




Oregon Institute of
Occupational
Health Sciences

The SHIFT Onboard Study: *Success and Health Impacts For Transit operators during Onboarding.*

DATE: JULY 17, 2023 PRESENTED BY: RYAN OLSON, PHD



Being new is stressful,
but also a chance to start
fresh and seize new
opportunities



*An ounce of prevention
may be worth pounds of
cure...*

Bus operator health hazards and research needs

- **Potential health hazards:**
 - Sitting time, break time adequacy, stressors, shift work (including splits), timing of meals, etc.
 - Body weight changes.
- **Lack of research on programs for new operators:**
 - None have addressed health hazards/job opportunities.



Weight gain hazard



- **Objective data: small transit authority**
 - 55 bus operators
 - 2/3 gained weight during first 2 years
 - Average weight gain of **+11.9 lb**
- **Survey: union local & medium transit authority**
 - 266 bus operators
 - Reported average year 1 weight gain **+7.5 lb**

(Olson et al, 2022)

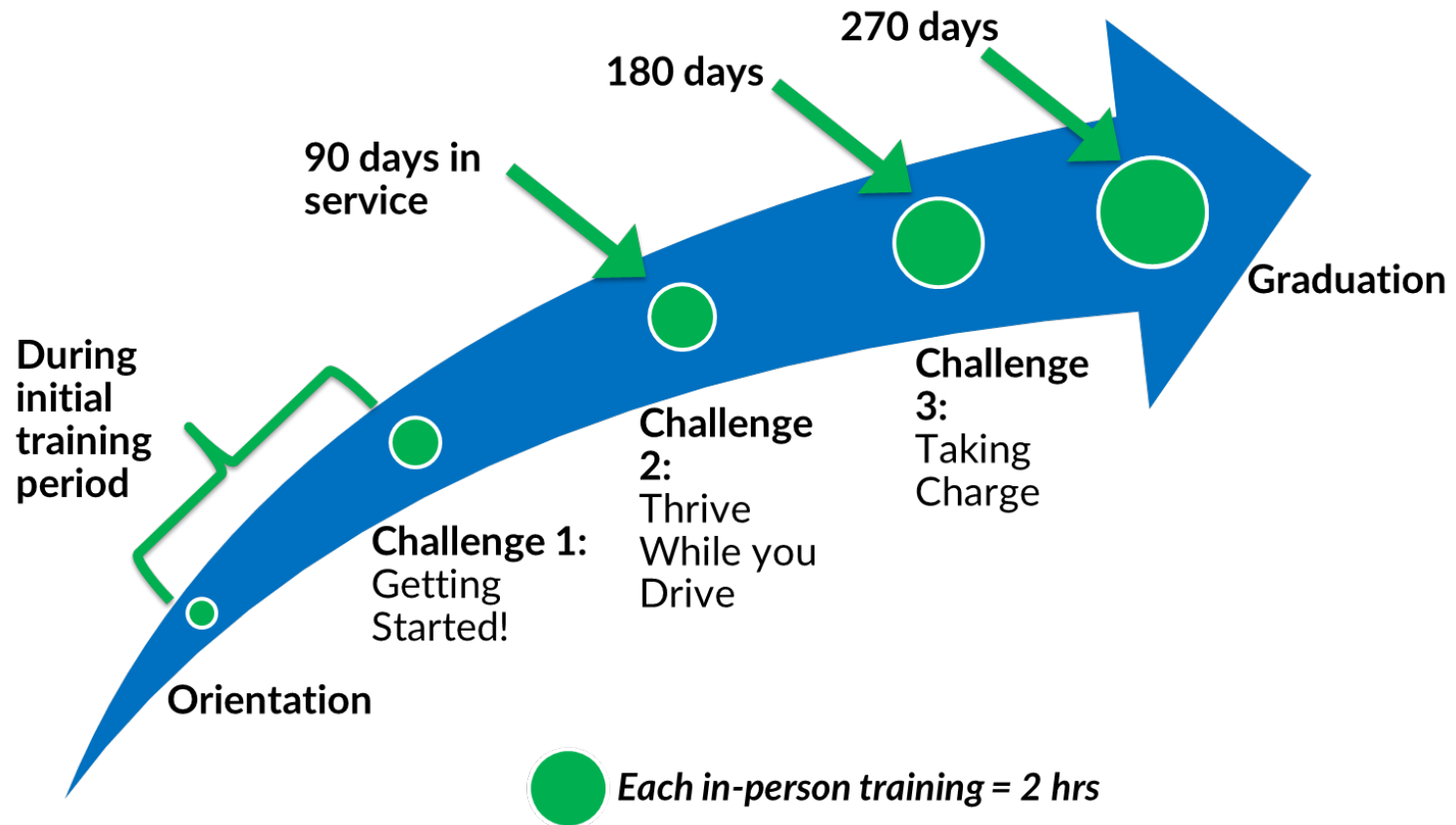


Study Phases

- **Pilot** (published):
 - Two agencies (non-random assign)
 - N = 23 (int. = 14; control = 9)
- **Randomized Trial** (in progress):
 - Six agencies (randomized)
 - N=293 (int. = 131; control = 162)



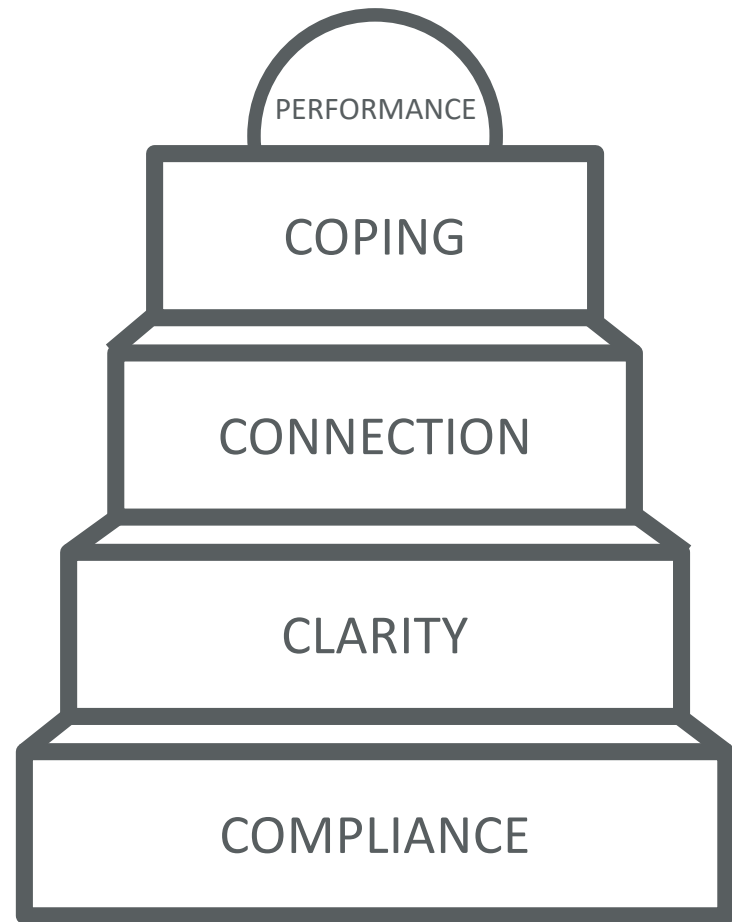
Enhanced Onboarding Program



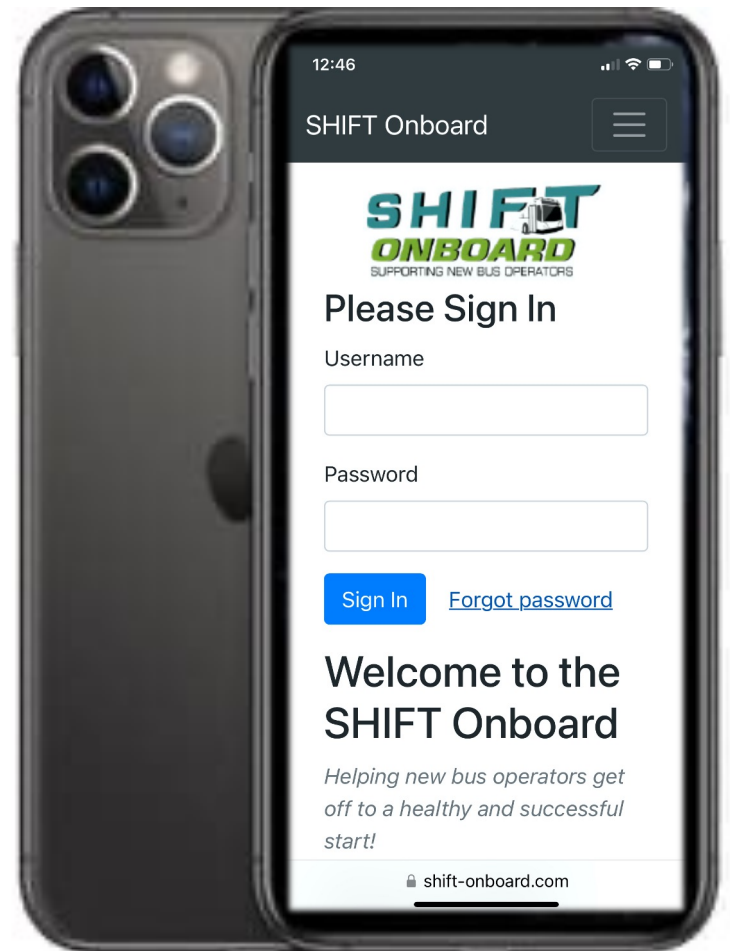
HEALTH SUCCESS Steering Wheel



Steps to JOB SUCCESS

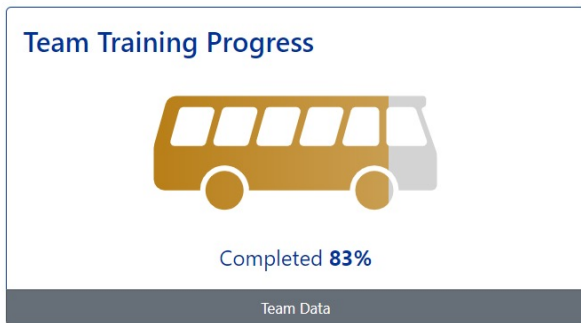


Example Challenge: *Website Warmup*



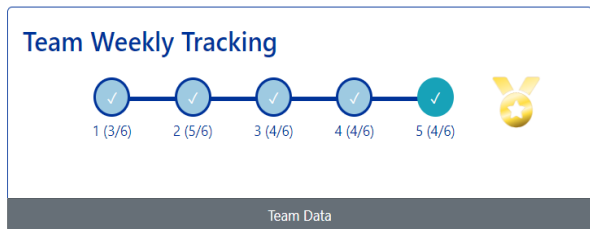
Example Challenge: *Website Warmup*

Training 🎓



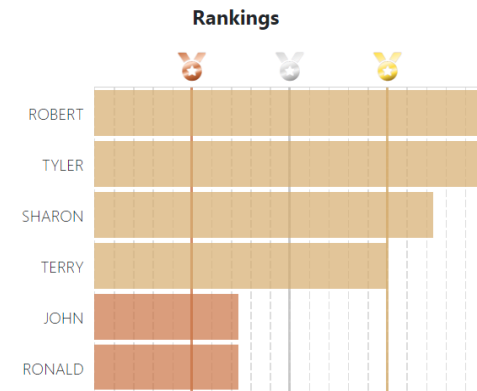
- 4/6 class members took **100%** of the trainings
- **100%** of class too **at least 1** training

Tracking 📈



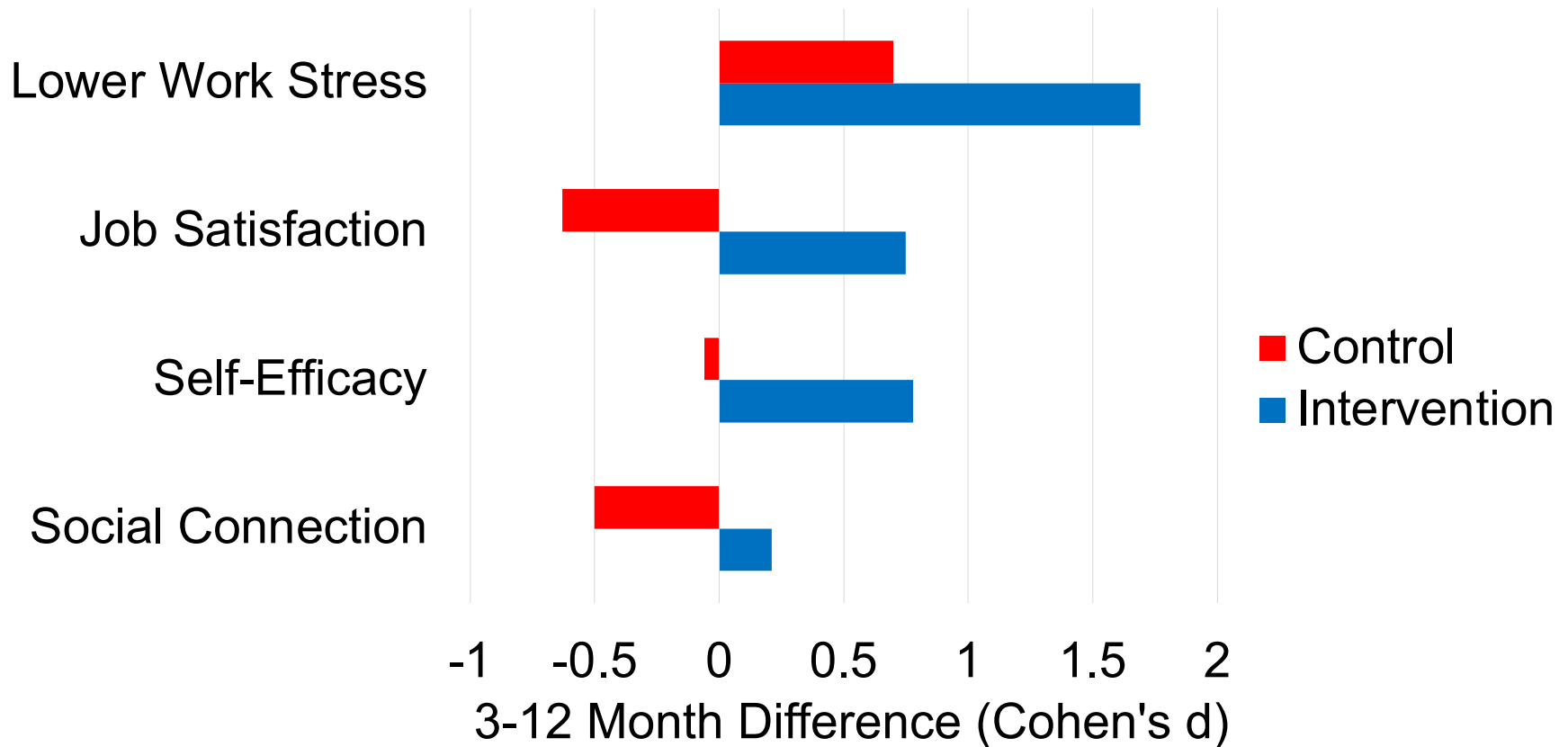
- **67%** of class logged at least **3 out of 5** weeks

Challenge 🏆

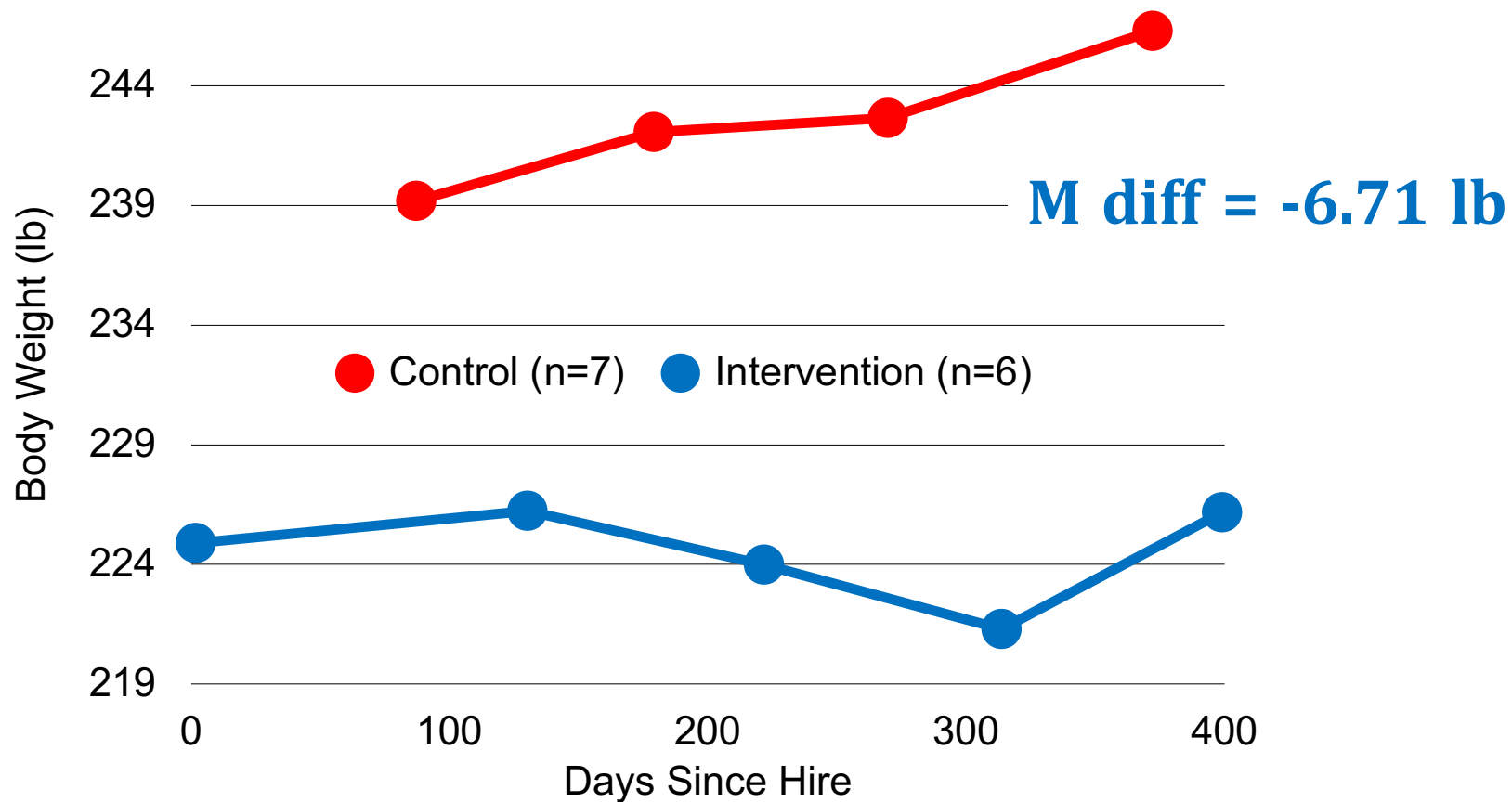


- **All** class members earned **BRONZE** or higher.

Pilot: *Newcomer Adjustment Outcomes*



Pilot: *Body weight outcomes*



Potential Returns on Investment

“ounce of prevention” +10 hrs in-person training in first year

HEALTH Success Returns:

Weight gain of about 8 lb escalates health care costs by \$200 annually per person.

- If prevented among 50 new operators, over 5 years this would **save \$50,000**

JOB Success Returns:

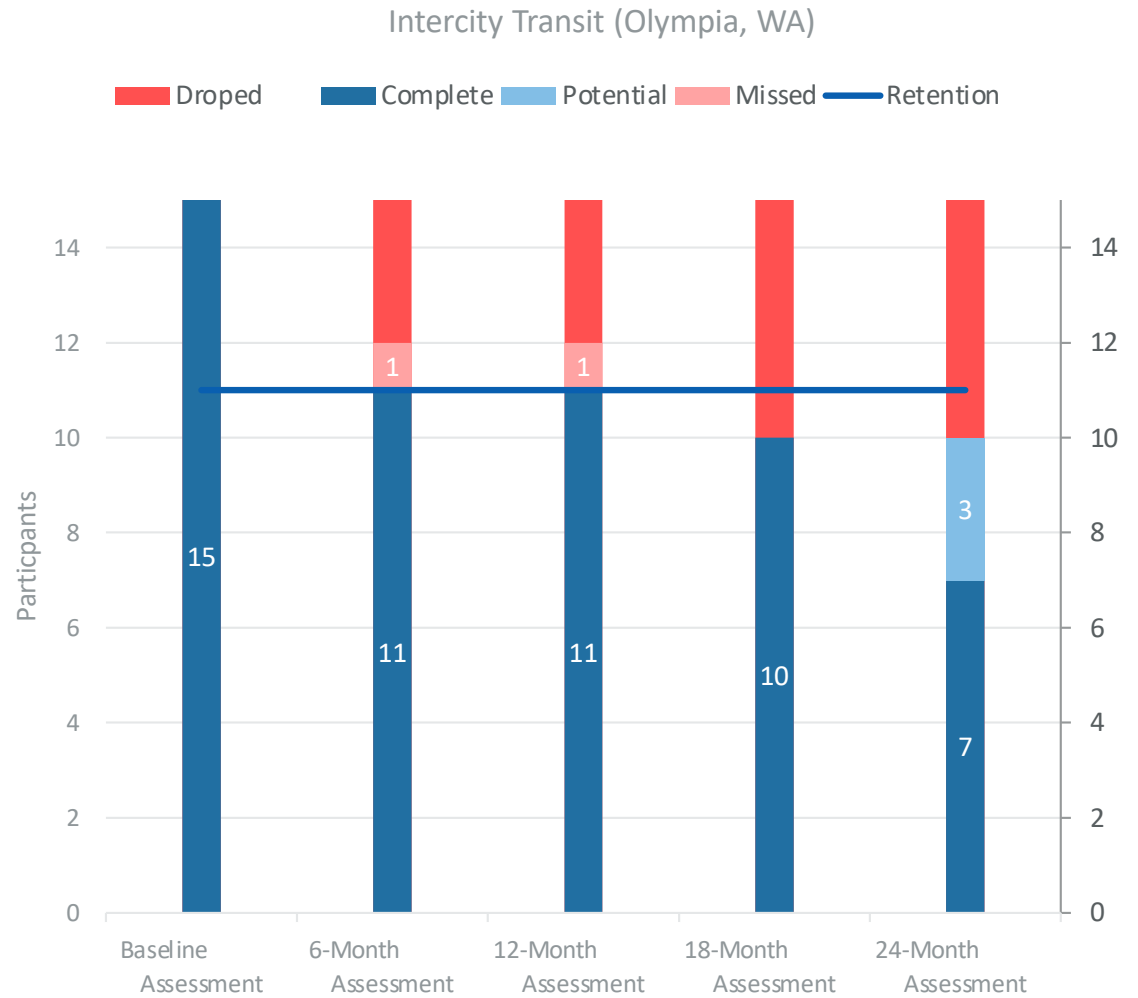
Replacing a new operator ~ \$12,000. Bus collision with injury ~ \$30,000 to \$300,000.

- Preventing just ONE operator from leaving, and ONE collision, would **save \$42,000 to \$312,000**

Invaluable Returns:

More positive and supportive workplace; Healthy, safe, and happy operators

Trial: *Study participant status*



Discussion and Future Directions

- **Take home points**
 - **Program results:**
 - reduces stress and improves job satisfaction
 - prevents weight gain
- **Next Steps**
 - Trial completion with all partners
 - Trial results, and further sharing
- **SHIFT Onboard Program Availability**
 - All or part of program; working with each agency



Scientific Team & Funding



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