

Utility Scale Renewable Energy Development

Aiding Public Officials in the Decision Making Process

2015 National Extension Energy Summit
Seattle, WA
April, 2015



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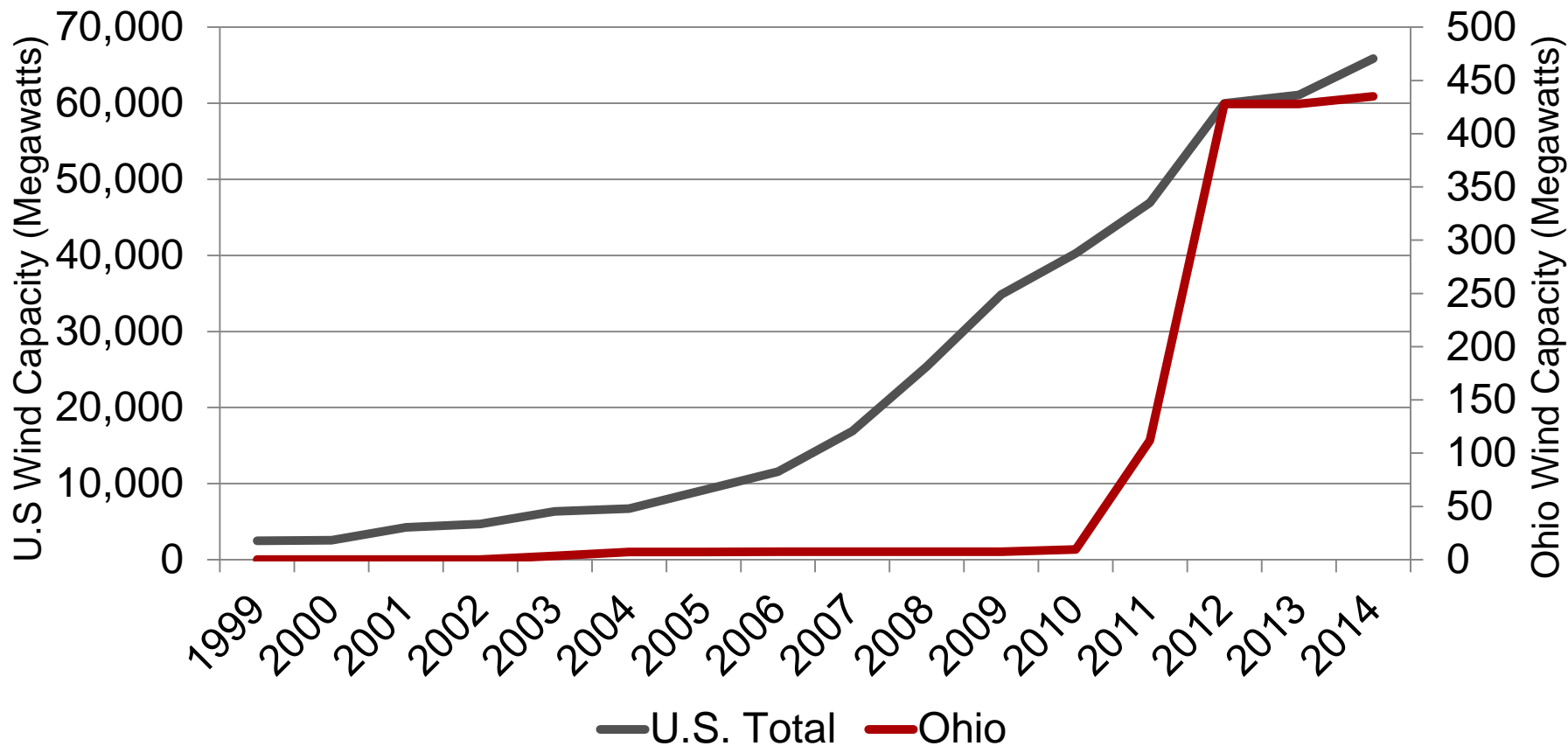
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Learning Objectives

- Wind Energy Trends
- The Situation
- Wyandot County Partnership Model
- Survey Results
- Community Outreach
- Next Steps



U.S. Installed Wind Capacity



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Data Source: U.S. Department of Energy, Office of Energy
Efficiency & Renewable Energy

“Renewable energy, however, is widely accepted as having broad environmental benefits by reducing harmful emissions. Yet, opponents often cite local environmental impacts, such as harm to wildlife or impacts to the visual landscape, as reasons for challenging the construction of renewable energy facilities.”

Bidwell, D., *The role of values in public beliefs and attitudes towards commercial wind energy*. Energy Policy (2013), <http://dx.doi.org/10.1016/j.enpol.2013.03.010i>





Pros and Cons

Proponents:

- wind power can supplement other sources
- wind power is never going to rise in cost
- wind power does not pollute the air or water
- wind turbines are visually appealing
- wind turbines are not too noisy
- wind power increases national security

Opponents:

- wind power is intermittent
- wind turbines spoil the scenery
- wind turbines are noisy
- wind turbines are dangerous
- wind turbines kill too many birds
- wind power is too expensive



Local Economic Impact

Blue Creek Wind Farm

- 304 MW / 152 Turbines
- \$600 Million Project Investment
- \$2 Million Annual Lease Payments
- \$2.7 Million Annual Local Taxes

Timber Road II Wind Farm

- 99 MW / 55 Turbines
- \$175 Million Project Investment
- \$1 Million Annual Lease Payments
- \$900,000 Annual Local Taxes



Local Social Impact

- Commissioners scrap energy zone designation – Times Bulletin 4/17/13
- Ohio wind farms praised by some, criticized by others – The Journal Gazette 10/16/13
- Residents: Wind project to cost county as much as gains – The Examiner 2/12/14
- Controversy surrounds wind energy tax law – The Daily Standard 7/28/10
- Wind Farm company, residents spar at town hall meeting – Times Bulletin 4/17/14
- Champaign wind farm tax break battle looms – Springfield News-Sun 10/23/13
- Opinions differ over wind power – The Yellow Springs News 5/17/12
- Divided Ohio High Court Greenlights Wind Farm – Law360.com 3/6/12



Ohio Renewable Energy Policy

- SB 221 – Established Ohio’s First Alternative Energy Portfolio Standards.
- SB 232 - Establish alternative energy zone with a statewide standard Payment in Lieu of Taxes (PILOT) Program.
 - Note: SB232 -Requires County Commissioner approval
- SB 310 – Two year freeze on Alternative Energy Portfolio Standards.



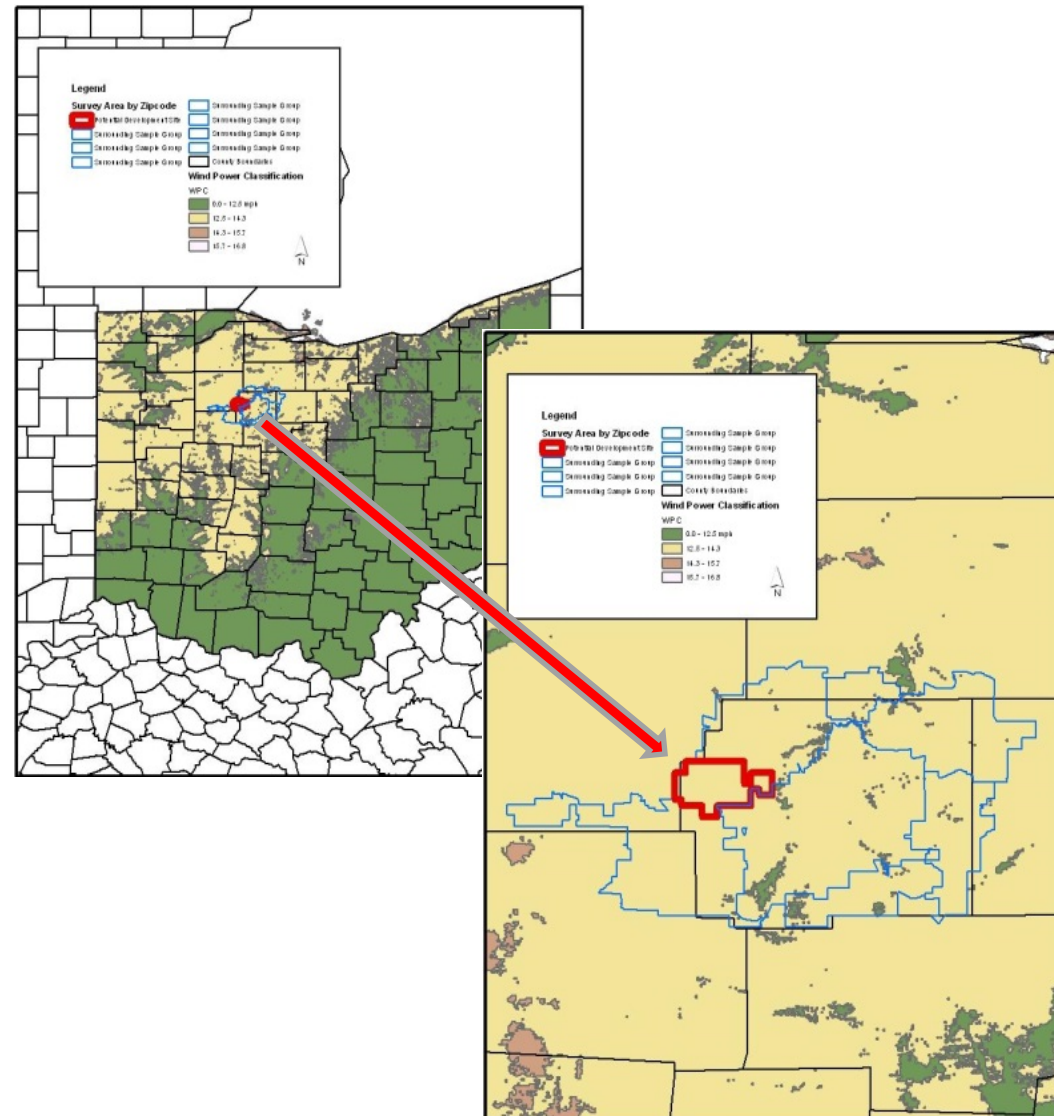
Wyandot Wind Project Partnership

- 100 MW wind farm with 10,000 acres leased
- County leadership concerned with process and conflict in other communities.
- Data - need for local public opinion on wind energy.
- Collaborative structure between **university, local government, and industry** with leverage funding.



The Survey

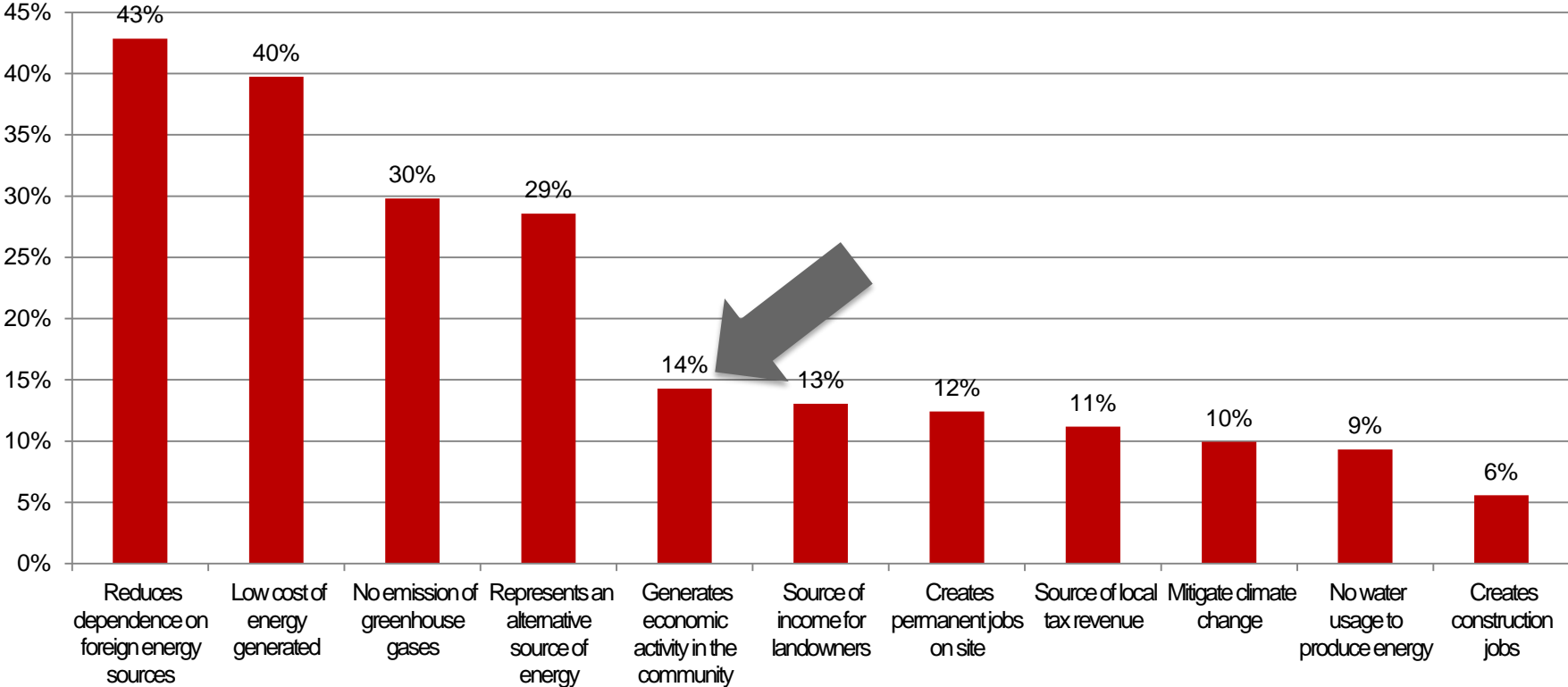
- 11-page / 45-item
- 700 household sample
- 100% sample of development zone
- 26% overall response rate
- 30% in development zone



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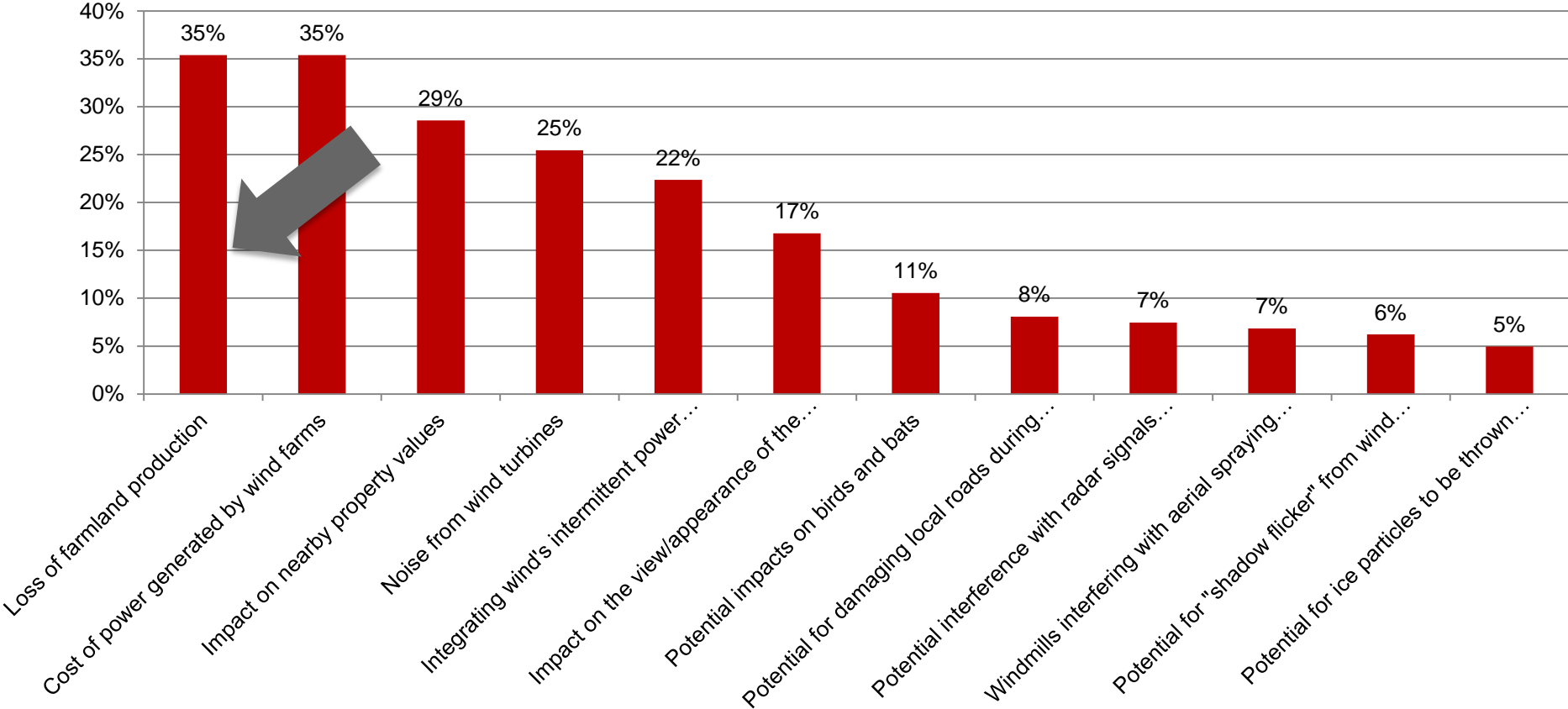
Perceived Benefits of Wind Energy



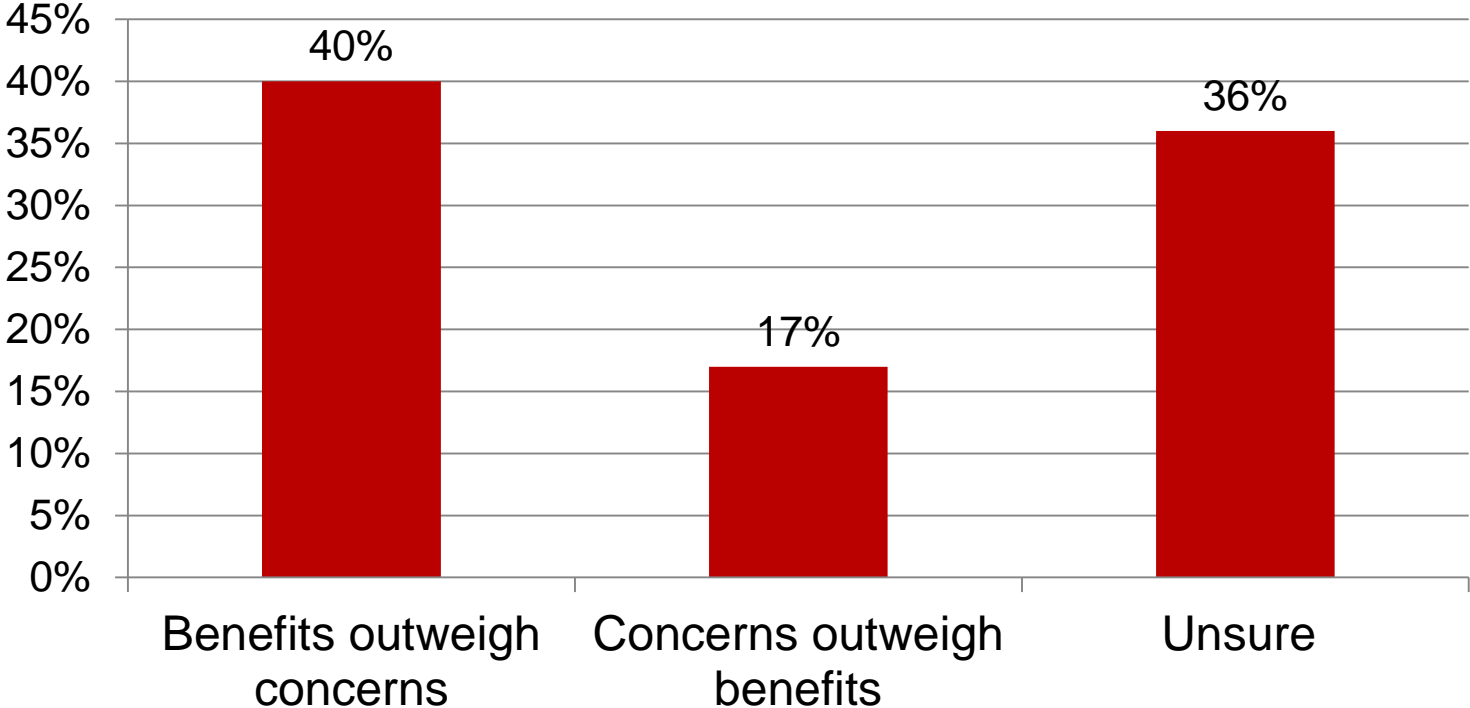
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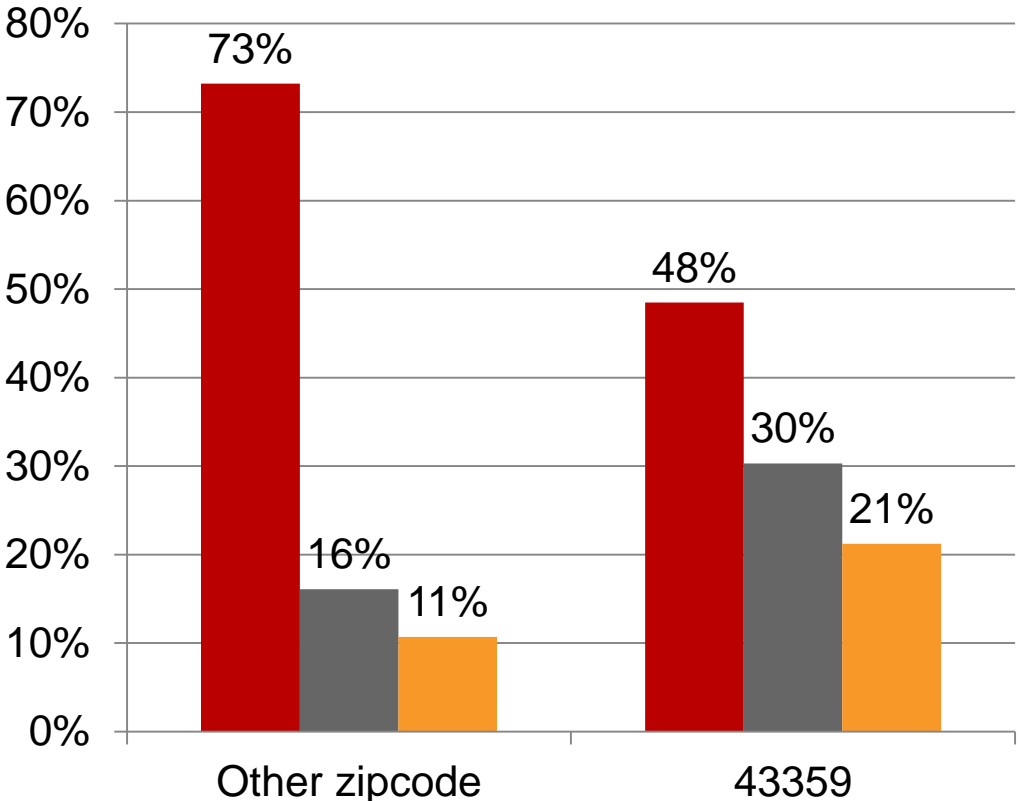
Perceived Problematic Issues of Wind Energy



Benefits vs. Concerns of Wind Energy Development



Support for Wind Turbines Based on Residents' Zip Code of Renewable Energy



General support or opposition for wind turbines in their county:

- Support/strongly support
- Neutral
- Opposed/strongly opposed

Wind Farm Development, Local Taxes, and Public Service Statements

I would support wind farm development plus a modest local tax increase to assure quality public services are maintained.

43% of respondents selected

I would support wind farm development to maintain public services with cuts to services to make up the difference.

35% of respondents selected

I would prefer no wind development but a modest to substantial tax increase to assure public services are maintained.

6% of respondents selected

I would prefer no wind development and no local tax increase, but substantial cuts in government services.

16% of respondents selected

Community Outreach

- Wind Developer
- County Commissioners
- Regional Planning Commission
- Economic Development Office



Next Steps

- Monitor policy and progress of project
- Coordinate outreach, education, and public meetings with county leadership
- Follow up survey?



One county commissioner indicated that because local government funds were limited, the county was initially hesitant to support the study. However, by leveraging funds from university, local government, and private industry, the knowledge gained from this project, compared to the investment, will prove to be invaluable when making future energy related decisions.



Questions ?

Eric Romich

OSU Extension Field Specialist, Energy Development

romich.2@osu.edu



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