Pros and Cons of Windfarms

Midland County
November 21, 2017

Sarah Mills, PhD
Who am I & Why am I here?

- PhD in land use planning
  - Farmland preservation

- Grant from C.S. Mott Foundation, taking lessons-learned from Michigan windfarms to ensure future wind development respects local community values

- To provide data-based account of opinions
  - Not relying on newspaper accounts
  - Give voice to the quiet folks
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
Common arguments AGAINST wind turbines
Noise

Turbines create noise pollution

Strongly agree
Agree
Disagree
Strongly disagree

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<td>19</td>
<td>12</td>
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<td>29</td>
<td>22</td>
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<td>Disagree</td>
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<tr>
<td>Strongly disagree</td>
<td>12</td>
<td>18</td>
<td>10</td>
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Visual/Aesthetic

Turbines create visual/aesthetic problems

- Strongly agree
- Agree
- Disagree
- Strongly disagree

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<tr>
<td>Agree</td>
<td>25</td>
<td>19</td>
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<tr>
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<td>12</td>
<td>22</td>
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Property values

Turbines decrease nearby property values

- All: 24 Strongly agree, 30 Agree, 36 Disagree, 10 Strongly disagree
- Paid: 14 Strongly agree, 21 Agree, 46 Disagree, 19 Strongly disagree
- Unpaid: 27 Strongly agree, 33 Agree, 32 Disagree, 7 Strongly disagree
Health Problems

Turbines cause human health problems

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<thead>
<tr>
<th></th>
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<th>Disagree</th>
<th>Strongly disagree</th>
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<tr>
<td>All</td>
<td>9</td>
<td>18</td>
<td>49</td>
<td>23</td>
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<td>10</td>
<td>21</td>
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Turbines’ effect on relationships with neighbors

- Greatly improved
- Somewhat improved
- Neither
- Somewhat worsened
- Greatly worsened

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<tr>
<td>11</td>
<td>7</td>
<td>12</td>
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<tr>
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<td>5</td>
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Relationships with Neighbors
Data about the negative impacts

• 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, but some do

• Majority don’t think it’s divided the community
  • Even in some pretty contentious projects
Common arguments FOR wind turbines
Job Creation

Turbines create jobs

Strongly agree | Agree | Disagree | Strongly disagree
--- | --- | --- | ---
21 | 57 | 15 | 6
31 | 54 | 10 | 5
18 | 58 | 17 | 7

All | Paid | Unpaid
Tax Benefits

Turbines’ effect on county services

- Greatly improved
- Somewhat improved
- Neither
- Somewhat worsened
- Greatly worsened

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<td>62</td>
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<td>15</td>
<td>26</td>
<td>11</td>
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<tr>
<td>Overall</td>
<td>4</td>
<td>3</td>
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**Tax Benefits**

Turbines’ effect on county gov’t in Huron County in 2015

- **All**: 77
  - Greatly improved: 3
  - Somewhat improved: 15
  - Neither: 62
  - Somewhat worsened: 4
  - Greatly worsened: 2

- **Paid**: 62
  - Greatly improved: 7
  - Somewhat improved: 26
  - Neither: 3
  - Somewhat worsened: 2
  - Greatly worsened: 11

- **Unpaid**: 82
  - Greatly improved: 2
  - Somewhat improved: 11
  - Neither: 4
  - Somewhat worsened: 2
  - Greatly worsened: 4

$2.749 Million to county gov’t in Huron County in 2015
Roads

Turbines’ effect on local roads

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<tbody>
<tr>
<td>Greatly improved</td>
<td>7</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Somewhat improved</td>
<td>20</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>Neither</td>
<td>60</td>
<td>40</td>
<td>67</td>
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Somewhat worsened | 4   | 5    | 3      |
Greatly worsened  | 3   | 3    | 1      |

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Farm Income

Investments over 5 years: 2009-2013

- **Non-windfarm**: $187k
- **Unpaid neighbors**: $180k
- **Neighbors in pool**: $193k
- **Turbines**: $449k

- **Home**
- **Outbuildings**
- **Drainage/Irrigation**
- **Equipment**
Farm Succession

% that have farm succession plan

- Non-windfarm: 57
- Unpaid neighbors: 64
- Neighbors in pool: 62
- Turbines: 80
Data about the positive impacts

• Most see job creation with caveat about types of jobs

• Majority (60%+) haven’t seen changes to roads, townships services, county services, or local schools
  o Despite pretty substantial payments
  o Likely because of how money being used: plug holes, do more of same

• Landowner payments linked to substantial increase in on-farm investment and increase in succession planning
Overall drivers of attitudes

• Direct compensation

• Type of land owned
  o secondary vs. primary residence
  o farmland / rental property only

• Being within earshot of turbines

• Attitudes about process, wind developer
What lessons do I draw?

• Wind energy is an economic development proposition for Michigan townships and counties

• Communities need to decide if this type of economic development fits with your goals
What lessons do I draw?

• If goal is for substantial residential development or growth of tourism, wind may not be right
  o These landowners less likely to directly benefit
  o Some may be deterred from building

• If goal is to sustain agriculture, wind can fit
  o Farm diversification & succession planning
  o Keeping young people on the farm/in town
  o Adds to the property tax base
  o Siting on property lines takes little land out of production
    • Compatible with PA 116
The CLOSUP Wind Project

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