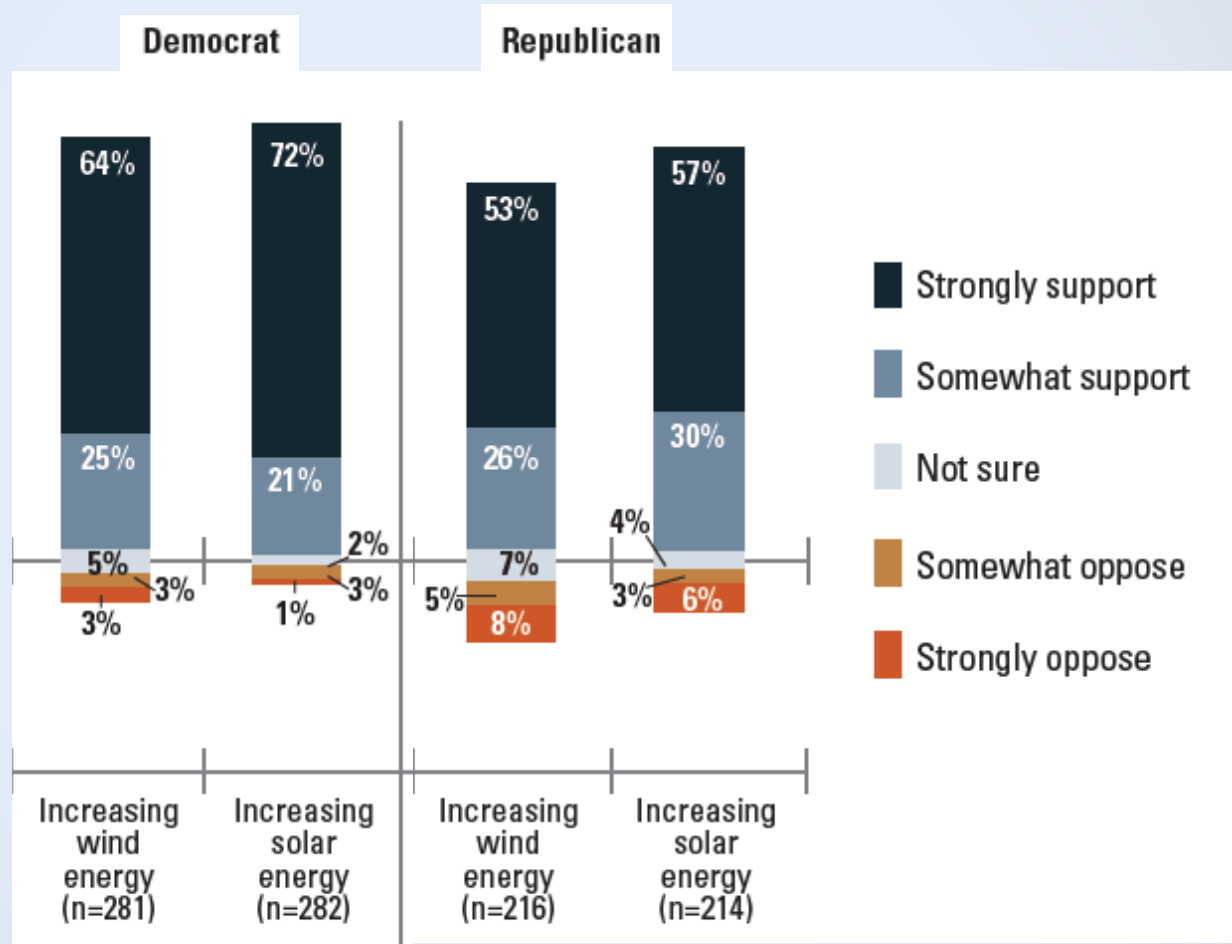


Why Community Benefits for Renewable Energy?

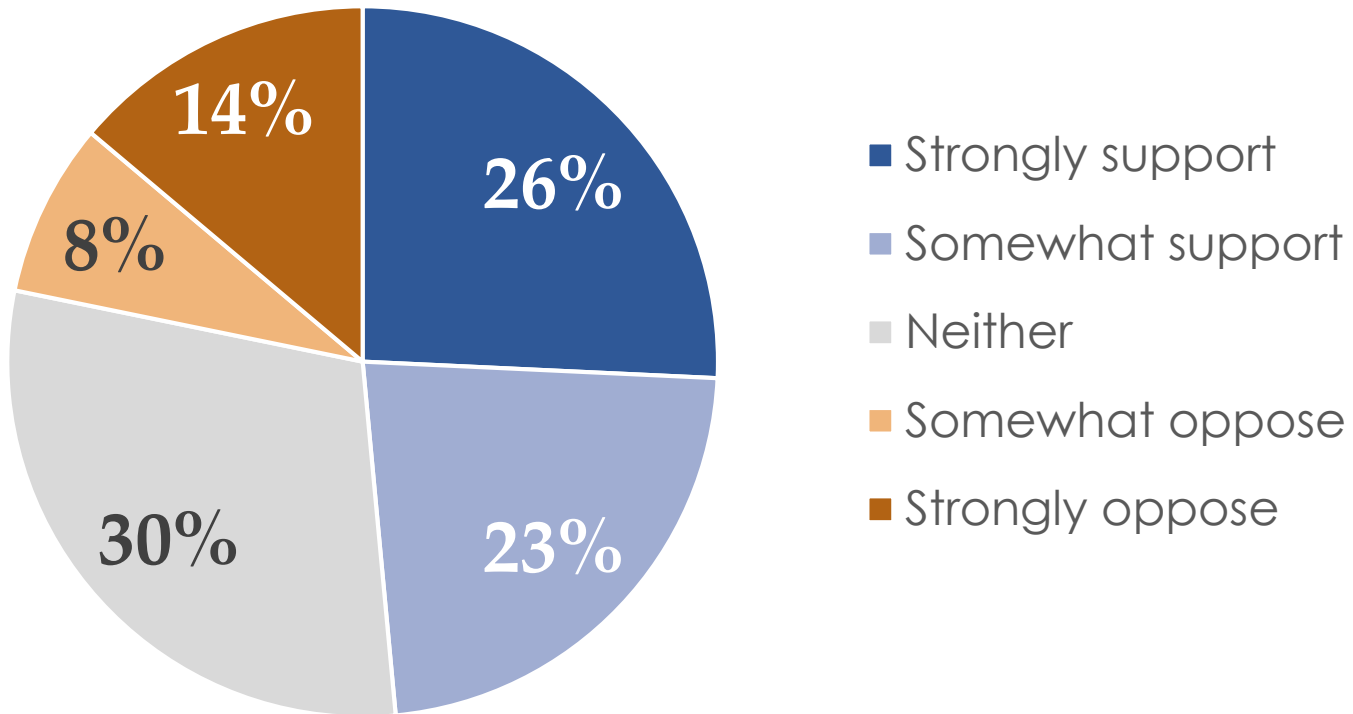
Sarah Mills, PhD

High overall support for Wind & Solar



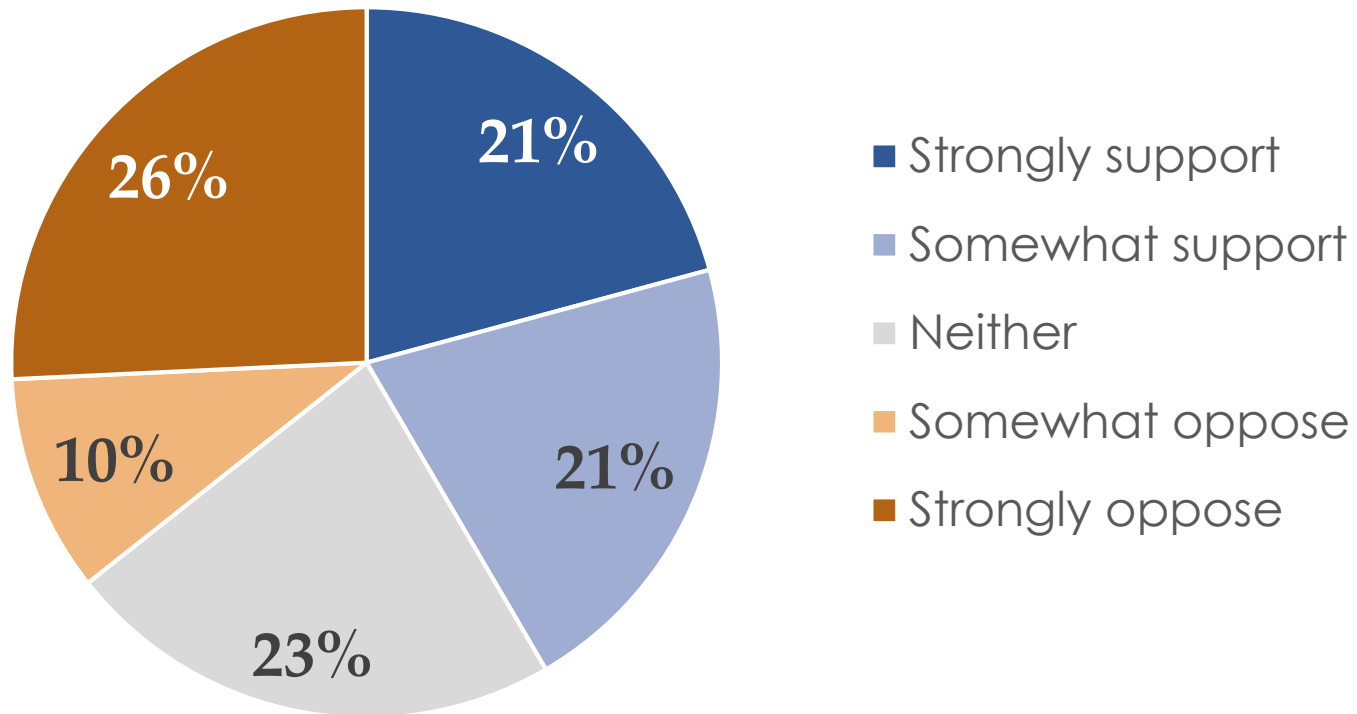
But in MI communities with windfarms?

Willingness to host additional turbines elsewhere in the state



But in MI communities with windfarms?

Willingness to host additional turbines in their township



Global Benefits, Local Impacts

Local Benefits

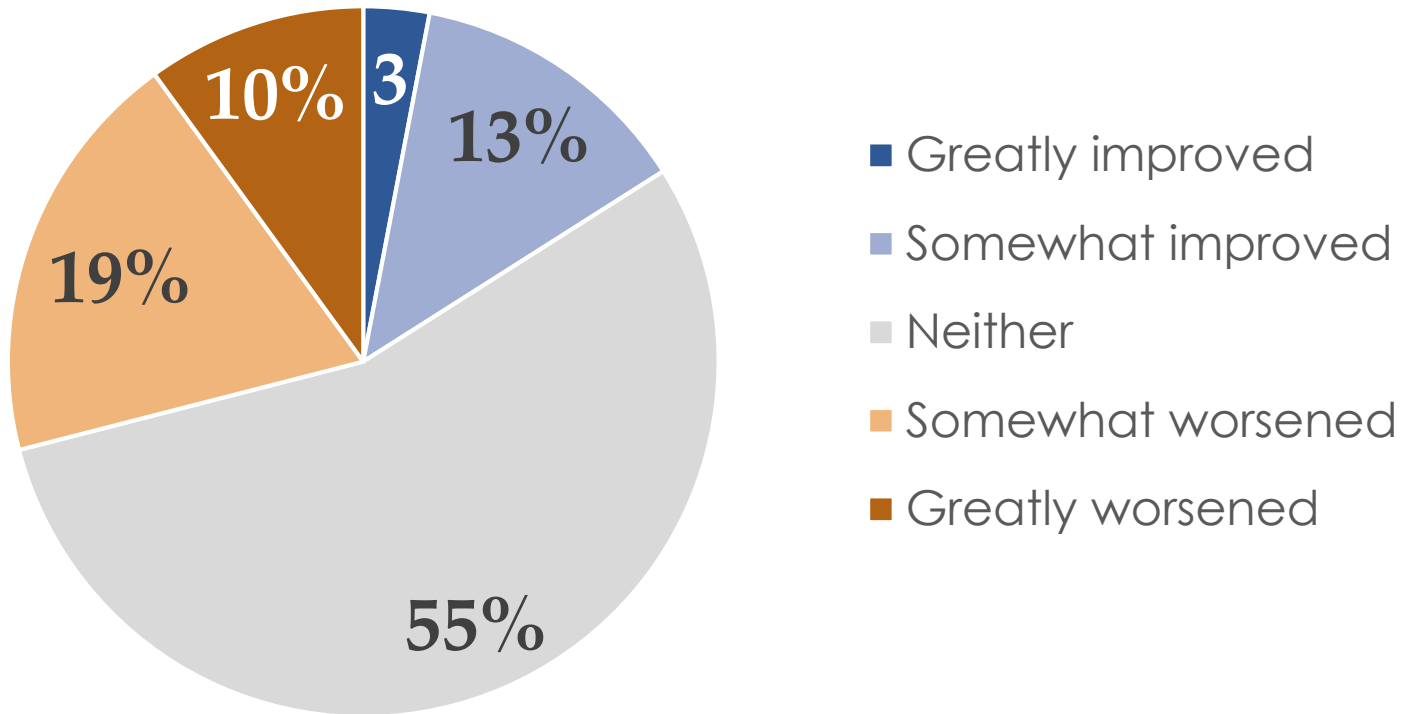
- Landowner payments
- Tax payments, developer donations
- Jobs
- Climate / health

Local Concerns

- Noise / health
- Wildlife
- Visual Impacts
 - Short and long-term
- “Not why I moved here”

On wind, more see negatives than positives

Turbines' effect on overall quality of life in township



What determines local attitudes about wind?

- Type of land owned
 - secondary vs. primary residence
 - farmland / rental property
- Direct compensation
 - Some better than none
 - \$1,000 per year as key threshold
- Attitudes about process
- NOT environment/ climate attitudes

Bottom Line

Wind Energy =
Rural Economic Development Opportunity

Community Compensation

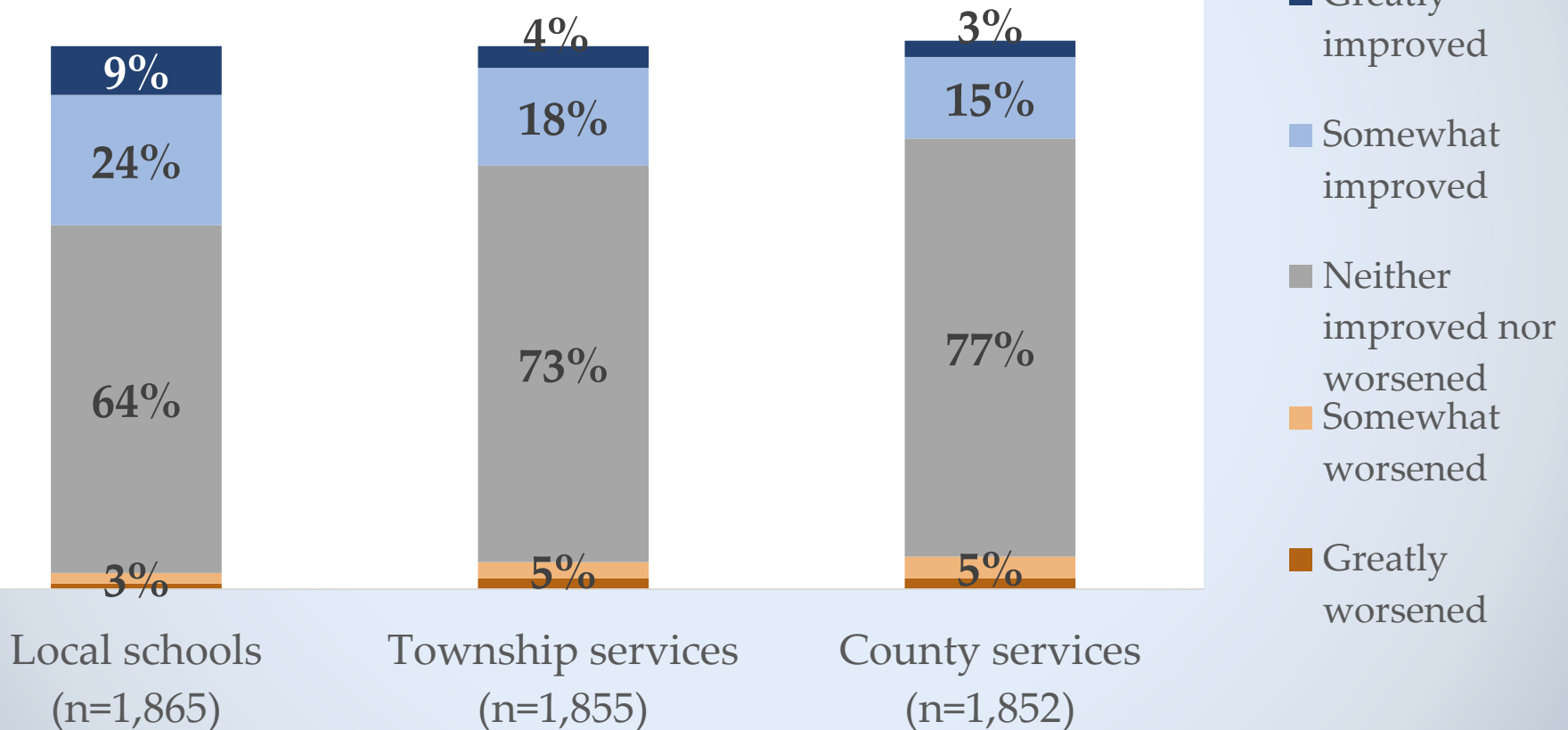
- LBNL found stated preference for “community payment” among those not receiving direct compensation
 - Examples: open space, schools, buildings, or wildlife enhancement
- What is meant by Community Payment?
 - Direct donations?
 - Community benefits agreements?
 - Property tax payments?

Wind Property Tax Payments in Michigan

- ~ \$20,000 per turbine
 - Depreciates to 30% by Year 10
- ~\$20M per year, statewide
- Supports: Township, county, school

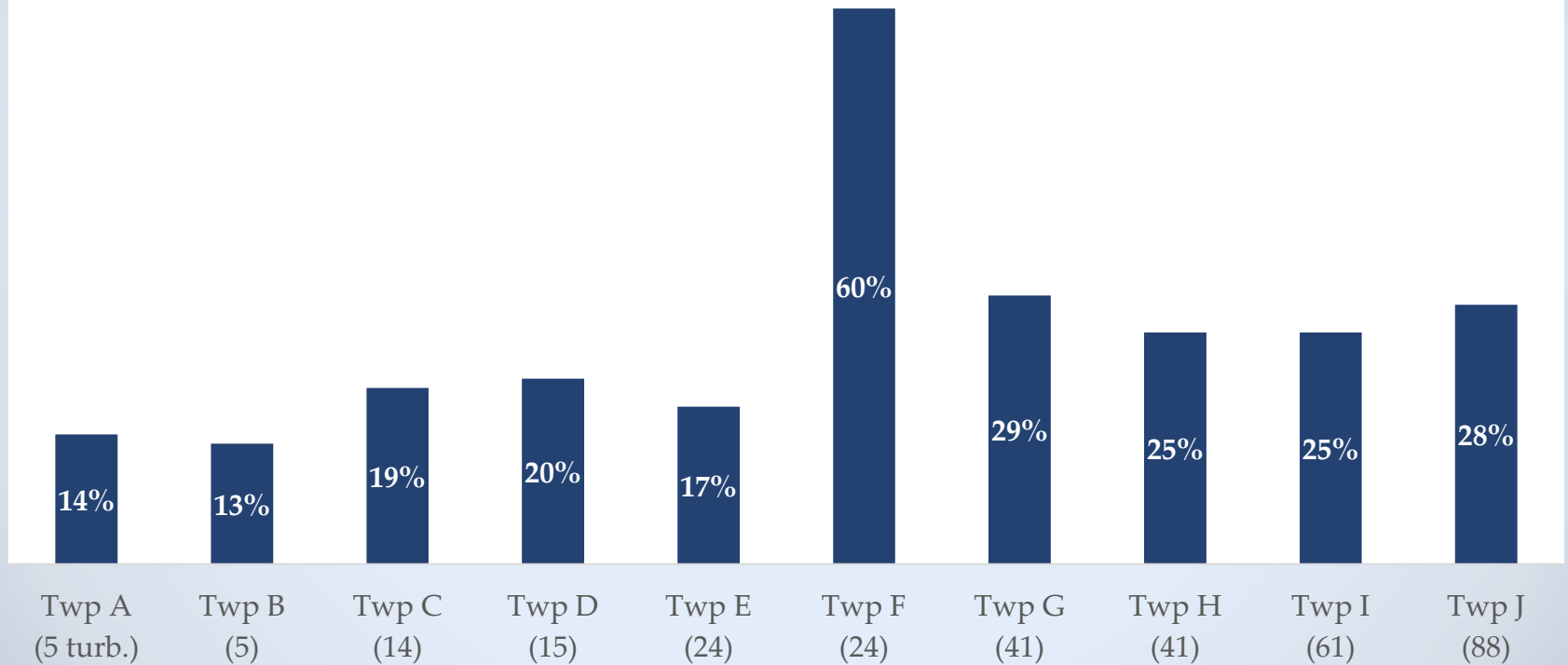
Do people recognize tax benefits?

Impact of wind turbines on...



Benefits only recognized when directly linked

% who said Township Services Improved from Wind Development



Why Community Benefits Are Important For Wind

- Few direct local long-term jobs; opportunity to “see” impacts
- Give everyone stake; approximate Europe/MN “community ownership”
- Most wind projects = net exporter of energy
- But... Impact on ratepayers (esp. low-income)

Community Benefits For Solar?

- Local (negative) impact more limited
 - Minimal noise
 - Easier to screen
- Even so, seeing objections
 - Wise use of farmland
 - Run-off
 - “Not why I moved here”
- Fewer landowners directly benefit (lease payments)

The CLOSUP Wind Project

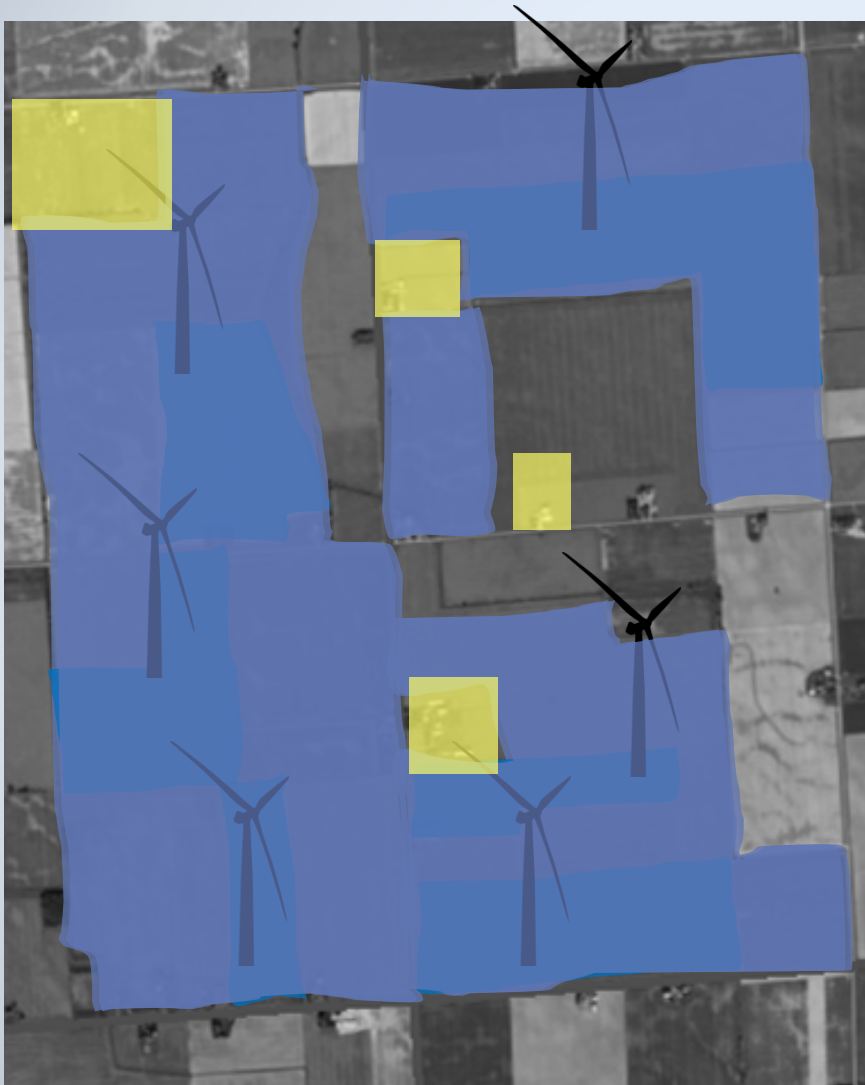
Sarah Mills, Project Manager

Phone: (734) 615-5315

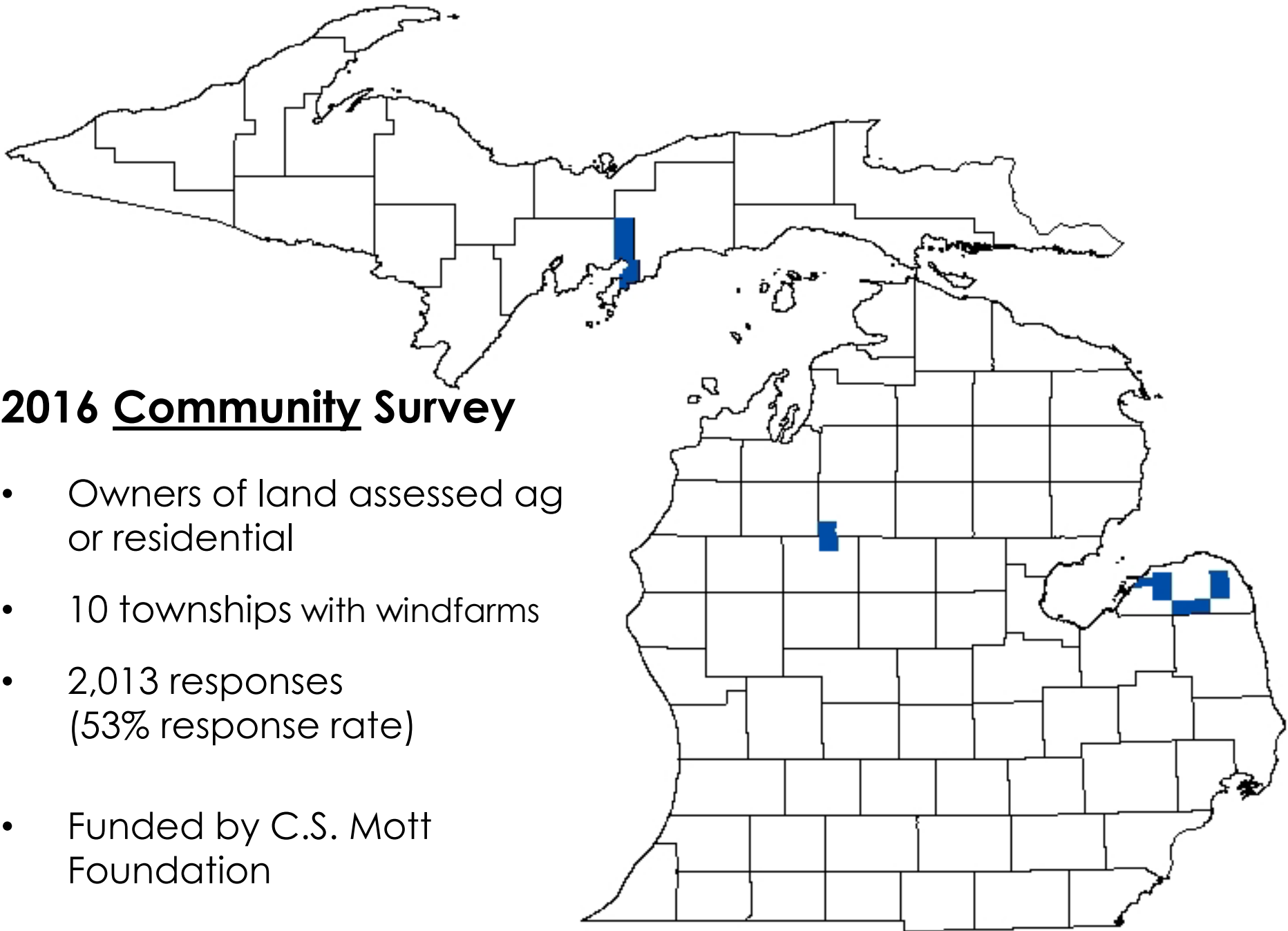
Email: sbmills@umich.edu

Web: www.closup.umich.edu/wind

Direct Benefits to Others

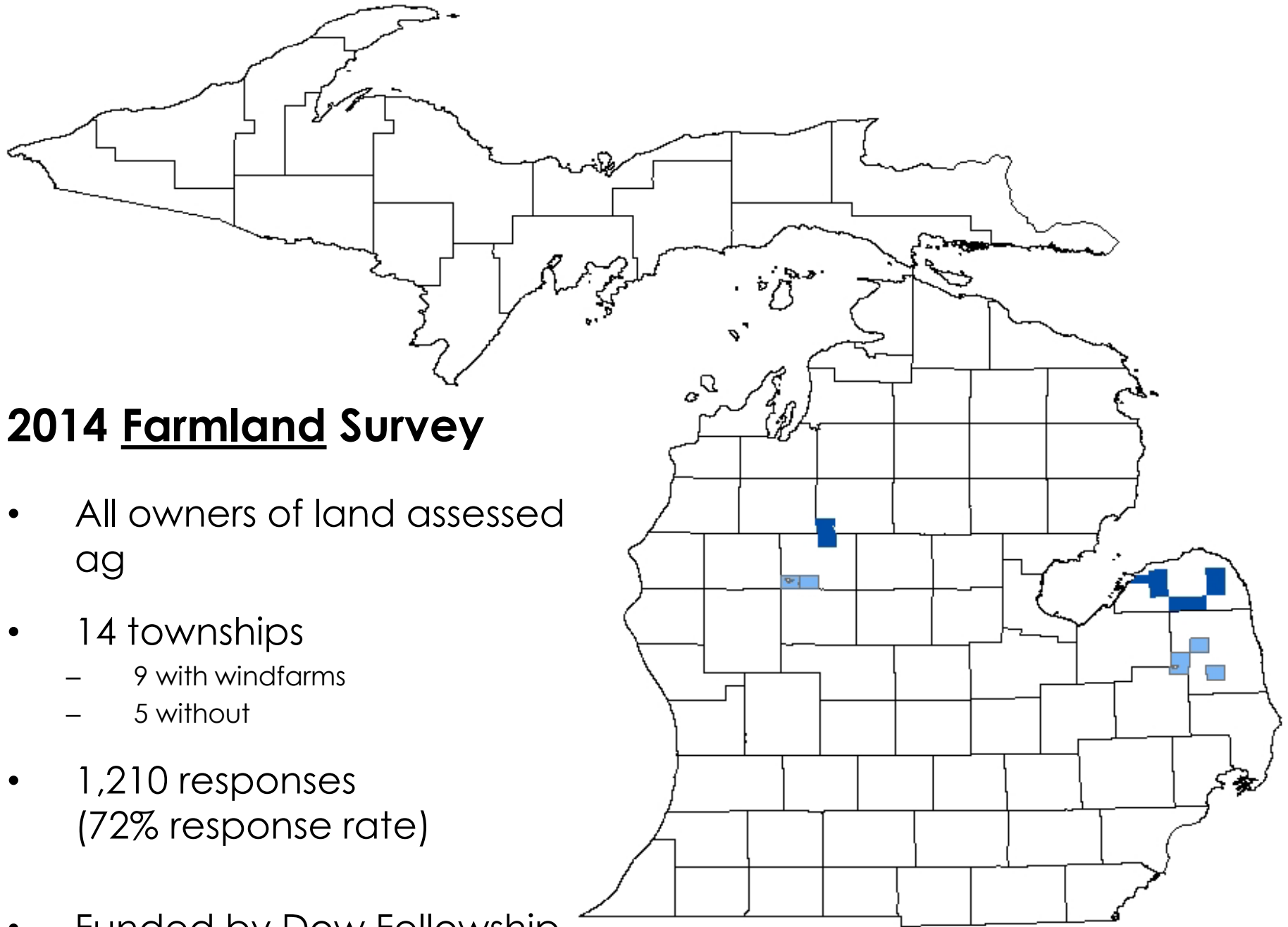


- Old Model: Winner takes all
 - Disturbance
 - Royalty
- Newer Model: Pooled Royalties
 - Usually per-acre
- Newest Model: Includes Smaller Parcels
- **Direct benefit to others depends on model**



2016 Community Survey

- Owners of land assessed ag or residential
- 10 townships with windfarms
- 2,013 responses (53% response rate)
- Funded by C.S. Mott Foundation



2014 Farmland Survey

- All owners of land assessed ag
- 14 townships
 - 9 with windfarms
 - 5 without
- 1,210 responses
(72% response rate)
- Funded by Dow Fellowship

Does Pooling Royalties change Community Attitudes?

- Pooling doesn't decrease support of those with turbines
- Pooling does change narrative
 - Traditional model
 - More comments about tension
 - “Greed” of few getting paid
 - Pooled model
 - “Jealousy” of few not getting paid

Citation: Mills, S. (2018). Wind Energy and Rural Community Sustainability. *Handbook of Sustainability and Social Science Research*. Edited by Leal Filho, W., Callewaert, J. & Marans, R. Zug, Switzerland: Springer.