



Advanced Data: Increase Efficiency Without Increasing Your Payroll



GUEST SPEAKER



Sean Hudson

Director of Data & Analytics

A few reminders:

Drop your questions in the Q&A as we go!

Yes, this is being recorded!

A recording of this presentation will be emailed within the next few days.

Links provided at the end of the webinar:

- Request a follow-up meeting
- Next webinar





Sean Hudson

Director of Data & Analytics

Food Rescue Hero & 412 Food Rescue



More rescues, same staff size??

FACT

All orgs want to grow impact.

PROBLEM

Scaling dispatch is expensive, and doesn't necessarily increase donations.

SOLUTION

Data can inform us about scaling smart!



Recurring Rescues: Consistency Pays Off



What drives daily rescue volume?

Statistical analysis (regression) findings:

- Fridays tend to be everyone's busiest weekdays
- More dispatchers, or people creating rescues did little to increase total daily rescue count
 - ◆ Important: more than two dispatchers was rare
- Higher shares of recurring rescues almost invariably meant many more total daily rescues

	Dependent variable:
	rescues
admins	0.279** (0.136)
share_recurring	24.761*** (0.325)
dowMon	-4.283*** (0.370)
dowThu	-4.574*** (0.369)
dowTue	-5.871*** (0.368)
dowWed	-4.025*** (0.367)
Observations	22,024
R ²	0.558
Adjusted R ²	0.558
Residual Std. Error	17.334 (df = 22000)
F Statistic	1,208.256*** (df = 23; 22000)
Note:	* p<0.1; ** p<0.05; *** p<0.01

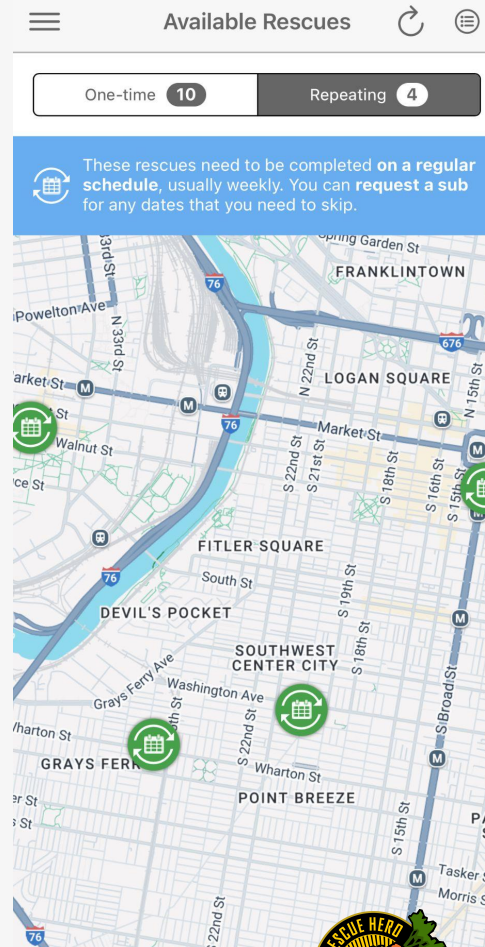


Recurring Rescue Share is the Key Driver

**A 10% increase in recurring share predicts
~2.5 more rescues/day**

- Adding dispatchers helps, but it's less efficient
- Managing donor relationships to encourage regular donation is cost effective in both budget and opportunity

Strategy: Optimize structure, not just headcount



What's the catch?



No Donations (and why it's a problem)

No donation: when a rescue, *usually recurring*, is scheduled but no food is available.

*This is generally discovered only **after** the volunteer arrives at the donor location to pick up the food.*

This can lead to:

- Wasted time
- Frustrated recipients
- Erosion of volunteer trust



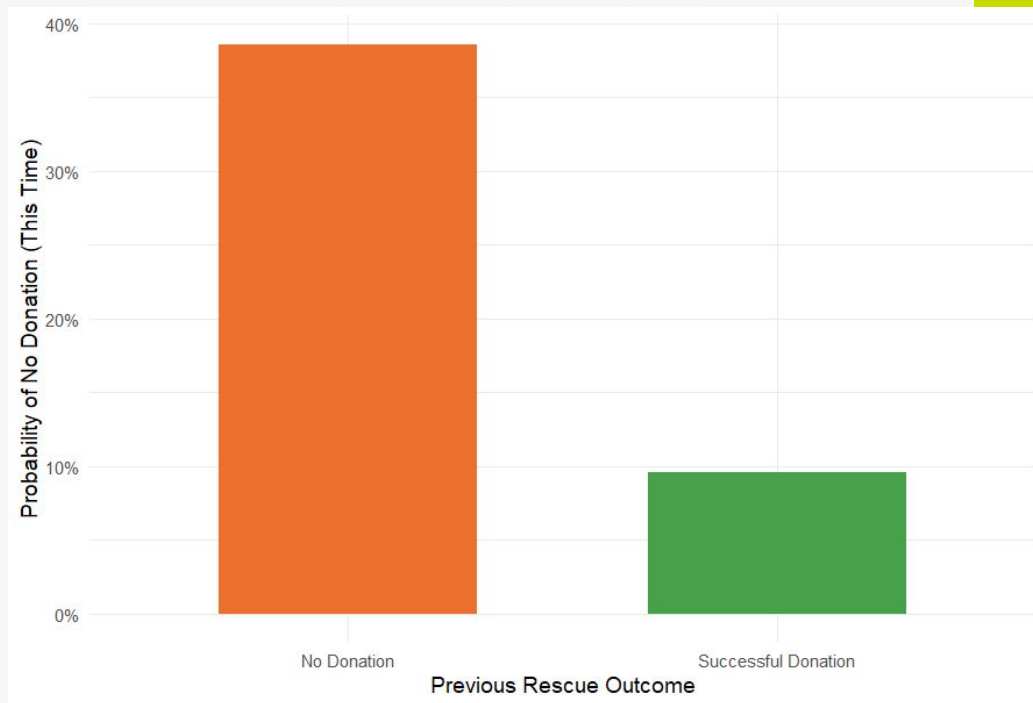
Looking Back to Predict What Happens Next

- For each rescue, we tracked whether the **previous rescue at that same location** was successful or not.
- This became our **lagged variable**: a simple way to check if failure tends to repeat.
- We used this to build a **2x2 contingency table** of outcomes:
 - ◆ Was the previous rescue a success or a no donation?
 - ◆ Was the current rescue a success or a no donation?
- Chi-Squared test shows very strong relationship ($p < .0001$)

		PREVIOUS DONATION	
		No Donation	Successful Donation
THIS DONATION	No Donation	3,700	5,872
	Successful Donation	5,874	55,042



Are No Donations Predictable?



- A prior no donation increases the chance of another by just over **29%**
- Nearly a four-fold increase in the risk



Using Data to Intervene

Insights into Action

- Ops team implemented a check-in process after 2–3 no donations
 - ◆ Often, check-in was enough to get them on track
 - ◆ Sometimes cancelled rescues that just weren't working out (this is good!)
- Tracked whether the pattern improved
- Rate dropped to less than half of high point



We don't just guess – we know.

- We found the biggest lever: recurring rescues
 - ◆ Developed through *relationship management*
- We identified the most common recurring issue:
 - ◆ No Donation
- We used data to **predict, intervene, and validate** impact.



Questions?



A 🐛 FOOD RESCUE HERO™ WEBINAR SERIES

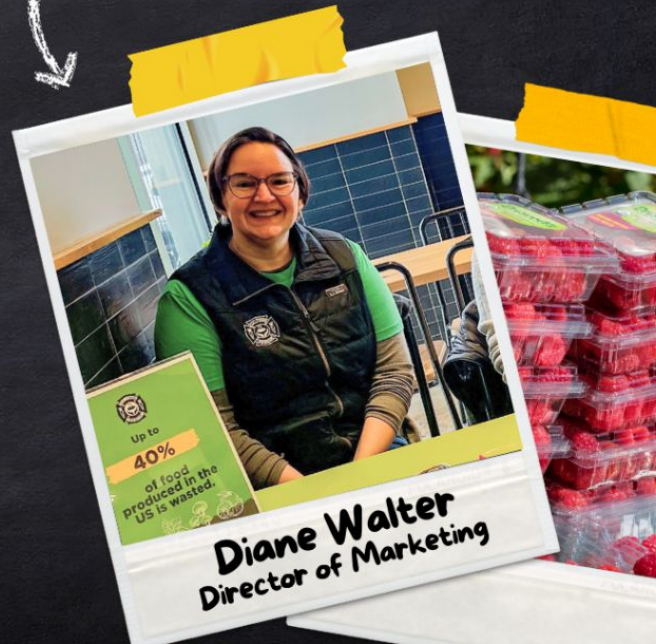
HOW TO START A FOOD RESCUE

Lesson ⑤:

Marketing Must-Haves
(even if you have no time or staff)

Report to class on May 29, 2025 @ 1pm ET

Guest speaker!





Navigating New Federal Realities: Strategies for Food Rescue Resilience

JUNE 12 | 1PM ET





Making greater impact, together.



FoodRescueHero.org