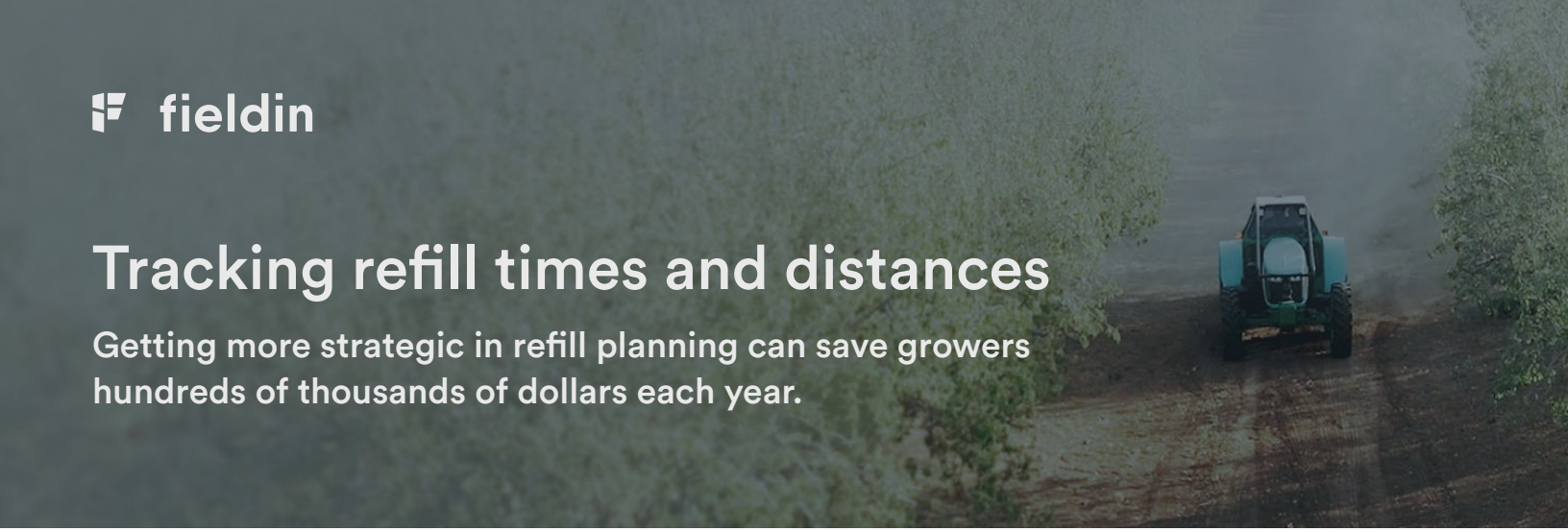
fieldin



Tracking refill times and distances

Getting more strategic in refill planning can save growers hundreds of thousands of dollars each year.

Refilling Sprayers: The unspoken inefficiencies in your operations

With new overtime laws in California and Washington and sky rocketing fuel prices, growers need to optimize their spraying shifts to cover as many acres as possible without sacrificing the spray quality.

With this notion in mind, there are a few areas of spraying shifts that can be optimized. Refilling is a major one as Fieldin found after evaluating data across more than 300,000 spraying shifts.

Cutting into shift productivity

× Crews waiting their turn at refill stations or nurse trucks

× Driving longer distances than necessary

× Using refills as an excuse for extra break time

× Refilling with low pressure pumps

Saving $150/acre with small improvements

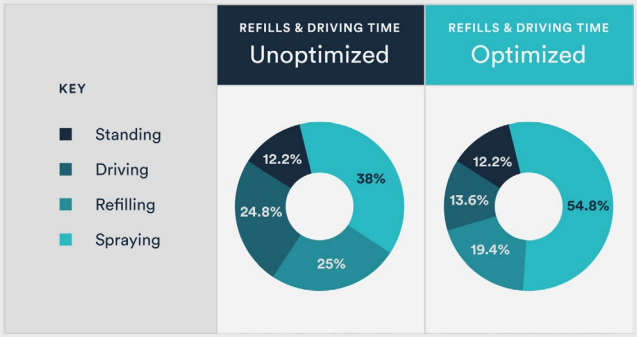
Small improvements across refill and driving times can add up to significant bottom line savings for growers. In the example illustrated (see image), shaving 3 minutes off of refill times and 3 minutes off of drive time to/from refills results in savings of $224,320 across the year ($150/acre).

Small improvements add up to big savings

Every micro-improvement impacts your bottom line.

Apple Orchard Example

1500	9	18
ACRES	SPRAYERS IN A SHIFT	SPRAYS PER YEAR



	REFILLS & DRIVING TIME Unoptimized	REFILLS & DRIVING TIME Optimized
ACRES PER HOUR	2.43	3.51
ACRES PER SHIFT (9-HR SHIFT)	21.89	31.55
COST PER ACRE (LABOR + MACHINE)*	$27.14	$18.83

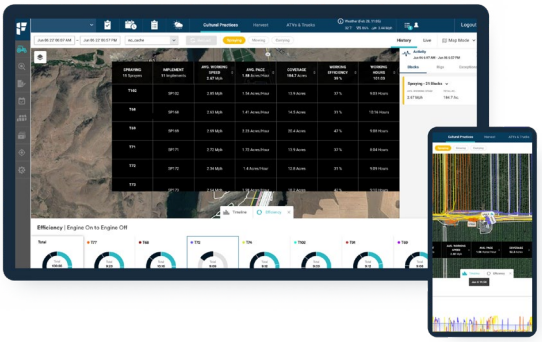
* Labor costs calculated at $26/hour and machine costs $40/hour, based on 2019 study from UC Davis. Overtime not factored into calculations.

Tracking refill activities to close gaps and get more strategic in field operations planning

Fieldin helps growers remove blind spots around refill activities so they can reduce unnecessary costs associated with inefficiencies. In the Fieldin app, users can see all of their refill stations as a separate layer in the map view, enabling full visibility into refill activities within shifts.

Once inefficiencies are identified, steps can be taken to make improvements that directly boost the bottom line. We've seen Fieldin customers drive efficiency improvements through activities such as staggering shift times to reduce wait time at refill stations, identifying and guiding operators to the closest refill station during shifts, and making strategic decisions around location of refill stations and whether to use fixed stations vs mobile nurse trucks.

With the added visibility that Fieldin provides into these operations, you can now make better-informed decisions based on data from the field.



Data-backed insights

- ✓ Average refill times at the operator level
- ✓ Acres per hour and shift efficiency, relative to refill times
- ✓ Distance to refill stations
- ✓ Average time spent at water points

Helping growers grow smarter.

Fieldin partners with high value crop growers to digitize their operations and build the autonomous farm of the future. Our innovative technology unlocks real-time insights for better visibility, accuracy, and efficiency, which improves business performance and ESG outcomes.

Schedule a demo: fieldin.com/schedule-demo