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The Impact of Emergency Preparedness on Improving Recovery, Trust in Government and Employee Morale

Joe DeVries

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The Impact of Emergency Preparedness on Improving Recovery, Trust in Government and Employee Morale

Joe DeVries

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EMPA 396 – Graduate Research Project in Public Management

Dr. Mick McGee and Dr. Joaquin Gonzalez III

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Abstract: In 2020, the Covid-19 pandemic required local governments to quickly shift workforce priorities for extended periods of time while other emergencies continued to unfold including civil unrest in the wake of the George Floyd killing, and, in California, wildfires that were the worst in state history. This paper examines the impact of how local governments prepare their workforces to respond to emergencies, identifying themes that can benefit future emergency planning efforts. The literature review examines past disaster responses, resiliency strategies, employee engagement, and current responses to COVID-19, and informs the theory of change. A local case study to find primary data was conducted using Key Informant interviews and a survey of Disaster Service Workers (DSW) in the City of Oakland and the County of Alameda, California. This study provides findings that can shape disaster preparedness training programs developed by local governments to better respond to future emergencies.

Chapter 1: Introduction

Background of the problem: When the State of California issued a Shelter In Place (SIP) Order on March 19, 2020, cities and counties activated their Emergency Operations Centers (EOCs) to initiate critical tasks: distributing Personal Protective Equipment (PPE) for first responders, health care workers, and essential employees, establishing protocols for maintaining sanitary facilities, and opening testing centers. Following these primary tasks, some jurisdictions then initiated food distribution programs, set up non-congregate emergency homeless shelters, and began to institute a number of new engagement strategies in underserved communities. The civil unrest following the killing of George Floyd in May created a new set of circumstances for EOCs that were already activated. Then in mid-August, wildfire destruction and resulting air pollution in California created another layer of emergency response for local governments. Many were faced with the dilemma of opening Emergency Respite Centers to allow (unsheltered) persons a place to come inside for clean air while still encouraging the population to shelter in place and stay socially distanced.

First responder personnel (Police and Fire) are trained in EOC standards and procedures but with competing emergencies, there is a need for a larger DSW response across all local government departments and agencies. Many Bay Area agencies had not fully developed their DSW programs which caused delays in response (UASI, 2020). Considering that natural disasters are on the rise, increasing at a rate of 50% or more every decade since 1970, a different organizational response is required (Mithani, 2020).

This paper closely examines the City of Oakland's efforts to register, train and activate staff members from across all departments as DSWs and evaluate the effectiveness of these efforts. Research and observations of Human Resource planning, deployment decisions, and

measures to ensure all departments participated in the DSW program equitably informed the conclusions of this paper.

The new DSW assignments created an opportunity for employees whose normal duties were suspended to participate in new meaningful public service. The research in Chapter 4 studied whether these assignments improved staff morale and enthusiasm, how employees respond to an extended emergency, and how local governments can adapt to weave DSW assignments into regular workplans.

Statement of the problem: The COVID19 Pandemic required cities and counties to activate their Emergency Operations Centers for a unique emergency with which few people had prior experience. Challenges presented themselves in activating DSWs to support the effort; systems needed to be put in place including new protections for workers, and conversations with labor unions had to occur. The long-lasting nature of the pandemic as an emergency requires cities to rethink emergency response as a more permanent part of the service-delivery landscape. The specific problem researched was how local governments respond to multiple, extended emergencies and what will make that response more effective.

Purpose of the study: This study evaluates effective ways to implement a local DSW program and the positive impacts in doing so. Its purpose is to assist local governments increase the resiliency of the community during an extended emergency.

Significance of the study: This study identifies obstacles municipalities have faced in responding to a pandemic or other unique emergency. It recommends protocols that will improve the effectiveness and speed of response and recovery, and support increases in trust in government and employee morale. It will recommend that cities use the lessons learned from the

pandemic to improve on the core functions of local government. To the extent that Public Administration involves the planning, organizing, directing, coordinating, and controlling of government operations, this study benefits Public Administration scholars by using literature review and a localized case study to demonstrate effective administration standards. It also benefits local administrators in preparing for future emergencies and disasters.

Research Question: If local governments have prepared workforces ready to shift to Disaster Service Work as part of their regular workplan, what effect will it have on disaster recovery outcomes? Will local governments be better prepared to respond to and faster recovering from a disaster or emergency? Will these measures improve trust in government? Will training and preparedness improve staff morale and enthusiasm?

Theory of Change: As local governments experience multiple, extended emergencies due to global pandemics, climate change, and civil unrest, a workforce that is prepared to shift priorities quickly to serve as DSWs will help communities to recover more quickly, restore trust in government, and improve employee morale.

Assumption: IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans,

THEN they will be better at responding to and faster recovering from emergencies
THEN there will be increased trust in government,
THEN there will be an improvement to staff morale and enthusiasm.

Limitations: This study does not conduct a quantifiable comparison of specific emergency programming across multiple jurisdictions. For example, measuring how many meals a city distributed versus another, or the rates at which testing facilities were opened, or how many tests they performed was not considered but would be relevant as part of continued research. The

unique nature of the COVID emergency that is affecting every local jurisdiction at the same time means there will be ample data available later, capturing what was implemented and whether it was effective. This paper concentrates on the impact of staff preparedness.

Definition of Terms:

1. **Disaster:** A sudden natural or human-made event bringing great damage, loss, or destruction including loss of life and property.
2. **Disaster Service Worker (DSW):** All public employees in the State of California are required to be available to be placed into service during a state of war, a state of emergency, or a local emergency. DSWs can be assigned to perform a variety of functions, requiring registration and training.
3. **Emergency:** The existence of conditions of disaster or of extreme peril to the safety of persons and property that allow government to take certain actions and request additional resources from the state, or federal governments to assist in response and recovery efforts.
4. **Emergency Operations Center (EOC):** A physical or virtual location designed to support emergency response, continuity of service delivery, and crisis communications activities. Staff meets at the EOC to manage preparations for an impending event or manage the response to an ongoing incident.

Expected Impact of the Research: This paper provides recommendations on how local governments can best prepare for and respond to emergencies. Its findings will serve as a reference for current and future local government leaders' emergency preparations, and what the likely outcomes are in regard to the speed of recovery, people's trust in government, and employee morale during an emergency.

Chapter 2: Literature Review

The independent variable of whether a local government has a workforce that is prepared to serve as DSWs as part of their regular workplans, includes the training required to perform DSW tasks and the actual registration and assignment process. Developing that registration process can be as complex as the tasks themselves. Some cities and counties may have an established electronic registration and notification system for DSWs that has already been incorporated into Human Resource functions and agreed upon by labor organizations while others may only address these processes in the midst of a disaster or emergency. This chapter poses each of the study's specific research questions and references literature that provides evidence that answers those questions and supports the hypothesis. The literature includes scholarly articles and government reports and examines past responses to disasters at the local, state, and federal level.

Will a prepared workforce equate to a more effective local government response to emergencies and a faster recovery? Concluding that cities will be better in their response, in the article, "Human Resources And Emergency Planning: Preparing Local Governments For Times Of Crisis" (Mann, 2014) the author looks at whether local governments involve their Human Resource Departments in the emergency planning process. Mann concludes that cities that involve their HR Departments deeply in emergency planning are much better prepared for difficult HR issues in real time during an actual emergency (Mann, 2014). Supporting the position that local governments should incorporate emergency preparedness into the overall workplan of their employees, the article "Quality Improvement in Public Health Emergency Preparedness" (Seid, 2007) concludes that although employees see preparedness training as extra work beyond their normal scope, they are able to better respond to emergencies because of it

(Seid, 2007). In “Adaptation in the Face of the New Normal” (Mithani, 2020) observes that by relying on specific dedicated resources instead of sharing skills and knowledge across the workforce, organizations reduce the extent to which they can respond to a threat.

“Factors Affecting City Government Emergency Preparedness” (Chen, 2009) acknowledges that cities are expected to be the first responders in emergencies and developed a survey instrument to assess how well California Cities prepare for emergencies. Chen evaluates how independent variables such as the city charter, staffing levels, and training affect preparedness. In a small case study, Britta Lokting highlights the experience of the small coastal town of Manzanita, OR in her article, “They Were Waiting For The Big One. Then Coronavirus Arrived” (Lokting, 2020). Residents, led by a city council member, began taking disaster preparation seriously after a damaging storm hit the town in 2007. A network of people joined in Community Emergency Response Team (CERT) training and have woven disaster preparation practices into their daily lives; the model even spread to nearby towns. This preparation helped them respond to the COVID19 Pandemic this past year. Authors Abdul-Akeem Sadiq and John D. Graham, in their work, “Exploring the Predictors of Organizational Preparedness,” (Sadiq, 2016) further support this theory through their examination, showing that organizations that have experience with past disasters are more likely to be prepared for future ones.

Will a prepared workforce equate to faster disaster recovery? A community’s ability to recover from a shock to its system is most commonly defined as its resilience and many initiatives have emerged in the past 5 years promoting resiliency in local governments. Resiliency can only be achieved through a “strong connection between neighborhoods and community organizations, and between a diversity of local and non-governmental groups” (Madrigano, 2017). A resilient workforce must reach across disciplines and include far more

than first responders, to withstand significant shocks. In the article “Shock Leadership Development For The Modern Era Of Pandemic Management And Preparedness” (Shufutinsky, 2020) the authors argue that in order for organizations to recover from the current pandemic and future expected shocks to our systems, a specialized, preparedness-based model of leadership development needs to be implemented, suggesting that the current backlash against failed leadership in many instances during the current pandemic are due to an historic lack of investing resources in preparedness training at the leadership level of organizations (Shufutinsky, 2020).

“State of the Art in Risk Analysis of Workforce Criticality Influencing Disaster Preparedness for Interdependent Systems” (Santos, 2014) explores the impact of workforce disruption and availability in the aftermath of pandemics and hurricanes and how that availability affects recovery. Citing Hurricane Iniki and the after-effect on unemployment caused by damaged infrastructure, the article noted that clean water disruption led to outbreaks of diarrhea and stagnant water led to Dengue and Malaria contributing to workplace absenteeism. (Santos, 2014). The conclusion they draw is that local government coordination is essential.

Will a prepared workforce equate to increased trust in government? Trust can be evaluated by people’s perceptions that the government is capable and reliable in its ability to deliver needed services. In “The Performance–Trust Link: Implications for Performance Measurement” the authors conclude that an important tactic to improve trust in government is directly through citizen participation in the evaluation process or indirectly by improving citizens’ perceptions of government performance (Yang, 2006). It also can be quantified by measuring people’s perception that those providing the services are concerned about and motivated to protect the welfare of those they serve. Simply put, what level of benevolence the agency holds for those it serves (Grimmelikhuijsen, 2017). Grimmelikhuijsen cites McEvily and

Tortoriello and their analysis of several ways to measure trust as validation that perception of benevolence, and capability and reliability are validated (McEvily, 2011).

“Community engagement in disaster preparedness and recovery: A tale of two cities—Los Angeles and New Orleans” (Wells, 2013) assesses community engagement and finds that certain subgroups are more vulnerable when exposed to disasters including children and under-resourced communities of color, putting them at high risk for poor outcomes. Wells notes that national policy supporting “Community Disaster Resilience” (CDR) concludes the work of building trust can best be done at the local level (Wells, 2013).

A survey of 1,960 public, private and nonprofit employees in the United States evaluated differences between how private, non-profit, and public sector employers prepare their workforce for disasters. It found that public and nonprofit organizations are significantly more likely to engage in preparedness activities, providing written information on what to do during a disaster, where to meet after a disaster, how to communicate during a disaster, and talked with employees about disaster preparedness. This speaks to the mission of public and non-profit organizations as public servants feeling an obligation to serve that is not (necessarily) shared in the private sector. (Tyler, 2020). This commitment, when demonstrated during an emergency can improve trust in local government.

“Rebuilding trust in government: Four signals that can help improve citizen trust and engagement” (Eggers, 2021) suggests governments can build and sustain citizen trust by focusing on four areas: humanity, transparency, capability, and reliability. (Eggers, 2021). The researchers found that trust in government can be improved through specific activities that are most impactful at the local level where people can witness government action firsthand. Conversely, state, and federal response to disaster is often only observed from afar, through news

or media sources and people do not have a direct involvement in the decision-making process as they do locally. An assessment of Public Health Departments' emergency response draws the same conclusion that local engagement with community is essential and "training employees in participatory methods is needed to bridge technical knowledge in emergency management to daily practice" (Gamboa-Maldonado, 2012). A prepared and well-trained DSW workforce during a disaster can demonstrate competence and reliability when people need it most, providing the largest gains in trust. Performance measurement can improve citizen trust in government directly through citizen participation in the evaluation process or indirectly by improving citizens' perceptions of government performance.

Will a prepared workforce equate to an improvement to staff morale and enthusiasm? Measuring staff morale and enthusiasm experienced by DSW workers involved in emergencies shows that preparation and training lead to high morale among workers. The authors of "Healthcare workers experience in dealing with Coronavirus (COVID-19) pandemic" (Almaghrabi, 2020) surveyed 1036 healthcare workers, including nurses and clinicians who participated in this study with a high response rate. Of those surveyed: 74.3% agreed to work overtime, 93.1% understand why they should stay past their shift end, and 93% of participants know their responsibility to report to work in the event of a disaster. Also, more than 75% of study participants either strongly agreed or somewhat agreed on what they are supposed to do in the event of a disaster (Almaghrabi, 2020).

The study found that workers that did not report to work cited concerns about spreading infection to their families, a lack of PPE, and their own safety. But most notably it observed:

"Many studies suggest poor willingness to report to duty during virus pandemics is caused by a lack of staff preparedness/education, provisions for PPE, vaccines, crisis counseling, and family preparedness with social support... Moreover, frequent exposure

to disaster preparations, such as disaster drills and educational sessions by the emergency and disaster management of the hospital will be helpful to increase the awareness and responsibility among the healthcare workers”

The demonstrated effect of a prepared workforce is measured in this study, showing that workers will extend their shifts, work overtime, and commit themselves to disaster response as long as they receive proper protection and training. A Government Accounting Office review of FEMA Workers from 2017-18 found that staff who were designated as qualified who lacked the skills and knowledge to perform their positions, negatively affected disaster assistance delivery, staff workload, and morale (GAO, 2020). In “The Road Map to Preparedness: A Competency-Based Approach to All-Hazards Emergency Readiness Training for the Public Health Workforce” (Parker, 2003) the authors note that understanding role responsibility is critical to productivity and that well developed training programs are met with increased enthusiasm by workers.

In summary, the literature review shows consistent evidence that preparedness programs among local government workers do allow communities to recover faster and better from emergencies and that trust in government and staff morale are improved through this preparation. An interesting sub-theme that the literature reveals is the significance of *local preparation* on trust in government as people are inherently more likely to work and build relationships with local government workers as opposed to those serving at a state or federal level. This underscores the importance of this study and its effort at gathering primary data through a closer look at the City of Oakland, located in Alameda County, CA.

Chapter 3: Research Methods

Introduction: This study uses an Assumption-based format, deploying quantitative and qualitative research methods by gathering data from Subject Matter Experts (SMEs) in coordinating local government response and the experience serving as DSWs during the COVID-19 pandemic. The goal was to determine if the data supported the theory of change that a prepared workforce allows local governments to respond better, recover faster, and improve public trust and employee morale during a disaster/declared emergency. A survey was deployed that used a Likert Scale to assess employees' response to questions that demonstrate employee morale through examining satisfaction, the sense of well-being, and outlook on the job. Those quantitative answers are evaluated alongside qualitative themes identified through Key Informant Interviews. This section provides the reader with a high-level view of the research design. Identifying themes in the Key Informant Interviews and matching those themes to measured survey respondent answers provide conclusions that will be useful for local administrators.

Research question and sub questions: If local governments have prepared workforces, ready to shift to Disaster Service Work as part of their regular workplan, what effect will it have on Disaster Recovery outcomes? Is there evidence that local governments with training and preparedness plans respond better and faster to a disaster or emergency? Will they improve trust in government due to these programs? Last, will preparedness and the flexibility to quickly shift to disaster service work improve staff morale and enthusiasm?

Theory of Change and Assumptions: As Cities and Counties experience multiple, extended emergencies due to global pandemics, climate change, and civil unrest, they need a workforce that is prepared to shift priorities quickly to serve as disaster service workers (DSWs) in order to recover more quickly, restore trust in government, and improve employee morale.

Independent Variable:

If local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans,

Dependent Variables:

Assumption 1 (A1): Then they will be better responding to and faster recovering from emergencies,

Assumption 2 (A2): Then there will be increased trust in government,

Assumption 3 (A3): Then there will be an improvement to staff morale and enthusiasm.

Operational definitions:

- 1. Disaster Recovery:** A local government's effort to bring functions back to normal in response to a disaster and can include both government services and programs as well as assistance to the private sector.
- 2. Trust in Government:** People's perceptions that the government is capable and reliable in its ability to delivery needed services.
- 3. Staff/Employee Morale:** Employee morale is based on the satisfaction, outlook, and feelings of well-being an employee has while at work.
- 4. Prepared workforce:** A set of employees that have been registered, trained, and given the necessary resources to serve as DSWs whenever necessary and for a variety of emergencies.
- 5. Disaster service workers (DSW):** All public employees in the State of California are required to be available to be placed into service during a state of war, a state of emergency, or a local emergency. DSWs can be assigned to perform a variety of functions, require registration and training.
- 6. Part of their regular workplans:** This means that the ongoing workplan of an employee, regardless of whether a State of Emergency has been declared, included some

portion of work on a monthly, quarterly, or semi-annually basis includes training for or performing DSW assignments.

7. **Faster disaster recovery:** A decrease in the amount of time it takes a local government to bring functions back to normal in response to a disaster
8. **Improvement in staff morale:** An increase in a worker's level of satisfaction, outlook, and sense of well-being while performing their work duties.

Population sampling strategy: The gathering of primary data was through a Survey of Disaster Service Workers in the City of Oakland and Alameda County and through Key Informant Interviews of City of Oakland staff. The survey was offered to City and County DSW staff that served in various roles during the 2020-21 activation of EOCs at the City and County level. These include workers that were assigned to: The Alameda County Community Food Bank to support food operations, City food distribution and delivery sites, COVID-19 testing and vaccination facilities. It also included DSWs that were activated to serve during civil unrest activations of the EOC and to operate clean-air respite centers during the wildfire events of 2020.

The key informants included City of Oakland leadership and staff involved in the direct management of the Emergency Operations Center (EOC) during the same period and activations.

Procedure, Data Processing, and Analysis: The Instrumentation utilized was a combination of Key Informant Interviews and an online, anonymous survey using Survey Monkey and included quantitative questions with answers that have been cross tabulated and graphed to identify significant trends. The survey had open-dialogue boxes for respondents to add narrative responses. These responses are aligned with themes that are identified in the key

informant interviews. The answers provided in the Key Informant Interviews provide context to the quantitative data and inform the recommendations made in Chapter 5.

The qualitative data gathered through KI Interviews and open-ended survey box responses were used to either support or challenge the assumptions in this study. In tandem with that analysis, the quantitative responses were tallied and cross-tabulated to identify trends that support the same themes that are supported by the qualitative data. For example, managers identified the need for a registration system prior to activation of the EOC. Surveys showed that workers who used that system indicated they felt registration and assignment was very easy and efficient. Both qualitative and quantitative evidence therefore supports the establishment of such systems to improve a local government's emergency response.

Internal and External Validity: This research's internal validity is based on asking people directly involved with DSW work and Emergency Operations in Oakland and Alameda County their opinion as to whether their agency was prepared for the pandemic and subsequent emergencies, whether that preparedness led to a faster recovery, and the impact on trust in government and employee morale. The survey is anonymous to allow complete honesty from respondents without fear of retribution. However, because the survey is voluntary, it is possible that those who are more likely to respond will be persons who viewed their DSW experience favorably and therefore could skew the responses favorably, for example, in regard to employee moral or enthusiasm about the work. Also, those KI's whose job it is to plan for emergencies and manage responses may display a bias to protect their agency from perceived criticism.

This survey instrument could be applied to other local jurisdictions if attempting to measure the same assumptions; whether a workforce was prepared and how quickly its city

recovered, and the impact on trust in government and employee morale. These are topics that can be measured in any city or county and therefore these results will have useful external validity.

Limitations: The survey and interviews demonstrate the opinion of individuals involved in the emergency response to the pandemic and other emergencies. It is not an actual measurement of the speed of recovery of a local jurisdiction in comparison to others. More research could be conducted to determine what quantifiable measurements can be used to measure recovery speed. Similarly, more exploration is warranted of standards to measure trust in government. Last, this paper examines the 2020-21 response to the COVID-19 pandemic which is unique in its scope and duration. Comparisons to other emergencies or disasters is possible and performed in the literature review, but a true comparison to local government responses to other global pandemics are not readily available or valid as the most recent pandemic of this nature took place 100 years ago.

Conclusion: The findings in this research are internally valid as the data was gathered from subject matter experts in the jurisdiction being studied. It is applicable to the City of Oakland in its assessment of its emergency and disaster planning and can be externally useful to other jurisdictions examining the same content. Its limitations include the unique historical circumstance being evaluated and a need to develop additional metrics to assess a government's speed of recovery.

Chapter 4 Results and Findings

This chapter first explores the quantitative data gathered from a survey of Oakland and Alameda County DSWs who served when the City's Emergency Operations Center (EOC) was activated during the 2020 emergency created by the COVID19 Pandemic and subsequent emergencies. It will then present the background of the Key Informants who served in various leadership and management roles during the response and were interviewed to discuss the assumptions and synthesize the quantitative data with the qualitative data gathered during the interviews. The chapter is organized by each of the assumptions, starting with an overview of the EOC efforts, then an assessment of the survey data with graphs to demonstrate those findings, followed by themes from the interviews supporting that assumption. Last, each section will identify any data that challenges those assumptions and indicates an area worthy of further exploration.

EOC Overview

The EOC was activated on March 12, 2020, and as the Shelter In Place (SIP) Orders were issued by Governor Newsome on March 17, 2020, the EOC became the operating headquarters for the entire City of Oakland. The City Administrator and several Department Heads and support staff worked from this location for the first several weeks of the SIP. As is typical in EOC Activations, daily Situational Reports (Sit Reps) were given while the Mayor and other key leaders either participated in person or remotely. This activation was unique in its duration and 15 months later the City is still under a State of Emergency even though all employees involved in the EOC activation have primarily returned to their normal work duties. The activation led to setting up public COVID-19 testing facilities, decontamination centers for first responders that were exposed, and multiple food distribution efforts. The activation also allowed for the

implementation of other unique programs such as closing dozens of streets to allow for more outdoor recreation (known as the Slow Streets Initiative), deploying Park Ambassadors to secure recreation facilities and prevent gatherings, and organizing a core of volunteers to make phone calls into impacted neighborhoods to identify people with special needs. Later in the summer, as civil unrest unfolded in the wake of the George Floyd murder, the EOC was partially activated for law enforcement to maintain order during massive protests. Last, in the late summer, wildfires ravaged California and the EOC/DSW structure was used to open Respite Centers to provide unsheltered persons a place to go indoors with air conditioning and filtered air. Throughout these activations, DSWs were deployed and today some efforts are still operational. For example, over 10,000 meals per week are still being distributed in the community either from libraires or delivered directly to seniors' homes, PPE supplies are still sent to departments in need, and pop-up vaccination sites are being supported.

Key Informant Background

This study interviewed 10 Key Informants who served in various leadership and implementation roles within the structure of the City's EOC. Below is a summary of those who were interviewed to provide the reader with an understanding of the variety of people across the local government spectrum that participated in the emergency response and the programs they implemented.

Assistant Fire Chief Robert Lipp normally oversees technical operations for the Fire Department and during the initial activation of the Emergency Operations Center (EOC) was the acting emergency manager or "Incident Commander" to whom the entire EOC structure reported.

Battalion Chief Tracey Chin whose primary role is overseeing first responders was assigned as the Supply Chief during the EOC activation and managed the storage and distribution of critical supplies such as Personal Protective Equipment (PPE) to City departments.

Assistant Emergency Manager Olga Crowe for the Emergency Management Services Division and during the EOC activation coordinated EOC operations for the Planning Section. Prior to this she worked with the Red Cross for over ten years in Emergency Response.

Emergency Planning Coordinator Brianna Horton also with the EMS Division but when the pandemic started she was an Executive Assistant to the Director of the Department of Transportation. She was assigned to co-lead the DSW Unit, building and managing the system that people used to register and receive assignments.

Executive Assistant to the Public Works Director Tami Lawrence was assigned to Co-lead the DSW Unit with Brianna Horton. Together they built a registration system that registered and managed close to 400 workers to be available for activation. This included tracking of time sheet coding and maintaining records to track reimbursements.

Assistant Director of Oakland Public Works (OPW) Richard Battersby was initially assigned as the Logistics Section Chief of the EOC which is the traditional role of OPW but after an early reorganization was assigned to lead the Facilities group, which was responsible for cleaning, sanitization, safety, standing-up of additional work sites, and modification of City facilities to protect essential workers.

Director of the Department of Transportation (OakDOT) Ryan Russo was rotated in as the Logistics Chief for short periods of time during the beginning of the activation. His team

implemented the Slow Oakland Streets Initiative and also maintained essential operations such as street repair and repaving during the SIP.

Controller Stephen Walsh represented the Finance Department and served as the Acting Section Chief of Administration & Finance. His team was responsible for ensuring purchases and expenditures could be made in a timely manner and created the apparatus to ensure reimbursements later from the Federal Emergency Management Agency (FEMA).

City Administrator Analyst Rose Rubel was the Executive Assistant to the Director of Public Works when the EOC was activated. She was assigned as the Inventory Manager, overseeing the procurement and distribution of all necessary supplies, PPE, items needed to set up testing facilities, and supporting food distribution operations. This involved the smooth distribution of tens of thousands of units per month of items such as masks, gloves, and bottles of hand sanitizer.

Supervising Librarian Derrick DeMay was assigned to implement and manage a food distribution system to serve especially hard-hit communities including a meal delivery program for vulnerable, home-bound senior citizens. At the peak of the effort, the City coordinated the distribution of 88,000 meals per week to families in need.

Public Works Watershed Program Specialist Michael Perlmutter served as a Disaster Service Worker from June-August, 2020 and was assigned to facilitate documentation of hours and efforts by the Emergency Operations Center staff. Documentation is to be used in incident analysis and future incident planning, as well as cost recovery from FEMA.

The Mayor's Policy Director on Mobility and Interagency Relations Warren Logan served as the Community Resilience Chief in the Operations Section. His team was responsible for delivering testing sites on City property, launching the Slow Streets and Flex Streets

Initiatives (two program that closed portions of several streets to allow for expanded outdoor recreation areas.

Each of these Key Informants had unique observations in support of the assumptions which will be discussed below. They identified subthemes that can guide more impactful recommendations at the conclusion of this study.

Assumption #1

IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, THEN they will be better at responding to multiple extended emergencies, and faster at disaster recovery.

1. Quantitative Results

As upper part of **Chart 1** below indicates, two thirds of survey respondents (30/45) that did receive prior DSW training in disaster preparedness felt somewhat or very prepared to serve compared to only 41% (10/24) of workers that did not and when an online registration system is factored into the equation the results show an even greater sense of preparedness. The lower part of **Chart 1** shows those with an online registration system and training top out at 74% (23/31) with those that had neither reaching only 28% (2/7). 66% (31/47) of workers who reported that their agency had an online registration system when they were assigned found the process to be somewhat or very efficient and easy whereas only 45% (9/20) of workers without an online system felt this way. Getting registered and assigned quickly is a critical piece to measuring an agency's ability to respond to an emergency. 80% of those that had neither an online system nor training felt that more training and preparedness would have made their agency somewhat or significantly faster and effective at its response and recovery. Only 63% of those that already had both training and an online registration system felt that way.

Chart 2 shows that workers with no prior training felt more strongly that additional training would lead to a faster recovery by their agency with 75% (18/24) believing their agency would be either somewhat or significantly faster and more effective while only 56% (25/45) of trained workers felt that way. This indicates a strong support for some level of training but once that level is reached, the return on the training is reduced. Those with training did not think the response would have improved by as great a margin as those without training believed would be the case. This was supported by KI Interviews which will be discussed below.

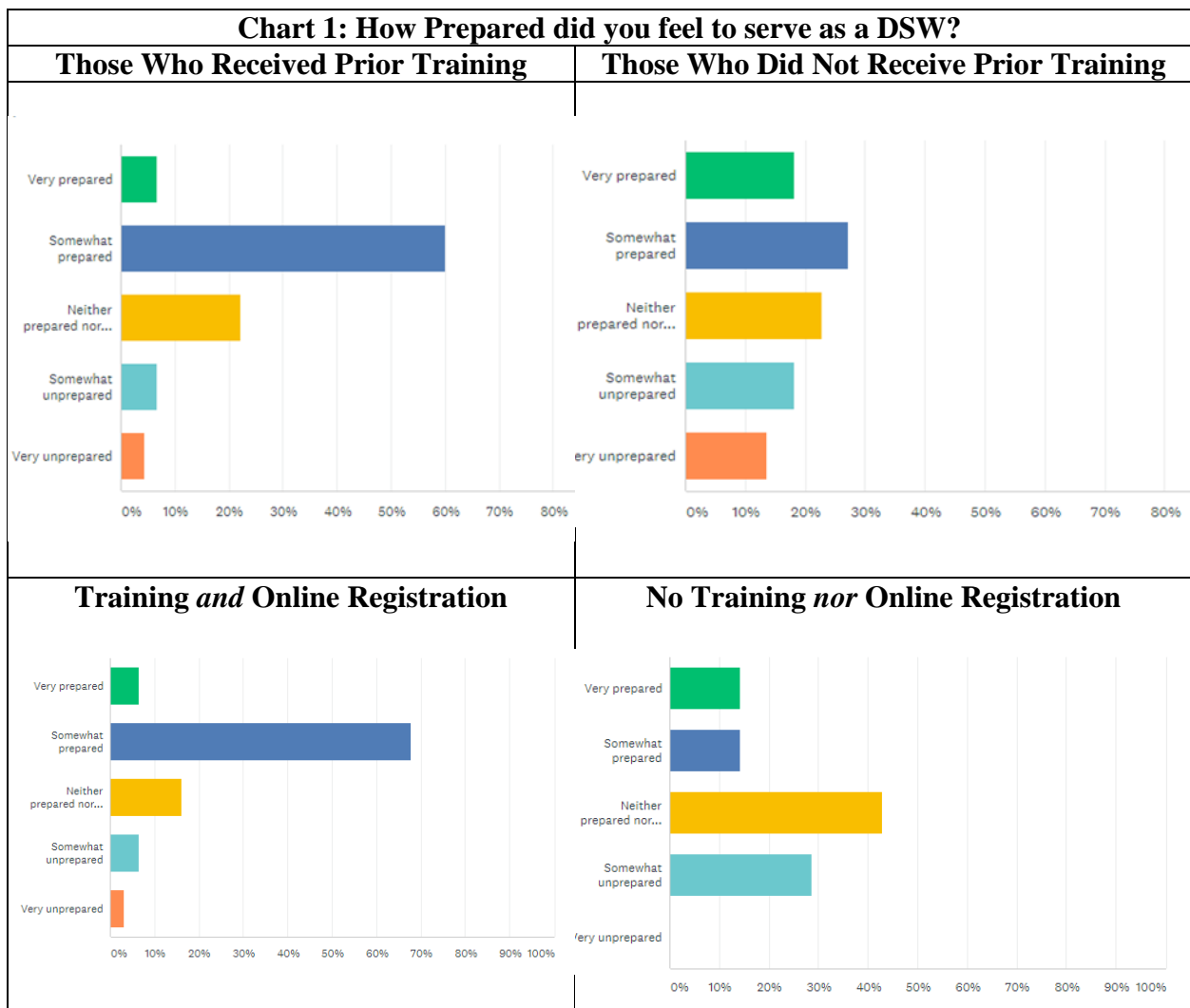
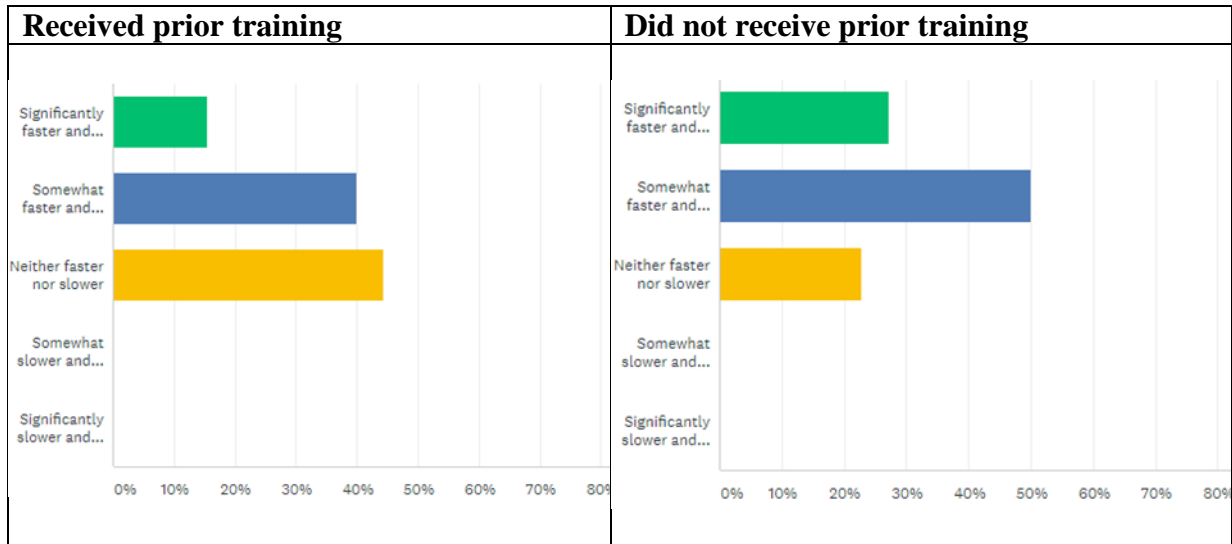
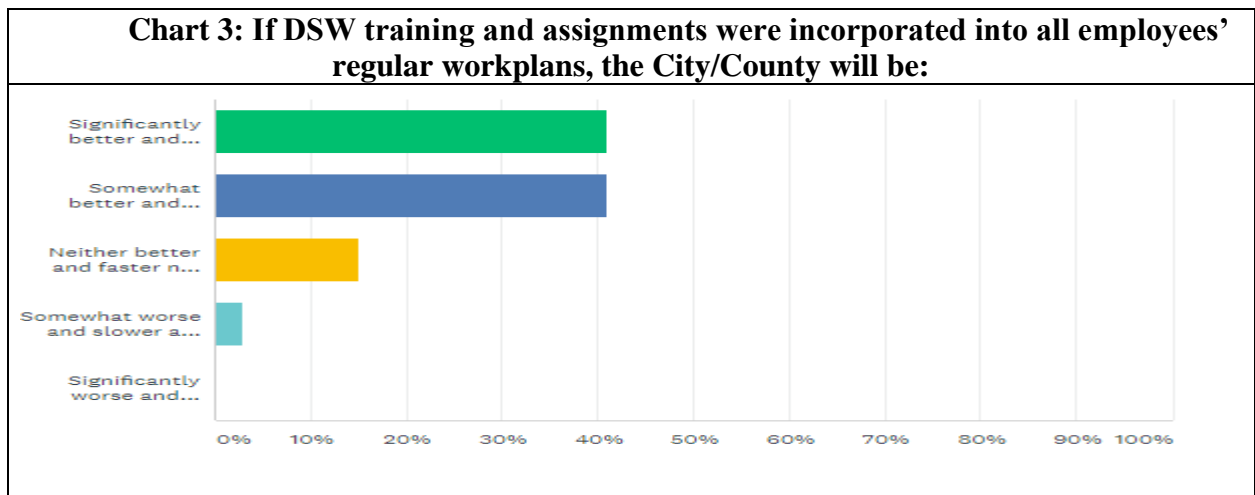


Chart 2: If my coworkers and I had more training and preparation before being assigned as DSWs, the City/County’s disaster response and recovery would have been:



(N= 70)

A further indication of the importance of training shows up when respondents were asked the value of incorporating DSW training and assignments into all employees’ regular workplans (Chart 3). 78% (35/45) of those with prior training and 87% (21/24) of those without prior training felt their agency would be somewhat or significantly better and faster at responding to emergencies. When asking workers who felt somewhat or very unprepared to serve as a DSW, a remarkably high 92% (12/13) responded this way.



(N=69)

Alignment with Literature

These responses align with the scholars cited in the literature review in chapter two. Authors found that a resilient workforce must reach across disciplines and include far more than first responders, to withstand significant shocks and for organizations to recover from the current pandemic (Shufutinsky, 2020) and that local governments should incorporate emergency preparedness into the overall workplan of their employees (Seid, 2007). Although employees see preparedness training as extra work beyond their normal scope, they are able to better respond to emergencies because of it (Seid, 2007). (Mithani, 2020) observed that by relying on specific dedicated resources instead of sharing skills and knowledge across the workforce, organizations reduce the extent to which they can respond to a threat.

2. Qualitative Results

The Key Informant Interviews supported the assumption that preparedness would improve the effectiveness of the response and the speed of recovery and identified some sub themes that will focus the conclusions of this study. All KIs answered that if cities and counties implement workforce disaster preparedness training, public service delivery *will be more resilient*, with one exception who noted that it depends on the quality and frequency of the trainings. Similarly, the KIs believed that training would allow operational *recovery to be faster*. Two sub themes emerged during the interview process: the amount and type of training needed received varied responses and having *systems and processes in place* prior to an emergency was stated to be as important as training by every person interviewed.

DSW Training

The amount and type of training perceived to be necessary varied depending on the respondents. Fire Department Staff who are involved in Emergency Management on a regular basis placed a greater emphasis on the need for ongoing training. Assistant Chief Lipp advocated

for ongoing training that would include tabletop exercises and hands on opportunities for City staff on an annual basis. He stated, “it does a disservice to the work to think a four-hour training ten years ago will equip a person to step up when an emergency occurs today.”

Battalion Chief Chin observed that operationalizing for first responders and other front-line workers who are on-call such as public works staff is easier because they are trained to provide an immediate response when one is needed on a daily basis. Non-first responders may not have the same experience with a chain of command, or the structure that first responders are so practiced at using. She noted that the activations in 2020 allowed a broader cross section of the City’s workforce to become more prepared for future emergencies which will lead to the organization’s recovery being faster. The most important training being to have people understand and be fully aware of what would be expected of them as DSWs.

A counter argument in favor of more limited training that emerged was that it was hard to predict what type of DSW work would be needed during a pandemic and therefore it would have been difficult to anticipate what to train people to do. Also, the work that was required of most DSWs was not overly complex and it took little training to get someone prepared to work. Olga Crow cited the opening of Respite Centers during the wildfire events later in the summer as an example. Staff that were called in to work at those centers, received what is called “just in time training” when they arrived at the site and within an hour were ready to open.

Derrick DeMay noted that while preparing to open food distribution facilities, he was more concerned with what locations he would use and how to acquire fleet vehicles and refrigerated trucks for safe food delivery and less concerned with whether food distribution should be classified in the EOC structure as being under the Logistics Section or the Operations Section or how to fill out an ICS-214 form (a requirement to obtain FEMA reimbursement).

Systems and Process

Every interviewee responded that having *systems in place* ahead of time such as the on-line registration that was built, and clear expectations about roles and responsibilities for DSWs was equally if not more important than increased training. Olga Crowe, who previously worked for the Red Cross and was brought on staff as the Assistant Emergency Services Manager, stated, “Having a three-ring binder of 500 pages is not the solution. But knowing what the plan consists of and what the expectations are and what everybody's areas of responsibilities are or will be, is essential.” Because the City had not activated its DSW system in thirty years, many people across the organization were unfamiliar with the EOC structure and the responsibility of all employees to be available to serve as DSWs. As Rose Rubel stated, “you take an oath to be a DSW when you are first hired but you don’t really think about it again, if you do, you assumed it would be an earthquake or a fire, not an emergency that would span a year or more.” Rose is still serving as the Inventory Manager, fulfilling weekly orders of PPE for departments while performing her regular duties.

Michael Perlmutter summed up the need for systems in place as follows: “In advance of a disaster, it would be helpful for cities to inventory their services and categorize which are essential and why. It would also be helpful to inventory special skills such as language, medical, etc. to know how these might be deployed during a disaster. In many cases workers may have relevant skills to a disaster that are not related to their everyday jobs. It would also be helpful to inventory possible constraints (distance to work, bridges to cross, family to care for, health conditions, etc.) to know who might not be able to serve.” Other KIs also identified the need for an employee to feel that their family is prepared, protected, and safe at home in order for them to feel comfortable coming to work.

Brianna Horton was called in as a DSW in the first two weeks of activation and was charged with putting eligible employees for DSW work into a registration system and then assigning them the work that needed to be done and monitoring and tracking that work. She described it as really quick matchmaking and stated it was less about the training, it was more so about the processes and she noted, there was a lack of process. Once the on-line system was built and the decisions were made, deploying DSWs effectively was successful. Had those systems been in place ahead of time, the entire response would have been faster.

Finally, several interviewees made an observation about having systems in place that will be entitled “Effective Problem Solving,” as three interviewees used that phrase unsolicited when describing what worked well at the EOC. Rose Rubel pointed out that if regular city functions could be managed with that same mentality the City’s entire structure would work better. Ryan Russo noted that this is the real benefit of working in the EOC, making those connections to be able to effectively problem solve later. Last, Warren Logan mused that this type of problem solving needs to happen across agencies in considering his partnership with the County.

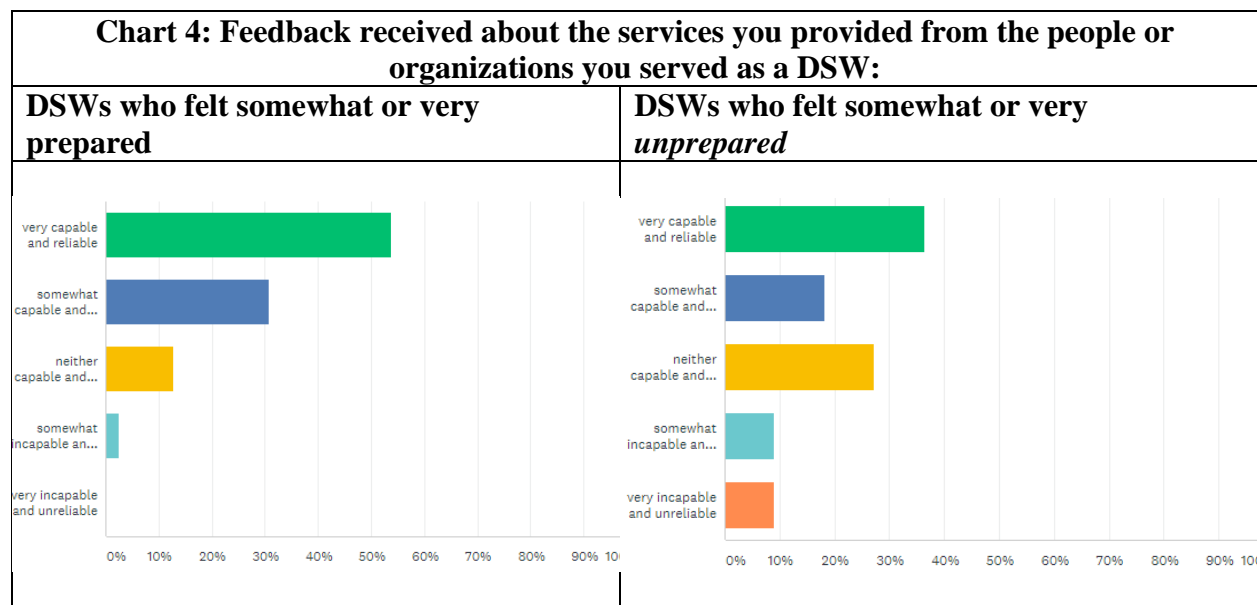
Assumption #2

IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, THEN there will be increased trust in government.

1. Quantitative Results

There are two ways this project evaluates trust in government through the experience of the DSWs: First is measuring people’s perception that the services they receive are reliable and capable. Second is measuring people’s perception that those providing the services are concerned about and motivated to protect the welfare of those they serve. Simply put, what level of benevolence the agency holds for those it serves. 77% (51/66) of all DSWs reported the feedback

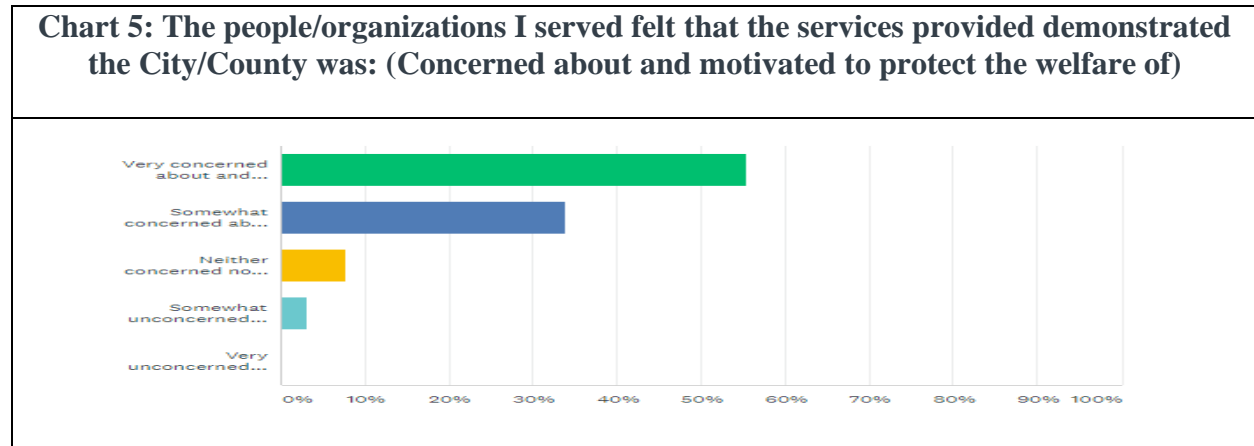
they received about the services they provided described those services as somewhat or very capable and reliable. But for those with prior training the total grew to 82% (36/44) and for those who had no previous training the combined total dropped to 68% (15/22). This is an indication of the value of training in the perception of capability and reliability. Conversely, when DSWs who felt somewhat or very unprepared to serve responded, the total drops to only 58% (7/12) and for those who felt somewhat or very prepared, the number jumps to 85% (33/39) of respondents. As a measure of trust in government, the measure of capability and reliability of the service shows that more trust can be gained if the workforce is prepared (**Chart 4**) below shows the sharp decline that accompanies a decline in how prepared the workers feel.



(N=66)

To measure benevolence, the survey asked about the perception of those served and whether the services they were provided demonstrated the City/County was somewhat or very concerned about and motivated to protect the welfare of the public. Overall, 90% (61/68) of DSWs reported this to be the case (**Chart 5**) but that number grew to a high of 95% (41/43) for those with prior training and fell to 79% (19/24) for those without prior training. Even for

employees who felt somewhat or very unprepared to serve, the total was still a solid 85% (11/13) showing that people perceive all DSWs to be caring and motivated even if they are not fully prepared or capable.



(N=68)

This factor shows that governments need merely to respond with some level of service in order to demonstrate benevolence to the people it serves. Even those who felt unprepared reported that the service was perceived in a positive manner. The message to local government here should simply be, “Do Something!”

Alignment with Literature

These findings align with the research explored and scholars cited in the literature review in chapter two. Researchers found that trust in government can be improved through specific activities that are most impactful at the local level where people can witness government action firsthand. (Eggers, 2021). Also, public sector organizations are far more likely to provide information and services during an emergency and this demonstrates an obligation to serve (Tyler, 2020) this obligation can be defined as benevolence.

2. Qualitative Results

The KIs who participated generally thought that the City's response would increase trust in government, but some felt it was a limited impact. Richard Battersby noted, "Observing and benefitting from a rapid and focused response including test sites, shelter locations, food distribution and vaccination sites most certainly increased trust in local governance capacity. It was apparent via television and Internet that not all municipalities were able to muster responses as quickly and comprehensively as the City of Oakland was able to execute thanks to the EOC and DSW staff."

Conversely, Stephen Walsh commented, "I'm not sure it made a difference or that residents understood government's role in food distribution or other disaster response activities." His skepticism underscores a theme that the City does not tell its story well. Other KI's found that the people they served were extremely grateful and expressed a strong sense of satisfaction with the service they received. However, people who did not need services were largely unaware of what was being done and therefore would show no gain (or loss) in trust for government. Rose Rubel commented, "I feel like they have to sort of see it, hear it, feel it, touch it, experience it first themselves or at least hear of others experiencing it and benefiting from it to gain trust." She equated this to the City's Public Works Department performing free bulky waste drop off programs—unless you participated and benefited from dropping off waste, you didn't really know what a great program it was and if you still see illegal dumping in your neighborhood, you may not even know what the City is doing to address it, diminishing your trust in government.

As Derrick DeMay noted, "the people receiving the services represent a very small percentage of the population and they loved it but who knows if everyone else even knows what we did." He went on to note that those people that did receive services were emphatic about the benefit and more likely to seek help from the City in the future. He noted that many families that

came to the library to pick up food he had never seen before but now they began to see the library staff as allies and will ask for help with things they never would have sought from the library prior to this experience. In summation of the likelihood that the City's efforts increased trust in government, Michael Perlmutter said, "Oakland need to do a better job telling its story."

Highlighting the impact emergency response had on regular core functions and citizen perception of the City's capability and reliability, Tami Lawrence observed, "Public Works employs staff who are most-often considered essential workers. Most of our staff members continued working with slight modifications to their schedules during the pandemic to provide uninterrupted services to our community. There was little in the way of complaints from citizens due to our department maintaining some semblance of normalcy. With the help of the EOC ensuring our essential workers had the PPE they needed to perform their jobs safely, we soldiered on." Here she observes the potential for a poor response to cause a decrease in trust—had normal operations begun to fail, a wide cross section of the population would notice.

Expanding on the idea that a prepared workforce during emergencies will improve trust during regular times, Warren Logan commented on the need to train people on effective problem solving during the EOC activation and post-emergency. As he was coordinating with County health officials on establishing testing sites, he needed to understand the County governance structure to quickly identify needed resources. That ability was critical to a fast and effective response. He suggested, "It's really Civics 101, it would be helpful if our staff understood how other government agencies were organized... to save time and not have to track people down to problem solve. *A lot of trust is broken when you reach out to someone and the answer is 'not me, try again, not me, try again' ...* whereas if you know what you're looking for and can point people in the right direction, its value added." He felt that a basic training across the entire workforce

about how the larger government systems functioned would make all employees more effective at increasing trust in government and the EOC activation was an opportunity to provide that training to a larger percentage of the workforce.

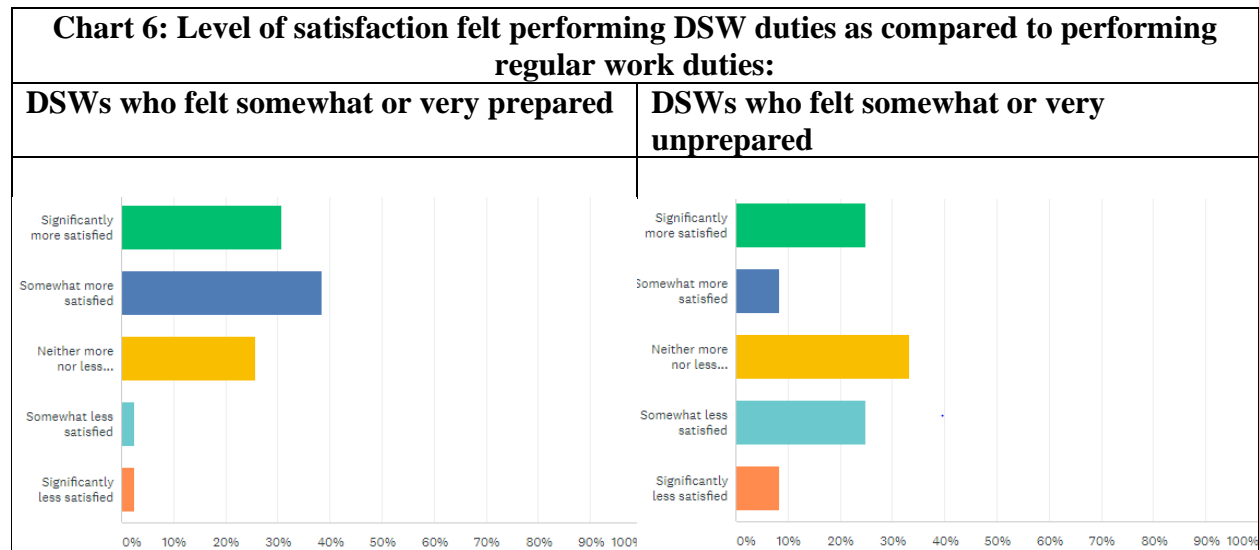
Assumption #3

IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, THEN there will be an improvement to staff morale and enthusiasm.

1. Quantitative Results

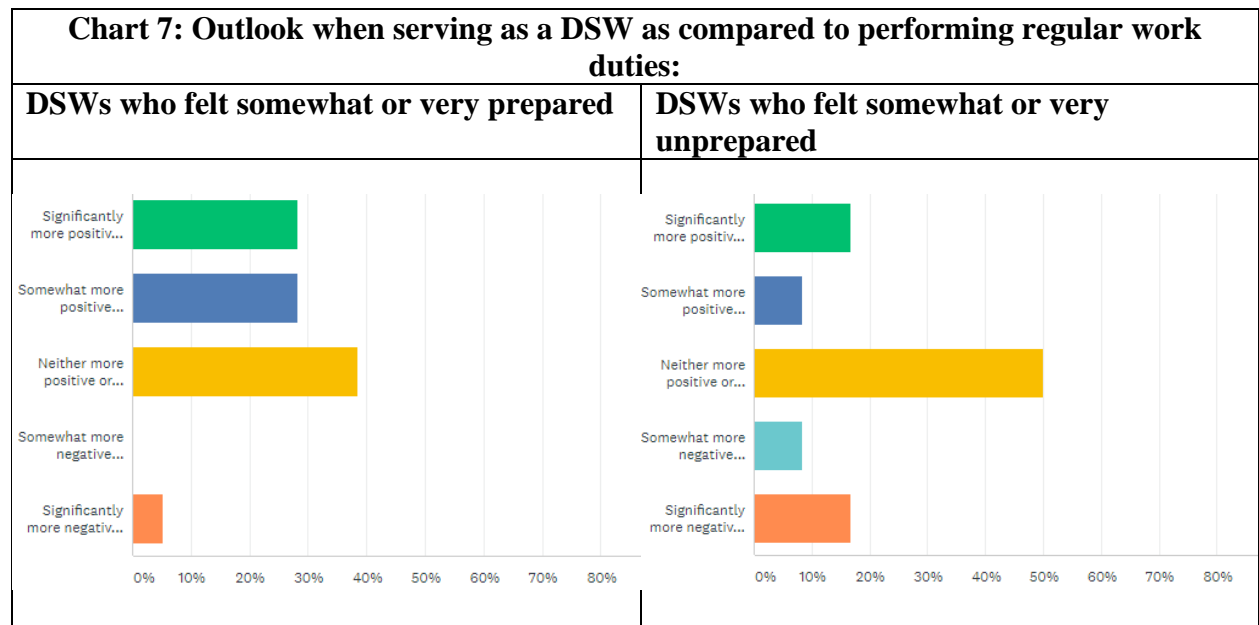
Staff morale was measured in the survey by asking respondents to describe a) their level of satisfaction, b) their outlook, and c) their feeling of well-being while performing DSW duties as compared to performing their regular work duties. A measurement of enthusiasm while serving as a DSW as compared to regular work assignments was also explored. The findings in each question supported the assumption that a well-prepared workforce will have a measurably higher level of morale and enthusiasm.

65% of the overall staff (43/69), 66% of trained staff (29/44), and 58% of untrained staff (14/24) felt a higher level of satisfaction while performing DSW work as compared to their regular assignment. 85% of DSWs (33/39) who felt somewhat or very prepared felt greater satisfaction while only 38% of DSWs (5/13) who felt somewhat or very unprepared did (**Chart 6**).



(N=54)

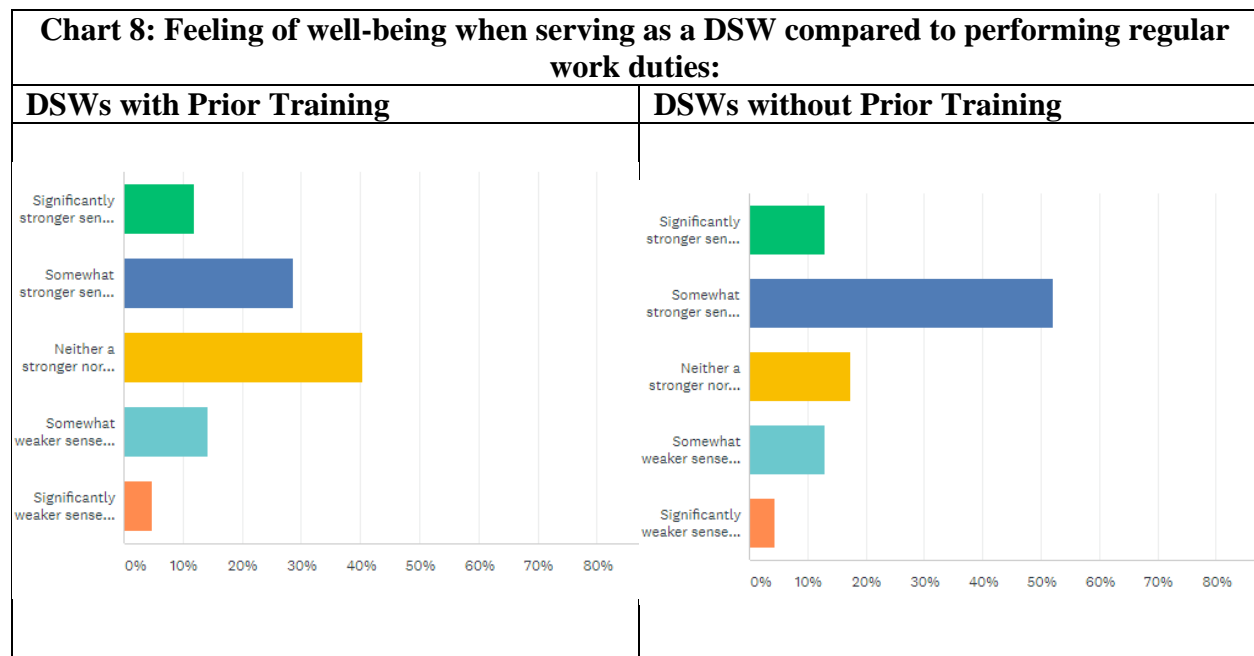
Approximately equal numbers of all DSWs, trained or untrained, felt a somewhat or significantly better outlook while performing DSW work in comparison to their regular work assignments at 62% overall (43/69). But again, in comparing the sample of workers who felt somewhat or very unprepared, the number drops to 23% (3/13) while those who felt somewhat or very prepared scored a high of 55% (22/40) (Chart 7).

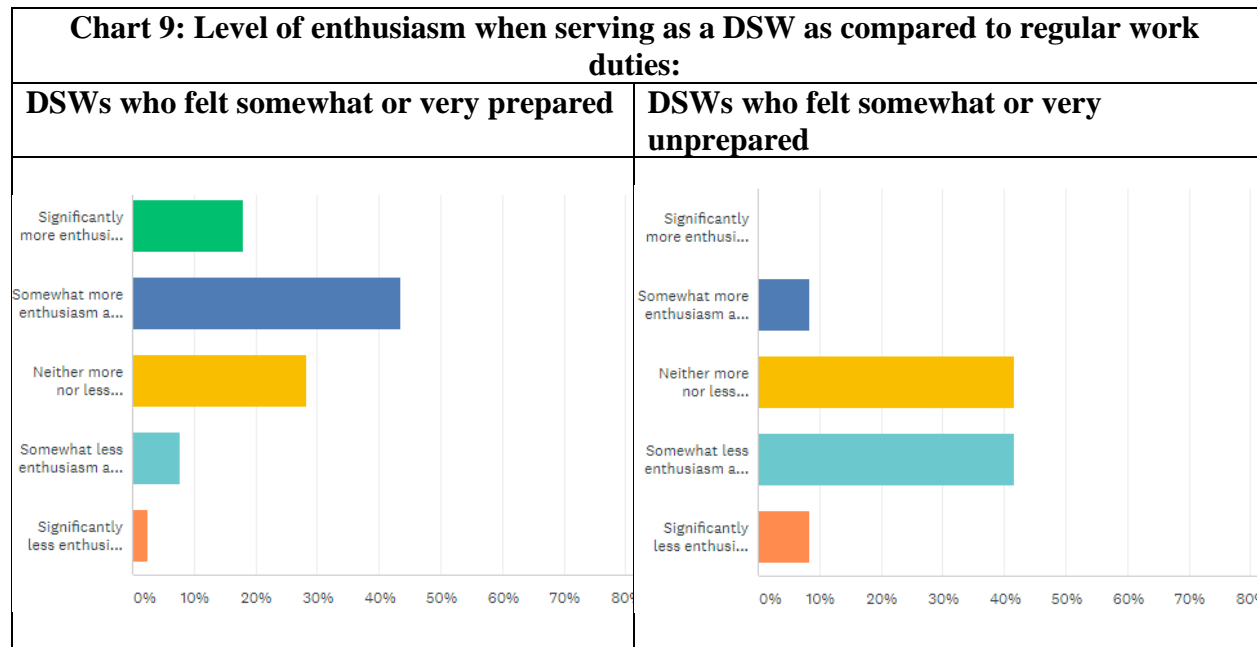


(N=53)

Employees' sense of well-being while serving as DSWs as compared to regular work assignments showed an interesting variation: Overall, 49% (32/65) felt a somewhat or significantly stronger sense of well-being while serving as a DSW but 65% (15/23) of staff who had no prior training felt this way while only 40% (17/42) of employees with prior training felt this way (**Chart 8**). This suggests an untrained worker could see a fast improvement in their sense of well-being if provided that training, a principle that could apply outside of the parameters of emergency response.

The measurement of employee enthusiasm while serving as a DSW asked whether employees felt somewhat or significantly more enthusiastic while serving as a DSW and showed an overall response of 51% who did (35/69). As is seen in the data below (**Chart 9**), the response from those DSWs who felt unprepared provide a vastly different answer. An extremely low 15% (2/13) felt somewhat or significantly more enthusiasm, with 46% (6/13) feeling somewhat or significantly *less enthusiastic* about the DSW work.





(N=53)

Alignment with Literature

These findings align closely with the arguments made by the scholars that were researched in the literature review in chapter 2. For example, surveys of healthcare workers showed a willingness to work overtime or extra shifts during the pandemic and had a strong understanding of what they were required to do as a DSW (Almaghrabi, 2020). The same study showed that those who did not show up or performed reluctantly, did not have a clear understanding of their role or prior training to prepare them for the work. A Government Accounting Office study found that when staff are not qualified it negatively affected disaster assistance delivery, staff workload, and morale (GAO, 2020). The local findings validate the application of this assumption to the local study group.

2. Qualitative Results

The KI interviews showed alignment with the assumptions and the quantitative data but also provided some details about what specifically affected employee morale and enthusiasm for the work. Employees who understood what they were expected to do and why

they were deployed felt a strong sense of duty and a feeling they were involved in something bigger than themselves. To quote Brianna Horton, “I think the people that were called to serve were extremely honored to have had an impact, especially when the impact was communicated to them. I was really excited to have been a DSW and I would do it again. I got to find out in real time that I was capable of more and I was actually good at it!” Ms. Horton and Ms. Rubel are among three staff members this researcher is aware of who received promotional opportunities quickly after serving as DSWs. Although one cannot prove a causal relationship, it is noteworthy their promotions came so soon after displaying a high level of enthusiasm and competency in an emergency.

As a Department Director, Ryan Russo sees incorporating DSW work into regular workplans as a “tremendous opportunity.” He noted that as the emergency extended over several months it was a diversion of resources from core programs. But if incorporated, depending on the size and scale, could serve as capacity building as it strengthens team building, network building, and relationship building. However, he sees this more so at the management level, than for frontline staff. Several interviewees had a similar feeling. Rose Rubel noted that the team building and breaking down of departmental silos required by the emergency could translate to more productivity in normal times if people apply the same problem-solving process and maintain those cross-departmental relationships.

As a Librarian Supervisor, Derrick DeMay noted that normal processes that are slower and sometimes demoralizing, and appreciated the fact that the EOC structure allowed the City to be more nimble and found the experience to be motivating; “I learned a lot by looking at a problem and not looking at it as an unsolvable problem, look at every problem as if there’s a solution (in the EOC) it’s like a roller coaster, you go from point A to point D in three seconds

instead of 2 hours...working with people of different personalities and skill sets, how to make that all come together to accomplish a goal that is completely selfless.”

Olga Crowe felt she had the unique perspective of seeing people both inside and outside the EOC and determined the inside enthusiasm and morale was greater. “Even if (a DSW) was not completely familiar and comfortable, they could obviously reach out immediately and tap the shoulder of someone in charge to get a better understanding.”

Michael Perlmutter similarly observed, “Serving as a DSW holds the potential to boost morale if the worker feels their work is really critical to meeting the moment and that they are contributing meaningfully in a time of need. I felt that when I was interacting with people I delivered food to for instance. The people I served were so grateful, and I was happy to help them.” However, in support of the data regarding those who did not feel prepared or who received poor communication about the expectations, he described how he felt when he was first called upon to serve: the instructions were unclear, he didn’t know whether he would have PPE and protocols in place to protect him, how to manage his daughter’s childcare needs during a Shelter In Place, and whether he would have to find someone else to cover his regular work duties. These factors created unnecessary anxiety and made the initial reaction more negative. Once he had a better understanding of the expectations his outlook on the work improved vastly.

Richard Battersby observed, “the better the training, the higher the confidence and effectiveness of the workforce. Lack of specific training in advance of a disaster actually contributes to apprehension, uncertainty and low morale which results in less enthusiasm and even resistance to participation.”

Another subtheme regarding employee morale and enthusiasm was whether the DSW felt a sense of fairness and thoughtfulness in their assignment. The pandemic created unusual

circumstances for City employees with first responders and essential workers still coming in to work and many other workers sidelined to work only from home. When the need for DSWs arose, messaging from individual departments was inconsistent. Some workers were told their participation was mandatory while others were told it was voluntary. Participation levels across departments varied widely which caused some resentment by those who stepped up that others (appeared to have) stepped back. Clear and consistent standards that have been agreed upon prior to the emergency and applied to all departments could have prevented this feeling of unfairness. Some DSWs felt they were poorly matched to their assignment and could have helped play a greater role if they had been asked. A well-maintained inventory of employee skills ahead of time would have avoided this problem as well. An anonymous answer from the narrative part of the survey had this to say, “I was totally lost, when I was assigned. I had no idea what the hell I was getting into. They even made filling out the damn timesheets torture. We need to be much better prepared. People have no idea what the hell they are getting into.” They went on to say, “They blindsided the hell out of you. Some people worked hella f***ing hard and got no damn recognition whatsoever. Some of us were exposed and taken advantage of. We risked our health, to serve the city, and the city got all the damn credit.” Clearly some people felt a high level of frustration associated with feeling unprepared and poorly informed.

Alignment with Literature

These findings align closely with the arguments made by the scholars that were researched in the literature review in chapter 2. Local government needs systems to be in place and a workforce that is trained and has clear expectations prior to an emergency in order to achieve increased employee morale and enthusiasm in the midst of an emergency response.

Without those systems, confusion and a sense of unfairness can significantly diminish employee morale during a crisis.

Conclusion

The quantitative data in this chapter strongly supports the three assumptions of this study and the qualitative data provides observations about specific actions that can be recommended in the conclusion to improve outcomes for local government during an emergency. If systems are in place prior to an emergency and workers have a modest amount of training, the response will be more effective, and the recovery will be faster. The opportunity to be part of the emergency response leads to gains in skill in effective problem solving that strengthens the organization. Workers who do not feel prepared to respond feel most strongly that training will increase the speed and effectiveness of the response. Increased trust in government is high among people receiving direct services but an unknown for the general population. This area requires further research such as a public opinion survey but that was outside the scope of this study. Employee morale and enthusiasm is significantly higher while performing DSW duties with the exception of workers who do not feel prepared for the assignment.

Chapter 5: Conclusions, Recommendations and Areas for Further Study

The research conducted in this study included literature review of scholarly articles that examined past responses to disasters and emergency response at the local, state, and federal level. This included studies that evaluated how the public perceived services, how to quantifiably measure trust in government and the impact on employees who are involved in emergency response. Following the literature review, the primary data gathering was done by surveying Oakland and Alameda County DSWs and by conducting Key Informant Interviews of city workers who managed the response to COVID19 in the Emergency Operations Center in 2020. The survey results consistently support the theory of change posited in this study without exception. When the right structures are in place to respond to an emergency, and workers felt prepared to perform DSW duties, they were able to respond faster and more effectively. They received more positive feedback from the public about the services they offered than their less-prepared counterparts, and they had improved employee morale while serving. The Key Informant Interviews provide thematic details that display where the assumptions are strongest and where more research needs to be done. Combined, the literature, survey results, and interviews allow the study to form useful recommendations for local government as outlined below.

A. Conclusions

Assumption #1: IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, THEN they will be better at responding to and faster recovering from emergencies

VALIDATED

1. The first research question posed was if local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, will they be

better at responding to and faster recovering from emergencies. The answer is yes, and the definition of *prepared* is a significant part of the equation, it includes staff training as well as systems processes. Workers need some level of training and a clear understanding of what the expectations are in these emergency roles. They do not need a large amount of training nor to the depth one would expect of a first responder, but it does need to be ongoing and would improve if incorporated into their regular workplan. It also should include the administrative processes such as the tracking of time as required by FEMA. Once a frontline worker has the basic understanding of their role, the returns on additional training diminish. For supervisors and managers and those who will oversee day-to-day operations, the training should be more in-depth and should include tabletop exercises on effective problem-solving methods that can be applied to scenarios that could come up during an emergency. Training about directives and city policy should also be required for Department Heads that include the EOC structure and the importance of each department's participation requirement.

The need for systems and processes to be well established before an emergency is as important as staff training. Human Resource managers and Emergency Services management need to co-create functioning registration systems that inventory all employees' skills, availability, job classifications, and limitations. On-line registration systems should be implemented and published Administrative Instructions should be available for employees and managers to reference on an ongoing basis. Those instructions need to be enforced to ensure consistent participation by all departments. Had some of these systems been in place in 2020, some emergency functions would have responded more quickly and effectively.

Assumption #2: IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, THEN there will be increased trust in government.

VALIDATED IN PART

2. The second research question posed was if local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, will they increase trust in government? The research leans affirmative but with some narrow limitations that can be improved upon with an effective communications strategy. This study was limited in that it only surveyed and interviewed those providing services, not the general public. DSWs who were surveyed answered strongly that the response they received displayed an increase in trust in government. That trust should translate into those individuals being more likely to seek services from the City beyond the immediate emergency. For underserved communities, this benefit could have a significant effect on resource allocation where it is needed the most. However, interviewees cited that only a small percentage of the public received services and it is unknown if the broader population is as enthusiastic about those services or is even aware they were offered. Further research should be conducted in the future to include a broader survey. A subtheme mentioned by several interviewees was that the city does not tell its story well and needs to as part of its response plan. An outreach campaign about services offered to the general public could have an impact in increasing trust.

A second sub-theme that presented itself during the literature review was a clear difference in impact that can be achieved by local government versus its state and federal partners. People in local government are most likely to interface with the public so even a small, competent effort will get noticed and increase trust. However, state, and federal officials who are

removed from the community have less of an impact on trust even if they are making a bigger effort. Conversely, during an emergency, if local government begins to stumble with maintaining normal business functions, the opportunity to lose trust is magnified for the general population-- those who receive services and those who do not.

Assumption #3: IF local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, THEN there will be an improvement to staff morale and enthusiasm

VALIDATED

3. The third research question posed was if local governments have a workforce that is prepared to serve as disaster service workers as part of their regular workplans, will there be an improvement to staff morale and enthusiasm. All the data points to an increase in morale and enthusiasm while assigned DSW work. Respondents consistently describe a sense of higher purpose, and a duty to serve those in need. However, for DSWs who did not feel well prepared, the morale and enthusiasm decreased significantly. A subtheme that emerged was that it was important for DSWs to feel a sense of fairness in how assignments are made to all city workers. Inconsistency in assignments and workloads created resentment for some DSWs toward workers who were able to opt out of the work. Clear protocols that activate workers across all departments can reduce this negative effect.

Another subtheme is in regard to the impact on the workforce as people return to their normal duties after an emergency. The findings indicate that the relationships people build and the hand-on experience they gain, transfers to their normal workflow with better skills at effective problem solving. It also strengthened relationships across the organization that can be

used to respond to other city projects more effectively. This theme was expressed by several people who served in the EOC.

B. Recommendations

These recommendations are written in narrative form then followed by a table displaying them formatted using the SMART Criteria (Specific, Measurable, Achievable, Realistic, and Timely).

1. Registration and Training Systems

Local government agencies should create an online registration system that includes an inventory of workers' skills and limitations and matches them to certain types of DSW work in the event of an emergency. The system should be designed to allow for online training for the employee and there should be annual requirements for employees to update their skills, receive refresher courses, and information about new policies.

For Supervisor and Manager level employees, more detailed trainings should occur that include ongoing tabletop exercises in which they are required to utilize effective problem-solving skills to address an emergency and in which they become well-versed in the EOC structure, federal guidelines regarding reimbursements, and HR rules for DSW workers.

2. Build an Enhanced Communications Strategy into the EOC Response

To improve trust in government that will increase civic participation during and after an emergency, local government's EOC response should have an enhanced communications strategy that communicates with those served but also communicates an ongoing message to the general population that tells the story of the work being done. Additional staff should be assigned to the EOC Communications team who are charged with documenting the work, including with photographic and video examples, and then developing a media portfolio and ongoing plan to disseminate that material through a variety of media, social media, and community outlets. This

documentation and production cannot be shouldered by those implementing the programming or postponed until a later point. It should be done in real time throughout the emergency and beyond. Because communication moves in multiple directions, the communications strategy should include considering developing a database of those served (voluntary) so they can be engaged later by staff working on meaningful projects post-emergency. This relationship building can have a long-term impact on trust that far outlasts an emergency.

3. Protocols and Recognition

Similar to the trainings at the line staff and manager level, at the Department Director level, protocols need to be written that establish exactly who will be assigned as a DSW and what type of assignment they can be given. Those protocols should allow for balanced participation of staff from all departments during an emergency. They should also address Director concerns about regular workflow and the impact emergency operations will have on their department's ability to meet its normal demands. To ensure a sense of fairness, these protocols should be shared with staff and should allow for rotations for longer assignments to avoid any one department being burdened with too great a role in the response.

Recognition of all staff who serve as DSWs should be part of the department-level protocols and leaders should have an evaluation system in place that observes employee performance during an emergency activation and notes exceptional performance in their personnel file to support future advancement in the organization. This type of recognition will increase employee morale and enthusiasm long after an emergency ends.

See below for these recommendations displayed in the SMART Format in Table 1:

SMART	Recommendation 1	Recommendation 2	Recommendation 3
Specific	Create an Online Registration System and Training that is specific to Line Staff and a more detailed training for Supervisors and Managers	Enhance Communications Strategy during EOC Response , starting with a thorough recap of what was done during pandemic and including receiving input from those served	Create Departmental Protocols and a Staff Recognition Policy to ensure equity in DSW assignments and performance evaluation for future advancement consideration
Measurable	Inventory Staff Skills/Provide Problem-Solving Exercises for Supervisors and Managers on a quarterly basis	Document media releases to the general public, and feedback received surveys of those served	Inventory assignments by department Verify recognition policy via review of employee personnel files and promotional history of those assigned to DSW work
Achievable	Requires minimal time commitment to avoid impact on regular work duties	Proper procedures in place will ensure documentation occurs at the onset of an emergency	The assignments can be tracked carefully by department and adjusted. Administrator level review will encourage department leadership to implement measures
Relevant	The Pandemic, Social Unrest, and Wildfires along with forecasted increases in future emergencies indicate a growing future need	Information can improve trust in government and encourage those served to participate further in local government	Local Government is reshaping constantly, and a new data set presented itself in 2020 for employee evaluation, recognition, and development
Timely	Cities are still in the Pandemic Recovery Stage so employees are already well-primed for training	While still in the recovery period, this work can resume and inform a city's recovery response	All pandemic impacts are not all known yet. This is a strategic time to implement these measures.

C. Areas for Further Research

As stated above, this study interviewed and surveyed staff who served during an EOC activation but did not survey the general population. A public survey could further validate (or challenge) the assumption that a well-prepared workforce during an emergency improves trust in

government. In many urban settings, the pandemic brought with it increases in crime, growth in homeless encampments, and disruptions in normal services. While the research in this study shows that those receiving services had an increase in trust in government, it is possible that the general population's trust decreased due to these other factors.

Another area that could not be measured during this study is the long-term impact on local governments due to the shifting of resources to emergency response. The pandemic is still too recent and not all services have been completely restored. Further research in a year could evaluate how this prolonged emergency response impacted employee morale. It is possible that burn-out has been experienced like what has been seen in the health care industry. Alternatively, employees may have taken their new skills and applied them to old problems successfully which would likely improve morale over a longer period.

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Appendix A: Research Survey and Informed Consent Form**Title of Research:**

The Impact of Emergency Preparedness on Improving Disaster Recovery, Trust in Government and Employee Morale.

Principle Investigator, Affiliation and Contact Information:

Joe DeVries

Golden Gate University

536 Mission Street

San Francisco, CA 94105

Description of research topic:

The Covid-19 pandemic required local governments to quickly shift workforce priorities for extended periods of time while other emergencies continued to unfold. This project will examine the impact of how local governments prepare their workforces to respond to emergencies, identifying themes that can benefit future emergency planning efforts

Purpose of the Study:

The study will help determine if having a well-prepared workforce improves a local government's quality and speed of response and the impact on trust in government and employee morale.

What will be done:

You will complete a short survey answering questions about local employees' perception of serving as Disaster Service Workers during the COVID-19 pandemic in 2020. It should take no more than 5 minutes.

Risks or discomforts:

No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. If you decide to quit at any time before you have finished the questionnaire, your answers will NOT be recorded.

Confidentiality:

This survey is being conducted on survey monkey and therefore confidential. The researcher does not have access to who fills out the survey. The survey link was provided to your employer's Human Resources Department with the understanding it would be emailed to anyone who participated in DSW work in 2020. The researcher does not have any record of who the survey link was emailed to.

1. Did your employer have an online registration system for Disaster Service Workers that you registered in before being selected as a DSW worker in the summer of 2020? (A1)
 - a. Yes
 - b. No

2. Select the choice that most closely reflects your experience: (A1)

The DSW registration and assignment process was:

- a. Very easy and efficient in providing me an assignment
 - b. Somewhat easy and efficient in providing me an assignment
 - c. Neither easy nor difficult in providing me an assignment
 - d. Somewhat difficult and inefficient in providing me an assignment
 - e. Very difficult and inefficient in providing me an assignment
3. Did you receive any training as a DSW or in Emergency Preparedness in general, prior to this assignment? (A1)
 - a. Yes
 - b. No
 4. How well prepared did you feel to serve in the role you were assigned? (A1, A4)
 - a. Very prepared
 - b. Somewhat prepared
 - c. Neither prepared nor unprepared
 - d. Somewhat unprepared
 - e. Very unprepared

5. Select the choice that most closely reflects your experience: (A2)

If my coworkers and I had more training and preparation before being assigned as DSWs, the City would have been:

- a. Significantly faster and effective at disaster recovery
- b. Somewhat faster and effective at disaster recovery
- c. Neither faster nor slower at disaster recovery
- d. Somewhat slower and ineffective at disaster recovery
- e. Significantly slower and ineffective at disaster recovery

6. If you received any verbal or written feedback from people or organizations you served as a DSW, select the choice that most closely reflects the feedback of the people you served:

The person felt that the service they received was: (A3)

- a. very capable and reliable
 - b. somewhat capable and reliable
 - c. neither capable and reliable or incapable and unreliable
 - d. somewhat incapable and unreliable
 - e. very incapable and unreliable
7. As compared to the service delivery they normally receive from the City, did the people you served appear to perceive this service as: (A3)
- a. A significant improvement
 - b. Somewhat of an improvement
 - c. Neither an improvement nor a decline
 - d. Somewhat of a decline
 - e. A significant decline
8. Select the choice that best describes the level of satisfaction you felt serving as a DSW as compared to while performing your regular work duties: (A4)
- a. Significantly more satisfied
 - b. Somewhat more satisfied
 - c. Neither more nor less satisfied
 - d. Somewhat more unsatisfied
 - e. Significantly more unsatisfied
9. Select the choice that best describes your outlook while at work serving as a DSW as compared to when performing your regular work duties: (A4)
- a. Significantly more positive outlook
 - b. Somewhat more positive outlook
 - c. Neither more nor less positive outlook
 - d. Somewhat more negative outlook
 - e. Significantly more negative outlook

10. Select the choice that best describes your feeling of well-being while at work serving as a DSW as compared to while performing your regular work duties: (A4)

- a. Significantly stronger sense of well being
- b. Somewhat stronger sense of well being
- c. Neither a stronger nor weaker sense of well being
- d. Somewhat weaker sense of well being
- e. Significantly weaker sense of well being

11. Select the choice that best that best fits your feeling: (A4)

While serving as a DSW, I feel:

- a. Significantly more enthusiasm at work
- b. Somewhat more enthusiasm at work
- c. Neither more nor less enthusiasm at work
- d. Somewhat less enthusiasm at work
- e. Significantly less enthusiasm at work

12. Select the choice that best fits your feeling: (A1)

If DSW training and assignments were incorporated into all employees' workplans, the City will be:

- a. Significantly better and faster at responding to multiple extended emergencies
- b. Somewhat better and faster at responding to multiple extended emergencies
- c. Neither better and faster nor worse and slower at responding to multiple extended emergencies
- d. Somewhat worse and slower at responding to multiple extended emergencies
- e. Significantly worse and slower at responding to multiple extended emergencies

13. If DSW work was incorporated into your regular work plan, describe how it would impact your perception of being a local government employee.

14. Provide any obstacles you experienced in effectively registering and serving as a DSW.

15. If you were asked to serve again as a DWS, please describe any changes you would make to the DSW program to improve your enthusiasm and morale about serving?