

Is Wind Energy Right for your Township?

Mount Forest Township
August 24, 2017

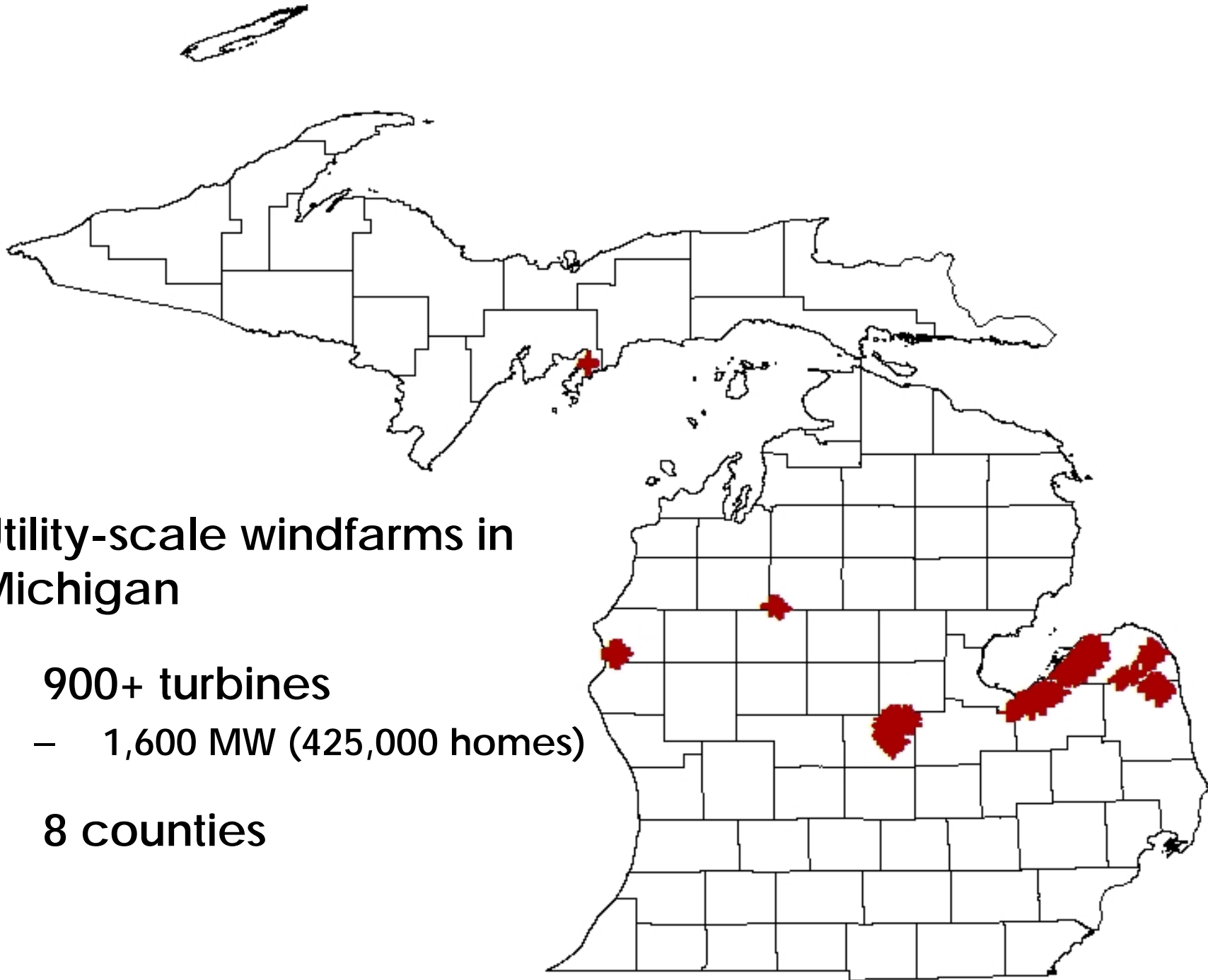
Sarah Mills, PhD

Why am I here?

- Grant from C.S. Mott Foundation
- Helping take **lessons-learned** from Michigan windfarms to ensure wind development **respects local community values**
- To provide data-based account of opinions
 - Not relying on newspaper accounts
 - Give voice to the quiet folks

What I'll cover

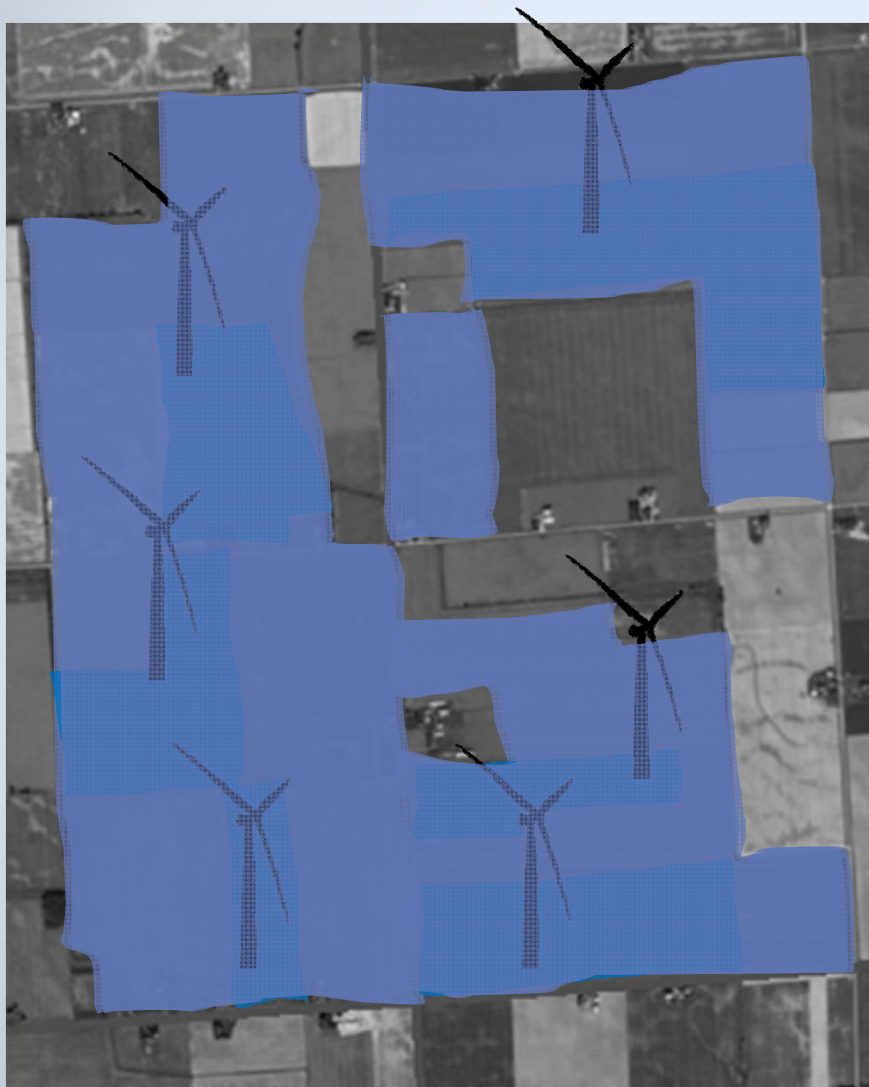
- Overview of wind development
- Surveys of landowners
 - Individual impacts
 - Community impacts
- What should you consider?



Utility-scale windfarms in Michigan

- 900+ turbines
 - 1,600 MW (425,000 homes)
- 8 counties

Wind Development 101

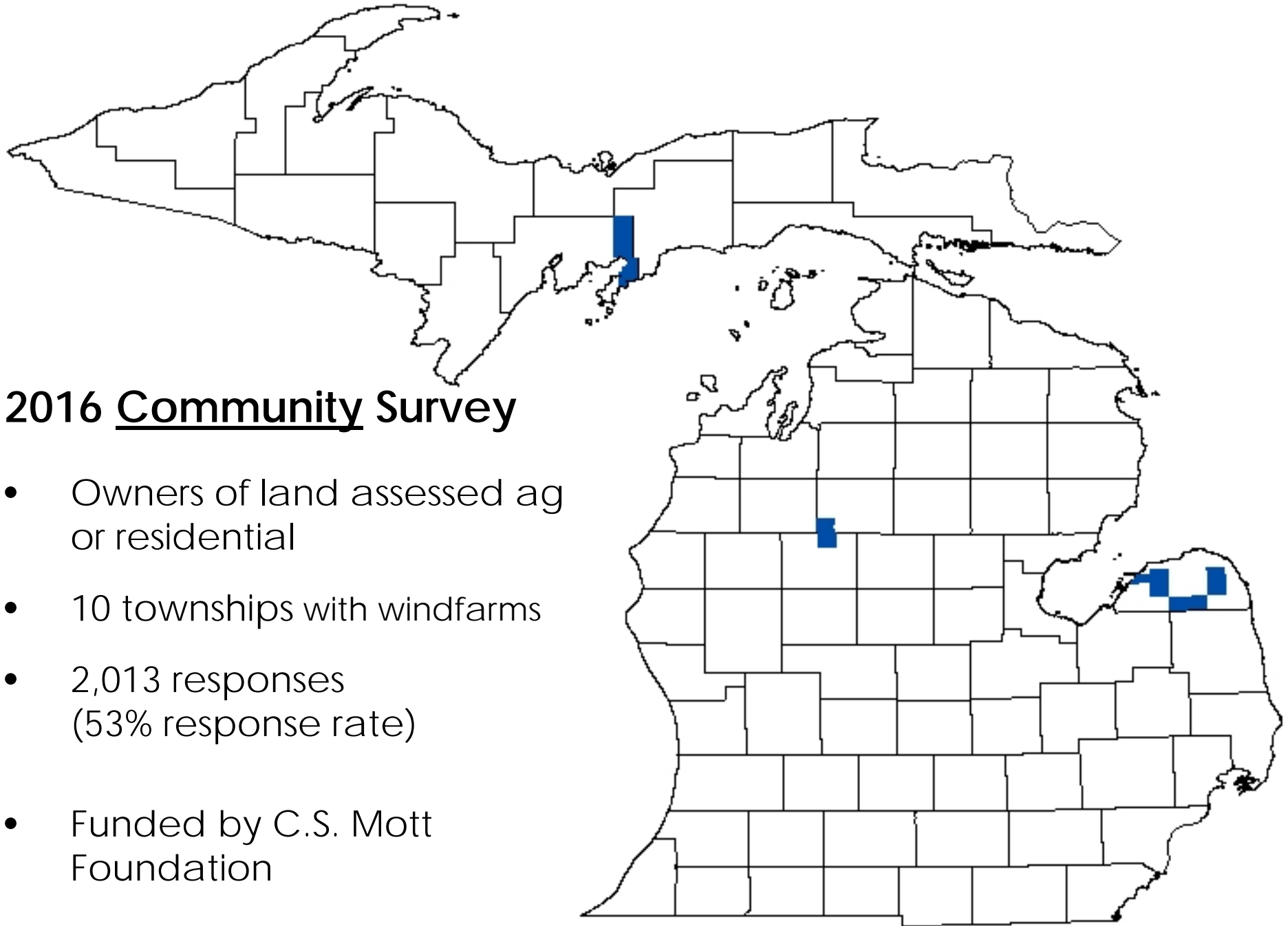


- Zoning constraints
- Landowner payments
 - Disturbance
 - Royalty
 - Participation/friendly neighbor
- Property tax payments
 - ~\$20M per year statewide

Survey Data

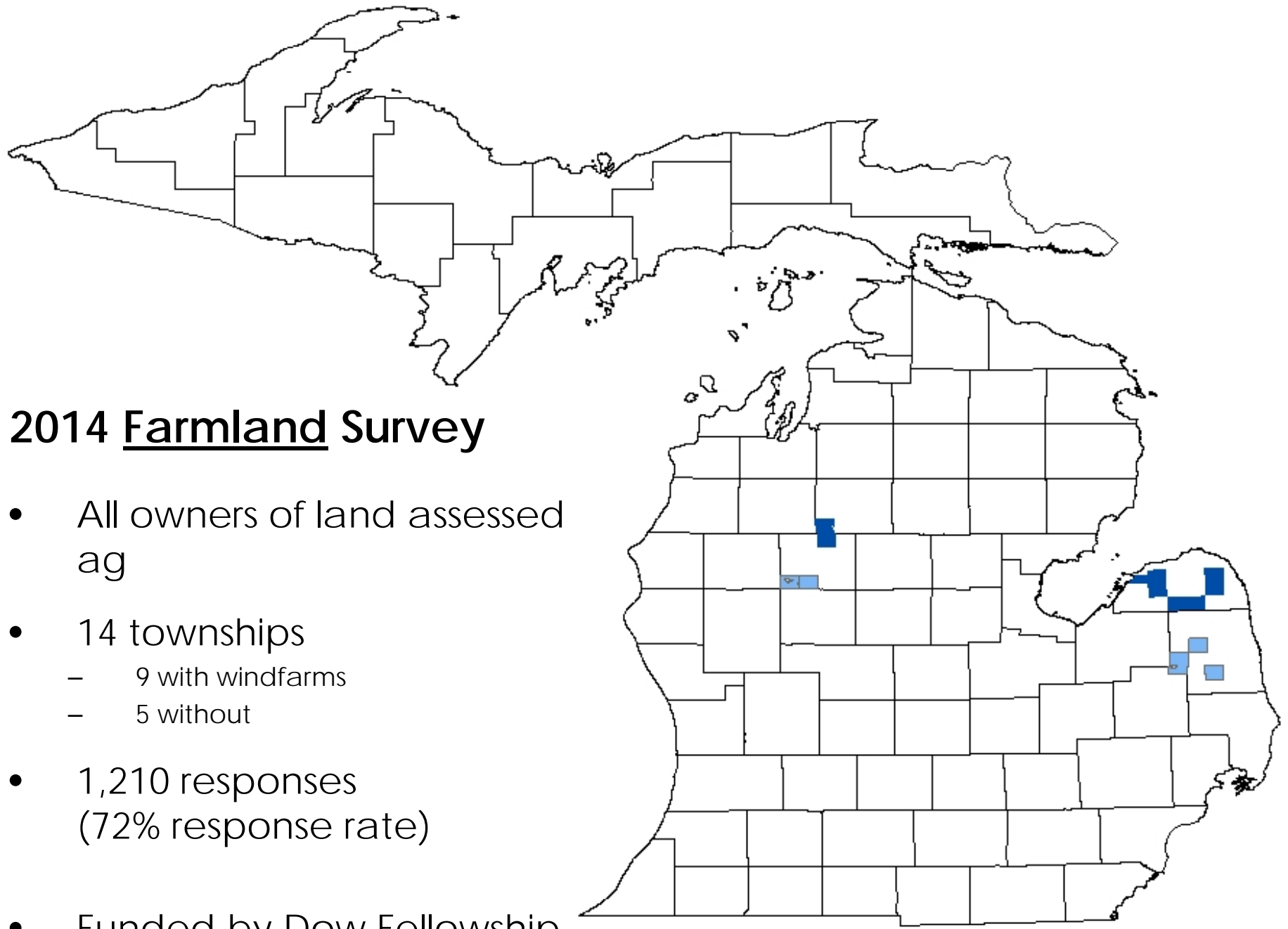
...

When, who, and where
& what did I find?



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

Overall drivers of attitudes

- Type of land owned
 - secondary vs. primary residence
 - farmland / rental property *only*
- Being within earshot of turbines
- Direct compensation
 - Some better than none
 - \$1,000 per year as key threshold
- Attitudes about process, wind developer

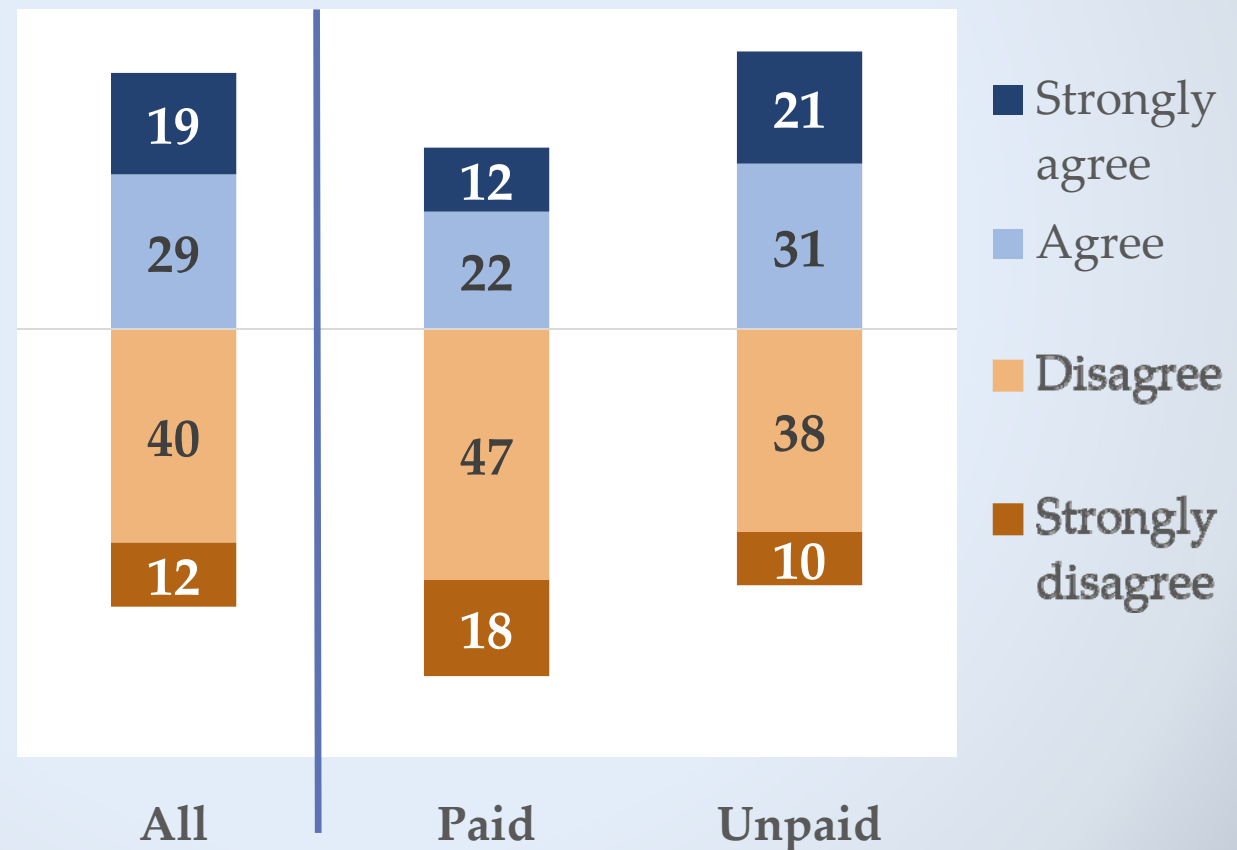
Individual-level Impacts

- Noise
- Visual
- Health
- Property value
- Farm income
- Farm succession

Individual-level Impacts

- Noise
- Visual
- Health
- Property value
- Farm income
- Farm succession

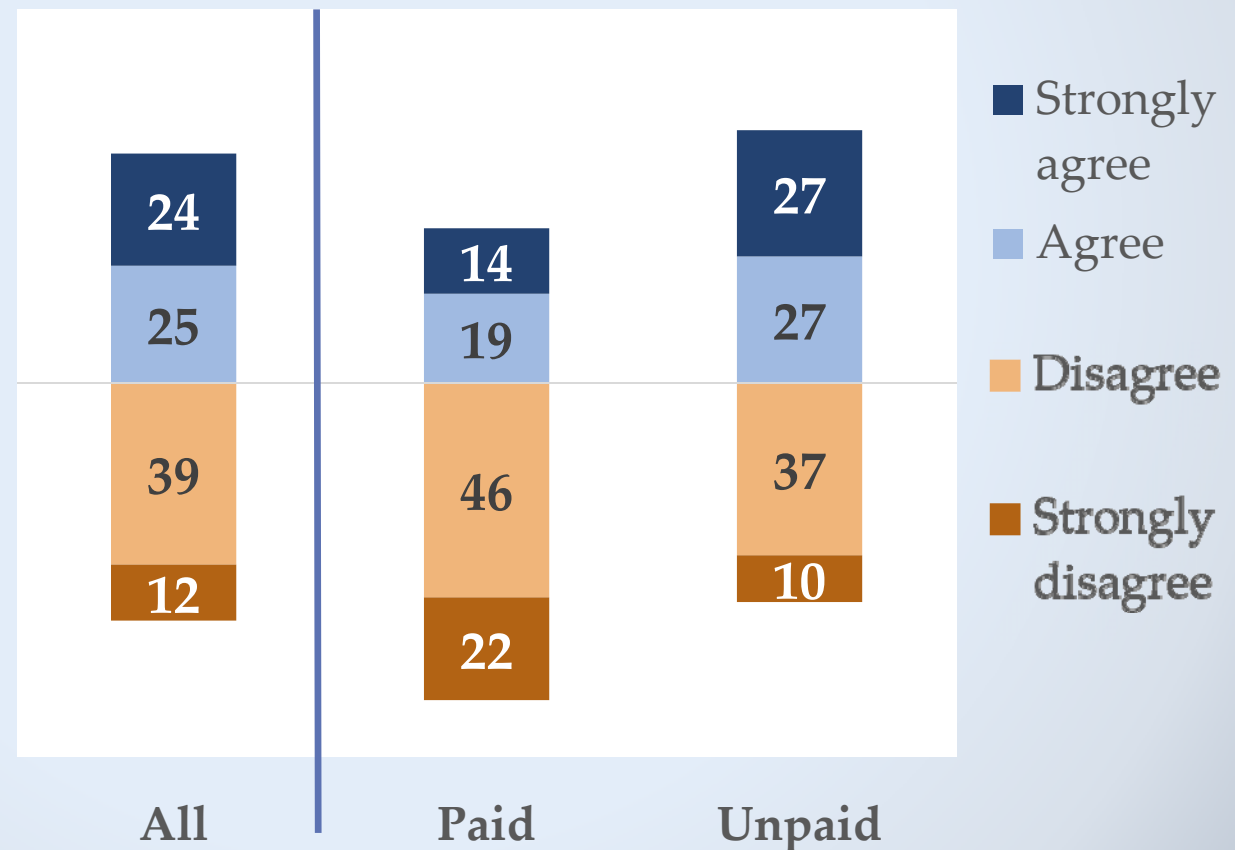
Turbines create noise pollution



Individual-level Impacts

- Noise
- **Visual**
- Health
- Property value
- Farm income
- Farm succession

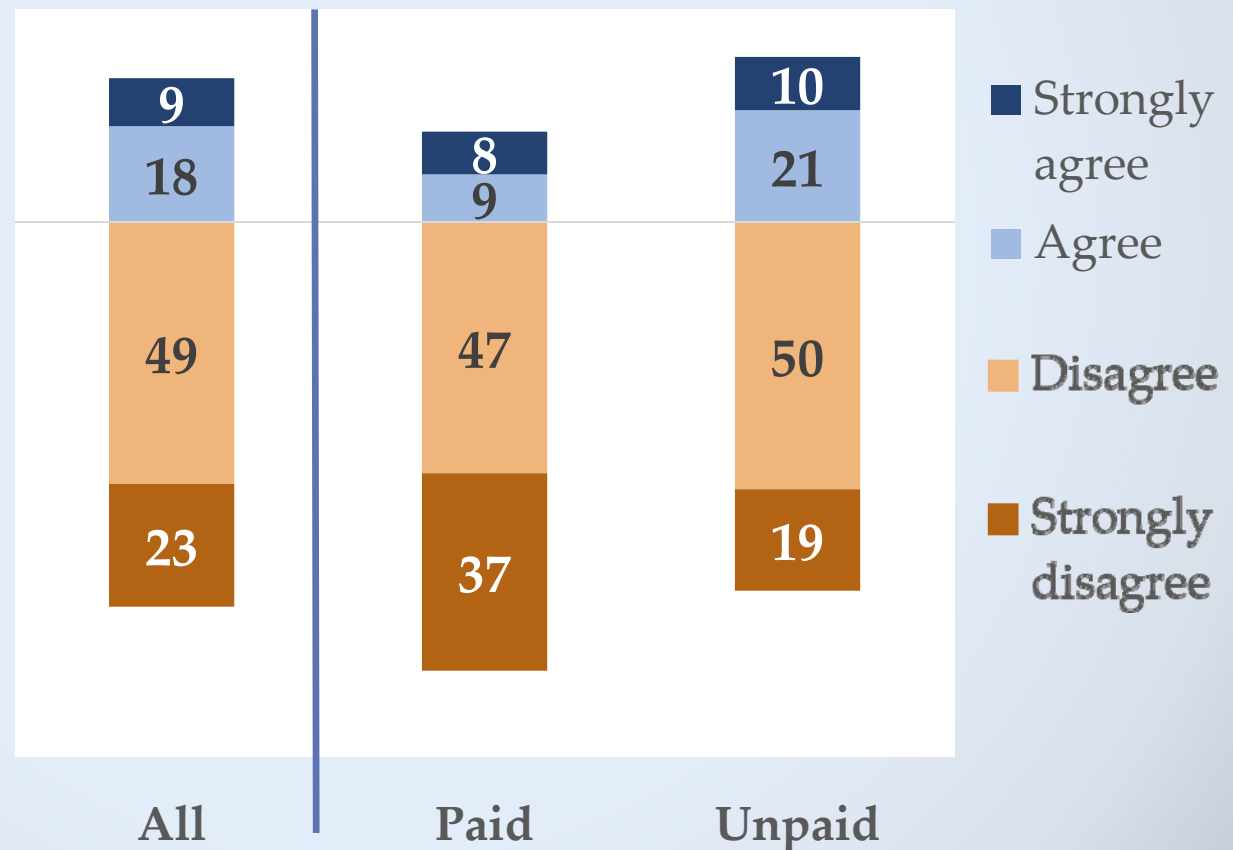
Turbines create visual/aesthetic problems



Individual-level Impacts

- Noise
- Visual
- **Health**
- Property value
- Farm income
- Farm succession

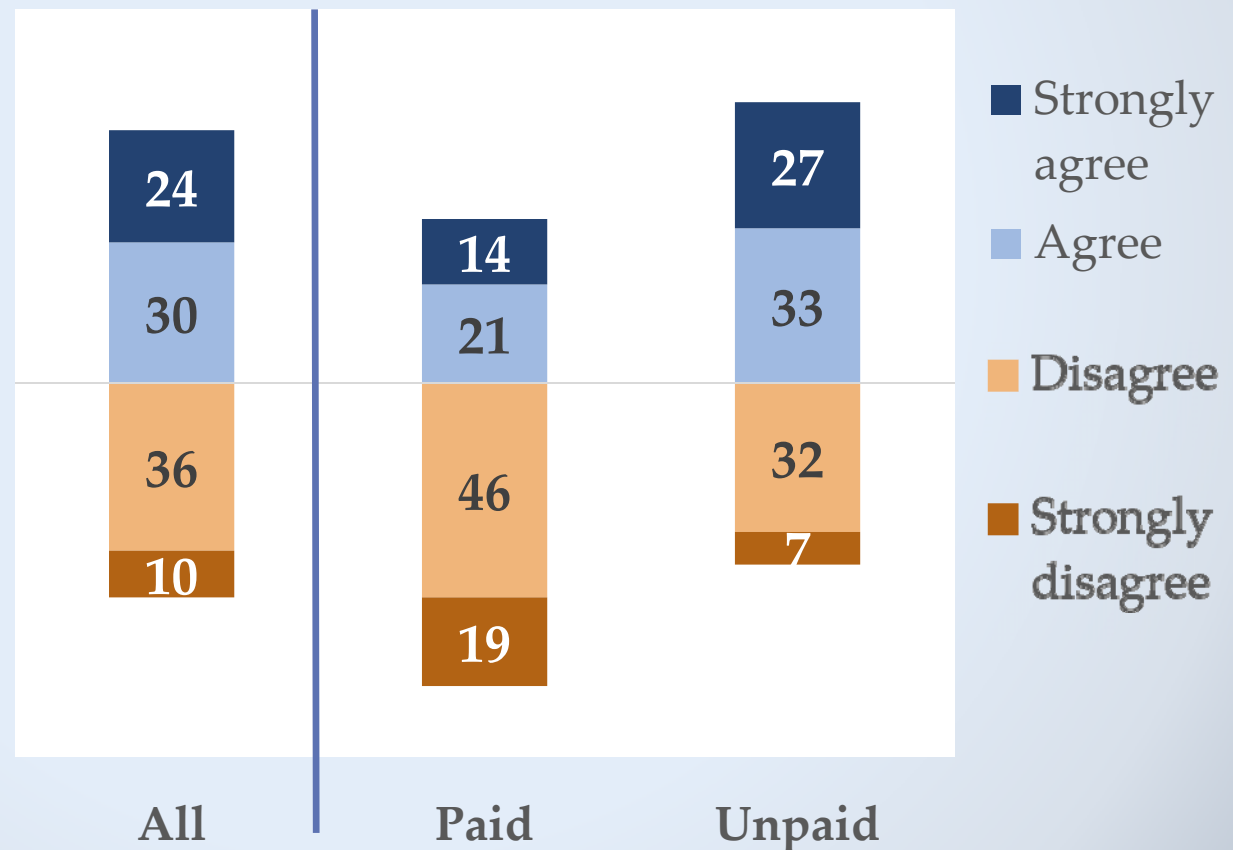
Turbines cause human health problems



Individual-level Impacts

- Noise
- Visual
- Health
- **Property value**
- Farm income
- Farm succession

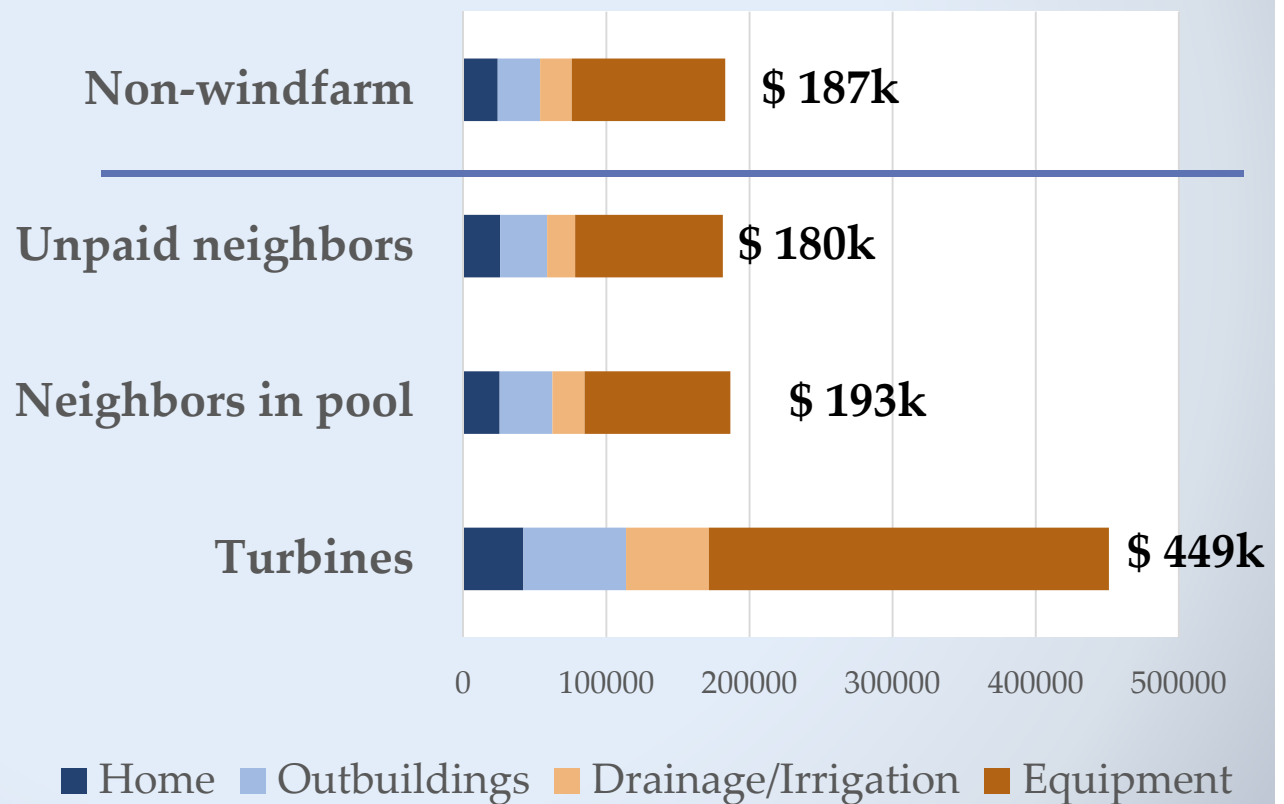
Turbines decrease nearby property values



Individual-level Impacts

Investments over 5 years: 2009-2013

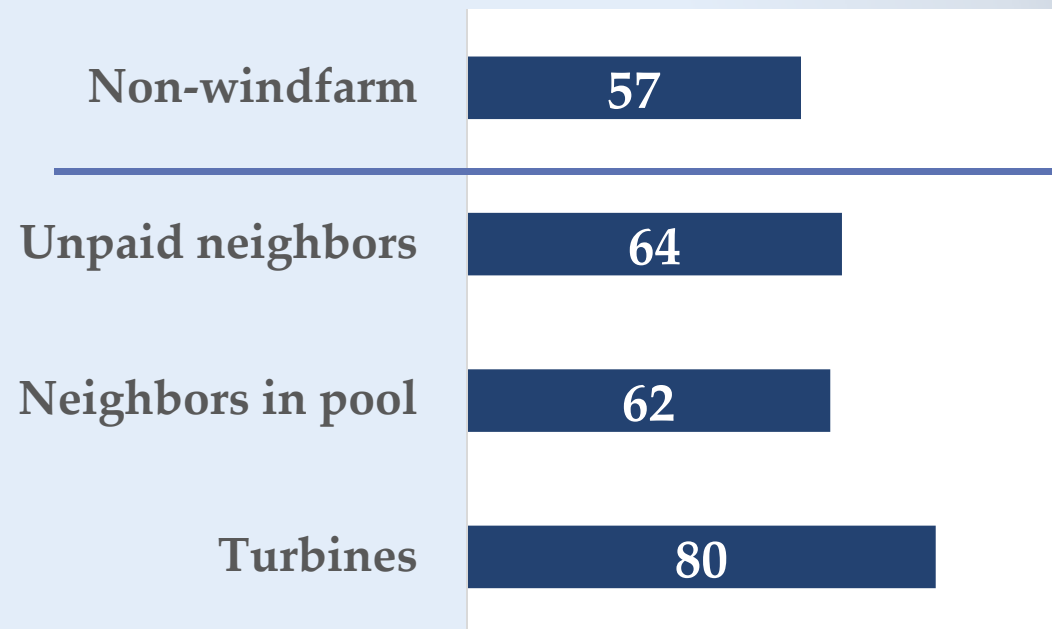
- Noise
- Visual
- Health
- Property value
- **Farm income**
- Farm succession



Individual-level Impacts

- Noise
- Visual
- Health
- Property value
- Farm income
- Farm succession

% that have farm succession plan



Individual-level Impacts Take-aways

- Views on noise, visual impact, property values roughly 50/50
Financial stake = rosier view
OR
no financial stake = more soured view
BUT STILL SPLIT OPINIONS
- Most don't see health impacts
- Having turbine on property is linked to additional on-farm investment, succession planning

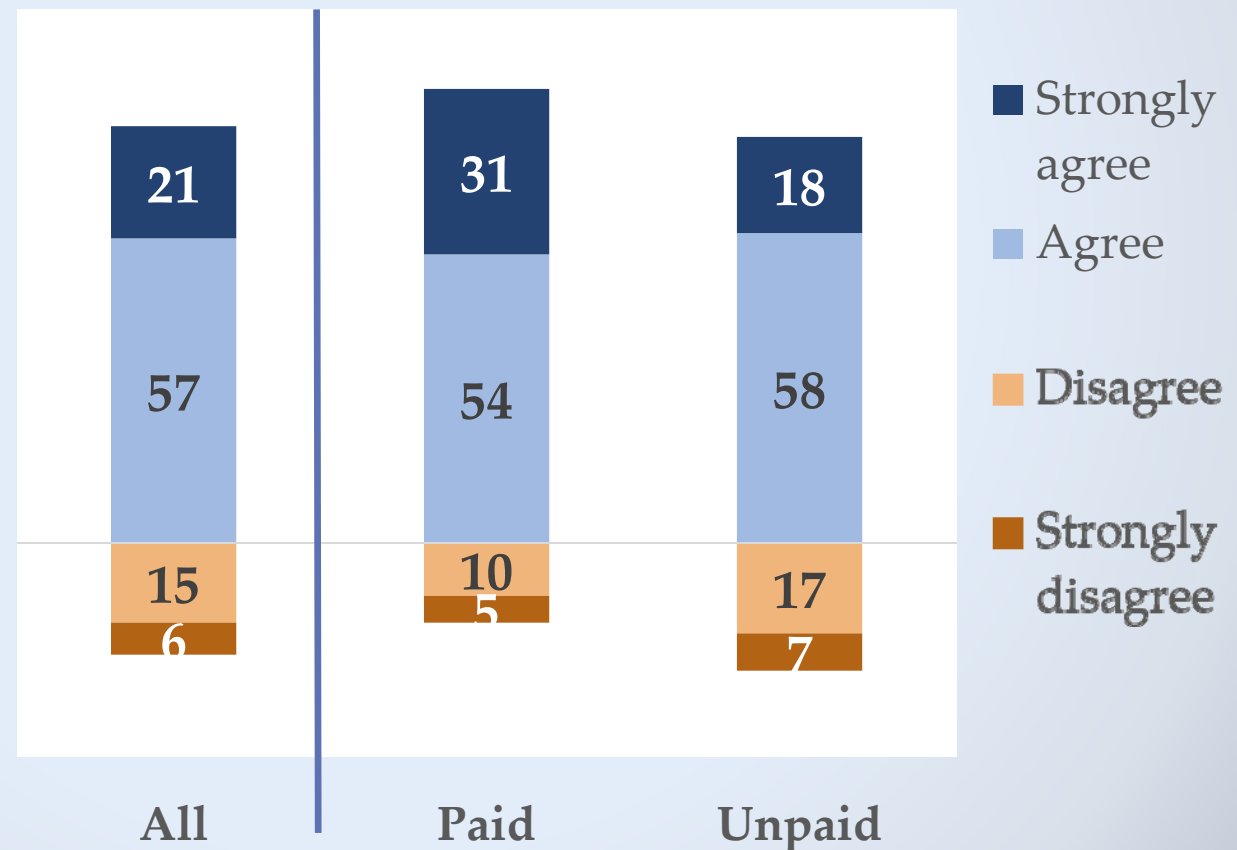
Community-level Impacts

- Job creation
- Roads
- Township services
- County services
- Schools
- Relationships with neighbors

Community-level Impacts

- Job creation
- Roads
- Township services
- County services
- Schools
- Relationships with neighbors

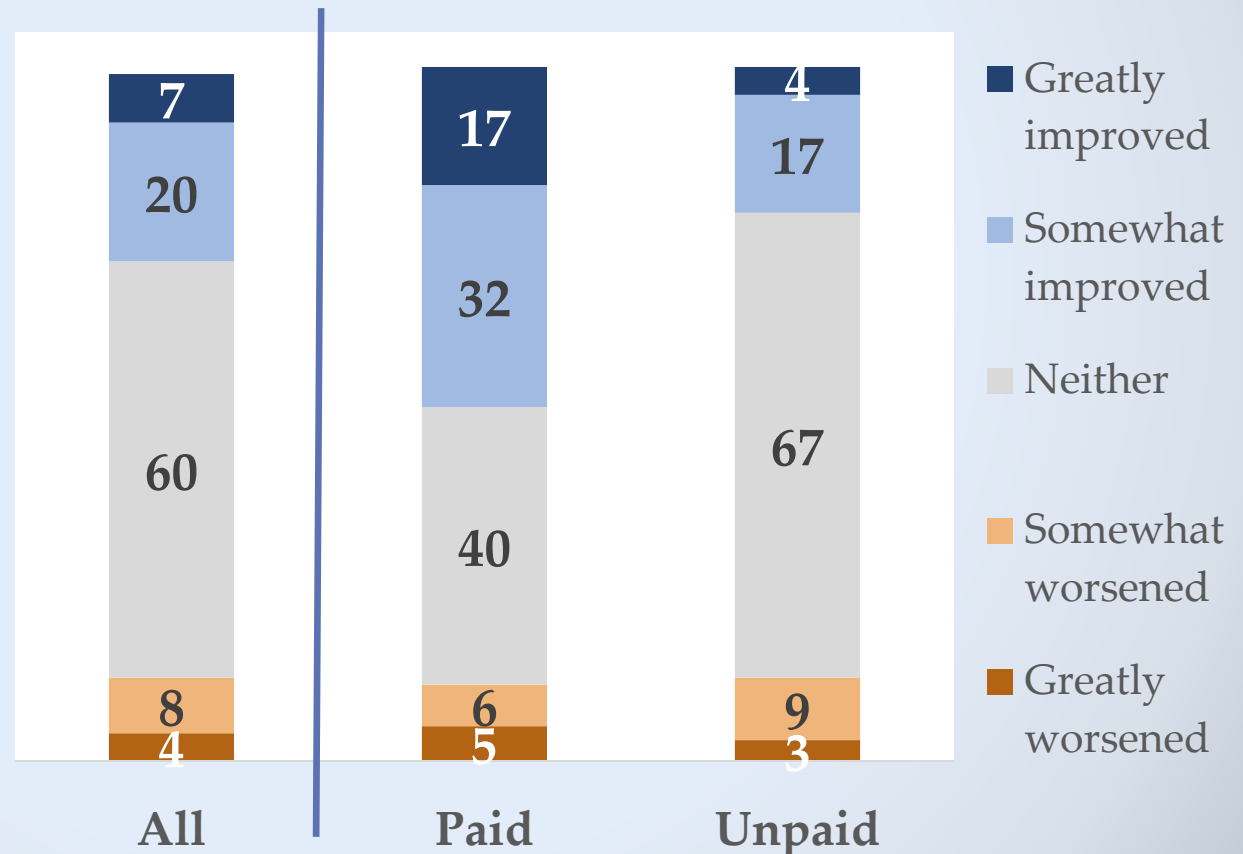
Turbines create jobs



Community-level Impacts

- Job creation
- **Roads**
- Township services
- County services
- Schools
- Relationships with neighbors

Turbines' effect on local roads

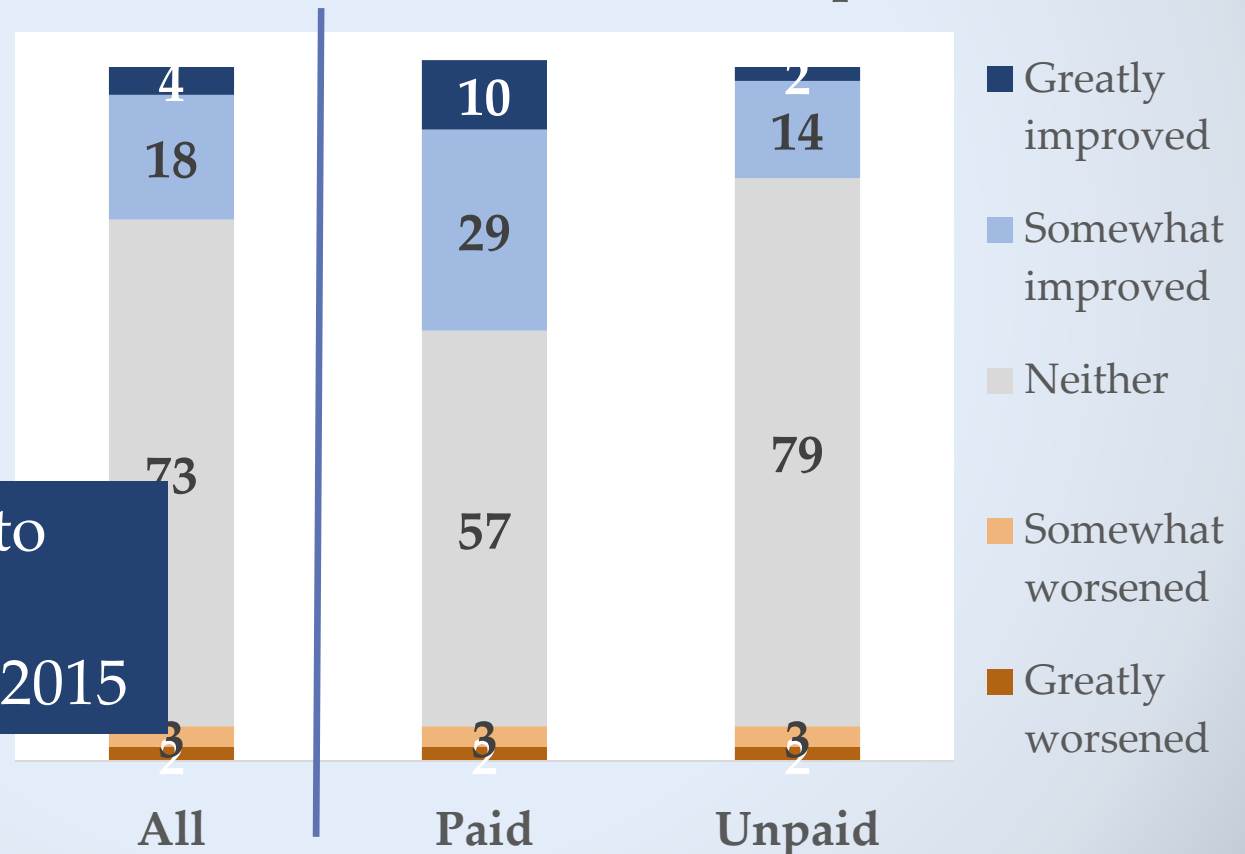


Community-level Impacts

Turbines' effect on township services

- Job creation
- Roads
- Township services
- County services

\$2.630 Million to townships in Huron County in 2015

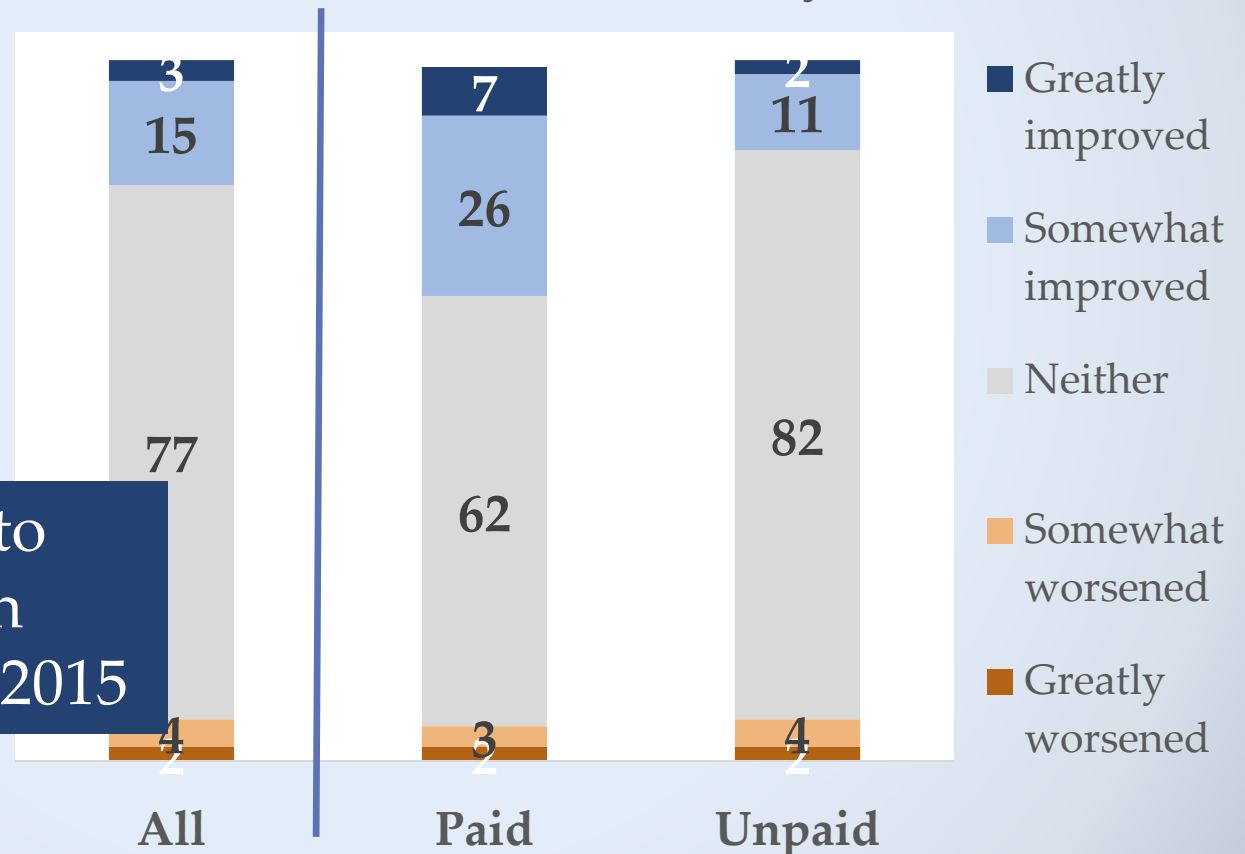


Community-level Impacts

Turbines' effect on county services

- Job creation
- Roads
- Township services
- **County services**

\$2.749 Million to county gov't in Huron County in 2015

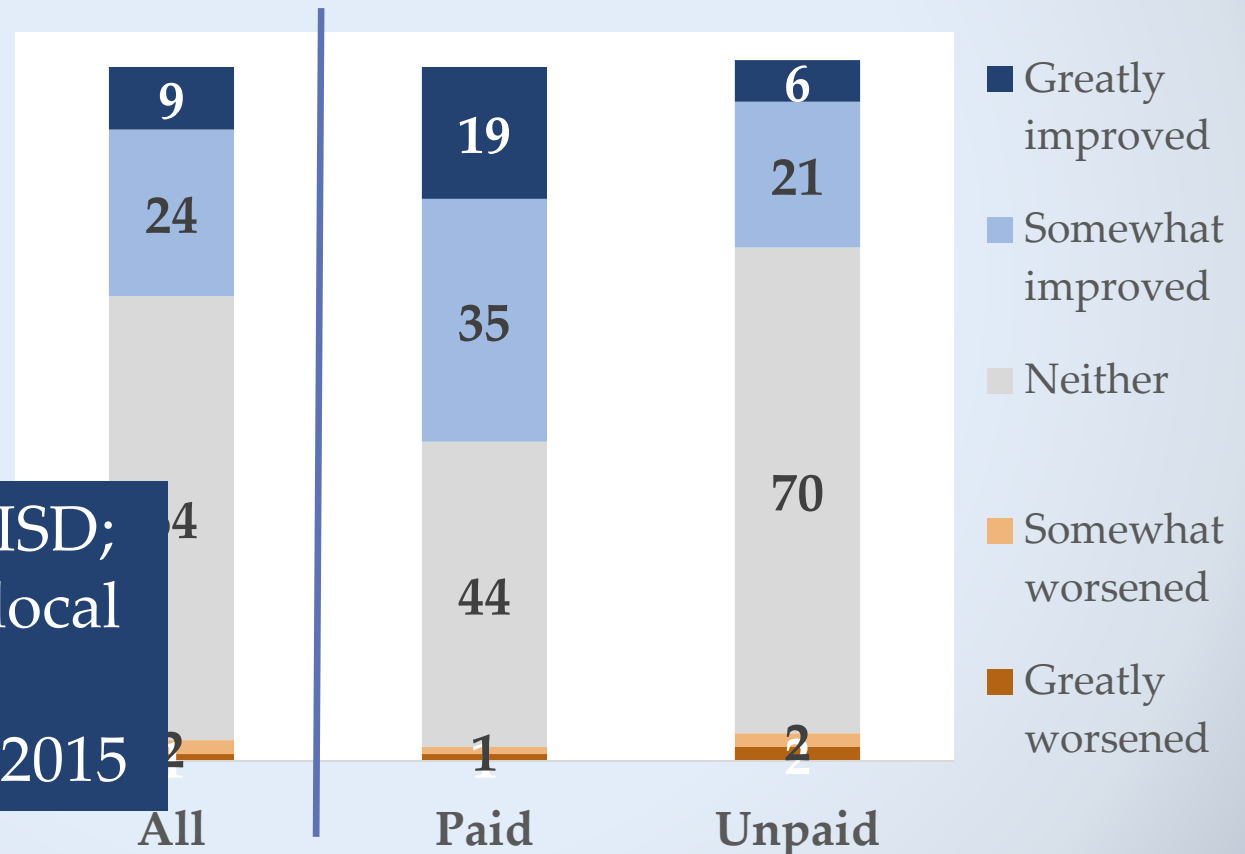


Community-level Impacts

- Job creation
- Roads
- Township services
- County services

**\$2.083 Million to ISD;
\$2.074 Million to local schools in Huron County in 2015**

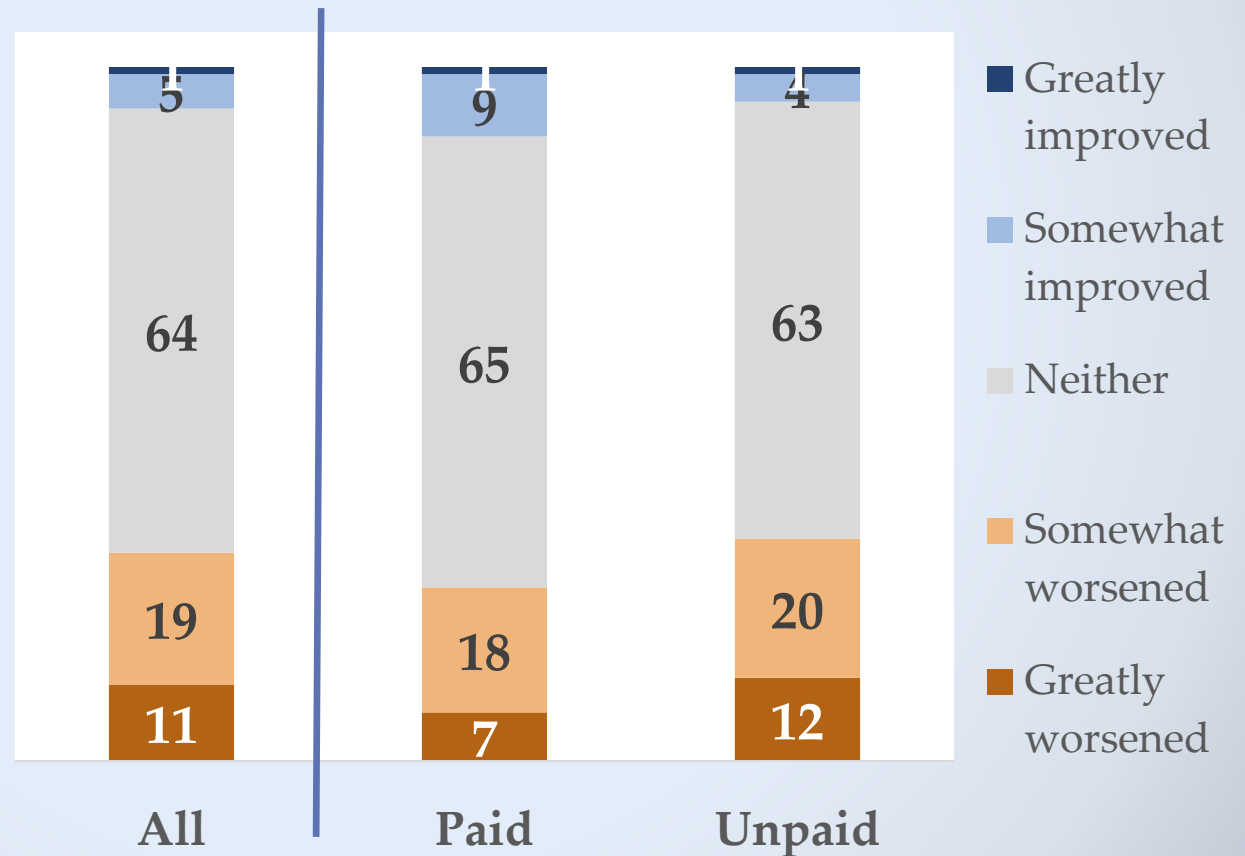
Turbines' effect on local schools



Community-level Impacts

Turbines' effect on relationships with neighbors

- Job creation
- Roads
- Township services
- County services
- Schools
- Relationships with neighbors



Community-level Impacts Take-aways

- Most see job creation (with caveat about types of jobs)
- Majority haven't seen changes to community services, schools, or relationships with neighbors
 - Tax uncertainty
 - Increasing cost of services, declining revenues over time may limit visible impacts

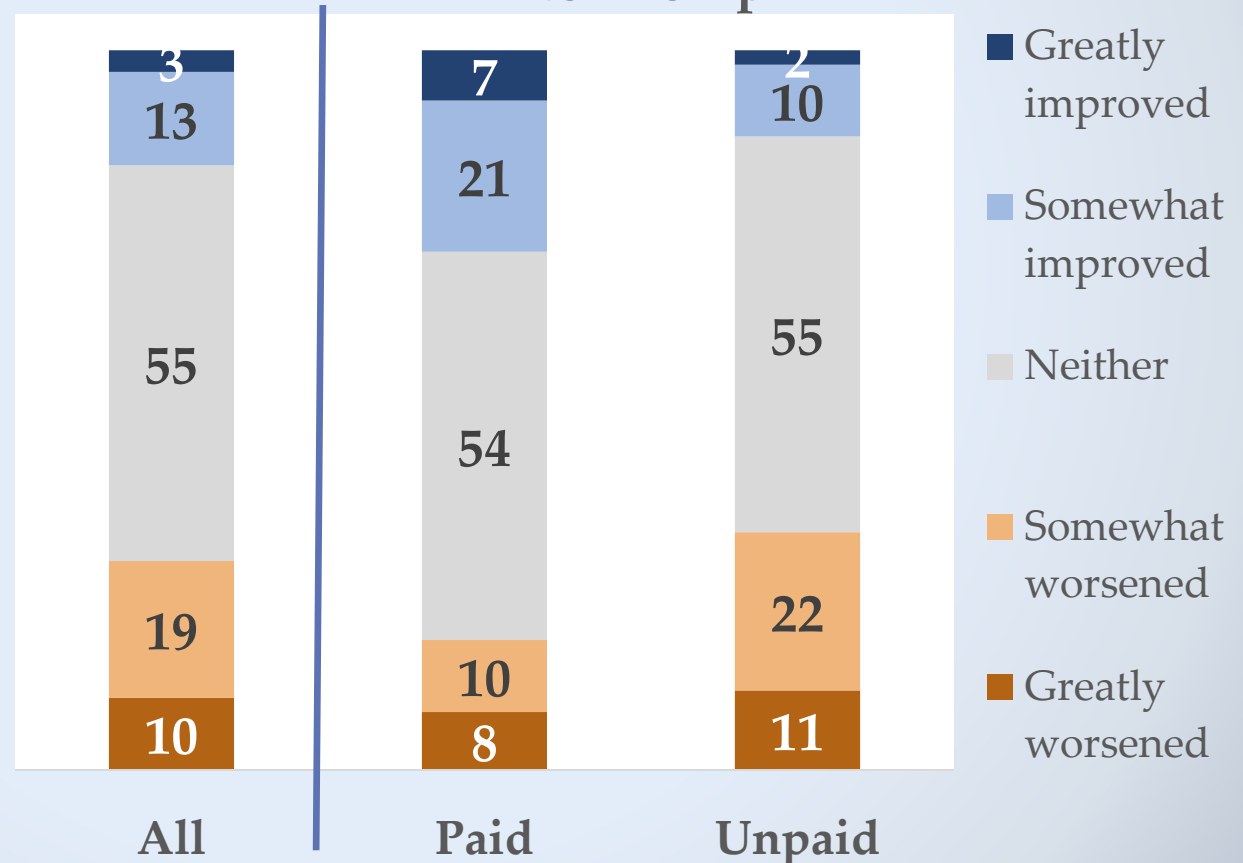
Would they welcome wind development again?

- Quality of life
- Willingness to accept new turbines

Would they welcome wind development again?

Turbines' effect on overall quality of life in township

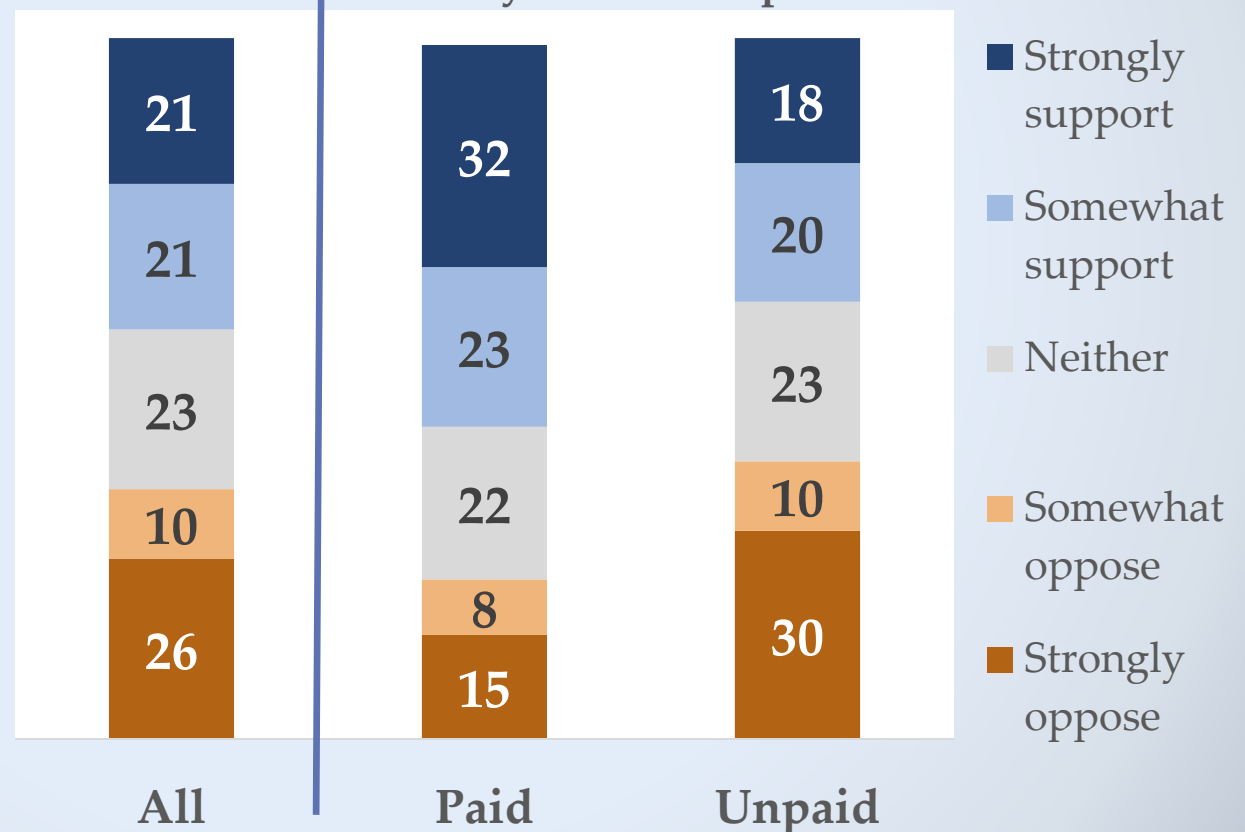
- Quality of life
- Willingness to accept new turbines



Would they welcome wind development again?

Willingness to host additional turbines in your township

- Quality of life
- Willingness to accept new turbines



What should you consider?

...

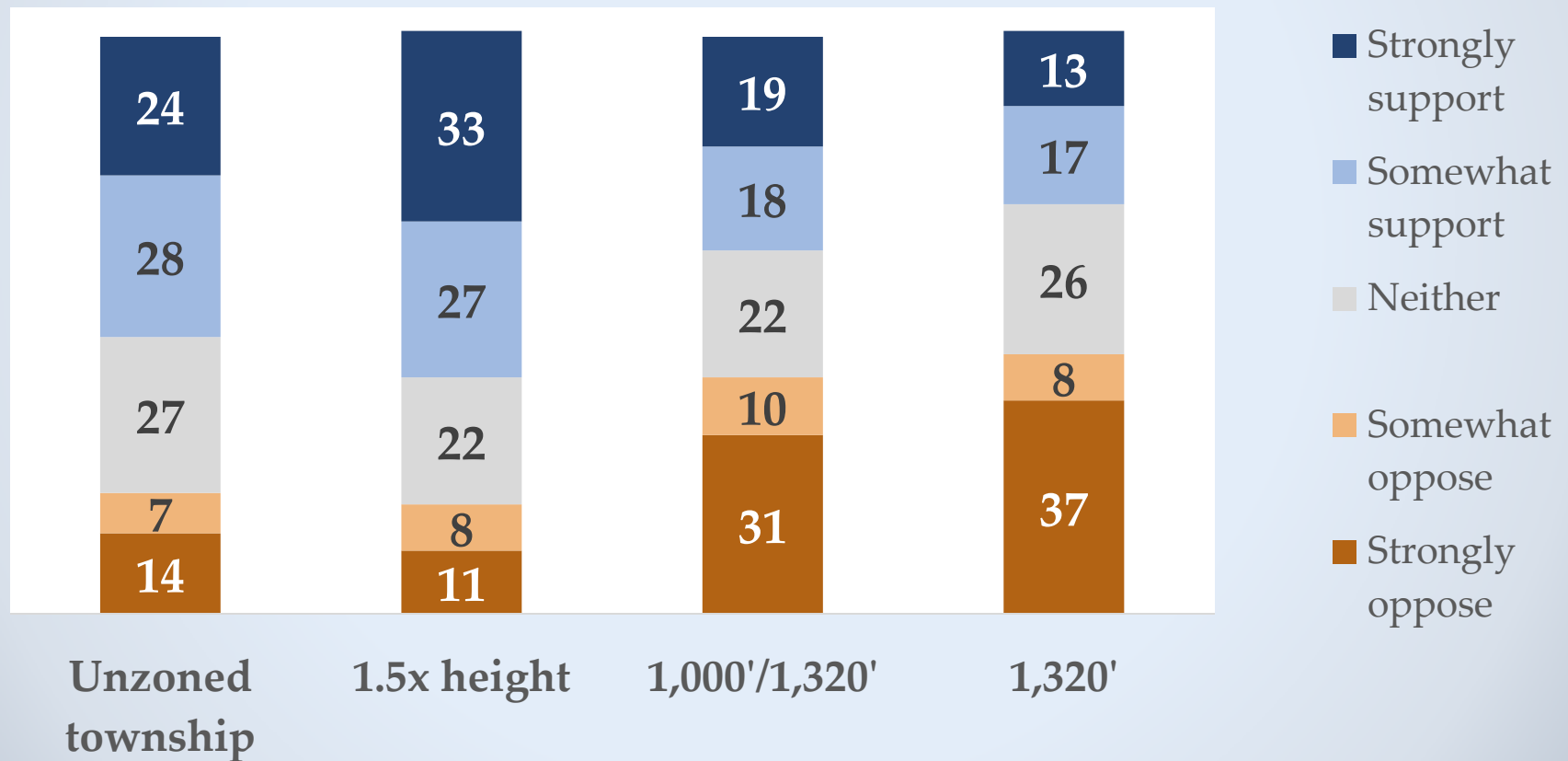
How to reap the benefits without the heartburn

How does this fit with your long-term plan?

- If goal is for substantial residential development or growth of tourism, wind may not be right
- If goal is to sustain agriculture, wind can fit
 - But depends on turbine placement; siting on property lines conserve much more land

The ideal zoning ordinance?

Support/oppose additional turbines in township,
by zoning setback distance

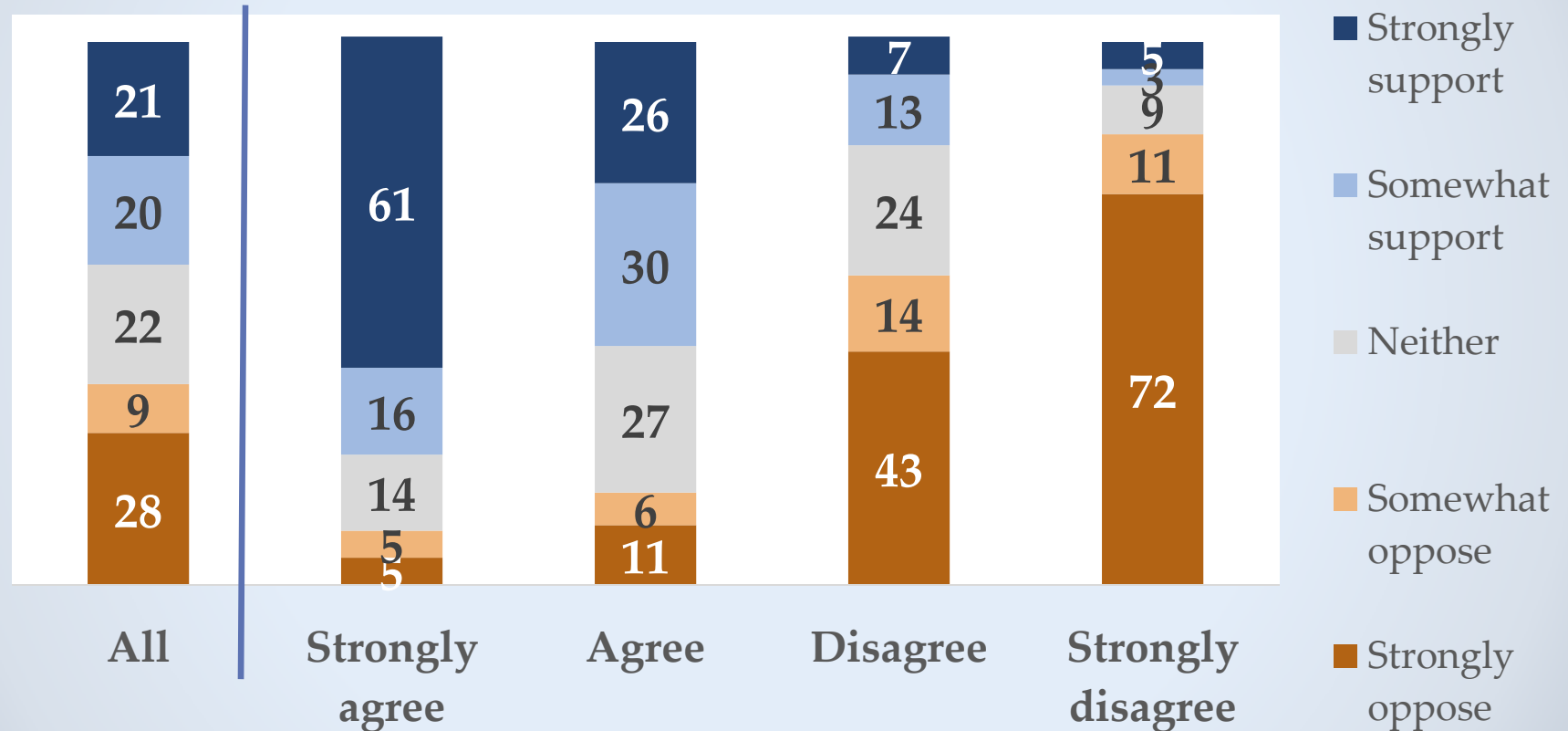


Zoning ordinance considerations

- Participating vs. non-participating landowners
- Noise, flicker analysis
- Decommission plan/financial assurance
- Have an open & transparent process

The importance of transparency

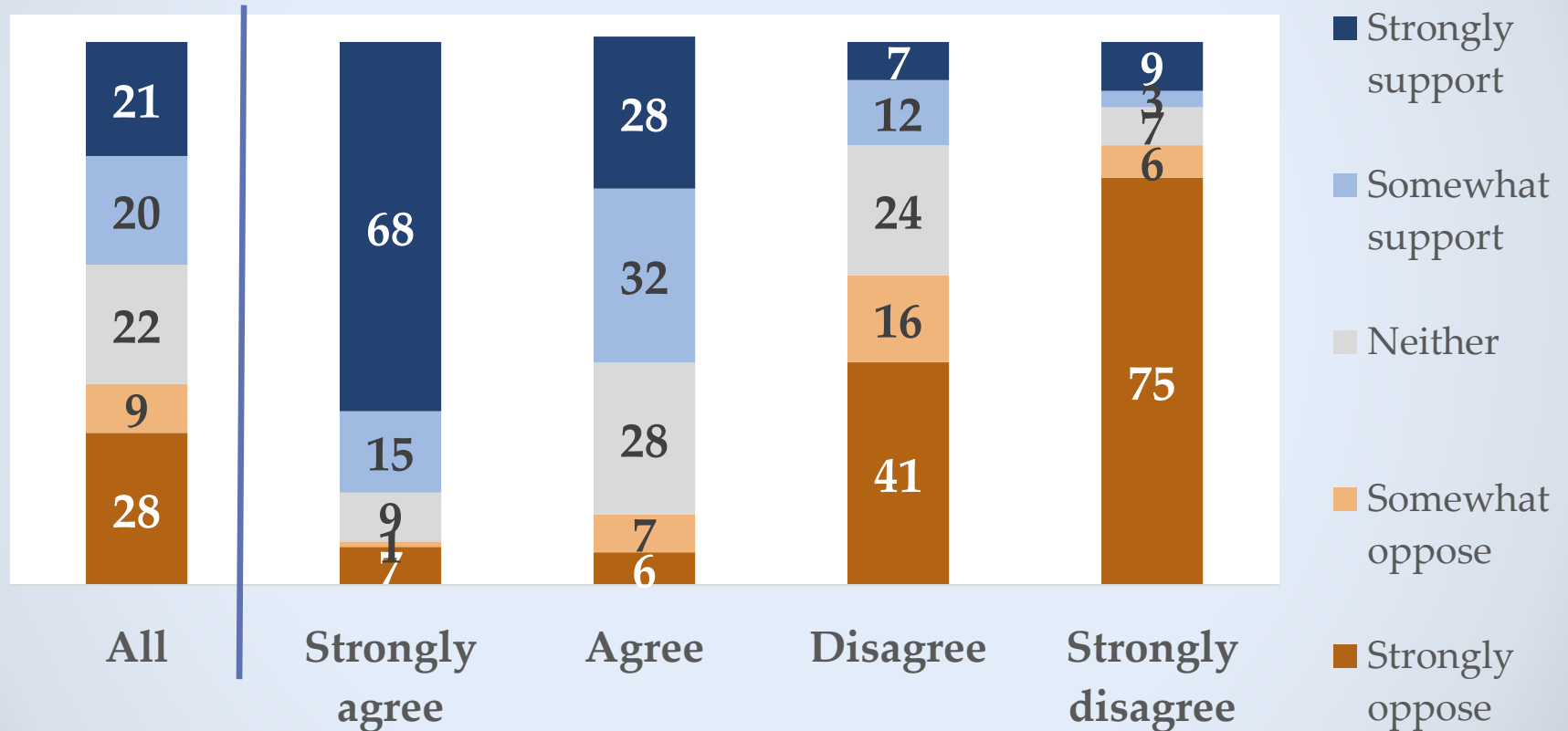
Support/oppose additional turbines in township,
by agree/disagree wind developer acted transparently



“The wind project developer acted openly and transparently throughout the planning process.”

The importance of transparency

Support/oppose additional turbines in township,
by agree/disagree local officials acted in best interest



“Local government officials’ decisions about the wind project were in the best interests of our township.”

Don't be afraid to ask questions

- About who benefits
- Amount of tax revenue
- The impacts (noise, flicker) on your home
- Decommissioning



Gerald R. Ford
School of Public Policy



The CLOSUP Wind Project

Sarah Mills, Project Manager

Phone: (734) 615-5315

Email: sbmills@umich.edu

Web: www.closup.umich.edu/wind