

EXECUTIVE SUMMARY

Our current food system fails to directly connect farmers to consumers, which leads to many inefficiencies. Farmers, especially minority and small farmers, struggle to turn a profit, and many people lack access to fresh, healthy food at affordable prices. Meanwhile, up to 50% of fresh produce grown in the US is wasted. World Wildlife Fund's (WWF) Markets Institute believes that the US Postal Service (USPS), a significant yet underutilized asset, could help bring fresh produce from farms to front doors across the country and address these problems at the same time. A third-party platform could be integrated with the USPS to allow farmers to ship produce directly to consumers. This would improve market access for producers while simultaneously expanding access to nutritious, fresh, local produce to consumers across the US.

WWF's Markets Institute has served as an idea generator, catalyst, and convener, bringing together key stakeholders and subject matter experts to evaluate whether Farmers Post is feasible and, if so, what opportunities and hurdles exist, and what the next steps should be.



This process included conversations with farmers, food hubs, food security groups, the USPS, USPS unions, veterans' groups, public health officials and experts, and other community stakeholders. We believe that Farmers Post could be a win-win solution offering new markets to farmers and greater equity, access, convenience, and nutrition to consumers. This program would provide much needed revenue for the USPS while addressing food loss and waste and making use of an existing, nationwide asset.

Farmers Post can open new markets for struggling farmers and consumers, delivering gains to all stakeholders. Before COVID-19, about 8% of farms sold directly to consumers, but this was primarily limited to larger, more urban farms and only through consumer pickup options. This meant a limited market and large customer acquisition costs. It also left out most of the smallest farmers and minority farmers. Meanwhile, 53.6 million people (17.4% of the US population) are lowincome and struggle with access to fresh, healthy food. This is especially true for predominantly minority, urban communities. By delivering healthy food straight from farms to customers' doors, Farmers Post will open up new market opportunities and offer the distribution networks needed to connect farmers to people and retain profits. With easier access, consumers can enjoy nutritious, fresh produce and the health benefits it provides. Currently, just one in ten Americans eat the recommended servings of fruits and vegetables, but significant health benefits can be gained from eating more produce, even without changing other behaviors. Finally, Farmers Post will provide a new revenue stream and opportunity for the USPS.

Before any home delivery program for food moves forward, it is important to address key issues. The program must identify who will be liable if food safety or quality are compromised. Few USPS vehicles are temperature controlled, so produce has to withstand a variety of temperatures for 12-48 hours during shipping. While whole fruits and vegetables are generally low-risk for food-borne illnesses, there is always some risk, and customers care about quality as well as safety. There should be thoughtful consideration of what customer support



is needed and how to best reach all consumers. Fruits and vegetables coming straight from a farm may look different than produce in a grocery store, so consumers may need some education, handling information, and recipe ideas. Programs should be designed to reach low-income consumers, senior citizens, and the disabled, as they benefit even more than others from home delivery.

WWF proposes a third-party solution – the "Farmers Post" part of the program. At a minimum, this would be a web platform that is integrated with the USPS system. Consumers could enter their zip code, locate farms, and place orders. Farmers would receive the orders, payment, and shipping labels or instructions. This would take the burden off small farms having to build their own websites and advertise, and it would also support farms through established economies of scale and best practices. However, this could take place with a physical food hub that aggregates food from multiple farms or a virtual model connecting individual farms through an online platform. These models have different benefits, so a system could be designed with both in mind, which would allow for the widest participation and access across the country. Early partners are ready and willing to test both these models, as well as different USPS forms of shipping that include a new Local Connect program and Parcel Select drop-off at regional processing facilities. This early pilot will inform next steps. Along with the results from the pilot, next steps will include testing logistics, market analysis, and research and advocacy to inform the program design.

Farmers Post has the potential to transform how we get food from farms to consumers, benefitting farmers, consumers, the environment, and the USPS. Early learnings are positive but further steps are needed to ensure that optimal program designs ensure access and benefits for all stakeholders.

INTRODUCTION















Our current food system does not directly connect growers to consumers, which leads to many inefficiencies. Farmers, especially minority and small farmers, struggle. Growers get just 7.8 cents out of every dollar that consumers spend on fruits and vegetables (USDA ERS) and many farmers must work off-farm jobs to make ends meet. Meanwhile, many people lack access to fresh, healthy food at affordable prices and just one in ten adults eats the recommended servings of fruits and vegetables. At the same time, up to 50% of fresh produce grown in the US is wasted. These problems aren't new, but the pandemic has exacerbated them, highlighting the need to rethink our food system to ensure that consumers have access to nutritious produce at affordable prices, increase profits and income for farmers, and reduce food loss and waste.





World Wildlife Fund's (WWF) Markets Institute believes that the United States Postal System (USPS), is currently an underutilized asset with the potential to serve the public in innovative ways, especially as people send less mail. This could include bringing fresh produce from farms to front doors across the country to address our food system's underlying problems. The USPS is an equalizer, serving every household regardless of race, income, ethnicity, or rural/urban status.

A third-party platform integrated with the USPS will allow farmers to ship produce directly to consumers, improve market access for small and minority farmers, and expand consumer access to healthy, fresh, local produce to consumers across the US. This market-driven enterprise has the potential to revolutionize the distribution of fresh produce across the country, bringing significant benefits to small and minority farmers, all consumers (especially lowincome, minority communities, both urban and rural), the environment, and the USPS. Farmers could access new and larger markets and keep more profits with a shorter, more direct supply chain. Consumers could purchase fresh food in an accessible format, even in food insecure communities. Food loss and waste will decrease through new market creation and local food delivery, without increasing the environmental footprint elsewhere by utilizing an existing structure; the USPS already delivers to most homes daily. The USPS would see new revenue streams. This is an opportunity to revitalize local markets for farms and ensure that all Americans have access to nutritious food through a financially and environmentally sustainable enterprise.









PROCESS

WWF has served as an idea generator, catalyst, and convener, bringing together experts across a wide range of topics to evaluate whether Farmers Post is feasible and, if so, what opportunities and hurdles exist, and what the next steps should be.

In spring 2020, as the pandemic began, people stayed at home and cooked more, supply chains struggled to pivot from food service to grocery stores where shelves were bare, and many farmers selling to food service businesses were forced to leave healthy food rotting in fields while food insecurity skyrocketed. None of these problems were new, but they were exacerbated. WWF began to explore potential solutions and the idea for Farmers Post began to take shape. WWF developed a business case to understand the economic potential for such a program.

With support from the Institute of Food
Technologists' Seeding the Future Global Food
System Challenge, WWF spent the past six months
engaging in conversations with farmers, food
hubs, food insecurity groups, the USPS, USPS
unions, veterans' groups, public health officials
and experts, and other community stakeholders.
This has led to a greater understanding of what is
possible, what opportunities exist, what hurdles
need to be addressed, and what the next steps
should be. We've also been able to put together
a core team of partners to analyze potential
program models, design a beta test, and receive
commitments to gather additional data through
model testing.

OPPORTUNITIES

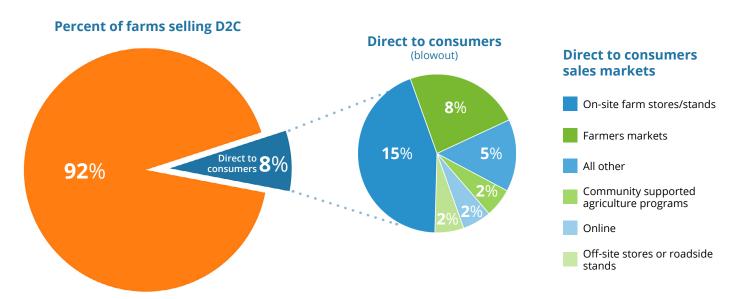
Farmers Post is a win-win solution that would bring new markets to farmers and increase equity, food access, and convenience for consumers. At the same time, Farmers Post would direct fees to the USPS while addressing food loss and waste and making use of an existing, underutilized asset.

Before the pandemic, about 8% of farms sold directly to consumers, but this was largely limited to larger, more urban farms (USDA AMS). A full two-thirds (67%) of farmers who sold directly to consumers were located in metropolitan counties, leaving out a significant consumer and farmer base. They also only sold food through methods requiring consumer pick-up, such as on-farm stores and farmers' markets. This can be hard on farmers, too. Customer acquisition can be a major pain point, especially for consumer-supported agriculture (CSAs) or on-farm stores, since farmers need to invest significant time visiting farmers'

markets if they want to gain a share of an existing customer base. These costs are often the most burdensome on the small number of BIPOC-owned specialty crop farms in the US, with Black vegetable farmers earning \$42,030 annually on average across all types of sales compared to \$271,693 for white vegetable farmers (USDA NASS). This is especially true since most farmers' markets are in higher-income, less diverse areas.

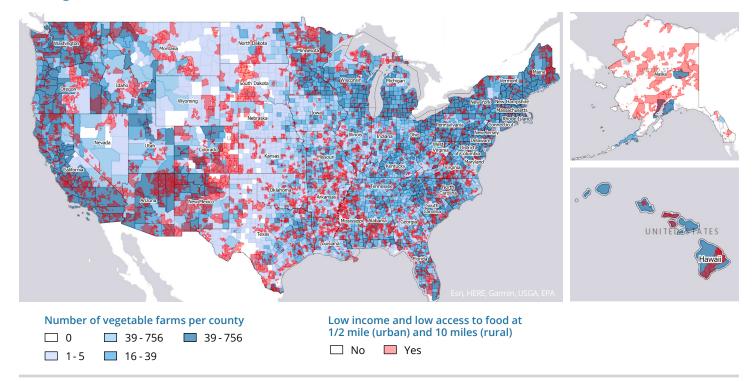
There is strong consumer interest in supporting small farmers, but a farmer-to-customer model still must be convenient. People express passion for local food and local farms, but they are discouraged if buying local produce is far less convenient than visiting a grocery store or getting their groceries delivered. CSAs often offer pick-ups only at certain times and in certain areas while farmers' markets typically have limited hours and few locations. Home-delivered local produce

Foods sold through intermediate markets and institutions accounted for the largest share of local food sales in 2015



Note: Intermediate markets and institutions include processors, wholesalers, schools, hospitals, food hubs, and colleges & universities **Sources:** USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, 2015 Local Food Marketing Practices Survey

US Vegetable Farms & Food Deserts



through Farmers Post would considerably expand the existing direct-to-consumer markets, allowing greater access for farmers to a far larger customer base. It would especially benefit small farmers who are not large enough to sell business-to-business but struggle to access and earn a profit in the few markets currently offering direct-to-consumer sales. Farmers Post could also help address seasonality problems; even for farmers who sell successfully at farmers' markets, few are open year-round. However, a farmer could ship produce that stores well in the winter months, such as root vegetables and apples, and, if they meet relevant license requirements, value-added products like jams or salsas to supplement their income in the off-season.

Farmers Post would also help get more food and nutrition to more people. Today, 53.6 million people (17.4% of the US population) live in low-income areas and struggle with insufficient access to fresh, nutritious food, and minority consumers

are overrepresented in that group (USDA ERS). Nationally, 10.5% of people are food insecure, but that percentage rises to 21.7% of Black households and 17.2% of Hispanic households (USDA ERS). Yet, fruit and vegetable farms exist in the majority of counties across the US. Better market opportunities and strong distribution networks could help get that healthy food to more people.

This system could also help change the narrative of what it means to be food insecure. Historically, programs addressing food insecurity have offered a limited variety of free food. Farmers Post would still be a market-based program but could help address access and affordability while providing a greater selection. Consumers at all levels could choose whether and when to purchase food as well as what to purchase. Local farms would also be incentivized to grow foods that have regional market acceptance or cultural significance but that are often hard to locate, creating new markets for farmers and food that is valued by consumers.





Consumer benefits would extend beyond lowincome or food-insecure communities. Home delivery offers a huge benefit to disabled individuals and seniors who may struggle to get to the store. With grocery delivery services increasing in popularity, it could also ensure a steady pipeline of nutritious food for people who already order online. Consumers are increasingly interested in regional and local food production, but there is currently no way to offer that to a broader base of consumers. Individual farmers recognize the market but lack the infrastructure to deliver. For farmers, the costs of driving to different farmers' markets can be an obstacle, and current labor shortages make it difficult to vertically integrate and start their own home delivery programs.

Making it easy to access fresh, nutritious food would ensure an ongoing focus by consumers while improving health outcomes. Today, just one in 10 Americans eats the recommended servings of fruits and vegetables (CDC). The USDA and HHS recommend two cups of fruit and 2.5 cups of vegetables daily for adults, but the average American eats only 0.9 cups of fruit and 1.4 cups of vegetables (USDA ERS). Increasing the amount of fruit and vegetables consumed by a relatively small amount, even while leaving the rest of one's diet unchanged, can have meaningful impacts. A series of studies found that eating more fruits and vegetables was significantly associated with a lower risk of all-cause mortality. In particular, the risk of all-cause mortality decreases by 5% for each additional serving of produce a day.² Risks from cardiovascular disease were one of the most significantly reduced,³ however, fresh produce is also associated with lower blood pressure, reduced risk of heart disease and stroke, preventing certain types of cancer, reduced risk of eye problems and digestive problems, a positive







impact on blood sugar, and the promotion of weight loss.⁴ As Dr. Will Ross, MD, MPH, Professor of Medicine at Washington University and Principal Officer for Community Partnerships shared, "it is remarkable how a small increase in fresh fruit and vegetable production can dramatically improve health outcomes. This could be a real gamechanger." Farmers Post doesn't need to significantly change dietary behaviors; it would create a positive impact by simply helping people get more nutritious food.

Finally, Farmers Post presents a valuable opportunity to the USPS. Mail volume is down 31% since 2007. The USPS faced an \$8.9 billion loss in 2019 and an even higher \$9.2 billion loss in 2020.⁵ While a recent postal bill addressing long-term benefits will help save some costs, the USPS also needs to generate higher revenues. WWF estimates that Farmers Post could offer the USPS \$1.5 billion in revenues with just 2-3% market penetration and up to \$6 billion in annual revenues with 10% penetration.⁶ While this wouldn't fully fill the gap, it could be a significant step in the right direction.

Farmers Post also fits in well with existing USPS goals. At an estimated 15-20 lbs., the produce boxes are well within a sweet spot (the post office will handle packages up to 75 lbs. but prefers lighter ones). The program is focused on very local, last mile delivery, which is the USPS' expertise. Even other delivery services, such as UPS and FedEx, outsource last mile to the USPS on a regular basis. The USPS serves as an equalizer, delivering to every single household regardless of income, race, ethnicity, gender, or rural or urban status. It would make use of an existing service and could help to amortize costs over more revenue streams while leveling demand. For example, the busiest season of the year for the USPS is December, when holiday boxes are shipped. The peak delivery season for Farmers Post will vary by region but will most commonly be June – October. Finally, the USPS has a chance to focus on and communicate a success story, feeding the country with Farmers Post. This will go over well to the general public. regardless of political affiliation.

LEARNINGS

Before any program can move forward, it is important to integrate key learnings around food safety and quality, consumer support, accessibility, and USPS concerns. While none of these present a significant hurdle, they raise important considerations about how to mitigate risks and structure a program for success.

A successful program will ensure food safety and quality and identify who is liable for any critical issues. The USPS vehicles are not temperature controlled, so produce must be able to withstand a variety of temperatures for 12-48 hours during shipping. While there are many temperature-control and insulation methods such as Styrofoam, mylar, cold packs, and dry ice, these are expensive and environmentally wasteful. Tests should be conducted to determine what items can be shipped in what conditions with minimal (or reusable) packaging. This will also vary by location and season.

The FDA puts whole fruits and vegetables in a low-risk category for any type of health concern or contamination, but there is still always some risk. And, while the FDA is concerned about food safety,

Farmers Post must also implement quality control. Even if produce is safe to eat, if it arrives bruised or damaged, customers will be less satisfied. Without a hub for central quality control, a single farm may generate bad publicity for the entire program if it fails to ensure food quality.

Additionally, many small farms are not GAP certified (a USDA certification on agricultural best practices). While this is generally required for farms selling to businesses, there is an exception for farms earning less than \$25,000 annually and for farms only selling direct to consumers. This could exacerbate liability questions, such as who bears the cost of damaged fruit or potential customer illness, if those are not established up front.

It's also important to consider what customer support and education needs to be built into the program. Consumers are now accustomed to convenient services such as real-time tracking, delivery windows, and low-cost or even free shipping. While local produce delivered to one's door is enticing, Farmers Post will need to offer enough services to compete with other convenient



offerings, such as Amazon Fresh and local grocery delivery. Often, the USPS delivers during the day when people are less likely to be home. This could result in box theft or perishable produce left to sit in a range of temperatures and weather conditions. However, the USPS does offer a variety of fast shipping solutions under \$10, and postal workers are more likely to have access to vestibules and other drop-offs in urban settings than other delivery drivers. A third-party website for Farmers Post could also work to integrate what have become standard tech offerings and abilities.

Beyond managing expectations, some consumer education may be needed, as the fruit and vegetables coming straight from a farm may look different than those in supermarkets. They may be dirtier if recently harvested, have a range of sizes and shapes, and perhaps even come in different plant varieties. Local offerings will also depend on seasonality unless there are indoor farms participating in the program. Many consumers may also be unsure of how to prepare unfamiliar types of produce. The FDA already offers consumer education around best practices for storing and preparing fresh vegetables and fruit. This should be included as well as additional materials to help support and educate consumers.

Food accessibility also goes beyond home delivery. Right now, SNAP and WIC benefits are limited online to a few large retailers. If Farmers Post moves forward, Congress could extend benefits to this program and consider offering subsidized shipping to consumers who qualify for SNAP and WIC benefits. Many states also offer "double food bucks" programs where SNAP and WIC benefits that are used at farmers markets are doubled









in value. These programs also tend to be limited to in-person purchases but should be extended to Farmers Post. Doing so may also allow for additional offerings, such as seeds, to integrate more home-grown produce into people's diets.

There should also be exploration into how Farmers Post could integrate with pilot projects and nascent efforts on Produce Prescriptions (PPRs or Produce Rx.) At its simplest, PPRs offer the opportunity for a physician to prescribe fresh produce to low-income patients suffering from diet-related health risks or conditions, such as diabetes, obesity, or high blood pressure. There are at least 108 PPRs across 38 states⁷ largely funded with private dollars. However, if successful, this might be an avenue for revenue from health insurance companies in the future. Linking Farmers Post with PPRs would bring easier access to food for patients receiving a prescription and funding to purchase that produce from a local farm.

Farmers Post will also need to reach people who cannot order online. Since the USPS already serves everyone, this could be accomplished through postcard sign up or perhaps at local post offices, which are often a center in rural communities. There could even be pop-up farmers markets at post offices with sign-up options onsite to help market the program and reach more people.

Finally, any Farmers Post program will need to address USPS concerns and structure. The USPS has historically been extremely popular, with approval ratings of around 91% in a survey conducted in Oct 2020. However, USPS operations differ in rural and urban/suburban areas which could present challenges. Rural communities may see some of the highest benefits from Farmers Post since other services may not exist in the region, but they also present a few hurdles. Due to differing pay structures for postal workers in different regions, picking up packages late in the day in rural areas may be difficult, and farmers in those regions could face long drives to drop off boxes. USPS mail carriers in rural areas often also use their own cars, so an increased package load may be difficult to accommodate. However, package deliveries are already increasing, so the USPS is currently considering how to address this concern. Rural areas are not the only ones facing unique challenges. In urban environments, package theft may be more of a concern and postal workers do not always use cars, but new innovations and practices are already underway, as people order more and more packages to their homes. Central drop-off locations, lockboxes, and new technology can be utilized to assist with deliveries.

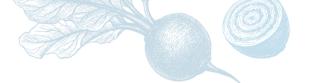
PROGRAM MODELS

There are a few program models to consider, and a few should be piloted before one is chosen. It is also possible that two or more shipping models will best support different local and regional food systems.

WWF proposes a third-party solution – the "Farmers Post" part of the program. At a minimum, this would be a web platform that is integrated with the USPS system. Consumers could put in their zip code, locate farms, and place orders. Farmers would receive the orders, payment, and shipping labels or instructions. This would take the burden off individual small farms from having to vertically integrate, build their own websites, and market to consumers. It would also support farms by providing established economies of scale and identifying better practices. While any farmer could currently ship a box of produce at the post office, to get special rates and/or negotiated service agreements, a single vendor must spend more than \$300,000 annually with the post office. As an entity, Farmers Post could bring this volume to the USPS and then also work to best serve farmers. It would also allow for standardization and greater efficiency around box sizes, packaging, food safety, and more. A single entity could also work to target and promote key groups, such as focusing on small and minority farmers and helping to market their goods to consumers.



Australia has its own Farmers Post called Farmhouse Direct. They began with 40 farms but built the program to more than 400 in a few years. At this point, they do not have to advertise, and demand from consumers and farms continues to grow. The idea started after Australia Post commissioned a survey of small businesses and discovered that farmers were one of the main groups lacking access to consumers. They created and run the Farmhouse Direct website, acting as the "Farmer Post" in this scenario. Australia Post keeps 7.5% of the revenue from online orders and PayPal takes another 2.5%, leaving farmers with 90%. This is significantly higher than the 7-8% farmers keep in the US today. If the box is shipped with Australia Post, they also receive that shipment fee. Since this service is for all food purchases including meats and dairy, some boxes are shipped through third parties better equipped to handle refrigerated packages, even though the program is run through Australia Post.



While Farmhouse Direct can and should offer many lessons for Farmers Post, we do not suggest that the USPS vertically integrate and take on the full role of Farmers Post. Instead, this could be structured as a third-party or non-profit partner that integrates into the USPS and its online offerings. This way the USPS can focus on their expertise in distribution and logistics while another entity with expertise in farming and food shipments can focus on marketing, standardization and specifications, and farmer support.

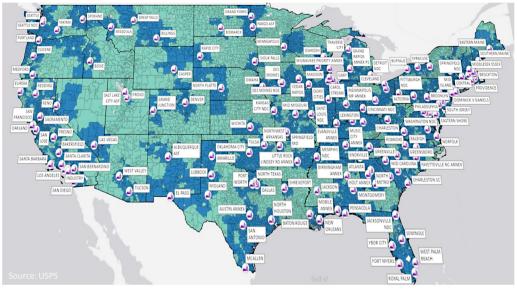
There will need to be discussions and decisions around a food hub versus an individual farm model. A virtual Farmers Post could easily accept orders from food hubs as well as individual farms. This would allow for the widest participation and access across the country. However, these two models do bring different benefits, and a large food hub may be more interested in working directly with the post office to keep more of the total purchase cost than in ordering through a virtual platform. Consumers may see more value in purchasing from a hub if it means greater

selection of produce, but farms that can offer a variety may benefit from participating individually to keep more of the profits. It is likely that both these models will be tested before a final program design is chosen.

There are also various USPS offerings that bring different benefits and drawbacks. A new program, Local Connect, is currently being rolled out.

This program is focused on very local same-day delivery at low rates. These boxes can be picked up during a normal postal route and delivered the next day or dropped off at a post office early in the morning to be delivered the same day – but only if the delivery is in the same five-digit zip code. At \$4-6, these are quite cost-competitive and fast but are best situated if a farm is delivering to a lot of addresses in one town. If a larger food hub were delivering to a wide range of addresses, having to drop off at post offices in many towns may not save money or time.

There are trade-offs between a hub or individual farm model		
	Individual Farm	Food Hub
More money for farmer	X	
More work for farmer	X	
More mixed products/a la carte ordering		Х
Greater availability throughout year		х
Faster scale of program (since food hubs aren't located everywhere)	X	
Standardization and food safety controls		Х



DSCF - Regional Facility

Reach over **80%** of the U.S. population by the next day through USPS network of regional plants nationwide.

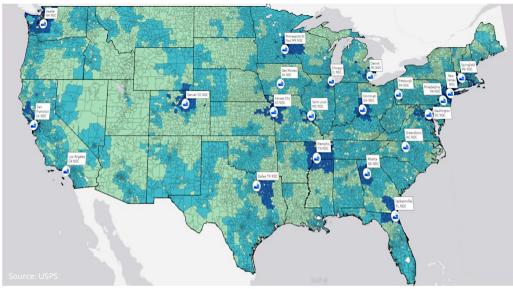
SCF Reach



1-day reach



2-day reach



DNDC - Processing Site

Reach over **85%** of the U.S. population in 2 days or less from strategically located distribution centers.

NDC Processing Site



1-day reach



2-day reach



3+-day reach

The USPS also offers Parcel Select drop-off at a DSCF (regional facility) or DNDC (much larger facility serving an entire region of the country). There are minimums (currently 50 boxes or \$50) but a business can get a lower rate, similar to but slightly more than Local Connect, by dropping off in bulk. Boxes can be dropped off at night for next-day delivery, limiting delivery times to under 24 hours. There are fewer options for early drop off for same-day delivery, but discussions around this are ongoing. DSCF and DNDC facilities may not always be located near a farm or food hub, but this could be a great option for those at a reasonable distance, and for food hubs shipping to a much broader range of addresses. DSCF facilities

are based on a three-digit zip code so instead of having to deliver to a post office serving a single five-digit zip code, a regional facility will typically serve a wide range of zip codes that start with the same three digits.

On the consumer side, the USPS already delivers to individual households across the country (even in regions where that involves dog sleds and mules) but delivery may not be ideal for every consumer. For those living in areas where packages aren't secure or damage is a concern, it may make sense to explore using libraries, community centers, schools, VFWs, or American Legions as drop-off and pick-up locations. This is







less convenient for individuals and may not bring a change in price, since the USPS travels a route to someone's home anyway, but it could offer additional safety and storage where needed.

Seasonality will also be an important consideration in any home delivery program design. There will be large differences across the US with some regions supporting year-round growing seasons and some regions with very limited growing seasons. Overall, this will be a largely seasonal program, but with better market access, producers may see the value of investing in greenhouses, hoop production systems, and other ways to extend the growing season in both directions. Since this program is about local food delivery, offerings will be limited to what farms can grow. This may carry an additional benefit of helping more people consume in-season produce and consider their food's environmental impact. As the program grows, the availability of produce may expand through the inclusion of indoor farms, which operate year-round, and through storing excess produce that can be sold in the off season.

Finally, program models should consider marketing options. Multiple solutions should be used to gain the participation of hard-to-target consumers who stand to benefit the most from Farmers Post. The USPS offers "every-door-directmail" (EDDM) where it blankets postcards to every single house along a postal route. This could be a great option to advertise the program as it is

rolled out across the country, especially when paired with pop-up events at community sites, as discussed above. National partners and groups could also offer significant marketing support. For example, veterans' groups could promote the program to their members. Veterans make up 24% of the USPS workforce, 10% of farmers, and are overrepresented in food insecure communities. Many veteran organizations are already eager to partner on this endeavor and already offer constituent services and outreach.

STAKEHOLDERS

We have solicited input from many key stakeholders during the planning process, whose advice and participation will be essential moving forward:

- Producers, with a focus on small and minority farmers
- · Food hubs
- Virtual food aggregators/platforms
- USPS
- USPS postal unions
- USDA Agricultural Marketing Service
- Veterans groups
- Members of Congress and other elected officials
- Food insecurity groups
- FDA

As WWF moves this program forward, we will convene an Advisory Council to help inform program design, analyze and disseminate insights from the pilot and from other similar efforts, and ensure that all audiences and target markets are considered fully in building a Farmers Post program.

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PILOT

Through this preliminary research, WWF has identified two partners who are ready and willing to pilot potential models. WWF is currently working with these two partners and the USPS to finalize the design of those pilots with the goal of undertaking beta tests June-October 2022.

4P Foods is a food hub based in Warrenton, VA, operating across Virginia, Maryland, and Washington DC. They work closely with their farms to deliver healthy, seasonal, sustainably-farmed food to customers and community partners. As a food hub, 4P Foods already collects food from their partner farms and aggregates it in a central location. This includes a quality control and sorting process. When COVID-19 hit in spring 2020, they began pivoting to home delivery since it was no longer feasible to use central drop-off locations like businesses, as people stayed home and socially distanced. Their home delivery service continues today but the last-mile delivery is the largest pain point, especially to more distant communities that may have fewer customers.

4P Foods will pilot a 'food hub' type model. Since they already have their own website to receive orders from customers and collect and package their own food, they would continue these processes but simply alter how the food gets from their warehouse to the customer's door. 4P would likely test drop-offs at early morning hours to individual post offices to use Local Connect as well as Parcel Select entering at regional DSCF or larger DNDC processing centers. The USPS would waive minimums for a short-term pilot and as a major food hub, 4P would ultimately be able to meet those minimums if a full program were to move forward.

Healthy PlanEat is a sustainable food tech start-up based in East Lyme, CT, serving CT and Fishers Island, NY. It is a virtual food hub, providing a platform to connect local farmers to local consumers so that farmers don't need to develop their own websites and consumers can easily order from one site. However, they do not physically collect, aggregate, or deliver any food. Instead, Healthy PlanEat offers a different model, providing detailed specs, advice, and even physical boxes to farmers, but relying on them to pack and deliver them.

In summer 2021, Healthy PlanEat completed a micro-pilot, shipping 61 boxes of fresh produce from three different farms to consumers using current USPS offerings. These were mixed boxes of produce containing ingredients such as kale, summer squash, cucumbers, salad greens,

tomatoes, garlic, and carrots. The boxes included one sustainable ice pack and an insulator. Boxes arrived on time and customers and farmers were satisfied, but since they were not using the programs discussed above, shipping prices were expensive. To keep shipping at or below \$10, the farmers could not exceed 10 lbs of produce. Using the planned models discussed previously, farmers should be able to ship around 20 lbs. for less than \$10.

Healthy PlanEat plans to test both Local Connect and Parcel Select, but instead of physically aggregating produce, it will work to update its website, educate farmers on best shipping procedures, and provide boxes and sustainable packaging materials. The farmers will complete their own packing and drop-offs.

Both 4P Foods and Healthy PlanEat agree that an ideal box size would be roughly 14" x 10" x 10" or 16" x 12" x 8". To be machinable, a boxes' L + 2W + 2H must be less than 108", any single dimension must be under 24", and total volume must be under 1728 cubic inches. These boxes would meet those requirements and piloting this size would provide valuable feedback on final product choice. They will also include some packaging and cooling materials but will work to keep those as limited (and reusable – see Next Steps) as possible.

By testing two different models, we will gain valuable information about better practices and potential next steps to ensure that an eventual Farmers Post program is designed to support all stakeholders.













NEXT STEPS

While the learnings to date have been extremely useful, there are several pivotal next steps required to build a Farmers Post program. These include, but are not limited to:

Logistics:

Test packaging: Better practices and guidelines will need to be established to ensure that all boxes reach consumers in good condition. This will include not only box sizes, but what can be done with minimal packaging and cooling to avoid waste. There will also be tests for what produce can be mixed together without overripening, what lasts for how long at what temperature, and how to layer and pack produce.

Re-usable packaging: Different models should be explored and tested to determine what packaging, if any, can be reused. This will include testing if boxes, liners, and cold packs are durable enough for reuse and if hygiene needs are met, and if so, for how long. Tests will also be conducted to

determine if returning boxes is cost-effective and whether customers follow through. For example, should these be collapsed to be returned? Should a customer receive a reminder to put all cool packs and liners in a box once a month and return it? Do return labels go to waste? Are pick-ups appropriately scheduled?

Models: Which models work best for the USPS, for farmers, and for consumers? Does everything arrive on time? Does it arrive in good condition? Are farmers and the USPS able to generate enough income to sustain this model?

Market:

Consumer surveys: Consumer surveys should be conducted to determine market size, willingness to pay, and how shipping cost should be displayed. It will be important to understand whether a la carte models are needed or if mixed food boxes are desirable. These surveys will also help inform how best to reach markets.

Market segmentation: Pre-market surveys will need to be completed in key areas to determine what is most culturally accessible for farmers to grow and what consumer education and support is needed.

Program design:

In-depth interviews with farmers: Individual in-depth interviews should be completed with farmers, including target farmers such as small and minority farmers, to add to the learnings from the initial pilot. These interviews should explore how to best reach farmers, what program models are most accessible, and how to de-risk the enterprise.

Focus groups with key consumer groups:

While consumer surveys will provide a valuable understanding of the total market, focus groups should be held with harder-to-reach market segments such as low-income consumers, people in food insecure areas, sparsely settled rural areas, reservations, the elderly, disabled consumers, and more. These focus groups should explore which program models would best target key customer groups and what customer education and support needs to be included.

SNAP/WIC extension: Analysis of double food bucks programs that exist across the country. Advocacy could extend SNAP/WIC benefits federally and those double food bucks programs locally to a Farmers Post program. Groups will analyze the potential for Congress to subsidize shipping for consumers purchasing from Farmers Post using SNAP/WIC benefits and for the potential to integrate Farmers Post with food prescription programs.

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