

MEMO

To: Reverend Mariama White-Hammond, *Chief of Environment, Energy and Open Space*
Dr. Alison Brizius, *Commissioner, Environment Department*

From: Peggy Zhang

Date: January 05, 2022

Subject: Pilot Program Evaluation - Healthy Places AC and Fan Delivery

EXECUTIVE SUMMARY

Background and Program Development: The Healthy Places AC and Fan Delivery Pilot Program (the Pilot) aimed to provide direct support to residents of Boston facing increasing high average temperatures and extreme heat events. The Pilot was planned and managed by the Climate Ready Boston (CRB) team of the Environment Department in collaboration with multiple City Departments and Agencies. During the summer and early fall of 2021, the Pilot distributed 400 air conditioning (AC) units and 700 box fan units free of charge to residents throughout the City, prioritizing residents who lived in neighborhoods that experienced particularly high temperatures, residents who did not have the resources to stay healthy and cool during heat waves, and residents who were more sensitive to heat stress due to their age and/or chronic health conditions.

Program Implementation - The CRB team identified residents to receive free AC units and box fans by directly reaching out to populations served by the Age Strong Commission and Boston Public Health Commission (BPHC) Breathe Easy program. Outreach efforts were conducted by volunteers, as well as Environment, Age Strong, and BPHC staff members. The Boston Housing Authority (BHA) also identified specific BHA housing communities that served elderly or disabled populations extremely sensitive to heat stress to receive both AC units and box fans. The Office of Emergency Management (OEM) provided a storage location in West Roxbury for all AC units and box fans, and logistical support to CRB team members and delivery vendor RTD Logistics during the AC and fan delivery process.

Evaluation - After a thorough review of this Pilot program using both quantitative and qualitative data, a number of issues related to program timeline, program management, implementation operations, and communication methods were identified. If this program is to be replicated or expanded in the future, the following recommendations should be taken into consideration

- Begin the program earlier in the calendar year (see [Appendix G](#) on following page for recommended timeline)
- Establish consistent roles and responsibilities among staff, and clear and consistent messaging to program partners, and the general public.
- Incorporate of language and communications access throughout the program.
- Include all program partners in the design of the program to create an equitable outreach process and streamlined delivery system.

See full report below

Pilot Program Evaluation - Healthy Places AC and Fan Delivery

BACKGROUND

The 2016 Climate Ready Boston report projected that the City of Boston would experience an increase in both average temperatures and extreme heat events in the coming years. Although rising temperatures and heat events create a climate hazard that can bring negative health impacts for all residents of Boston, not all residents are equally impacted. Residents that live in neighborhoods that have higher average temperatures than others, are more sensitive to heat stress due to their age or underlying health conditions, and/or have fewer financial or social resources to mitigate the impact of heat have higher instances of heat-related illness or deaths. With additional health and economic stress brought on by the ongoing COVID-19 pandemic in 2020 and continuing in 2021, many of these residents needed additional support to stay safe, cool, and healthy.

Beginning April of 2021, the Climate Ready Boston (CRB) team aimed to develop a Pilot program to provide immediate heat and pandemic relief to vulnerable residents who were simultaneously experiencing disproportionate negative impacts of the COVID-19 pandemic, and the climate hazard of extreme heat. To reach this goal, this Pilot built upon a 2020 Indoor Cooling Program developed in partnership with the Boston Medical Center and the Garrison Trotter Neighborhood Association, and was the first goods distribution program run by the Environment Department's CRB team. The Pilot would provide near-term interventions to vulnerable populations for extreme heat by distributing AC units, fans, reflective paint, and other resources to residents. This intervention was part of the ongoing Healthy Places Initiative, which aimed to develop plans and programs to integrate public health, climate resilience, and racial and economic equity across the City of Boston.

PROGRAM PLANNING

The Pilot planning process included several phases of proposals and realignments to create an effective and quickly deployable program during the summer of 2021. The planning process was managed by Sanjay Seth, Program Manager of the CRB team, with support from Hannah Wagner, Senior Resilience Fellow and member of the CRB team.

Planning was centered around engagement with numerous City departments and agencies to develop partnerships, gather input on the design of the program, and to ensure collaboration in the implementation of the program. Critical program partners included:

- **Procurement Department** - to purchase cooling equipment, procure a vendor for delivery services, and coordinate payments to vendors
- **Office of Emergency Management (OEM)** - to provide a storage space for cooling equipment and coordinate logistics for pickup and delivery to recipients.

- **Legal Team & Risk Management Team** - to guide legal program design and liability management, and the development of waivers and indemnity language.
- **Age Strong Commission** - to give input to the program development process, provide a list of residents to include in the program, and provide a volunteer through the Senior Property Tax Workoff Program.
- **Boston Public Health Commission (BHPC), Breathe Easy at Home Program-** to reach out to Breathe Easy program participants to help them participate in this Pilot
- **Boston Housing Authority (BHA)** - to provide guidance on adapting the program structure to serve BHA residents and for direction on which BHA communities should receive cooling equipment.
- **Boston Public Works** - Arranged for vehicle use for fan delivery

Partnerships with each department or agency included multiple conversations and varying methods of communication. Additional details about each partner and key contacts within each department can be found in **Appendix A**.

Financial and Timeline Considerations

As part of the Healthy Place Initiative, the Pilot was funded by Environment Departments operating funds. Funds for the Pilot became available beginning in mid-June after an amendment to the City Budget was approved. The Pilot was originally envisioned as a [grant program](#), in which grantees would identify residents who qualified to receive cooling equipment and distribute the cooling equipment. However after conversations with the legal team and given the time constraints of developing and deploying a full grant program, the CRB project team shifted to creating a City-managed outreach program with a vendor to carry out the distribution and delivery services. The [initial budget](#) for this project did not reflect the actual amount that was later spent.

PROGRAM DESIGN

Procurement of Goods and Services

After funds for this Pilot were determined to be available, the CRB team designed a program to fit with the availability of goods and services within the limitations of City procurement regulations. The CRB team worked directly with the Purchasing Agent in the Procurement Department to purchase cooling equipment - 400 AC window units (200 smaller [6000 BTU](#) units and 200 larger [8000 BTU](#) units), 700 Box fans, 2500 [Cooling Towels](#) (with [City of Boston logos](#)), and 250 5-gallons buckets of reflective paint.

The initial design of the program required a vendor (or outside contracting organization) to perform both individual and bulk deliveries of AC units and box fans, but the [bid](#) to identify

a vendor to do so was unsuccessful. The [Written Quote Contract](#)¹ (WQC) bid that was used for this Pilot was released in July and resulted in only 2 responses. As with all WQCs, the City was required to award the contract to the lowest responsive bidder, RTD Logistics, which quoted \$10 per individual delivery of an AC unit and \$39.50 for bulk deliveries of AC units. RTD Logistics did not provide a quote for the delivery of box fans. Given the need to deliver cooling equipment before the end of summer, the CRB team did not have time to start a different bidding process to search for another vendor. This necessitated the shift to using CRB team members to carry out the fan delivery themselves.

Program Focus

Without a comprehensive grant program, the cooling equipment distribution was then divided into 4 pieces - cooling towel distribution, reflective paint distribution, AC delivery and fan delivery. The distribution of the 2500 Cooling Towels took place in early August and was [loosely tracked](#) by the CRB team. Towels were given to City designated [cooling centers](#) such as Boston Public Libraries (BPL) and Boston Centers for Youth and Families (BCYF), to the [BPHC Engagement Center](#), and to participants of neighborhood events and City of Boston events attended by Environment Department staff. As of December 2021, the reflective paint purchased is still in storage, and will be distributed as a separate cool roof program still in development.

The primary focus of the Pilot program became centered around the delivery of 400 AC units and 700 box fans. Given the limited number of AC units, it was determined that these should be distributed only to vulnerable populations of elderly residents and low-income residents without adequate cooling equipment, or people with a chronic health condition exacerbated by COVID. A [Google form](#) was designed to determine which residents would fit into [eligibility criteria](#), with results from the form linking directly to a [master spreadsheet](#). The AC units would be delivered to each resident by the outside vendor (RTD Logistics). To limit potential liability from the City's perspective, residents would receive a waiver upon receipt of the AC, and installation services would not be included as part of this pilot. Residents who needed help in installing AC units into their windows were directed to the [Senior Home Repair](#) program.

For the 700 box fans, there was an agreement that BHA communities would be the best recipients, particularly facilities that were located in [hotspot](#) neighborhoods throughout the City and exclusively housed elderly populations.

¹ Written Quote Contract, WQC, are used for procurement of goods and services estimated to be between \$10,000 - \$50,000, and must be awarded the lowest quote that meets the requirements

PROGRAM IMPLEMENTATION

Implementation of the AC and fan delivery Pilot program began in early August 2021, when a new Project Manager, Peggy Zhang, joined the Climate Ready Boston team. Pilot implementation was carried out in 3 phases - 1) Outreach to program partners and individual residents to identify residents to receive cooling equipment; 2) Distribution of the cooling equipment to residents; and 3) Data tracking to measure the success of the program in reaching the intended target population. Due to the different populations that were designated to receive each type of equipment, the outreach, distribution, and data tracking processes for AC units and fans operated separately but concurrently.

Fan Delivery

The CRB team worked with senior Boston Housing Authority (BHA) staff members to determine which BHA housing communities should receive the 700 box fans available. Facilities that did not have cooling equipment (i.e. no central AC), facilities that housed Elderly/Disabled populations, and facilities in hotspot neighborhoods were prioritized.

1. Outreach - Outreach to BHA facilities began after BHA central senior staff members first determined which facilities would receive fans, they contacted the Regional Assistant Director of Property Management (ADPM) and/or Regional Manager of the receiving facilities, who then contacted the property managers at each individual facility. In early August, this process began with just 3 BHA facilities. CRB staff were connected to the property managers (or senior management aides during staff transitions) to coordinate a day and time for distribution, send them a flyer, (in English, Spanish, and Chinese) to post throughout their buildings to notify residents and signup sheets for residents. The signup sheets were used by CRB team members handling delivery to determine how many fans each facility required.

Since it was uncertain how many residents would sign up for fans at each facility, there were multiple iterations of engagement with BHA senior staff members, coordination with regional managers, and individual outreach with managers at each facility to arrange a date and time for fan distribution, and to provide the managers with necessary flyers and signup sheets.

2. Distribution - CRB team members Peggy Zhang and Zoe Davis carried out the physical delivery of fans. This required first the coordination with OEM Logistics Supervisor John Maxson to arrange dates/time to pick up the fans from the West Roxbury Education Complex where they were stored, and coordination with Robert Pardo of the Public Works Central Fleet Division to arrange for the use of a Fleethub cargo van² to transport the fans. The repetitive process of identifying BHA facilities

² Driving a Fleethub cargo van requires by a City employee requires the employee to first complete a registration process with the City and hold a valid MA state Driver's License.

and the limited availability of team members to drive around Boston, led to a scattered and inefficient delivery routes across the City. Fans were delivered to 8 separate BHA facilities, requiring 10 trips over 10 separate workdays between mid-August to late-September.

3. Data Tracking - The BHA facilities that received box fans were all designated as “[Federal Elderly Disabled](#)” locations BHA, meaning that each of the facilities had an elderly population of 80% and a non-elderly disabled population of 20%. Due to [income limitations](#) to qualify for residency in BHA facilities, all residents in these facilities were assumed to meet the age, income, and cooling equipment criteria of this Pilot program. Individual recipients of fans were not tracked by CRB staff, but were overseen by the property manager and supporting BHA staff to ensure an equitable distribution of fans to residents who needed them. The list of facilities which received fans was traced on an internal [BHA Tracker](#) spreadsheet. The summary of BHA facilities that received fans can be found in **Appendix B**.

AC Delivery

AC units were delivered to 3 separate populations - elderly residents served by the Age Strong Commission, residents with a chronic health condition that were part of the BPHC Breathe Easy program, and residents at elderly/disabled designated BHA facilities.

1. Outreach - The online [Google form](#) was initially designed to serve as the outreach tool for residents to individually apply to receive a free AC unit. However, concerns of inequity in using an online form were raised late during the Pilot design process, citing the limited ability of the target population (particularly elderly residents) or access (particularly low-income residents) to complete an online form. Additionally there was an added concern of potential misuse of an open form available to any resident. To address these concerns a direct outreach campaign was designed to reach a narrowed population of residents - those associated with the Age Strong Commission within the past year and current participants in the BPHC Breathe Easy at Home Program. A set of [eligibility criteria](#) were later created to limit only applicants part of the target population to receive the AC unit.

Outreach to residents served by the Age Strong Commission was managed by the CRB team. In previous conversations between the CRB team and Age Strong, the CRB team had wanted to learn how elderly residents kept cool during heat waves. As a result, as part of the Age Strong intake questionnaire during this time period, senior residents were asked “How do you stay cool during a heat wave?” and indicated whether they used an AC, fan, or other cooling equipment or services. In developing this pilot, staff members at Age Strong provided the CRB team a list of residents who had previously engaged with Age Strong programs and services between July 2020 - June 2021 and responded to the intake survey. Residents who

indicated in this survey that did not indicate that they had an AC to use to stay cool were added to the outreach list for this Pilot program. A [volunteer](#) from the Age Strong Commission [Senior Property Tax Workoff](#) Program reached out directly to residents on this list via phone, [using an outreach script](#) to help interested residents complete the Google form application by phone. This process was supported by Environment Department staff in late August, a second Senior Property Tax volunteer and Age Strong staff in October. Several attempts to reach nearly 400 residents on the list by phone, although some residents did not respond to phone calls or were unable to communicate with the caller due to language barriers.

The [Breathe Easy at Home Program](#) managed and conducted outreach to their program participants to inquire about whether the participants would like to receive an AC unit. Due to the requirements of participation in the Breathe Easy at Home Program, nearly all applicants qualified to receive an AC unit. Darris Jordan, Program Coordinator, performed all outreach efforts himself using both phone calls and text messages to reach program participants to inform them of the program and to encourage them to apply to receive a free AC. Data for all outreach efforts for the Age Strong Commission and Breathe Easy can be found in **Appendix C**.

When it became apparent that outreach efforts to only Age Strong Commission and Breathe Easy Program participants would not reach 400 people, CRB staff members engaged with BHA senior central staff members in late August to add BHA residents that fit the eligibility criteria as potential recipients of AC units.

Throughout the outreach process, word of mouth spread quickly from early recipients to their family and friends. As a result, many residents not associated with Age Strong, BPHC Breathe Easy, or BHA began to call the Environment Department, Age Strong Commission, and 311 to inquire about applying for the Pilot program. Due to the narrowed population targeted by the Pilot, residents who called to inquire about the program were deemed ineligible to receive an AC unit.

2. **Distribution** - A predetermined number of AC units were allocated to Age Strong Commission, BPHC and BHA based on the predicted number of recipients for each group (allocations can be found in **Appendix D**). The physical distribution of AC units was handled by the contracted vendor RTD Logistics (previously Skycom Courier). Prior to initiating deliveries, RTD was given a [Contactless AC Delivery Protocol](#) to address ongoing COVID-19 pandemic concerns, notification to residents, inclusion of a liability waiver, and photo confirmation. Senior management at RTD agreed to follow this protocol, although not all independently contracted drivers continued to follow this protocol throughout the delivery process.

The delivery of AC units began in mid-August, and concluded by the last week of October. This delivery process was designed to be initiated by the CRB team each week by sharing a list of residents that were to receive an AC unit with RTD via a [Google spreadsheet](#). RTD was then to coordinate deliveries for the following week. However, this process did not take into consideration the inconsistency of the outreach process to identify the AC recipients (dependent availability of the outreach caller and the number of residents responding to calls), the inconsistent availability of drivers RTD was able to hire³ with appropriate vehicles, and the difficulty of coordinating driver availability with OEM logistics availability at the West Roxbury storage facility. In later weeks of distribution when bulk deliveries of AC units were added for BHA facilities, deliveries were delayed even further.

Distribution services were also complicated by residents who called the Environment Department, Age Strong, Breathe Easy, and 311 who all had limited information about the delivery timeline. By December 2021, all invoices to RTD have been paid, with the delivery of 400 AC units costing a total of \$3,035⁴.

3. Data Tracking - Information for AC recipients associated with the Age Strong and Breathe Easy program were tracked by the CRB team on the [AC Master Tracker](#) upon completion of the Google form. Information for AC recipients at BHA facilities required property managers to complete a recipient tracker document and return it to the CRB team. Since many AC units were not delivered to BHA facilities until October (past the hottest time of year), many units were put in storage to be distributed the following summer. The summary of BHA facilities that received AC units can be found in **Appendix E**.

EVALUATION AND RECOMMENDATIONS

Following the conclusion of AC and fan deliveries in late October, both a quantitative and qualitative analysis of the Pilot program was performed. Quantitative analysis, including demographic data for residents who received AC units, can be found in **Appendix F**. Qualitative feedback was gathered through notification phone calls for residents who were deemed not eligible for an AC unit, and follow-up discussions with program partners at OEM (Ben McNeil, John Maxson), Age Strong Commission (Andrea Burns, Lisa Martins), BPHC Breathe Easy (Darris Jordan), RTD Logistics (Jeff Semon, Bennett Berstein), and each Senior Property Tax Workoff Volunteer and Environment Department volunteer caller.

³ As a logistics company, RTD did not employ their own drivers. They created the link between delivery jobs to individually contracted drivers. All drivers used their own vehicles of varying sizes and loading capacity.

⁴ Gifty Osei can verify invoice amounts, records can also be found on [this internal CRB spreadsheet](#)

Additionally, further discussions with staff members of departments and agencies that frequently conduct resident-facing programs allowed the CRB team to learn some of the best practices they used. These engagements included conversations with the Community Engagement Program Manager at OEM (Nancy Smith), Outreach and Communications Director / Emergency Food Access Coordinator at the Mayor's Office of Food Access (Catalina Prada Valderrama / Shannon Timlin), the Interim Director of the Mayor's Office of Language and Communication Access (Jeniffer Vivar-Wong), the Director of Area Agency on Aging of the Age Strong Commission (Alison Freeman), the Environment Department Communications and Engagement Team (Stacia Sheputa, Kathleen Hart, Lindsey Santana).

Feedback and additional conversations lead to the articulation of the following problem areas of this Pilot program, and future recommendations for the continuation or expansion of the program in future years.

Timeline of Program

This Pilot took place in 2021 with many factors that were beyond the control of the CRB managing team. The COVID-19 pandemic had been ongoing for over a year, and continued to cause workforce disruption and supply chain setbacks that delayed the purchase and delivery of goods. At the same time, the City of Boston experienced two Mayoral transitions - first the departure of Marty Walsh in late March 2021 and the transition of Kim Janey to Acting Mayor; followed by a months-long election process that resulted in the election and transition of Mayor Michelle Wu in November 2021. Throughout these transitions, staff turnover at every level of City Hall was high, contributing to a prolonged period of uncertainty. Lastly, the City of Boston's fiscal year runs from July 1 to June 30, meaning that this Pilot planning took place in April/May 2021 at the end of FY21 and the program was implemented using the budget of FY22.

Procurement of vendors and outreach to program partners did not begin until July of 2021. Feedback from both program partners and program recipients was consistent in saying that this process began too late in the summer. The outreach callers needed additional time to be trained on procedures before making calls, the delivery vendors needed more time to respond to a bid and plan their internal logistics to delivery to residents scattered all over the City, and residents wanted to receive cooling equipment earlier in the summer so they could be prepared to face extreme heat events throughout the summer. By the time this Pilot program concluded in late October, the hottest part of the year was over, and partners and recipients had shifted their focus away from managing extreme heat. Although another year of double Mayoral transitions is unlikely to take place again, the COVID-19 pandemic continues and average temperatures and extreme heat events continue to rise and impact residents

Future Recommendation: Begin AC/fan delivery program earlier

Planning, design, and implementation processes should begin as early as possible in the calendar year. As budgets are made for FY23 (which begins July 1, 2022) the determination should be made if this program should continue the summer of 2022. If this program continues and is added into the budget, then

- Outreach to program and delivery partners should begin February 2022.
- Outreach to potential recipients should then begin in April/May, as the weather begins to warm. Procurement of a delivery services vendor should take place simultaneously with outreach efforts.
- By the time vendors are hired for delivery, outreach should be mostly complete, so that large lists of cooling equipment recipients can be shared with the delivery vendor at the same time, and they can plan accordingly (driver availability, and locations of delivery in the same region), and delivery can take place by early June 2022
- See [Appendix G](#) for detailed timeline

Communications and Messaging

The Pilot AC and fan delivery program was managed by many members of the CRB team. The initial planning of the program was led by the CRB team's Climate Resilience Program Manager Sanjay Seth, while the design and initial implementation of the program was carried out by Senior Resilience Fellow, Hannah Wagner, who was working part-time and remotely at the time of the Pilot program. CRB Project Manager Peggy Zhang began implementation of the program as a new City employee with limited knowledge of City operations, with support from fellow Project Manager Zoe Davis. At the same time, each team member was also responsible for many other ongoing projects. As such, many conversations with Environment Department leadership, program partners, and the delivery vendors were had with different members of the team. These conversations often happened verbally, with little to no written documentation for transition from staff member to staff member. This resulted in some misunderstandings among team members, delays in implementation, and confusion felt by program partners communicating with different members of the CRB team.

Given that this program was a Pilot program with limited supplies to distribute, this program was not made public, which meant the City's own communications team did not have any information (including 311). Many program partners noted this lack of public information caused confusion and increasingly frequent calls directed to their program services and to the Environment Department from unhappy and angry residents who did not believe this was a transparent City program. Eligibility requirements for the Pilot were not clearly outlined and given to program partners, and were changed during the outreach process. Residents who completed the Google form with a volunteer caller to apply for an

AC were not contacted again following the completion of the form until RTD called them to confirm delivery, or until early November when they were notified that they did not qualify to receive an AC. Last City's communications team (including 311) were not given any information to reference when residents called in to ask for information. The resulted in an abundance of calls directed to the Environment Department and CRB team.

Future Recommendation: Establish clear and consistent roles and responsibilities of staff, including additional staff/temporary staff, and volunteers (if necessary).

During the period of planning and design, the CRB team should evaluate how this program will fit within the overall work plan for the team, and the capacity of each staff member to participate given the known workload. If staff capacity is limited, the needs for additional staff and/or volunteer capacity should be considered so that additional support can be lined up early on. This should include allocating funding for the hiring of staff support, and making sure resources are available as needed (such as workspace/phones/computers/program information).

Future Recommendation: Create clear and consistent messaging to City partners, and the general public about the program

In order to increase transparency and decrease confusion and frustration, the existence and capacity of this program (i.e. limited number of ACs/fans) should be made clear to all program partners and the general public. This communication could come in the form of a press release, blog post, and/or creation of a Boston.gov webpage to serve as a reference for those looking to get more information about the program. If specific eligibility requirements must be met, these eligibility requirements should be made explicitly clear to all City partners (Mayor's office, program partners, and communications sources like 311) so that messages to the general public are consistent. Certain eligibility requirements may require verification, and the design process should consider whether this verification will be conducted internally by CRB program management, an internal City partner, a community organization or nonprofit, OR should not require verification at all (additional barriers and time commitment verification will require)

Language and Communication Access

Communications and messaging should be provided in an equitable and accessible manner for all potential recipients. This Pilot program only considered language and communication access as needed throughout the process. Unfortunately, this required time and additional resources to provide adequate translation and interpretation services that were limited during the implementation of this project. During the design process, flyers to BHA facilities announcing the distribution of box fans were created with translation from English to Spanish and Chinese. Although CRB staff members were fluent

in these languages to provide quick translations of additional flyers to subsequent BHA sites, this did not include all languages (most notably Vietnamese, Haitian Creole and Cape Verdean Creole) that would have been required to provide equitable communication to residents at all BHA facilities where box fans were distributed. During the distribution process, CRB staff relied heavily on available BHA staff members (when available) to provide interpretation services to residents.

During the outreach process for elderly residents served by the Age Strong Commission, volunteers and staff members came across many language barriers because many residents did not speak English. Although on demand interpretation services are available through the City, this was extremely difficult to use while calling out to residents when the caller is unsure if the person will pick up, and which language they will need interpretation services for. Using the interpretation services for this project required some LCA training and technical abilities, and also the use of a phone with conference call capacity and a computer with secure internet access located in a space where extended phone conversations would not be disruptive to the workplace. Due to COVID restrictions, volunteers were not able to access space inside City Hall to do this work, and space within City Hall was limited for staff members to use for extensive phone calls.

Future Recommendation: Incorporation of language access throughout program

The program should be aligned with the City's [Language and Communications Access Policy](#), using the City's [LCA resources](#). For physical materials that would be posted throughout the City, this should incorporate the [language requirement by neighborhood](#), which varies from neighborhood to neighborhood. For Translating calls all callers should go through LCA training (including volunteer callers). Due to the difficulty in identifying language needs, multiple rounds of calls may be needed - first to identify the language interpretation needed, and second to call back with a translator who is briefed on the nature of the program and call content.

Outreach and Delivery

Outreach communications were unclear (see previous section), which led to many redundant steps or missed opportunities. Due to the limitations of vendor availability and procurement laws for WQCs within municipal government, RTD Logistics was the only choice for a delivery vendor. However it was assumed from the beginning that RTD Logistics employed their own drivers to carry out their delivery services, which the CRB team later found out was not the case. As a purely *logistics* company, RTD procured bulk contracts for delivery work orders, and then contracted this work out to drivers who served as independent contractors of RTD. As such, the drivers used different size vehicles (with varying capacity to hold ACs) and had varying levels of availability throughout the delivery timeframe.

Deliveries were further complicated by delays in identifying AC recipients, both residential and BHA. This resulted in delivery drivers making multiple trips to the same neighborhood or BHA facility - resulting in additional uses of vehicles and staff time.

Future Recommendation: Include all program partners in the development of outreach and delivery operations in order to streamline processes

Collaborate, do not dictate delivery process

If vendor, make sure we know how they already work, we can use their process

Better if community partner (see Food access list of CBOs) - best for outreach, can also support some local delivery

Alternate Recommendation: Work with Community-Based Organizations for Outreach and Delivery

The Breathe Easy AC outreach was conducted by the Program Coordinator of the Breathe Easy program. This outreach process resulted in a much higher success rate in actually reaching interested and qualified potential AC recipients than the volunteers and City staff who conducted the outreach for the elderly population from Age Strong's intake list. Unlike volunteers and assorted City staff, the Program Coordinator was familiar with the constituents he was reaching out to, and the constituents viewed him as a familiar and trusted resource.

If time and resources allow, an alternative way of reaching residents would be to reach out to other departments and agencies who frequently collaborate with community based organizations. In the evaluation of this pilot program, a few of these included:

- LCA's community based organizations and ethnic media [list](#)
- Food Access Community Organizations [list](#)

CONCLUSION

This program was funded in the FY22 as part of the Healthy Places Initiative, which was a one-time initiative of the Environment Department. The planning, design, and implementation timeline of this program this year created the largest setbacks of the program overall. If this program is continued in the future, critical points mentioned in the memo such as early planning and procurement in collaboration with other stakeholders, clear communication and messaging, equitable language access, and partner collaboration in distribution - can be easily addressed by the CRB team and supporting members of the Environment Department Staff.

The program provided immediate and near-term solutions for residents in response to the climate hazard of extreme heat. Residents who were able to receive cooling equipment expressed gratitude to the City for providing them a way to stay cool and healthy and avoid heat stress. However, this solution is temporary and does not take into account the additional energy usage of cooling equipment, maintenance and upkeep of the equipment, and long-term viability of the equipment that was provided. While this program does offer immediate relief, other programs such as building retrofits that better insulate buildings and use clean energy for HVAC systems should be explored for long-term sustainability and heat relief.

APPENDIX

Appendix A - Program partners and Key Contacts

Department / Agency / Organization affiliation	Name	Job Title	Role in AC / Fan Distribution
Purchasing	Kevin Coyne	Purchasing Agent	Head of purchasing department - purchased AC units, fans, and secured a vendor for delivery services for AC units
Legal Team & Risk Management Team	Robert Arcangeli Stephanie Miller	City of Boston Counsel	Provided legal counsel during the planning and design process of the Pilot and recommended certain limitations of the program to avoid potential liabilities.
OEM	John Maxson	Logistics Supervisor	John is responsible for many of OEM's logistical operations, including the management of COB materials at the West Roxbury Education complex. Distribution of ACs and fans depended on John's availability to meet the CRB team / RTD drivers in West Roxbury.
Age Strong Commission	Andrea Burns	Director, Age-Friendly Boston	Andrea helped to coordinate efforts between Age Strong and Environment department
Age Strong Commission	Lisa Martins	Volunteer Program Coordinator	Lisa oversees the Senior Property Tax Work off program which provided volunteers to call seniors from the AC call list,
Age Strong Commission	Melissa Berlin	Deputy Commissioner of Programs and Partnerships	Melissa oversees many programs that directly serve senior residents and directed many questions from senior callers to CRB.
BPHC	Darris Jordan	Breathe Easy at Home Program Coordinator	Darris is the coordinator the Breathe Easy at Home Program and managed all outreach efforts to program participants for AC delivery
BHA	Joel Wool	Chief of Staff	Joel and the BHA team assisted in determining how many AC units should be distributed to various BHA facilities
BHA	John Kane	Coordinator of	John and the BHA team assisted in

		Grants and Strategic Partnerships	determining how many AC units should be distributed to various BHA facilities
BHA	George McGrath	Director of Property Management and Operations	John and the BHA team assisted in determining how many AC units should be distributed to various BHA facilities
Public Works	Robert Pardo	Central Fleet Management Division	Robert helped secure a cargo van from the central fleet to be used in the delivery of fans.
RTD Logistics	Jeff Semon	Chief Operating Officer	Jeff is the strategic manager of operations and was the primary point of contact during the vendor bidding process.
RTD Logistics	Bennett Bernstein	Operations / Compliance Manager	Bennett oversees day-to-day logistical operations at RTD and connects drivers (independent contractors) with delivery work. He was the primary contact for new lists of AC delivery recipients.
Environment	Gifty Osei	Grants and Finance Manager	Gifty manages all financial operations (PO, invoices, payments) to outside vendors for the Environment Department.

Appendix B - BHA facilities that received Box Fans

BHA Region	Community Name	Total # of Fans Delivered
1	Bunte	113
3	Eva White	80
	Frederick Douglass	70
	Hampton House	52
	Washington Manor	75
	Peabody/Englewood	52
	Pasciucco	53
public/private	Heritage Elderly	205
	TOTAL	700

Appendix C - Outreach for AC units

Age Strong Commission		# People	% Total # People on Outreach List
<i>Outreach - 2 volunteers, Environment Department Staff, Age Strong staff</i>	Total number of people on outreach list	389	
	Number of people contacted	159	40.9%
	Number of applications completed	96	24.7%
	Number of people contacted but not interested	63	16.2%
	Number of people unable to contact	230	59.1%
Breathe Easy at Home Program		# People	% Total # People on Outreach List
<i>Outreach - Darris Jordan, Breathe Easy at Home Program Coordinator</i>	Total number of people on outreach list	92	
	Number of people contacted	73	79.3%
	Number of applications completed	46	50.0%
	Number of people contacted but not interested	27	29.3%
	Number of people unable to contact	19	20.7%

Appendix D - Total Allocation of AC units

Category	Total AC Allocation	Delivery Complete as of 10/26/21
Age Strong	150	78
BPHC Breathe Easy	75	42
BHA	175	280
TOTAL	400	400

Appendix E - BHA Facilities that received AC units

[Data source spreadsheet: BHA Tracker](#)

Region	Community Name	Total # of ACs Delivered	Number of ACs Distributed (as of Nov 2021)
1	Bunte	39	n/a
	Bellflower	18	n/a
	Annapolis	2	n/a
	Ashmont	13	n/a
	Roslyn	6	n/a
	Rockland	12	n/a
2	91-95 Washington	23	In storage
	Comm. Elderly	3	In storage
	Torre	15	n/a
	Codman	21	3 remaining units in storage
	Lower Mills	2	1 remaining units in storage
	Pat White	5	n/a
	St. Botolph	5	n/a
	Ausonia	3	n/a
	W. 9th	3	In storage
	Foley	1	In storage
	Msgt Powers	1	In storage
3	Hampton House	5	15
	Washington Manor	15	15
	MLK	15	15
	Holgate	10	10
	Hassan	10	10
	Malone	5	In storage
	Peabody/Englewood	5	5
	Pasciucco	5	In storage
	JJ Meade	5	In storage
	Management Office	34	In storage
	TOTAL	280	

Appendix F - Analysis of AC and Fan recipients

	Age Strong	Breathe Easy	BHA
Race	self reported	self reported	<i>management reported</i>
<i>Black / African American</i>	64	20	34
<i>Latino / Hispanic</i>	6	17	13
<i>Asian</i>	1	0	8
<i>Indigenous</i>	0	2	
<i>White</i>	17	1	18
<i>Multi- Racial (1+ race)</i>	4	5	0
<i>Not Reported (N/A)</i>	23	2	207
Number of People in Recipient Household	self reported	self reported	<i>management reported</i>
<i>1</i>	52	0	53
<i>2</i>	29	7	9
<i>3</i>	20	14	0
<i>4</i>	4	7	0
<i>5+</i>	3	13	0
<i>Not reported</i>	0	1	218

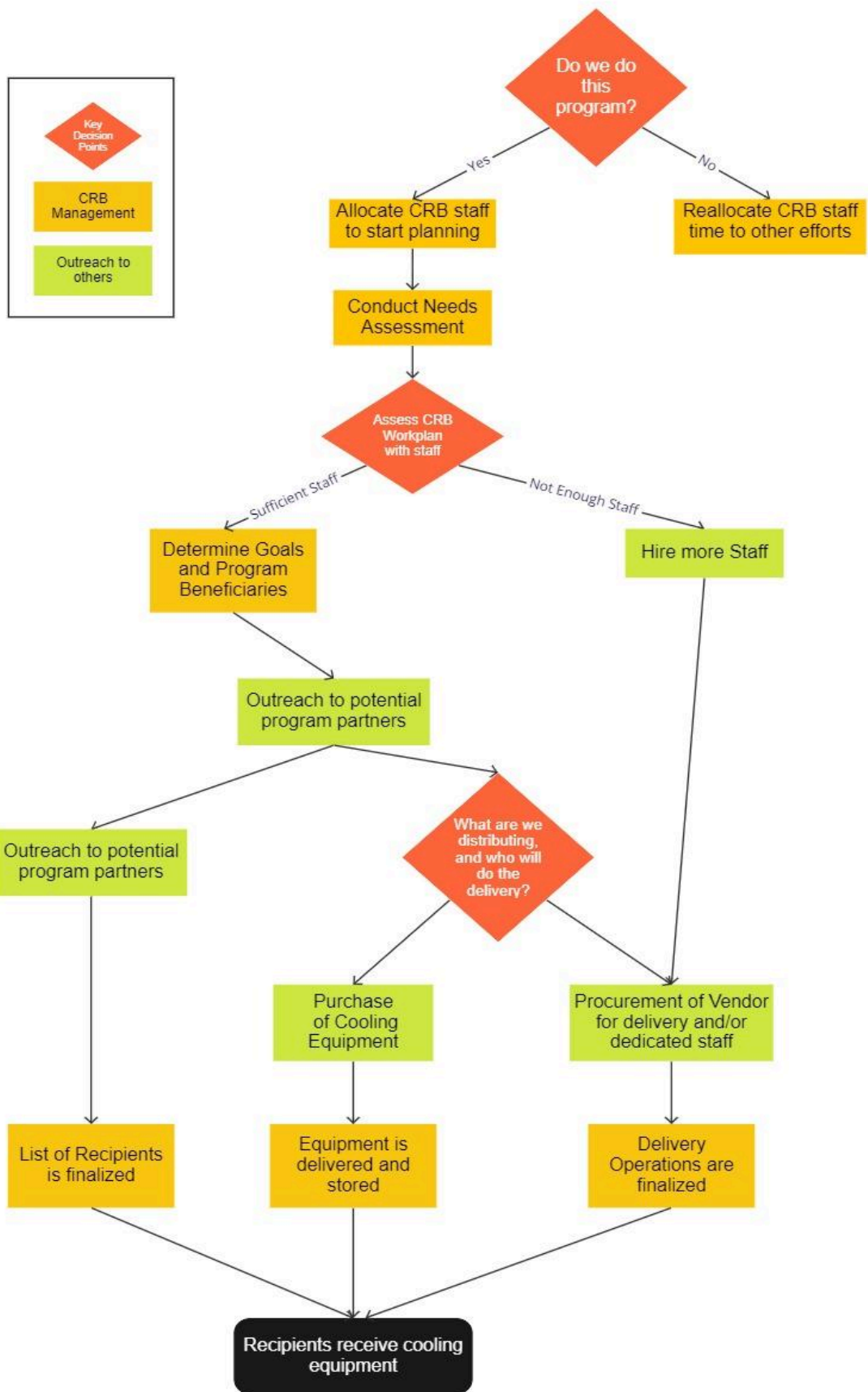
**note many residents self identified as more than one race*

Appendix G - AC/Fan Delivery Program - 2022 Proposed Timeline and Decision Points

Action	Department / Team	Timeline
Determine Scope of the Program Questions to consider <ul style="list-style-type: none"> ● What type of program will this be? <ul style="list-style-type: none"> ○ Annual program vs standalone project? ● Who will be responsible for leading the program? <ul style="list-style-type: none"> ○ Existing staff, additional staff, temporary hires? ● What funds will be available? 	Environment Department Leadership	January 2022
Conduct Needs Assessment Questions to consider <ul style="list-style-type: none"> ● What are the goals of this program? <ul style="list-style-type: none"> ○ Climate resilience intervention, public health benefit, 	CRB Team	February 2022

<p>community engagement, etc</p> <ul style="list-style-type: none"> ● Who will the program serve/benefit? <ul style="list-style-type: none"> ○ Limited population (who?) vs General Boston residents ● How will we reach our target population? <ul style="list-style-type: none"> ○ Who will our program partners be and what is their role in this program? ● How can we integrate equitable practices into our program design process and outreach process? <ul style="list-style-type: none"> ○ Who are the key stakeholders we should consult to ensure our program is designed with our target population in mind? ○ What language access materials will we need? ● How does this program fit into our overall CRB Work plan for the upcoming months? <ul style="list-style-type: none"> ○ What staff capacity do we have / what additional capacity do we need? ○ What are the resources that we have / what additional resources might we need? ● How might the ongoing COVID-19 pandemic impact how/what we can do? 		
<p>Outreach to program partners for planning and design</p> <ul style="list-style-type: none"> ● Procurement (to purchase goods/services) ● OEM (storage space and logistics) ● Agencies that work w/potential recipients <ul style="list-style-type: none"> ○ Age Strong Commission ○ Boston Public Health Commission (BPHC) ○ Mayor’s Office of Immigrant Advancement (MOIA) ○ Mayor’s Office of Language & Communications Access (LCA) ○ Mayor’s Office of Food Access ○ Mayor’s Office of Housing (former DND) ○ Boston Housing Authority 	CRB Team	February 2022
<p>Procurement of Goods (AC/ Fans)</p>	Procurement	March 2022
<p>Outreach to potential program recipients</p>	CRB team (plus other staff/ volunteers?)	April -May 2022
<p>Procurement of Services (Vendor for Delivery) <i>(see Peggy’s slides about COB Procurement Processes to determine type of procurement required for scope of the program)</i></p>	Procurement	April 2022
<p>Confirmation of Vendor</p> <ul style="list-style-type: none"> ● Collaborate to design program procedures for delivery operations that suit both program needs and vender stand operations 	CRB Team Vendor OEM (or storage partner)	May 2022

Delivery of AC / Fans	Vendor	May - July 2022
Collection of Data	CRB Team and partners	Throughout program



Key Decision Points

- CRB Management
- Outreach to others