state in early April 2020. The Washington State Department of Health began operating the facility shortly after as an I/Q facility

The funding environment was very unclear, leading to internal churn over payment plans and sustainability of choices. Federal plans to reimburse or fund these operations were not made clear until the fall of 2020, while decisions had to be made in March and April of 2020. By October 1, 2020, however, the City announced over \$31 million in one-time COVID-19 funding and \$2.75 million in ongoing funding directed to homelessness resources. By the fall, \$11.6 million was also announced to defray the costs providers had incurred the previous spring and summer to scale operations. A June 2021 City Council ordinance authorized the distribution of \$49.2 million in federal American Rescue Plan Act (ARPA) funds to the housing and homelessness portion of the Seattle Rescue Plan⁸.

While de-intensification primarily affected those who were already connected with the Seattle human services system, the unsheltered population living dispersed or in encampments faced different challenges. Many typically accessed hygiene resources at businesses and community centers that closed in response to the Governor’s Stay Home, Stay Healthy order. The City responded by reopening facilities at parks and community centers, deploying dispersed hygiene stations with portable bathrooms and handwashing, day center bathrooms, and restrooms at City Hall and Seattle Center. These resources began coming online by late March 2020.

Exhibit 15. Map of City-Funded Hygiene Services Available During COVID-19



Source: [City of Seattle](#), 2021.

⁸ <https://www.seattle.gov/council/issues/seattle-rescue-plan>

While ultimately effective, the approach to encampments and the unsheltered population was a point of political and intergovernmental tension for several reasons. The effort encountered coordination challenges among the Department of Neighborhoods, Seattle Public Utilities (SPU), the Mayor’s Office, and PHSKC, including disputes over whose responsibility it was to provide the hygiene stations. There was no precedent for the parties involved to be working together on hygiene stations and there was no guidance from federal authorities about responsibilities and reimbursements. Staff and policymakers were also concerned about deploying these resources during the emergency and then being unable to take them down without creating ill-will in the community.

The City’s pursuit of surveillance testing, public health outreach, and data collection was disproportionate to the actual health risk; while there were a handful of outbreaks in homeless encampments, the reality was not as bad as originally feared. During the height of the pandemic and prior to vaccine availability, the City adhered to CDC guidelines and did not try to break up the encampments. Stable encampments allow for concentrated testing and PPE provision as well as resident tracking and the isolation and quarantine of exposed or infected individuals. In 2021, the City resumed sweeps of homeless encampments as it worked to reopen the city and as vaccines were more available. This was controversial considering the continued public health risks, including the emergence of the Delta variant.

Services for the population experiencing homelessness was a politically charged issue, with policy disagreement between Council and the Mayor’s Office. For example, members of the Council were pushing for single occupancy shelters for de-intensification, including leasing vacant hotel properties, similar to efforts in King County with the Red Lion Hotel in Renton as well as in other jurisdictions such as Los Angeles. The single room solution was more effective for isolation, but operationally more challenging and requiring more staff. The City also had concerns about making a short-term allocation of resources that would be difficult to undo. In this charged climate, operations were delayed as staff felt pressure to continually ask for policymaker direction, which created operational inefficiencies.

While these challenges were significant, many stakeholder interviews highlighted the strength of interdepartmental cooperation. Staff from FAS, HSD, SPR, and SPU, lauded each other for being nimble and responsive with a creative “do what it takes” attitude to finding and deploying resources within the City to meet truly unprecedented needs.

Feeding Programs

Prior the pandemic, Seattle HSD had a COOP plan and an emergency feeding plan in place. Unanticipated problems such as the inability to provide meals in-person, global supply chain disruptions, and the unknown duration of the emergency, required the plans to be adapted. Despite these gaps, stakeholders reflected that these plans provided a good starting point for adaptation.

The City of Seattle Emergency Feeding Taskforce has completed a review of the pandemic response, published in June 2021. Highlights of the effort from March 2020 to March 2021 included 14,000 households receiving seven months of grocery assistance through a voucher program, over one million meals served to individuals experiencing or transitioning out of homelessness, and an additional one million meals served to older adults.

Exhibit 16. Photo from *Serving the Community: Seattle's COVID-19 Emergency Food Response*, July 8, 2021.



Source: *City of Seattle Human Interests Blog*, 2021.

The City also supplemented the Seattle Public Schools feeding program on weekends with more than 83,000 bags of fresh produce, 9,000 holiday meals, and food backpacks to 1,800 students at 40 meal sites. The City supported feeding efforts by partnering with the Seattle Food Committee to provide and distribute PPE, sanitation supplies, and bulk purchases of high-demand, nutrient-dense foods. The City also increased its usual investments in Seattle Food Committee member organizations, providing more than \$2.4 million in direct grants in 2020 and more than \$1 million in 2021 to support food bank operation and food needs.

The core challenge encountered in the pandemic was transitioning standard practices to a safe, socially distanced model. This shift and the increase in the number of people needing help happened at the same time as fewer volunteers (many of whom are retirees) were able to participate. Redeployment of City of Seattle staff to fill these gaps was voluntary and did not attract broad participation. This became an internal equity issue, as staff who had to perform their jobs in person, including shelter and feeding operations, were more likely to be staff of color. Staff with the option to work remotely were more likely to be white.

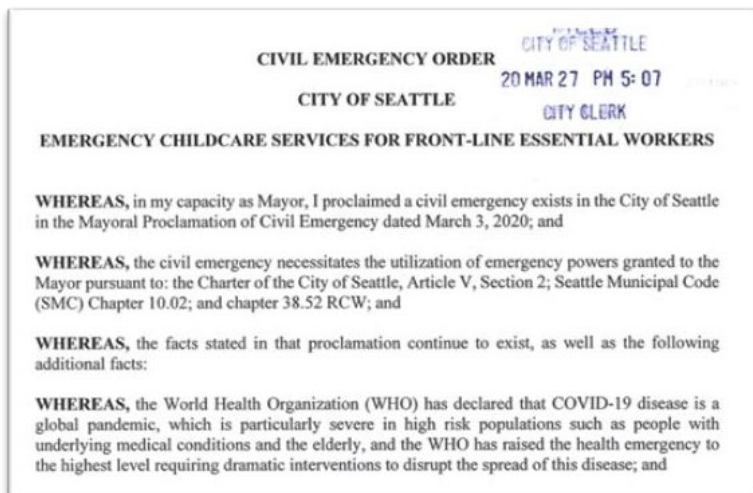
In the face of staffing challenges, the emergency feeding program accessed National Guard personnel, with the Guard proving to be an extremely effective and efficient partner. Overall, more than 60 redeployed HSD employees (out of a total FTE of about 385 at HSD and nearly 10,000 individuals in the City full workforce) and 123 National Guard members contributed to meal programs. One stakeholder credited the National Guard with preventing the feeding program from collapsing as typical volunteer sources dried up due to pandemic concerns among older individuals in particular and redeployment from other City departments proved challenging.

Equity lessons in the emergency feeding program stemmed from the diversity of the Seattle population. An interviewee noted that emergency food provision was very much needed for sustainability of household budgets through the pandemic, but for most, it was not at a life-or-death level of emergency. HSD paid attention to keeping people healthy while adhering to cultural and religious preferences, including a desire for fresh and culturally relevant food which often ruled out shelf stable but generally less healthy foods.

Child Care for Essential Workers

With a March 3, 2020 civil emergency order from the Mayor's Office, the City's Department of Education and Early Learning (DEEL) developed and deployed a free emergency child care program for essential workers, including caregivers working as first responders or in grocery stores or health care. This was in response to the closure of schools by the Stay Home, Stay Healthy order and was supported by repurposed funds from the Families, Education, Preschool, and Promise levy. Twenty-four days after the emergency order was issued, 250 slots were made available and lasted from March 27 to June 30, 2020, when the order expired. Emergency child care was located at 22 sites including Garfield, Meadowbrook, Miller, and Rainier Beach community centers, and provided via 11 separate providers. This program was free to users and the City pre-purchased the slots so essential workers could flexibly use them. Ultimately the sites served approximately 260 children and 193 families. The majority of parents worked in health care (58%), with others in the child care (8%), grocery (6%), and food service (5%) sectors.

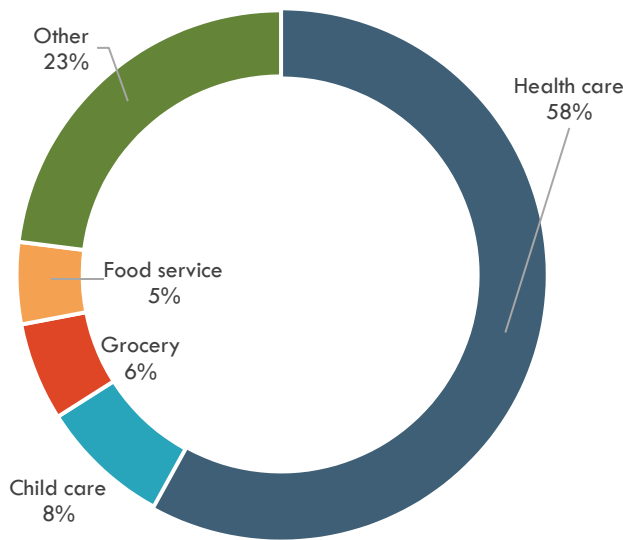
Exhibit 17. Emergency Order Granting Emergency Child Care Services for Front-line Essential Workers



Source: *City of Seattle, 2020.*

DEEL has since completed an internal after action review of the program with recommendations and a newly designed Emergency Child Care Plan. The review found the program was slow to fill and may have contributed to instability in the child care system where smaller private providers were trying to keep their doors open. The lower-than-expected use numbers may have stemmed from scheduling challenges or because some workers had the option to work remotely or chose to make their own kinship- or neighbor-based child care arrangements out of a fear of exposing their family to unknown vectors. Registration was intentionally low-barrier, so data on who used the emergency child care program by race, geography, income, and other such variables, are not very reliable. DEEL's redesigned Emergency Child Care Plan builds on these lessons learned and many more to expedite program execution and improve equity in client uptake and contracted providers, all while ensuring safe and quality operations. DEEL also supported providers within their Emergency Child Care Program, Child Care Assistance Program, and Early Childhood Education and Assistance Program to secure PPE, thermometers, and cleaning and sanitation supplies in the spring and summer of 2020 when supply chains were the most affected.

Exhibit 18. Emergency Child Care User Occupations



Source: Lori Baxter, [City of Seattle](#), 2020.

From June to August 2020, the City deployed their summer camp model that supported over 500 children of essential workers ages 5 to 12. This was closer to what families might access during a regular year. As the 2020-21 school year returned without in-person options, school age care was resumed in community centers, serving roughly 500 families. DEEL worked to support the transition to summer care for the families in the Emergency Child Care Program.

Child care is subject to a complex web of authorities including the City of Seattle, PHSKC, schools, State Department of Health (DOH), and the Centers for Disease Control (CDC). These entities did not effectively align their guidance, leading to significant confusion within the child care industry. Even within the City, messages regarding child care originated from two different Deputy Mayors as well as DEEL.

Ironically, even with the participation of these many entities, there were gaps. While environmental health addressed the state of the physical facility where care was provided, no agency was watching out for the health of child care workers themselves. Without an advocate, they ended up being required to work without adequate protection. Additionally, existing inequities in the system were exacerbated by the pandemic. For example, some child care facilities had modern HVAC, air purifiers, and disinfecting protocols in place, while other smaller facilities did not, leaving workers at these facilities more vulnerable to disease spread. Early on, child care workers were allowed to continue working even after an exposure to COVID-19 if they were not symptomatic. That changed when it became apparent that it was possible to infect others while asymptomatic. Additionally, many child care workers do not speak English, and many have health conditions that leave them more vulnerable to infection. Public health information was not equitably accessible to these populations.

While there was an overall lack of information about COVID-19 and how to protect the community, data and information about the effects on children and how best to protect them was especially scarce. PPE shortages were more pronounced for equipment that appropriately fit children, and these resources were

unlikely to be found in emergency stockpiles. Some child care providers resorted to making their own. Once FAS started coordinating the supply chain, conditions improved.

While K-12 school facilities elsewhere in the country were used as a child care resource, this was not the case in Seattle.

Findings and Recommendations

The City accomplished many successes in delivering social and human services in the pandemic. An incredible volume of relief and resources were rapidly delivered during an incredibly uncertain time. Many agencies, departments, non-profits, and private businesses worked together to support older adults, people experiencing homelessness, working families, and those displaced by the pandemic. The City also maximized the use of public facilities, often across departments, in creative ways to provide comfort stations, hand washing stations, and shelters.

The delivery of social and human services is a highly labor-intensive effort that relies on many contracted community partners and volunteers. Services were impacted from both the demand and supply side, as the need for social and human services increased by multiples in a very short period of time, just as staff and volunteers were harder to find. In some cases, partner agencies, providers, and companies lacked access to emergency management information, training, and input to emergency plans to be able to effectively partner with staff. Several departments involved in social and human services have participated in their own reflection exercises to document and learn from the COVID-19 pandemic.

SHS.1. Include lessons from departmental after action reviews in future pandemic planning and exercises.

SHS.2. Include community partners in purchasing and logistics, for example, allowing them to access PPE through City channels to continue to play their essential roles.

SHS.3. Develop plans and tools for accessing resources such as the National Guard to support more sustainable levels of emergency operation. This should be done in addition to efforts to strengthen internal infrastructure, tools, and culture to support employee redeployment and volunteering per Section 8: Staff Redeployment.

A public health emergency requires greater flexibility in contracting and financing to allow outside providers to be responsive to community needs. Community providers play a significant role in supporting the cultural relevance and responsiveness of emergency programs, but they can be restricted by contract terms and funding. These providers are often also accountable to other funders and regulatory structures and constrained by the rules of government-funded programs and the additional layers of guidance from the state and federal governments. As a funder, the City erred on the side of being generous and allowing flexibility to care of Seattle's residents rather than putting up barriers to eligibility for feeding and child care programs. However, the City also struggled to define its role and provide concrete guidance to outside providers who deliver many direct services.

SHS.4. Include community partners in the multicultural aspects of emergency planning and exercises.

SHS.5. Review contracting changes made and consider continued flexibility and mechanisms to quickly adjust scope and clarify roles and expectations in an emergency.

Social and human services have historically been chronically underfunded and understaffed. In an emergency, the lack of strong preexisting infrastructure and resources hampered the City's ability to

scale programs, despite the availability of models known to work and a major influx of funding. Seattle received more than \$300 million in ARPA funds and some of these investments are already going to building assets related to social and human services including digital equity, child care, and housing and homeless services.

SHS.6. Continue to invest in foundational infrastructure, including equitable, reliable internet connections, device availability, language support, and digital literacy for recipients of social services. The aging and disabled population was particularly at risk of social isolation given the divide in digital skills and broadband access.

SHS.7. Strengthen City capacity to guard against fraud. When emergency funds became available, departments lacked the infrastructure and skillset to effectively deploy and account for those funds. Fraud has been common during the pandemic, targeting the transfer of federal funds, private grants, and public grants and benefits. For example, an \$800,000 payment from the City to Mary's Place for homeless services was lost to a scam operation and is currently under investigation by the FBI and US Secret Service.⁹ Support from FAS or other internal budget resources could have been used to help allocate the funding while providing greater security measures.

⁹ <https://www.seattletimes.com/seattle-news/homeless/nearly-1-million-in-seattle-homeless-funds-may-have-been-stolen-emails-show/>

Section 7: Support for Businesses and Economic Recovery

To inform the analysis and recommendations contained in this section, the BERK team reviewed report summaries and documents, analyzed publicly available data, and conducted interviews with representatives of the Office of Economic Development (OED), Office of Emergency Management (OEM), Office of Labor Standards (OLS), and the Mayor’s Office. We also conducted surveys of organizations that support Seattle businesses and workers, with input from representatives of 55 organizations.

The analysis that follows is organized in four sections, with the recognition that support for small businesses and workers extends from the initial response phase through recovery efforts:

- [Providing Information.](#)
- [Support for Small Businesses.](#)
- [Support for Workers.](#)
- [Economic Recovery.](#)

Analysis

Providing Information

The nature of the pandemic, with rapidly evolving understanding of how the disease spreads and the significant impact of social distancing and other requirements on whether and how businesses could operate, meant that providing information was itself an essential function. Business owners required information to remain in compliance with the law, to communicate with their staff and customers, and to implement operational adaptations that allowed them to continue to generate revenues when their normal ways of interacting with their customers were disrupted. As one interviewee noted, businesses desired the maximum lead time possible to anticipate pending changes in policy that would impact their operations.

“Information is as important as money in these circumstances. People want to make good, informed decisions, which is incredibly hard to do in such unprecedented circumstances.”

Departmental stakeholder

In a survey of business support organizations conducted for this report, information about funding opportunities and public health direction regarding masking, social distancing, and cleaning in a business environment was reported to be most useful. Survey respondents from organizations that support networks with 75% or more women- or BIPOC-owned businesses reported that information about funding was the most important, while those with networks of less than 25% women- or BIPOC-owned businesses reported that public health direction was most useful.

Responses indicated that participants received information from the City mostly through the Office of Economic Development (OED) and press releases from the Mayor’s Office. All participants indicated that email is one of their preferred methods for getting information from the City and about a third also chose webinars, social media, or press releases.

“Public Health had no ability to communicate effectively; they were overwhelmed and could give public health information on the science, but not translate and communicate for non-scientific audiences. We translated both science and English-language materials into information toolkits.”

“It was important to focus on simple messages, without overly complicating or legalizing it.”

Departmental stakeholders

Information provision for businesses featured strong collaboration by City departments and participation by Public Health – Seattle & King County (PHSKC). Early in the pandemic, OED instituted a weekly call or webinar for small businesses. These calls reportedly had as many as 100 attendees at the beginning, shifting to biweekly with 50 or 60 participants as the pandemic wore on. A representative from PHSKC participated in these calls as early as March or April 2020 to provide public health context, but capacity constraints meant that PHSKC had limited ability to dedicate substantial resources to communication. City departments stepped up to translate science-focused information from PHSKC into content and languages that could be accessed by business owners.

“Interdepartmental collaboration was absolutely a strength of Seattle’s response to COVID-19.”

Departmental stakeholder

Interviewees described strong interdepartmental collaboration and successful engagement of community partners to help distribute information among businesses, workers, and members of the public generally. Examples include:

- A Somali-speaking staff member from the Office of Labor Standards (OLS) was placed on loan to OED to support businesses applying for grants.
- The Office of Immigrant and Refugee Affairs (OIRA) partnered with OLS, PHSKC, and other departments to deliver in-language information sessions. These sessions were designed to be one-stop sessions for everything that small businesses needed to know about evolving regulations and support resources available for businesses and workers. The events were held in the evenings, with simultaneous interpretation in the seven most common languages other than English spoken in Seattle.
- The Department of Neighborhoods worked with OLS to produce in-language informational videos posted to the Department’s YouTube channel and distributed via communication liaisons.
- The Office of Innovation and Performance created toolkits for businesses to reference as they planned for reopening.

- The Office of Sustainability and the Environment (OSE) engaged OLS staff as partners in shaping and raising awareness of efforts to distribute grocery vouchers and personal protective equipment. OLS’s community partners could deliver information to vulnerable and BIPOC populations who might not otherwise be aware of these resources. OLS packaged the information and helped partners shift their workplan from in-person to virtual communications methods.
- The Department of Early Learning distributed flyers created by OLS to inform child care workers they would be eligible for Paid Sick and Safe Time (PSST) if their center shut down.
- FAS produced informational flyers in up to eight languages and shared with businesses so they could stay informed of ever-changing public health requirements. FAS partnered with OED to distribute the in-language materials in newsletters to the community.

Key Learning

City departments and community partners played an important role in designing and promoting awareness about support programs for businesses and workers, prioritizing limited resources for those with the greatest need:

- OLS helped OSE target the second round of grocery vouchers for gig workers who were ineligible for unemployment support.
- Community partners raised awareness of needs among undocumented workers and individuals who live outside of Seattle but work in the city.

In addition to strong interdepartmental collaboration and partnership with community-based organizations, information-sharing successes included implementing multiple messaging strategies to distribute information. With most information available online, those without access to the internet at home faced a significant digital divide, particularly with libraries closed. Communications media included:

- Creation and translation of focused and relevant fact sheets, including short FAQs.
- Audio recordings.
- Videos.
- Phone help lines.
- In-person events held by community partners.

Support for Small Businesses

Over the course of the pandemic, in both Downtown- and neighborhood-based efforts, Seattle has focused its limited resources on supporting small businesses. One interviewee in the Mayor’s Office described “defining who we were going to help” as a learning process that took three to six months before “clarity of our mission” was defined around the City’s limited resources, which were inadequate to help impacted large businesses or sectors. The decision was made to focus on “those who couldn’t get help otherwise” and had encountered barriers accessing other financial assistance. Federal and state

support programs such as the Small Business Administration’s Paycheck Protection Program required businesses to provide financial statements for multiple years. Therefore, Seattle focused on businesses with fewer resources and more informal financial records. The City allowed applications from any business in sectors impacted by capacity restrictions under the Governor’s Stay Home, Stay Healthy guidelines. Seattle also provided technical assistance for business, including a large number of BIPOC-owned businesses, to update their business licenses and catch up on Business and Occupation (B&O) tax payments to become eligible for support. This clarity of mission and the rapid development of systems and processes to distribute funds led to a hugely successful effort through which the City has provided vital support to the small business sector.

“Outside of Downtown, and even in Downtown, the focus is small business recovery. Not Amazon, but restaurants that serve Amazon employees.”

Departmental stakeholder

As a response to COVID-19’s impacts on small businesses, the City of Seattle’s Small Business Stabilization Fund (SBSF) was repurposed in March 2020 to provide \$10,000 grants to support businesses with 25 or fewer employees, as well as workers in the hospitality industry. Prior to the pandemic, the program was very small, supporting about eight businesses a year on a first-come, first-served basis. Staff were cautious about violating Washington’s prohibition on gifting public resources and concerned that including BIPOC ownership as a screening criterion might violate Initiative 1200, Washington’s Anti-Discrimination Act.

The first round of funding was described as “terrible...We took applications through SurveyMonkey and brought the data into Excel for processing. We had \$2.5 million and wanted to do 250 grants of \$10,000 each, but we received 8,000 applications.” While there was a desire to target resources toward the neediest businesses, City resorted to a lottery distribution due to the overwhelming number of applicants and challenges, limited staff capacity, and OED’s inability to access financial information typically restricted to Finance and Administrative Services (FAS) personnel.

Significant effort was expended to retool the program to operate on a much-expanded scale. A consultant was engaged to develop a webform that placed controls on data input and would automatically populate some fields when applicants entered their business license. OED requested and was granted access to data that allowed screening of applicants, and significant resources were applied to provide translation and technical assistance to applicants.

SBSF eligibility requirements stipulate that businesses and nonprofits must:

- Be currently open and operating.
- Have 50 or fewer full-time equivalent employees.
- Be located within Seattle city limits.
- Have no more than two locations.
- Have an annual net revenue at or below \$2 million.

- Have an annual net loss totaling or exceeding the SBSF grant amount applied for according to City B&O data.

In line with the City’s overarching policy to target limited resources toward those who need it the most, two-thirds of funding in each round have been set aside for businesses determined to be at greatest risk. Businesses’ vulnerability was at first evaluated with the City’s Risk of Displacement Index, and later, the Race and Social Justice Index, which is now seen to be legally defensible and less likely to omit targeted businesses than the Displacement Index.

These targeting efforts have been highly successful. As of the writing of this report, data is available for five rounds of SBSF grants plus one separate round designated for restaurants and bars. Over \$10 million has been granted to 1,466 businesses over the course of these six rounds between April 2020 and April 2021. **People of color own 66% of the businesses awarded in Rounds 1 to 5 and the round for restaurants and bars.**

Exhibit 19. Small Business Stabilization Fund awards and demographics of recipients.

	Round 1	Round 2	Round 3	Round 4	Round 5	Restaurants and Bars
Month of grant disbursement	4/2020			12/2020	4/2021	
Grant award	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$3,15
Grantees	254	144	72	237	119	
Dollars granted	\$2,540,000	\$1,440,000	\$720,000	\$2,370,000	\$1,190,000	

Gender of business owner

Male	44%	50%	63%	53%
Female	52%	47%	37%	4
Prefer not to answer	3%	3%		
Other				

Race of business owner

Asian	35%	31%
American Indian/Alaska Native	1%	
Black/African American	24%	
Hispanic/Latinx	6%	
Middle Eastern		
Native Hawaiian/Pacific Islander		
White		
Other		
Two or more race		
Prefer not to		

No

Sources: [City of Seattle, 2021](#); [BERK, 2021](#).

In November 2021, the City announced an additional \$2 million in funding to support businesses and organizations impacted by recently imposed vaccine verification requirements. Applications are through the SBSF process, with \$1,000 going to each qualifying business or organization.

SBSF funding has come from the City of Seattle General Fund, federal Community Development Block Grants, and the Coronavirus Local Fiscal Recovery (CLFR) portion of the American Rescue Plan Act. Grants have been administered by OED.

Support for Workers

Seattle entered the pandemic with a strong foundation of progressive worker protections in place. The City's Paid Sick and Safe Time Ordinance, requiring employers to provide workers with paid leave to care for themselves or a family member, has been in effect since September 2012. Seattle's Minimum Wage Ordinance took effect in April 2015 and the City's Secure Scheduling Ordinance went into effect in July 2017.

Several temporary ordinances related to COVID-19 amended existing provisions and established new supports for workers impacted by the pandemic. These legislative changes were initiated by Council, with OLS staff given a short window to review and provide input.

- **Paid Sick and Safe Time benefits were important to individuals who continued to work.** Council issued an amendment in March 2020 that expanded the eligible conditions for using PSST benefits, including if a worker's place of business was closed for any health or safety reason. The Mayor issued an emergency rule prohibiting employers to demand proof of illness, as the overwhelmed medical sector had little capacity to provide such verification. OLS staff worked with other City departments and community-based organizations to rapidly raise awareness of these benefits among workers and to educate employers about changes in policy before business closures were put into effect. A City-operated technical assistance line for businesses saw a large uptick of calls at the beginning of the pandemic. The Enforcement Division also experienced an increase in investigations and informal resolutions.
- Two new ordinances were enacted to protect gig workers, including:
 - [The Gig Worker Paid Sick and Safe Time Ordinance](#), which went into effect on July 13, 2020 and requires paid sick leave for gig workers working for transportation network companies (such as Uber and Lyft) and food delivery network companies that arrange for delivery of groceries or prepared food using an app-based or online platform. This provision is set to expire 180 days after the end of the Mayor's declaration of emergency.
 - The [Gig Worker Premium Pay Ordinance](#), became active on June 26, 2020, requiring food delivery network companies to provide at least \$2.50 of premium pay for each order with a pick-up or drop-off in Seattle.
- Effective February 3, 2021, the [Grocery Employee Hazard Pay Ordinance](#) requires grocery businesses operating in Seattle to pay an extra hazard wage of \$4.00/hour for as long as the Mayor's declaration of emergency is in effect.

In addition to promoting awareness of and adherence to these legal protections, OLS staff worked closely with other City departments to deliver other assistance that benefited Seattle workers and their families, including food vouchers distributed by OSE and direct cash assistance provided through the Human Services Department. OLS helped shape these programs based on input from contracted community partners as well as input from meetings with labor and immigrant rights organizations convened by the Mayor's Office.

"Equity and social justice are integral to our department's work. We're deploying the Race and Social Justice Initiative (RSJI) toolkit on a number of efforts and it's important to keep

these issues at the forefront. We also bear in mind where we're not the expert. Engaging vulnerable communities isn't resident in our staff, but in our community, and so we need strong and trusting relationships in our partners."

Departmental stakeholder

OLS staff participated in an interdepartmental team that helped OSE think about how best to distribute food vouchers safely to community members with the greatest need. OLS maintains the Community Outreach and Education Fund (COEF) to “foster collaboration between OLS and the community by providing funds to community-based organizations to develop awareness and understanding of worker rights provided by Seattle's labor standards.” The community-based partners engaged through this program maintain trusted relationships with workers in their network, some of whom may be undocumented or live outside of Seattle. OLS allowed COEF partners to self-determine the best way to safely distribute food vouchers in a manner that was safe to themselves and the voucher recipients.

“We not only heard [partner] concerns, we acted on them. We didn't get it right the first time and got calls from organizations serving immigrants. We were able to respond and find a solution that worked for all. This collaboration was absolutely one of our biggest wins.”

Departmental stakeholder

OLS staff noted that flexibility built into partner contracts was essential to their success. Because OLS contracts were not narrowly focused on specific deliverables, OLS could flexibly redirect contracted community partners to perform the work required during the pandemic. OLS noted that other departments' contracts required rescoping and suggested that guidance from FAS would have been useful to encourage broader interpretation of contract terms during the emergency.

Staff noted, however, that they had less flexibility when it came to their own workload, which exacerbated capacity constraints. Going into the pandemic, OLS was staffed by 22 people. At the time, a portion of this limited staff capacity was devoted to a non-urgent project finalizing administrative rules included in the office workplan, but regulations prevented redeployment of staff to more pressing pandemic response needs.

Economic Recovery

The City began to plan for recovery in fall 2020, as COVID-19 cases were surging toward a winter peak. Mayor Durkan hired Pamela Banks in November 2020 as the City's Director of Recovery and Equitable Investment. She had no staff support until a position from the Office of Emergency Management was shifted to her in mid-February 2021. In mid-March, recovery planning was moved to OED which gave Banks more immediate access to OED's staff resources. In April 2021, the City established a subcabinet for Reopening and Recovery.

As described in Section 1: Policy Setting and Operational Coordination, the City's Recovery Framework is focused on two planks: Economic Recovery, and Community Resilience, investing in community to address structural racism and other fractures exposed during pandemic. This section focuses on efforts related to economic recovery and workforce development.

Neighborhood Recovery

The desired outcome of the Neighborhood Recovery focus, as articulated by the City, is “Neighborhoods and communities can rebound from the impacts of COVID-19 and thrive.”

One set of strategies was designed to allow restaurants and other small businesses to adapt to social distancing and capacity limitations by operating out of doors. Regulation of the use of public right of way for commercial activity was substantially relaxed. Free “Safe Start Permits” allowed businesses to operate in the right of way so long as it did not interfere with public safety and access. The Seattle Department of Construction and Inspections, Seattle Fire Department, and Seattle Department of Transportation (SDOT) collaborated on this successful effort to ensure that City regulations did not unnecessarily burden business activity during the pandemic.

City staff note that Seattle’s approach to increasing commercial uses of public right of way during the pandemic has been more thoughtful and successful than in other cities. Seattle staff have worked with businesses to ensure that public safety and access are not compromised when commercial activities extend onto the sidewalk or into the street. SDOT staff have also provided technical assistance and coaching to businesses which perhaps lacked the resources to help themselves.

“[Outdoor business activity on] Ballard Ave was bound to happen. Neighborhoods in the South End needed more coaching. We worked with Ballard to apply their model to other areas.”

Departmental stakeholder

Staff also noted that Seattle’s handling of parking meter rates has been more sophisticated than in other cities. Meter rates were brought to zero in Seattle and many other cities during the height of the pandemic. As economic activity begins to recover, rather than fully restore them, as has been done in other cities, SDOT is monitoring traffic volumes and using data to calibrate meter rates three or four times a year. Prior to the pandemic, meter rates were reassessed annually.

In December 2020, Mayor Durkan announced \$3 million in funding for the Clean City Initiative, an effort to address litter, dumping, graffiti, and deferred ground maintenance that had been exacerbated by the pandemic across the city. The effort involves several departments:

- Seattle Public Utilities (SPU) has added 10 new litter routes, more than doubling the scale of its pre-pandemic Community Litter Route program.
- Seattle Parks and Recreation (SPR), SPU, and SDOT are taking a coordinated approach to cleaning specific parks, neighborhoods, and surrounding streets.
- SPR, SDOT, and SPU are collecting trash from encampments across the city.
- SPU has added 10 new needle collection boxes across the City.

Three-hundred-and-fifty thousand dollars were targeted for litter and graffiti abatement within business districts located in neighborhoods at high risk of displacement.

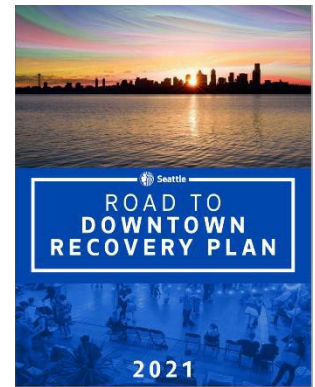
Finally, the City has provided funding directly to neighborhood organizations, including Business Improvement Areas, through the Neighborhood Economic Recovery Fund. This strategy of distributing

flexible CLFR funding directly to neighborhood-based organizations for their independent prioritization and use was adopted after the City considered investing in its own neighborhood-specific strategies. As with other City direct funding efforts, an effort is being taken to target resources with an equity criterion defined as: “Projects serving highest COVID impacted and high displacement risk neighborhoods and/or projects focusing support for BIPOC businesses and communities¹⁰.” This was met with some resistance, however, and in the end at least \$100,000 was given to every Neighborhood Business District, so equity districts received less than intended.

Downtown Recovery

The City has defined the desired result for this effort as: “Businesses, employees, residents, visitors and cultural institutions in downtown neighborhoods are revitalized after COVID-19 and thriving.”

Mayor Durkan convened the Downtown Recovery Working Group (DRWG) in February 2021. This group of stakeholders representing business, labor, arts, and community-based organizations met as often as biweekly with five breakout groups organized around public space activation, marketing, beautification, activating empty storefronts, and workforce development. DRWG recommendations provided the basis for the City’s Downtown Recovery Roadmap and the City of Seattle has invested \$9 million in these programs while private partners such as the Downtown Seattle Association and Visit Seattle have contributed \$7.4 million for marketing, activation events, and cleaning. Public sector funding included directing existing City resources and investing CLFR dollars. Safety and security were primary concerns of downtown business owners, operators, and representative associations — and these issues were raised repeatedly in conversations with City staff.



The effort began with a focus on getting foot traffic back downtown and breaking the vicious cycle of headlines about unsafe and unsanitary conditions downtown that kept employees and visitors away, leading to quiet streets and a sense of an abandoned city. The goal was to bring back positive activity, change the narrative about downtown, and recover the City’s economic engine. In July and September 2021, “Welcome Back Weeks” featured events and attractions to activate downtown and draw visitors. Programming included pop-up booths, outdoor games, music, giveaways, guided tours, and public art.

¹⁰ www.seattle.gov/office-of-economic-development/business-districts/neighborhood-economic-recovery-fund

Exhibit 20. Image of a Welcome Week Event from City of Seattle’s Downtown Recovery Website



Source: [City of Seattle](#), 2021.

The challenge, however, is that safety and security concerns persist, and the Delta variant surge has increased employer and visitor reticence to return at the very time the City and its partners were working to showcase Downtown as a vibrant and desirable place. City conversations with the Downtown Recovery Working Group and Small Business Advisory Council return time and again to the theme of safety and security, as do discussions with major employers. A separate group focused solely on public safety was formed, with representatives from the DRWG and a Maritime & Industrial Areas Working Group. Two primary strategies were agreed upon:

- To address crime, the King County and City of Seattle Prosecuting Attorneys Offices agreed to prosecute repeat offenders and Business Improvement Areas were invited to identify hot spots to concentrate patrol resources in areas highest impacted by crime.
- To help individuals in crisis, additional resources have been dedicated to Health One and to deploy social workers rather than police.

As an added challenge to encouraging employers to return their workforce to Downtown, the City of Seattle – itself a major employer with more than 10,000 personnel – has been late to confirm when it would bring its staff back to City offices. As of the time of this report’s publication, City staff will be required to return to their workplaces fulltime on January 18, 2022, unless they have an alternative work arrangement in place. Criteria established by the Mayor’s Office dictate that alternative work arrangements need to be justified by a business case specific to the position. While there may be more flexibility granted than pre-pandemic, very few positions have a business case that justifies 100% remote work.

Small Business Recovery

The desired result from this area of focus was: “Entrepreneurs and small businesses can recover from the impacts of COVID-19 and stabilize and/or grow their businesses.” The City pursued several strategies to this end, including some efforts that had begun prior to the focus on recovery:

- **Direct Funding.** In addition to the Small Business Stabilization Fund (SBSF) described above, the City expanded an existing program designed to improve commercial affordability and activate empty storefronts in the Downtown with a program that paid for utilities, insurance, and other basic expenses for up to 90 days, as well as expanding an existing program of tenant improvement grants.
- **Technical Assistance.** The City has provided technical assistance to small businesses seeking COVID-19 recovery-related funding from county, state, and federal programs or seeking to renegotiate leases, refinance back rent, and modify their business model in a post-COVID-19 world.

Large businesses with thousands of employees provide a significant portion of the economic engine that has powered Seattle in the recent past. Large businesses generally do not expect to be provided any monetary assistance in the same manner of business support provided by the City. Discussions with representatives of large businesses reveals that in emergencies and disasters, they most desire information from the City that can help guide their internal decision-making. This relationship with large businesses which have sophisticated business continuity programs can be cultivated by providing timely information that comes to them directly from the City rather than via local media channels.

Education and Workforce Development

The stated goal in this area was: “Current and future workers are employed and trained in opportunity sectors that are resistant to automation and have middle and high wage-earning potential.”

Of the \$23.5 million dedicated to Community and Small Business Recovery in Seattle Rescue Plan 1 (Exhibit 7), \$1 million was targeted to job training and workforce development:

- \$500,000 to support retraining, pre-apprenticeship, and retention programs for displaced workers, targeting BIPOC workers and women with a focus on opportunities in construction, IT, blue/green manufacturing, or other high-paying industries.
- \$500,000 to partner with the Port of Seattle to provide youth employment and paid internship opportunities targeting BIPOC youth ages 16–24 who are most underserved in our region.

This area may deserve additional resources in the future given the equity impact of access to living wage employment. This can include training and recruitment programs for positions with City departments, as well as funding for programs delivered by partner organizations.

Findings and Recommendations

Clarity of mission was essential to effectively targeting the City’s limited resources. By asking “who needs our help the most” and identifying gaps in other programs, the City clarified its mission and priority as helping small and BIPOC-owned businesses. This enabled the City to focus programs and target its limited resources to a sector of the City’s economy that was likely to have been more negatively impacted. While not requiring direct funding or technical assistance, the needs of large employers should not be lost in this focus. It is important that the City listen to the interests of large employers and share information that can be helpful as large employers position themselves for pending policy changes.

SBEV.1. Capture the lessons learned from this pandemic about the importance of establishing clarity of mission and aiding business owners unlikely to be supported through state or federal programs.

SBEV.2. Following the pandemic, hold listening sessions with large employers to build relationships and explore how best to support them in future emergencies, including feasible and equitable means of information sharing.

The City was highly successful in scaling up the Small Business Stabilization Fund and using existing data sets to target resources to businesses with the greatest needs. These wins should be consolidated for application in future emergencies.

SBEV.3. Institutionalize lessons learned from expansion of the SBSF, including how to receive and process applications at scale; the ability for OED staff to access relevant business financial data; and the confirmation that it is acceptable to target resources based on race and other criteria.

SBEV.4. Maintain the Race and Social Justice Index, Displacement Risk Index, and other data sets and conduct an in-depth study of how best to use them to target limited resources. This will support targeting of City resources for businesses and non-profits, residents, and others in both emergent and non-emergent conditions.

Interdepartmental efforts and both collaborative and contracted partnerships with community-based organizations were essential to sharing information and delivering direct support to businesses, workers, and others. This collaboration expanded the City’s resources, reach, capacity, and intelligence, particularly in how to serve vulnerable populations. Contracting flexibility is addressed in recommendation SHS.5.

SBEV.5. Document the extensive interdepartmental efforts focused on information sharing and resource provision to understand the interconnections among departments that deal with businesses, labor, housing, food security, child care, and other disciplines. Leverage these areas of overlap in non-emergent communications and program delivery.

Communications and technical assistance for business owners who speak languages other than English was a priority and more could be done to bolster resources in this area. Translations would lag behind English communications when access to current information was essential to business preparations for pending changes. This issue is addressed by recommendation PI.7.

“We were committed to language access and translation, but there was a gap. New information came out quickly, particularly early in the pandemic, and there would always be a three week gap, even with us making the best effort with the all the resources we had. The community would ask why are translated versions always behind.”

Departmental stakeholder

Workforce development and retraining is essential to individual, family, and community financial wellbeing and to overall economic recovery. Additional expertise, resources, and collaboration is needed in this area.

SBEV.6. Establish a framework for how to deliver workforce development activities effectively to aid future recovery efforts. This could include expansion of City department initiatives and funding for partner programs.

The time required to expand staff capacity in OED and OLS slowed the City's response to some degree.

SBEV.7. Prepare emergency staffing, creating an ability to scale up staff capacity more rapidly, and establishing maximum thresholds within which departments can plan.

Many advances were accomplished during the pandemic that could be incorporated in ongoing City operations.

SBEV.8. Establish greater flexibility for private use of the right-of-way.

SBEV.9. Continue to leverage interdepartmental collaborations and community partners to understand community needs and communicate the availability of public resources.

SBEV.10. Continue to institutionalize expanded support for workers and small and BIPOC-owned businesses. The Mayor's Small Business Advisory Council and relationships with the business community held by OED provide a platform for maintaining this connection.

SBEV.11. Continue to build connections with large regional employers and business organizations, exploring how the City can support business needs as well as how private sector capabilities and resources can be leveraged for the good of the region during emergencies. Relationships should be cultivated at both the leadership and staff level.

Section 8: Staff Redeployment

This section focuses on the shifting of staff resources across the City organization to meet emergency needs during the pandemic. Content was informed by interviews with staff at the Seattle Department of Human Resources (SDHR), as well as Mayor's Office and department staff from across the City who were involved with employee redeployment as either receivers, senders, or coordinators of the effort. We also reviewed six memoranda of understanding (MOUs) signed by the City and labor representatives during the pandemic and interviewed leaders of two unions, one of whom is a participant in a coalition of unions working with the City.

Analysis

While interdepartmental teams contributing to a shared initiative are relatively common, it is typically difficult for staff to be redeployed from one department or office to another. HR systems and pay codes are not designed to support interdepartmental redeployment of staff, agreements with labor are designed to protect worker rights to perform the functions for which they have been hired, and organizational culture retains staff within their department. In contrast to these organizational barriers, the pandemic caused a reduction of some workflows at the same time that there were urgent needs and staffing shortages created elsewhere in the City.

Early Informal Efforts

In mid-March 2020, the Director of the Office of Emergency Management (OEM) sent an email to other department directors requesting staff to augment the 11 OEM staff members responsible for standing up the Emergency Operations Center (EOC). The Office of Planning & Community Development (OPCD) responded just as the EOC was moving to virtual operations, and OEM provided training and onboarded several OPCD staff who provided assistance during the busy two to three weeks in the EOC prior to operational coordination shifting to the Mayor's Office.

Similarly, when the Office of Economic Development (OED) needed additional staff to support the first round of the Small Business Stabilization Fund, an email was sent calling out a need for staff with specific skillsets, including data processing and analysis. Such emails were personalized in that they were from one person, generally a department director or individual from the Mayor's Office making a specific ask. About 10 staff were loaned to OED from across the City. A Mayor's Office representative described this as happening "very quickly, very organically."

A third example of this informal and collaborative problem solving can be found with the Office of Immigrant and Refugee Affairs (OIRA). While OIRA is accustomed to administering contracts with community-based organizations, its staff couldn't absorb the financial and administrative load associated with the three- to four-fold increase in contracts that were being issued early in the pandemic. A staff member was loaned from the City Budget Office, which was described as "a tremendous help." An OIRA representative noted "I'm not exactly sure how we were connected to that person. I do know we told our Deputy Mayor about the problem we were having, and she problem-solved. I think that's how it happened."

In all these instances, requests were personal, issued by an individual, conveyed a sense of urgency, and contributed to a culture of shared commitment and collaboration; departments were

responsive, and redeployments happened. This was an important success in a time of crisis. As a representative from the Mayor’s Office described, these experiences exhibited the best of the City’s culture, with strong cross-departmental problem solving and collaboration energetically deployed to address the needs of the moment.

Formal Institutionalization/Systemization

As the pandemic persisted, there was a need to formalize and systematize the processes and systems in place for staff redeployment.

Labor Agreements Provide Flexibility

As one of six major MOUs negotiated by the City and labor unions, an MOU was agreed upon in May 2020 that stated:

The City reserves the right to reassign employees. No employee will be reassigned to work that requires licensure or certification where the employee does not have the required license or certification. Based on these principles, employees who meet the requirements of a reassignment and who are offered and then decline such reassignment, will be required to use applicable leave while at home...¹¹

The agreement waived a number of conditions from collective bargaining agreements that might prohibit redeployment for the term of the MOU, giving the City flexibility to assign staff out of class and to positions covered by unions different than their own. This could be done without typical advertising and fair recruitment processes.

Labor relations staff with SDHR noted that:

We had a mutual interest to keep employees safe, keep the City moving, and get work done... We relied on the relationships we’ve built over time to move through this agreement quickly with mutual trust: we negotiated quickly through bullet points with agreements to follow. It’s pretty remarkable: they could have gone another direction and demanded extra pay or other concessions.

A labor representative noted similarly that “It was the right thing to do at the time, as we had the same interest as the City” and proudly noted that President Biden’s Chief of Staff described Seattle as having the best City-labor harmony in the country.

Technology Platform Provides Functionality

In addition to labor flexibility, a technology platform was needed to support large-scale redeployment of staff. This need was identified early, while staff were still in-person in the EOC. A whiteboard session mocked up the desired functionality and a starting point was identified: Seattle Information Technology had been going through a classification and compensation study and had built an online platform to map employee skillsets. This tool was expanded upon to allow a manager to sit down with individuals and record all their skills, not just those associated with their position. This created a bank of identifiers that departments with staff needs could search. Notification systems were built in to communicate

¹¹ <http://www.seattle.gov/documents/Departments/HumanResources/Labor%20Relations/2020%20MOU%20-%20COVID-19%20Final.pdf>

redeployment assignments and time allotments to the individual's supervisor, HR, and labor, which had requested such notifications through the bargaining process.

With labor flexibility and an enabling technology platform, the City had the infrastructure in place to support larger-scale staff redeployment efforts; however, relatively few redeployments occurred through these formal systems. Requests posted to the platform largely went unanswered and redeployments that continued to happen occurred through direct asks from department to department or by the Mayor's Office. "It became a whole bureaucracy once formalized, and didn't work as effectively," shared a representative of the Mayor's Office.

Stakeholder interviews identified a number of factors that seem to have contributed to the lack of use of the platform.

- **Sometimes needs simply couldn't be met.** One interviewee noted that there were "lots of asks for accountants, but accountants were often busy at their home department."
- **As the pandemic wore on, the sense of urgency and people's willingness to help diminished.** This was sometimes attributed to a sense of unfairness: "Early in the pandemic, people were OK to help out, but this has ground out a little bit. People might say I stepped up to help and put myself at risk. Grocery store workers are making an additional \$4 an hour – where's mine?"
- **Cultural and leadership issues undermined departmental willingness.** It was unclear whether redeployment was voluntary or required, and cultural and organizational barriers were erected to prevent staff from working away from their home department. "Suddenly fiefdom nests started: people protected their people. Requests would go up on the platform, but no one would respond, and sometimes staff who could be lent were suddenly engaged in training for 40 hours a week."

"Requests for help would get posted to platform and I would remind our team that we could lend staff. Sometimes [the requests were] too far out of job description and no one picked it up. There wasn't a lot of pressure from the City; it didn't feel that urgent."

Departmental stakeholder

When Seattle stood up its first-in-the-nation largescale testing facilities, staff were needed to check people in as they entered the facility. The work could have been accomplished by an administrative specialist, but when the Fire Department asked for assurances that they could keep staff as long as necessary, the pool of candidates dried up. In the end, the City had 24 hours to hire 50 temporary workers and ultimately hired 120 temporary workers through an existing contract with a private ambulance service. The City paid for this capacity twice assuming there was capacity among the City's approximately 10,000 employees to accomplish the task.

While the City made great strides in its ability to redeploy staff where needed most, if future emergencies additional effort must be made to optimize the use of existing staff talent and capacity before hiring temporary workers.

Findings and Recommendations

The City successfully redeployed some staff during the pandemic, which was of great value to receiving departments and the communities they serve. It is critical to capture the mission-driven sense of service that motivated these redeployments for future emergencies.

- SR.1. Ensure that the full City organization, including the Mayor, department directors, and individual employees have a shared understanding that redeployments will be a critical element of future emergency responses.** Leverage the positional authority of the Mayor to emphasize the importance of sharing resources across departments to address service priorities.

“My view is that, in an earthquake, we’re going to need all hands on deck.”

Departmental stakeholder

The labor agreements and redeployment platform developed in this emergency are advances in foundational infrastructure that should be leveraged to prepare for and respond to future emergencies.

- SR.2. Engage with labor to reflect on redeployment successes and challenges and to establish template agreements that can be rapidly deployed as starting points in future emergencies.** While the parameters of future emergencies cannot be wholly predicted, the trust and parameters established in this planning will enable the City and its labor partners to respond more quickly and with greater alignment.
- SR.3. Augment the technology platform developed during the pandemic and use it to inventory staff skillsets and define skillsets in areas where additional capacity may be needed.** Once the platform is fully developed, the exercise of adding new employee information and maintaining existing employee information will serve as a reminder to employees that their responsibilities may change during an emergency based on their particular skillsets and how they might best be utilized to support the City in responding to a crisis situation.
- SR.4. Practice redeployments using the platform during emergency management exercises and through ongoing small tests.** In addition to tabletop and full-scale exercises, the City should seek out opportunities to test the tool and the practice of interdepartmental redeployments. With union participation and agreement, it may be possible to use the system to supplement, but not supplant, staff during peak workforce needs in an emergency or other time-bound event. Perhaps the system could be used, for example, to augment SPR lifeguard capacity on peak weekends by drawing on certified lifeguards elsewhere within the City workforce.
- SR.5. Continue to explore equity issues surrounding which City staff are required to report in person during emergencies.** There were clear racial disparities in the staff whose positions required them to report to work in person compared to those who were eligible for telework. As the City works to improve systemic racial inequities in its workforce, it should continue to monitor how these disparities play out during disaster response.

The City was described by stakeholders as a “federated system,” with departments operating on different, independent technology systems and HR policies, and with largely separate HR procedures

and labor relations. The pandemic highlighted that the City worked best when it leveraged the full expertise and capacity of the City workforce. Investments in updated, interoperable enterprise systems and a stronger “one City” culture would enable this benefit during and outside of emergencies.

SR.6. Update antiquated enterprise systems and centralize more HR functions to enable City departments to work more seamlessly, efficiently, and nimbly as an integrated system.

Improvement Plan

The City Office of Emergency Management will work with its emergency management partners to develop an actionable Improvement Plan based on the recommendations from each chapter of this report in 2022. The table on the following page provides an example of what information will be included, such as specific action steps, responsible parties, and a timeline for completion.

Improvement Plan: Summary Matrix

Topic	Recommendation	Type (P/T/E/Y)*	Action Steps	Lead Entity	Entity(ies) to be Consulted	Entity(ies) to be Informed	Due Date
1. Policy Setting and Operational Coordination	PSOC.1. Increase the accessibility of emergency planning documents		<ul style="list-style-type: none"> ▪ ▪ ▪ 				
	PSOC.2. Increase familiarity with the City’s emergency plans and procedures		<ul style="list-style-type: none"> ▪ ▪ ▪ 				
	PSOC.3. Establish plans for rapid decision making, ensuring the EOC policy-decision model aligns with Mayor’s Office procedures		<ul style="list-style-type: none"> ▪ ▪ ▪ 				

*(P/T/E/Y) – Planning, Training, Equipment, Policy

Appendix A. Members of AAR Committee

- David Kunselman, Department of Finance and Administrative Services
- Elenka Jarolimek, Department of Finance and Administrative Services
- Philip Saunders, Department of Finance and Administrative Services
- Randy Cox, Department of Finance and Administrative Services
- Torie Brazitis, Department of Finance and Administrative Services
- Bobby Humes, Department of Human Resources
- Tommy Howard, Department of Human Resources
- Tanya Kim, Human Services Department
- Joseph Kasperski, Human Services Department
- Deputy Mayor Shefali Ranganathan, Mayor's Office
- Julie Kline, Mayor's Office
- Maritza Rivera, Mayor's Office
- Tina Inay, Office of Economic Development
- Curry Mayer, Office of Emergency Management
- Matt Auflick, Office of Emergency Management
- Lucia Schmit, Office of Emergency Management
- Emily Alvarado, Office of Housing
- Steven Marchese, Office of Labor Standards
- Jenee Jahn, Office of Labor Standards
- Megan Jackson, Office of Labor Standards
- Chief Harold Scoggins, Seattle Fire Department
- Jesús Aguirre, Seattle Parks and Recreation
- Jon Jainga, Seattle Parks and Recreation

Appendix B. Interviewees

City of Seattle

Department of Education and Early Learning

- Leilani Dela Cruz

Department of Finance and Administrative Services

- Calvin Goings, Director
- Autumn Harris
- David Kunselman
- Elenka Jarolimek
- Holly Delacambre

Human Services Department

- Tanya Kim, Director
- Jill Watson
- Maria Langlais
- Deborah Witmer

Information Technology

- Jim Loter, Director
- Lawrence Eichhorn
- Dave Sutton
- Mary Wylie

Mayor's Office

- Deputy Mayor Michael Fong
- Deputy Mayor Shefali Ranganathan
- Deputy Mayor Casey Sixkiller
- Deputy Mayor Tiffany Washington
- Kathryn Aisenberg

- Tess Colby
- Stephanie Formas
- Kamaria Hightower
- Chase Kitchen
- Julie Kline
- Martiza Rivera
- Adrienne Thomson
- Tina Walha

Office of Arts & Culture

- Calandra Childers, Deputy Director
- Kelly Davidson
- Mike Davis

Office of Economic Development

- Tina Inay

Office of Emergency Management

- Curry Mayor, Director
- Matt Auflick
- Kate Hutton
- Laurel Nelson
- Lucia Schmit

Office of Immigrant and Refugee Affairs

- Joaquin Uy

Office of Labor Standards

- Steven Marchese, Director
- Jenee Jahn
- Claudia Paras

Office of Planning and Community Development

- Melissa Lawrie

Office of the Waterfront and Civic Projects

- Marshall Foster, Director

Seattle City Light

- Debra Smith, CEO and General Manager
- James Baggs
- Jana Elliott

Seattle Department of Construction and Inspections

- Micah Chappell
- Andy Higgins
- Kai Ki Mow

King County

Office of Emergency Management

- Alysha Kaplan, Deputy Director

Public Health – Seattle & King County

- Francisco Arias-Reyes
- Anne Burkland
- Mark del Beccaro

Seattle Department of Human Resources

- Bobby Humes, Director
- Jeff Clark

Seattle Department of Transportation

- Sam Zimbabwe, Director
- Patti Quirk

Seattle Fire Department

- Chief Harold Scoggins
- David Cuerpo
- Michael Sayre
- Brian Wallace
- Sarah Smith

Seattle Parks and Recreation

- Jesús Aguirre, Director
- Jon Jainga

Seattle Public Utilities

- Chad Buechler
- Cornell Amaya

- TJ Cosgrove
- Carina Elsenboss
- Lauren Greenfield
- Mary Snodgrass
- Matias Valenzuela
- Kirsten Wyses

Washington State

Emergency Management Division

- Robert Ezelle, Director
- Mark Douglas

Other

- Steve Kovac, International Brotherhood of Electrical Workers
- Shaun van Eyk, Coalition of City Unions

Appendix C. Timeline of Events and Actions

Note: Many, but not all, external events include hyperlinks to source documents and additional information.

Seattle COVID-19 Response: Summary of Major Milestones

March - June 2020 | Last Updated December 22, 2021 | *Note: Some, but not all external events and actions are hyperlinked.*

Legend - City Actions

- Operations and Infrastructure
- Community Needs
- Homeless and Human Services
- Public Safety & Health
- Recovery

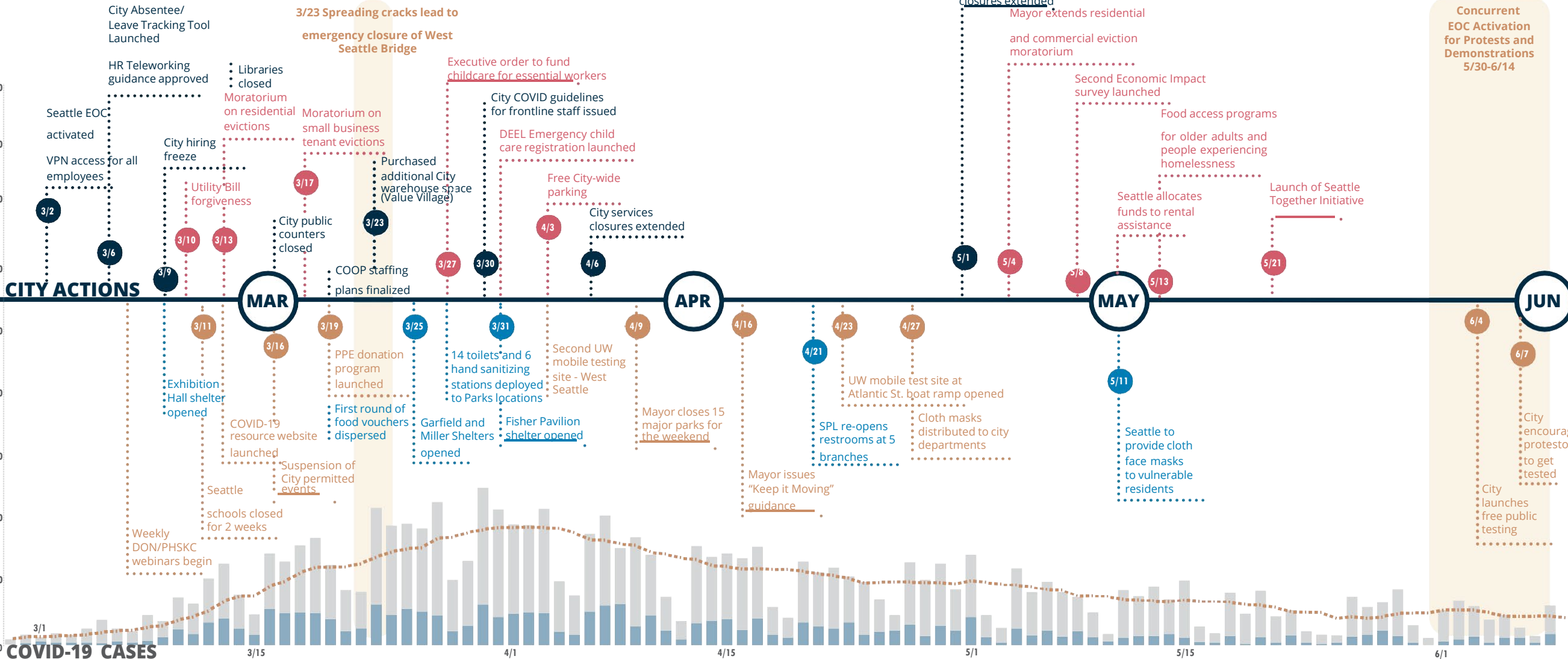
Legend - COVID-19 Cases

- Daily cases (King County minus Seattle)
- Daily cases (Seattle)
- 7-day rolling average cases (King County total)

EXTERNAL EVENTS

- 2/29: Emergency declaration for all Washington Counties
- 3/12: All WA schools closed for 6 weeks
- 3/23: WA Stay Home, Stay Healthy order
- 3/11: State prohibits events > 250 people
- 3/16: State prohibits gatherings of > 50
- 3/10: State nursing home restrictions
- 3/17: Closure of colleges and universities
- 4/2: Stay Home, Stay Healthy order extended to May 4
- 4/2: Field hospital deployed
- 4/7: Field hospital decommissioned
- 4/6: Schools closed for remainder of school year

- 5/4: Governor releases Safe Start WA Plan
- 6/2: Governor extends Eviction Moratorium
- 5/11: King County local Health Officer Directive on face masks issued
- 6/5: Limited business re-opening allowed in King County



Seattle COVID-19 Response: Summary of Major Milestones

June - Sept 2020 | Last Updated December 22, 2021 | *Note: Some, but not all external events and actions are hyperlinked*

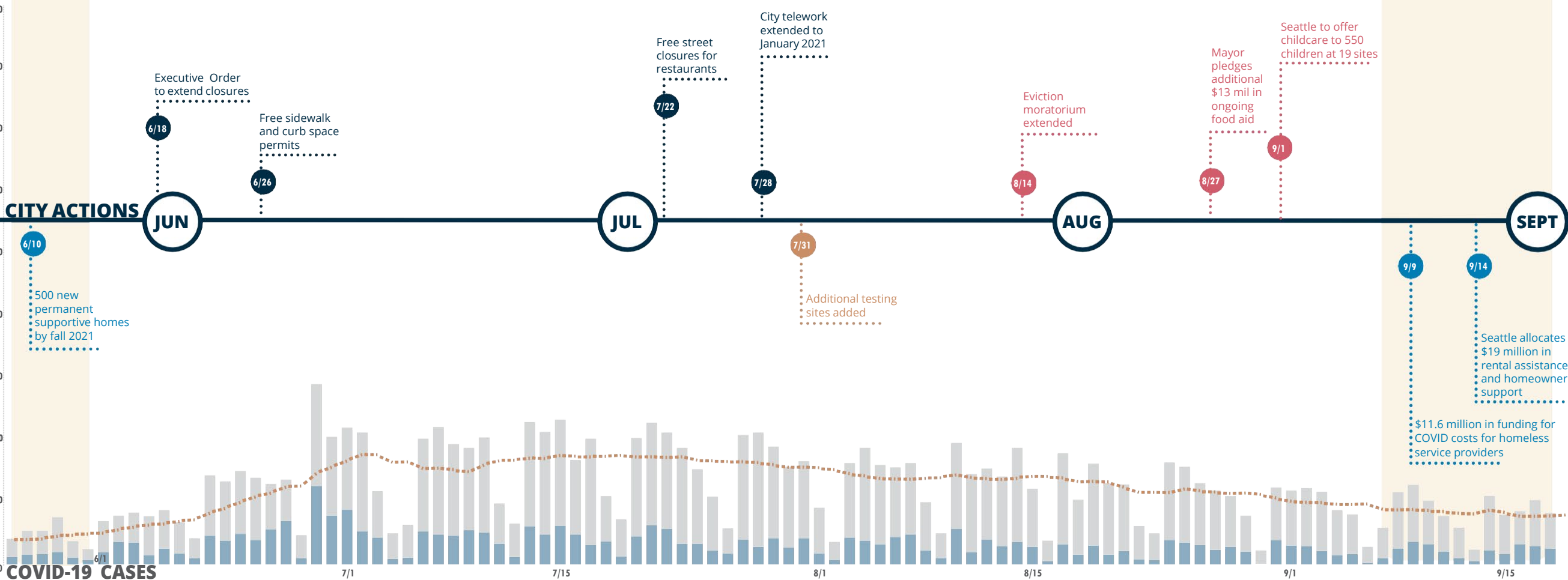
- Legend - City Actions**
- Operations and Infrastructure
 - Community Needs
 - Homeless and Human Services
 - Public Safety & Health
 - Recovery

- Legend - COVID-19 Cases**
- Daily cases (King County minus Seattle)
 - Daily cases (Seattle)
 - 7-day rolling average cases (King County total)

EXTERNAL EVENTS

- 6/9 Governor extends high-risk worker protections
- 6/23 Statewide mask mandate
- 6/18 King County distributes 25 million face coverings
- 6/19 King County enters Phase II of re-opening
- 7/7 Safe Start extended
- 7/14 Re-opening paused through 7/28
- 7/15 KC and KCPL distribute masks to community and faith-based organizations

Concurrent EOC Activation for Protests and Demonstrations 5/30-6/14



Seattle COVID-19 Response: Summary of Major Milestones

Sept - Dec 2020 | Last Updated December 22, 2021 | *Note: Some, but not all external events and actions are hyperlinked.*

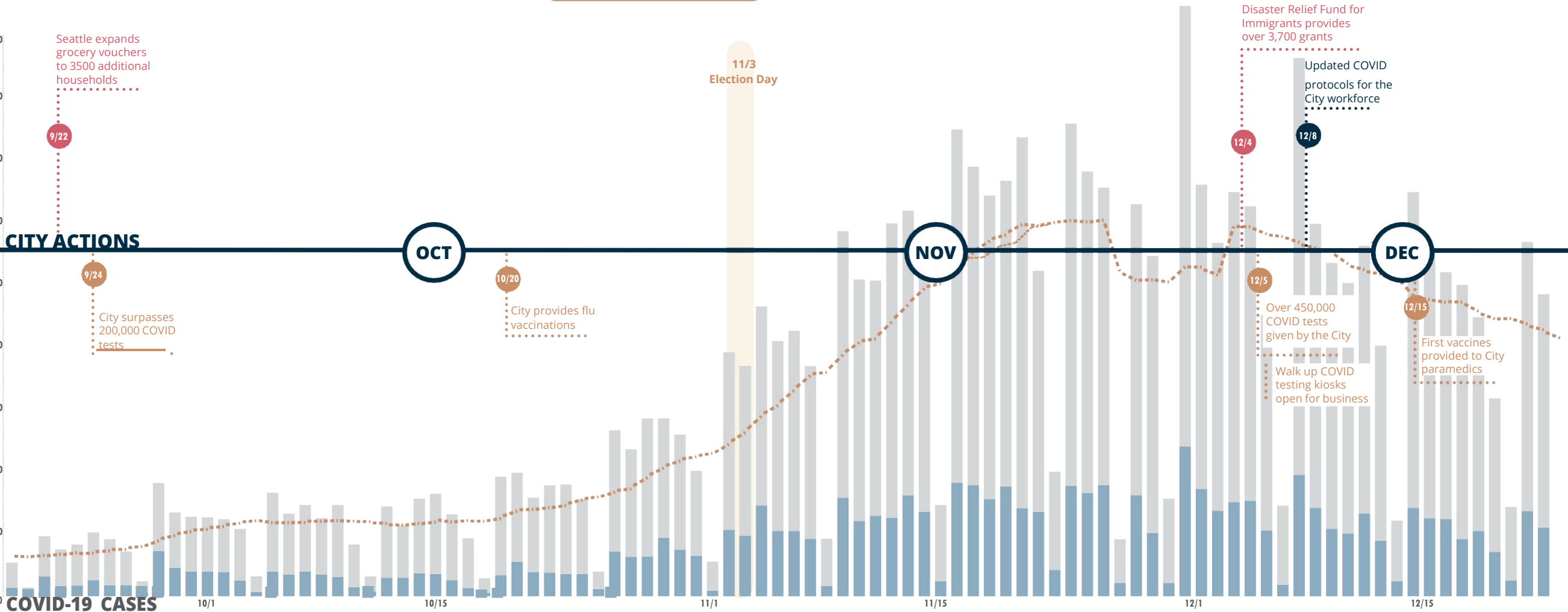
- Legend - City Actions**
- Operations and Infrastructure
 - Community Needs
 - Homeless and Human Services
 - Public Safety & Health
 - Recovery

- Legend - COVID-19 Cases**
- Daily cases (King County minus Seattle)
 - Daily cases (Seattle)
 - 7-day rolling average cases (King County total)

EXTERNAL EVENTS

- 10/14 Governor extends eviction moratorium
- 10/20 Governor establishes higher education guidelines
- 10/21 Updated guidance for religious and faith based orgs
- 10/22 DOH submits interim COVID vaccination plan to CDC
- 10/23 State offers no cost flu vaccines to the public
- 11/3 Governor issues travel advisory
- 11/15 New statewide restrictions
- 12/1 WA Notify exposure notification app goes live
- 12/11 FDA approves Pfizer vaccine
- 12/27 New Federal coronavirus relief bill

CITY ACTIONS



Seattle COVID-19 Response: Summary of Major Milestones

Dec 2020 - Mar 2021 | Last Updated December 22, 2021 | *Note: Some, but not all external events and actions are hyperlinked.*

- Legend - City Actions**
- Operations and Infrastructure
 - Community Needs
 - Homeless and Human Services
 - Public Safety & Health
 - Recovery

- Legend - COVID-19 Cases**
- Daily cases (King County minus Seattle)
 - Daily cases (Seattle)
 - 7-day rolling average cases (King County total)

EXTERNAL EVENTS

1/5 State shifts to "Healthy Washington" two-phased reopening framework

1/9 WA DOH approves SFD's application to administer COVID vaccines

1/21 Executive Actions to reorganize Federal COVID Response

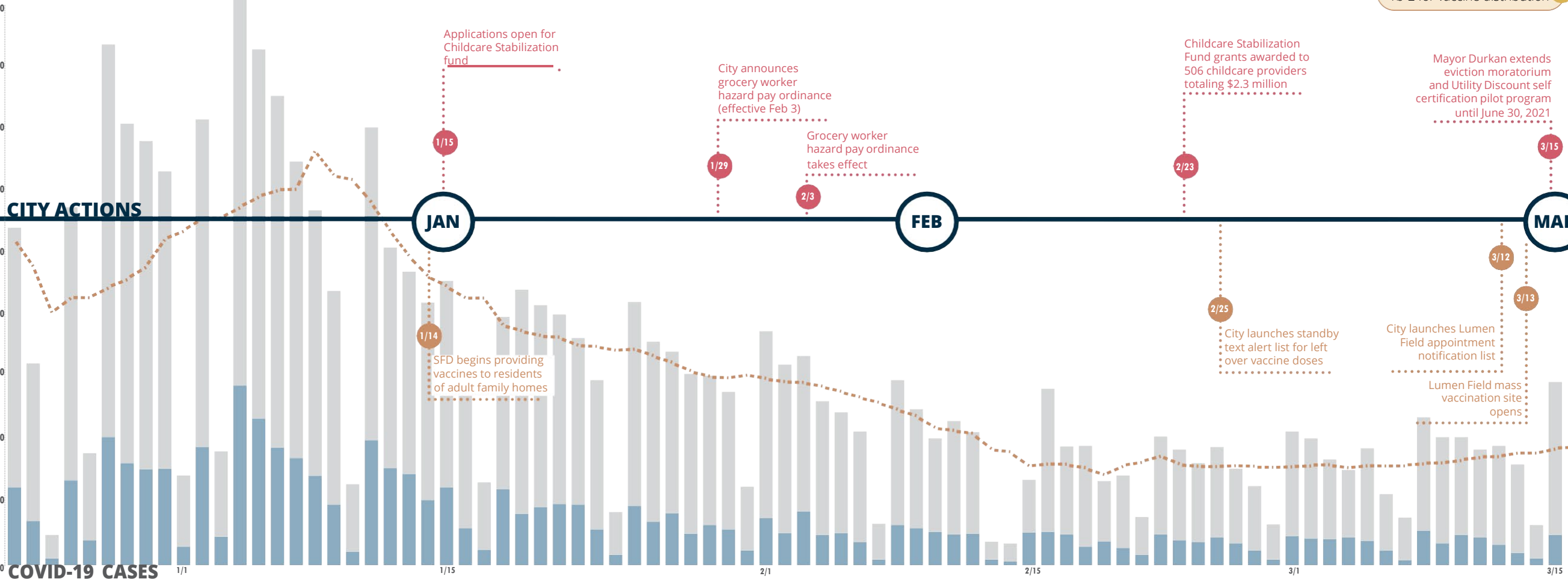
1/21 Governor extends 26 COVID proclamations until the end of the state of emergency

2/27 FDA approves J&J vaccine for emergency use

3/11 President signs American Rescue Act providing additional COVID relief

3/9 WA State DOH adopts CDC guidance on postvaccine behavior

3/17 WA State moves to phase 1b-2 for vaccine distribution



Seattle COVID-19 Response: Summary of Major Milestones

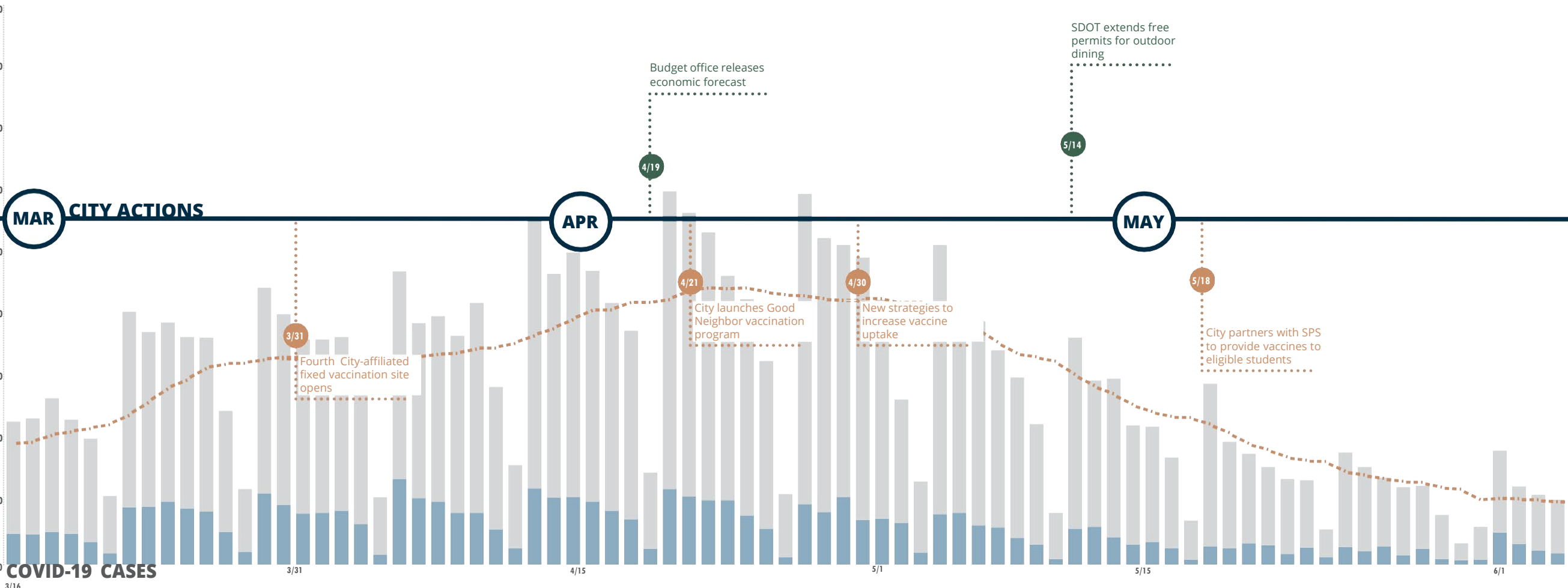
Mar 2021 - Jun 2021 | Last Updated December 22, 2021 | *Note: Some, but not all external events and actions are hyperlinked.*

- Legend - City Actions**
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- Legend - COVID-19 Cases**
- Daily cases (King County minus Seattle)
 - Daily cases (Seattle)
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EXTERNAL EVENTS

- 4/15 All people over 16 years old eligible for vaccination
- 4/23 J&J vaccine re-authorized after 10 day "pause"
- 5/3 Spectator event and religious organization guidance updated
- 5/10 FDA expands Pfizer-BioNTech emergency authorization to children 12-15



COVID-19 CASES

Seattle COVID-19 Response: Summary of Major Milestones

Jun 2021 - Aug 2021 | Last Updated December 22, 2021 | *Note: Some, but not all external events and actions are hyperlinked.*

Legend - City Actions

- Operations and Infrastructure
- Community Needs
- Homeless and Human Services
- Public Safety & Health
- Recovery

Legend - COVID-19 Cases

- Daily cases (King County minus Seattle)
- Daily cases (Seattle)
- 7-day rolling average cases (King County total)

EXTERNAL EVENTS

6/3 Statewide vaccine incentives announced

6/26-28 Seattle area experiences historic heat wave

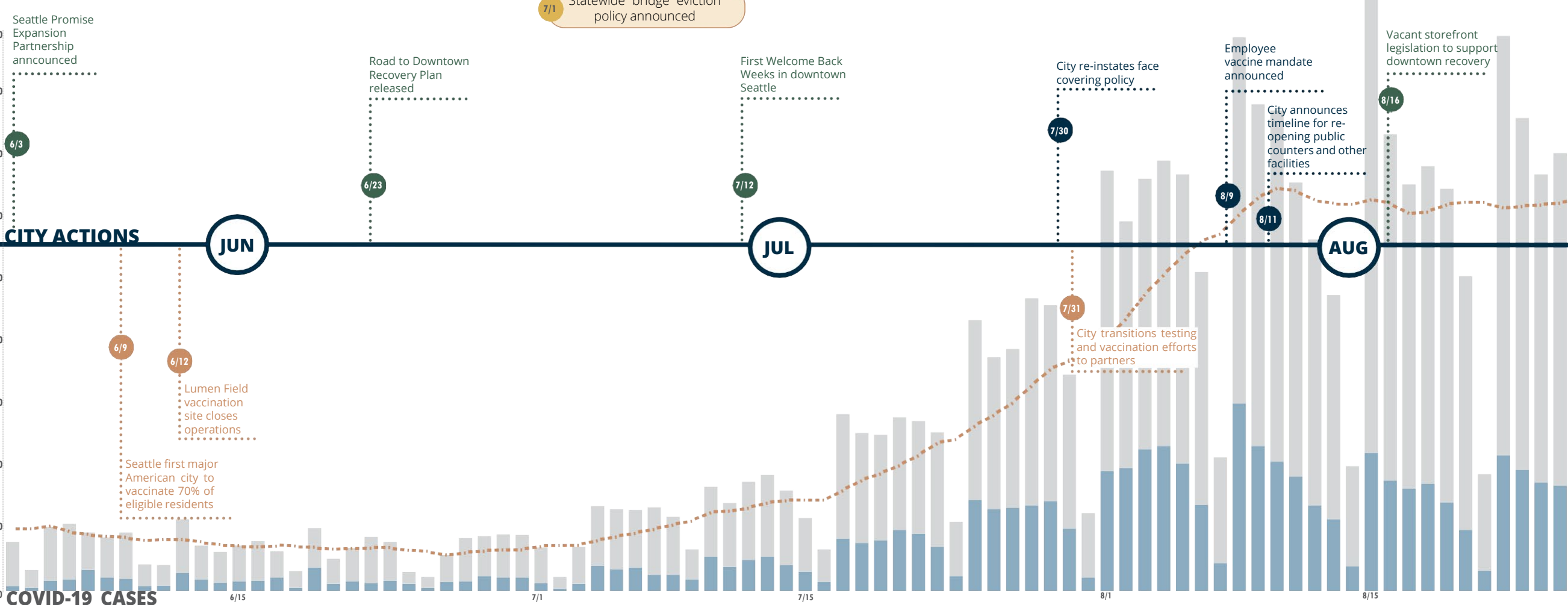
6/30 Statewide economic reopening

7/1 Statewide "bridge" eviction policy announced

8/9 Vaccine requirements for state employees and private healthcare/long term care workers

8/20 Updates to Statewide mask mandate, state employee vaccine mandate

8/23 FDA Grants Pfizer-BioNTech full approval



CITY ACTIONS

JUN

JUL

AUG

COVID-19 CASES

Seattle COVID-19 Response: Summary of Major Milestones

Aug 2021 - Oct 2021 | Last Updated December 14, 2021 | *Note: Some, but not all external events and actions are hyperlinked*

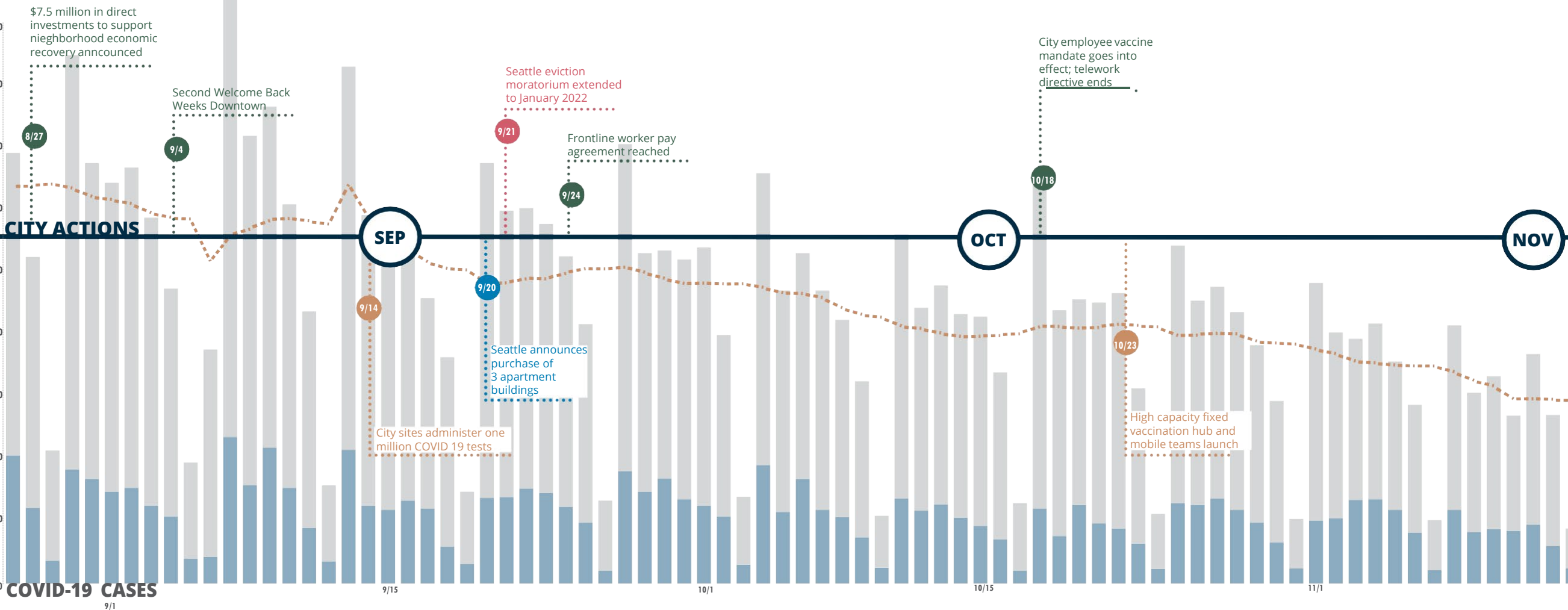
- Legend - City Actions**
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- Legend - COVID-19 Cases**
- Daily cases (King County minus Seattle)
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EXTERNAL EVENTS

- 8/26 Supreme Court ends federal eviction moratorium
- 8/27 \$7.5 million in direct investments to support neighborhood economic recovery announced
- 9/4 Second Welcome Back Weeks Downtown
- 9/6 Federal unemployment benefits expire
- 9/9 Biden supports employer vaccine mandates and issues Federal employee vaccine requirement
- 9/20 Indoor vaccine mandate announced

- 9/20 Seattle eviction moratorium extended to January 2022
- 9/21 Frontline worker pay agreement reached
- 9/24 City employee vaccine mandate goes into effect; telework directive ends



COVID-19 CASES

9/1

SEP

OCT

NOV

9/15

10/1

10/15

11/1