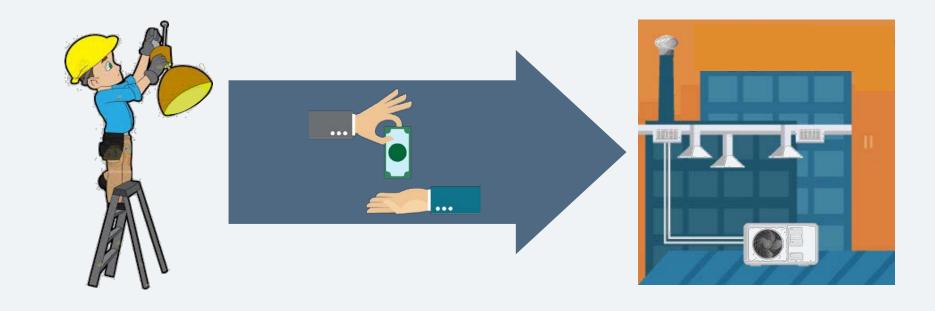
# Is the Left Hand Taking Away What the Right Hand is Giving? Or, Does an Industrial Energy Efficiency/SEM Program Teach Free-Ridership?

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# Repeat Participation Is Desirable



# Especially in an industrial program





# Erickson (2008): Are Repeat Participants Free-Riders?

I would have done that energy efficiency project anyway.

Come to think of it, the program did influence me.







## Does it Lead to Free-Ridership?



The program taught me the value of energy efficiency

But since they'll still give me incentives, I may as well take them.





## Any Direct Evidence?

Energy Trust of Oregon, Existing Buildings, 2006-2007:

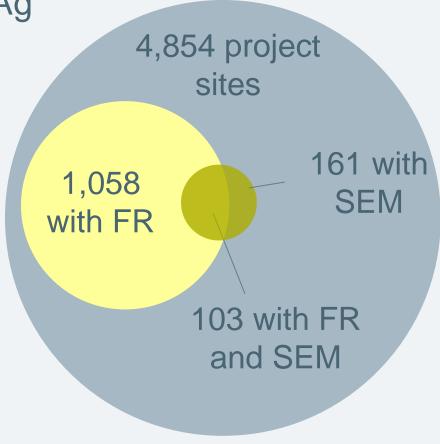
- Free-ridership higher for repeat participants (42%) than first-timers (29%).
- Cross-sectional data.
- Repeat participation was self reported.





# Can We Improve on That?

FR data since 2011 from Industrial / Ag program with SEM.







## Methodological Details

- Program tracks differ in mean free-ridership.
- We controlled for this in the following way... read the paper.





#### Research Questions

Is free-ridership related to:

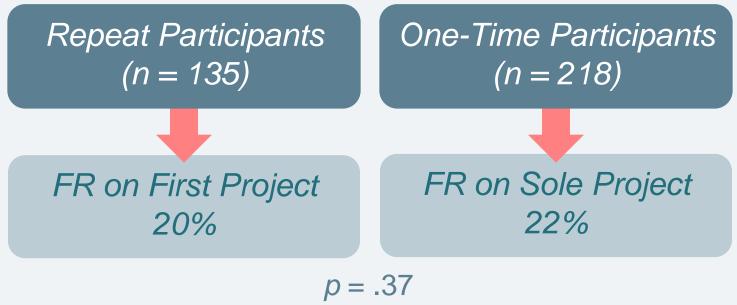
- Predisposition of repeat vs. one-time participants?
- Project timing (early vs. late) or sequence?
- SEM engagement?





# Repeat vs. One-time Participants: First Project

- Limited to those with first project by 2014.
- ANCOVA to control for date of first project.

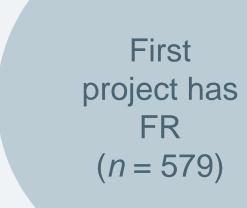






# First vs. Later Projects

#### BletsiteenviStites | Austlysis free-ridership rate (n = 1,058)

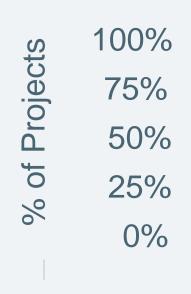


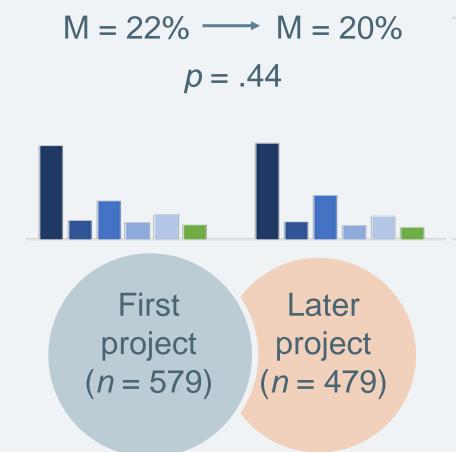
Later project has FR (n = 525)





#### Results: First vs. Later













## Correlates of Most Recent Free-ridership Assessment

Index	Bivariate Corr.		Multiple Regression	
	r	p	β	p
Number of projects	-0.01	.694	WTN*	
# Days from first project	-0.05	.121	WTN*	
# of projects w FR assessment	-0.06	.051	-0.026	.059

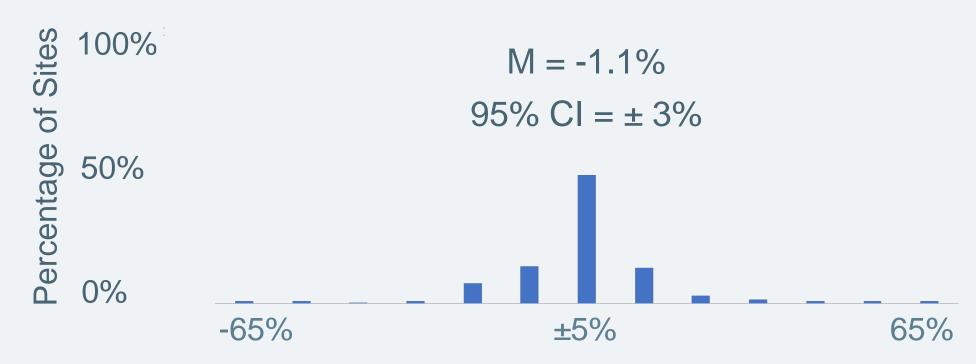
\*WTN = Wee, tiny numbers.





# FR Change over Time: Sites with Multiple Assessments

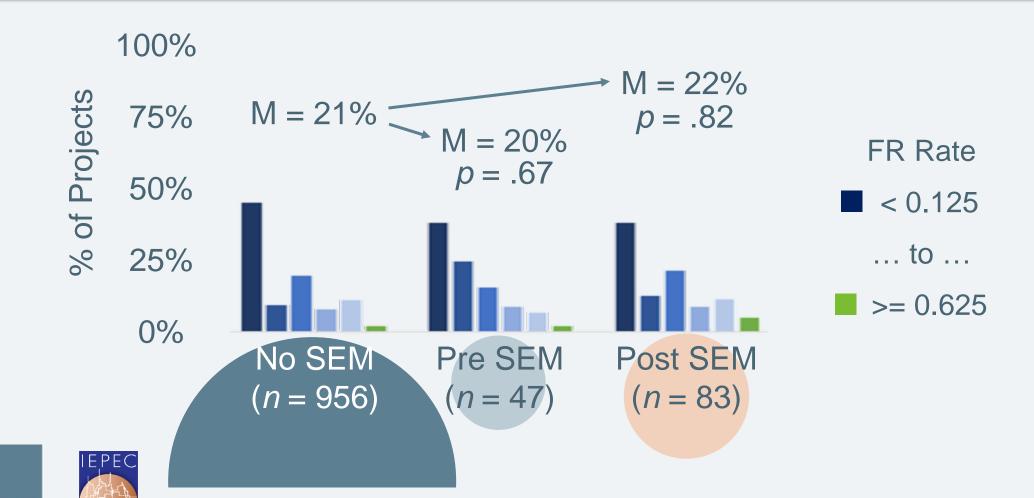
Slope of FR over time for each site (n = 175).







#### FR and SEM, Between Sites



## **Summary and Conclusions**

- FR not related to either repeat participation or SEM
  - → Good news for long-term engagement
- Limitations: Small SEM sample, control issues
- These findings don't speak to validity of self-report FR
- They don't say that FR can't be related to project timing:
  - → Recall effects could affect reported FR of more and less recent projects.







## **Questions?**



Thank you!

