PROCEEDINGS OF THE BROWN COUNTY
HUMAN SERVICES COMMITTEE

Pursuant to Section 19.84 Wis. Stats., a regular meeting of the **Brown County Human Services Committee** was held on Wednesday, September 27, 2017 in Room 200 of the Northern Building, 305 E. Walnut Street, Green Bay, Wisconsin.

Present: Chair Hoyer, Supervisor Brusky, Supervisor Linssen
Excused: Supervisor Schadewald, Supervisor De Wane
Also Present: Health & Human Services Director Erik Pritzl, Public Health Officer Anna Destree, Hospital and Nursing Home Administrator Luke Schubert, Finance Manager Eric Johnson, Robin Hallet, news media and other interested parties.

I. **Call Meeting to Order.**

The meeting was called to order by Chair Hoyer at 5:32 p.m.

II. **Approve/Modify Agenda.**

Motion made by Supervisor Brusky, seconded by Supervisor Linssen to approve. Vote taken. MOTION CARRIED UNANIMOUSLY

III. **Approve/Modify Minutes of August, 2017.**

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to approve. Vote taken. MOTION CARRIED UNANIMOUSLY

Comments from the Public: None.

Report from Human Services Chair, Erik Hoyer: None.

1. **Review Minutes of:**
   a. **Aging & Disability Resource Center of Brown County Board (May 25, 2017).**
   b. **Aging & Disability Resource Center Board of Director's Meeting (July 13, 2017).**
   c. **Children with Disabilities Education Board (July 17, 2017).**
   d. **Mental Health Treatment Committee (July 19, 2017 & August 16, 2017).**
   e. **Veterans' Recognition Subcommittee (August 15, 2017).**
   f. **Human Services Board (August 10, 2017).**

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to suspend the rules to take Items 1a-1f together. Vote taken. MOTION CARRIED UNANIMOUSLY

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to approve Items 1a-1f. Vote taken. MOTION CARRIED UNANIMOUSLY

Communications

2. **Communication from Supervisor Schadewald: My request for these committees Admin & Human Services) to evaluate the need and funding of a Housing Navigator to coordinate county-wide efforts to improve housing opportunities in Brown County. *Referred from August County Board.***

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to hold until the next Human Services meeting. Vote taken. MOTION CARRIED UNANIMOUSLY

Presentation

3. **UW-Green Bay Presentation – Safe and Stable Housing Study.**

Health & Human Services Director Erik Pritzl informed that at last year's County Board budget meeting there

were discussion with regard to housing resources for people; there were some ideas and different concepts loosely presented that had different price amounts. One thing that came out was they were probably not ready to commit to putting dollars to a housing resource but they would be interested in a study. Through committee level discussions, it was determined that they had different people in different areas receiving services that lacked housing or didn't have safe supportive housing for their recovery. The County Board set aside some money to commission a study, in which UW-Green Bay came to present. Pritzl felt it was good information to receive prior to next month's communications on the housing navigator and before general budget discussions. He introduced Dr. David Helpap and Dr. Lora Warner and noted that final copies of the study were distributed (attached) and a PowerPoint was provided in the agenda packet.

David Helpap, UWGB Professor of Public Administration, Political Science and a member of the Center for Public Affairs, which was the organization commissioned to do this study, along with Dr. Lora Warner, a Professor in Public Administration program and Director of the Center for Public Affairs, presented the report that they completed: Safe & Stable Housing for Brown County Consumers – Needs and Policy Options.

Linssen questioned how they could help people get to the point where they could take care of themselves, whether government funded or not. He questioned if there was something they were missing in this process? Warner informed they touched on it throughout many conversations but didn't look for that dividing line. The person they interviewed at Westcap stated if they had more or better coordinating mental healthcare and services, they wouldn't need as much housing to support it. Mental illness was keeping folks from getting a job, it also kept them from getting housing. If they were able to do more prevention and ongoing management of people with a mental illness, that would help. Pritzl stated that manageable mental health issues was a key way to look at this, they had options for people that might be more supported and more managed, such as a community based residential facility. They had consumers in those facilities for an extended period of time. What they were trying to get at with the study and what it brought forward was there were people that weren't meeting definitions of current programs necessarily. They may not meet a chronic homelessness definition or they might have some barrier to accessing affordable housing; criminal background, landlords can make decisions about whom they were renting to, there were lots of ways that that can come into play. There were people that weren't falling into a program, or they weren't to a point of needing that fully structured treatment environment. They really can do a lot independently but they had some barriers with their mental health issues and substance use issues and the accessibility to the housing unit itself, whether income or a suitability issue.

Linssen questioned if the study was looking at individuals who can get back on their feet with treatment and support, eventually not needing services or a minimal amount. Pritzl responded that that's where they were heading with this. The population they wanted to look at were Treatment Court participants who were determined that they can participate in the course, they need the support of case management, counseling, vocational work, supports, etc. If they were people who were on that path but were experiencing some barrier to success because they lack housing completely or the housing that they go back to was not safe or supportive of their recovery and the Treatment Court Judges have spoken repeatedly on the concept of they were just sending people back to the environment they came out of. They could provide all the treatment but their basic need was not met in a safe way in the community.

Linssen questioned if a halfway house would be of a use for this, Pritzl stated it was on the right track, Warner agreed, they weren't technically halfway houses but similar in that they were a supported environment. She added, people had very individual needs and some wouldn't do as well in a group-type setting, some would do better individually. There were 2 sets of recommendations with additional housing units. The smaller number of consumers would need permanent long term housing but a large group of consumers that they looked at they recommended transitional temporary housing while they were in the program or during the start into their recovery, a place to come out of jail and make plans and find a place to live, etc. Treatment Courts were looking for folks on the way to recover and had a few barriers.

Linssen questioned if they had full-time social workers, Warner responded, not necessarily. The Oxford House, which was run by the people that lived there, was very successful, had a lot of good outcomes and was very low cost. The folks that lived there might then go meet with their treatment provider, go to their court session, meet with a judge, they might have a job in the community and would be working on recovery in this kind of

setting. They could be getting treatment but also have a place they could live with a very low rent or subsidized rent for as long as they needed or unlimited, they could set it up any way really.

Brusky felt this was interesting, challenging but exciting; she had worked with homeless people so she was aware of some of the challenges. One of the issues that came to mind was if someone didn't have a criminal problem, they weren't legally bound to certain restrictions. How would they manage where there wasn't any legal recourse? Warner believed there would be different levels of care that could be provided through the case management function. Whoever was providing the treatment or monitoring them would need to work with them and if they weren't, the county could have a policy where they would have to work with them or there would be consequences. A lot of these things were to be determined by how the county wanted to set it up. What they heard from the people they interviewed was, if the county or a contracted non-profit managed this or was involved in holding the lease, then that would make it easier for the landlords to work with these folks. The community police talked about needing to make repeated calls to a certain locations and they were using a lot of community resources because they were not stable. They were the ones kind of monitoring them. The western side of the state has found that with the county playing a role, the landlord trusts that the Treatment Court was treating them and it was okay to rent to them now. Westcap, a non-profit, was providing rental incentives to landlords which allowed them to have more rental units. Hoyer stated that when it came to Diversion Courts there were such specific rules that the participants adhere to so if you have a situation where if someone was not meeting the rules of the Treatment Court, if that was being reflected in their living situation, they were off to jail.

Warner informed that they interviewed a number of non-profit Directors that were eager to have the county play some role. They really had the sense that millions of Housing & Urban Development (HUD) dollars would be available if there was more collaborating going on and partnering. Brown County was not able to access some of those dollars because the non-profits alone couldn't come up with what's required in a match. If the county was providing a staff person or maybe providing the rent for these units, then the community as a whole would be able to get more federal grants to provide housing. With regard to WHEDA money, developers were the ones that got the low income tax credits but by partnering and working together. NeighborWorks was a non-profit that has gotten low income tax credits for developing properties. Sometimes the solutions you might be partnering with and helping with help the whole community and indirectly save a lot of money to the whole system.

Warner stated this was under a contract to do this study and it was completed. She had her regular full-time job but this was something she was very interested in as a community member and noted that if there were other ways that they could offer their ideas or work with the county, she would be glad to.

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

Wind Turbine Update

4. Receive new information – Standing Item.

Barbara Vanden Boogart, Vice President of BCCRWE -7463 Holly Mor Road, Greenleaf, WI
Vanden Boogart informed that the President of BCCRWE was not available this evening so she'd be presenting what he normally would as well. Vanden Boogart read the following:

My comments this evening will address matters pertaining to the Sept 12, 2017 meeting at Bay Port High School regarding wind turbine adverse health effects.

First, the central focus of Dr. McCunney's presentation was the Health Canada study, which he knows, or should have known, cannot be applied to Shirley Wind. Health Canada and its lead researcher, Dr. David Michaud, have made it clear in public papers and statements that:

- *"...results may not be generalized to areas beyond the sample as the wind turbine locations in this study were not randomly selected"*
- *"...this design does not permit any conclusions to be made with respect to causality."*

- *"... the results will not provide a definitive answer on their own."*

Dr. McCunney did not disclose these limitations in his presentation, potentially leaving the impression that the Health Canada study is applicable to Shirley Wind, which it is not.

I am submitting some of the many critical reviews of the Health Canada study. I will read some excerpts from these reviews.

To begin, the following excerpts from the article, *Health Canada sought private meeting with CanWEA before announcing health study* appear to indicate that the Health Canada study was a collaborative effort between the Canadian government, Health Canada, and the Canadian Wind Energy Association.

"Federal Access to Information documents reveal that on May 3, 2012 members of Health Canada's Wind Turbine Noise and Health Study contacted the Canadian Wind Energy Association (CanWEA) to solicit a meeting and discuss the yet to be announced Health Canada led study investigating the health impacts of wind turbines."

Here is an excerpt from one of the emails obtained:
"Dr. David Michaud and I would like to meet with you/CanwEA to discuss a forthcoming HC-led study investigating health impacts and exposure to wind turbine noise as well as other HC efforts in this area."

To continue, the following excerpts are from the letter, *Comments to the Editor-JASA* [Journal of the Acoustical Society of America], which is a letter of concern regarding the Health Canada study that was written by a group of physicians, acousticians, and an audiologist with expertise in wind turbine noise and adverse effects.

Consider the facts presented in these excerpts in comparison to what Dr. McCunney presented, or failed to present, when discussing the Health Canada study at the September 12th meeting, and how these facts may change the conclusions reached by those listening to him. Also bear in mind that the noise level permitted at Shirley Wind is 50 dB(A).

"We note that the study, by design, excluded children and teens, [and] *those aged above 79..."*

"Given the numerous media and anecdotal reports of home abandonments in Ontario related to inability to tolerate residing in proximity to IWTs [industrial wind turbines], *the failure to survey the owners of the unoccupied or demolished homes is a significant omission..."*

"In the low IWT noise exposure group (25 to 30 dBA), the prevalence of migraines (+10% above general population), tinnitus (+10% above general population), and dizziness (+2.5% above general population) is higher for the Health Canada study respondents than for the general population. The rate increases in the high IWT noise exposure group (40-46 dBA) to +13% (migraines), +15% (tinnitus), and +10% (dizziness) over the general population."

"The JASA paper's conclusion that wind turbine noise is not associated with adverse health effects below sound levels of 46 dBA appears to be contradicted by the data for these important adverse effects. Unfortunately, we can only speculate what those graphs would have shown had the vulnerable groups been included."

"In summary, the exclusion of vulnerable groups, the failure to appreciate that the prevalence of certain adverse effects in their respondents were occurring at rates significantly higher than in the general population, and the increasing prevalence of selected symptoms as distances between homes and IWTs are reduced, renders the Heath Canada study's conclusions unsuitable for drawing conclusions regarding siting distances, and may explain why the conclusions are at odds with other studies of IWTs and community noise. They are also contrary to the codified understanding of the medical and acoustical community that nighttime noise levels above 40 dBA will adversely affect health in a significant minority of people (WHO, 2009)."

This ends the excerpts. I have made these points and am submitting these reviews both for your information and as a response to a statement made by James Crawford in the Sept 14, 2017 issue of the Denmark News,

where he stated:

"The Board of Health could rescind the human health labeling now that we're better informed."

While the Board of Health is now better informed, the result is quite the opposite. The testimonies of Dr. Coussons and Robert Rand support the Human Health Hazard declaration. Both of them have had professional interactions with some of the adversely affected residents at Shirley Wind, and have personally participated in investigating what could be the cause of their complaints, including supportive acoustical data. After all, isn't it the people at Shirley Wind that we're talking about?

Secondly, I would like to respond to the following question asked by James Crawford at that meeting, where he stated:

"In 2017 there are no complaints from local residents to Brown County and only seven complaints to the Town of Glenmore. They were about flicker, not noise. Doesn't this imply that those near Shirley Wind are not suffering?"

It is obvious that over time people give up on filing complaints when the conditions leading to the complaints continue to exist, which has been the experience of Shirley Wind residents for almost 7 years. Despite this fact, numerous adverse health complaints were filed with the Town of Glenmore in 2017 for the town's 5-year review of the Shirley Wind conditional use permit. So, it would be a mistake to assume that those not submitting complaints, again, are not continuing to suffer. Also, did you happen to look out into the crowd the evening of Sept 12 and see the numerous people with neon yellow shirts and each wearing a sign that read, *"I AM THE EVIDENCE"* or *"I AM A WIND REFUGEE"?* Does that suggest that they are no longer suffering?

Apparently Mr. Crawford failed to contact the Town of Glenmore for a record of such complaints. Had he done so, as BCCRWE did, he would have received copies of health complaints filed by nineteen separate residents.

For your review, I am submitting a sampling of these 2017 health complaints along with a summary table of written adverse health complaints or statements that have been filed by residents and visitors at Shirley Wind.

These complaints are not limited to shadow flicker, as Mr. Crawford alleges. When reading the summary table, bear in mind the facts that only written and recorded, not verbal, complaints are included, and, that over 50% of residents living within ½ mile of the Shirley Wind turbines have signed *"good neighbor agreements"* which may make them reluctant to file certain complaints.

Thirdly, I would like to respond to a statement that Duke Energy public relations spokeswoman Tammie McGee has repeatedly made, including in media coverage of this meeting. A September 13, 2017 Green Bay Press Gazette article states:

"Tammie McGee, spokeswoman for North Carolina-based Duke Energy, said outside the meeting. "We do not receive these types of complaints from people who live near our other wind farms."

Such is not the case, as demonstrated by the two articles I am submitting that describe a lawsuit against Duke Energy by plaintiffs who are hosting Duke Energy wind turbines on their own land.

In summary:

- The Health Canada study is specific to the wind projects studied and is not applicable to Shirley Wind or the Human Health Hazard declaration.
- Shirley Wind residents continue to experience and report adverse health effects
- Shirley Wind is not the only Duke Energy project where residents have reported adverse health effects.

I also have a comment regarding annoyance. The word *"annoyance"* is an underappreciated term that has a specific medical meaning in research literature, where it means a significant degradation in the quality of life and of health, including physical and mental well-being.

Dr. McCunney's presentation and papers focus on direct health effects and tend to marginalize the importance of annoyance as an indirect health effect. However, this is not the opinion of Health Canada and other researchers, as shown by the following excerpts from one of the Health Canada critical reviews I am providing today:

Health Canada's 2005 paper, *Community Noise Annoyance, It's Your Health*, states:
"The most common effect of community noise is annoyance, which is considered an adverse health effect by the World Health Organization"

Health Canada's 2014 paper, *Wind Turbine Noise and Health Study: Summary of Results* states:
"WTN [wind turbine noise] annoyance was found to be statistically related to several self-reporting health effects including, but not limited to, blood pressure, migraines, tinnitus, dizziness, scores on the PSQI, and perceived stress" as well as related to "measured hair cortisol, systolic and diastolic blood pressure."

also...

"The Principal Investigator of the Wind Turbine Noise and Health Study has also stated that "noise-induced annoyance is an adverse health effect."

Even *Colby et al. (2009)*, a paper co-authored by Dr. McCunney, discusses wind turbine symptoms and reports that symptoms such as headaches, nausea, tinnitus, vertigo *"... are not new and have been published previously in the context of "annoyance"..." and are the "... well- known stress effects of exposure to noise ..."*

So, annoyance, when properly understood as used in research literature, is not a trivial adverse health outcome to be dismissed as insignificant. By the way, do the health effects just described, which are medically defined as annoyance, sound familiar to anyone in this room. They are some of the same adverse health effects repeatedly reported by Shirley Wind residents. Perhaps it would refresh your memory to read through some of the complaints again.

All of the statements I have read regarding medically defined annoyance, along with the documented ILFN levels at Shirley Wind, support the Human Health Hazard declaration made by the Brown County (WI) Board of Health.

My final comment pertains to a document submitted by Duke Energy to the Board of Supervisors last week. We, as an organization, would be remiss to not respond to this document. In the near future BCCRWE will be submitting a response to Duke Energy's document to the Board of Supervisors and the Board of Health in order to correct any errors, misrepresentations, or omissions of necessary information that might have the potential to mislead persons reading that document.

Thank you,

Barbara Vanden Boogart
Vice President: Brown County Citizens for Responsible Wind Energy

Human Services Department

5. Resolution re: Reclassification of a Community Treatment Program Worker Position in the Human Services – Community Treatment Center Table of Organization.

Pritzl informed they were reclassifying an open position that had a lower qualification level into a higher qualification level which enabled them to do billing at a higher reimbursement rate. If they put it in this category they could attract the right staff.

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to approve. Vote taken. MOTION CARRIED UNANIMOUSLY

6. Resolution Providing One-Time Supplemental Compensation to: 1) Employees in the IBEW Local 158 Bargaining Unit; and 2) Employees in the Brown County Human Services Professional Employee Association.

Representatives from the Professional Employee Association were not present. It was Pritzl's understanding that they have not receive those increases yet so this would be a step in that process. It would cover all their social workers but HR could better address how many employees this would affect.

Weininger informed it was substantial for their department's Table of Organization, county-wise it wasn't substantial. The money was budgeted in 2017. This was a one-time payment and taxed at 25%. They won't be able to carry it moving forward.

Weininger noted that the IBEW voted to certify, he was not sure if the Professional Employee Association had taken any action. He assumed they were certified or planned on certifying. In order for them to be treated by all of the other employees, they would need this affirmative action for that to happen. Pritzl was not aware of any decertification right now. They did have a union at the Community Treatment Center that did decertify, but believed the Professional Employee Association was still in place. Weininger informed that the union decertified to get that base wage increase.

Linssen stated if they didn't get a raise at this time, when it came time to negotiate the new labor contract, wouldn't it be part of their discussion? Weininger responded they couldn't negotiate above the state, what the Consumer Price Index gave. Pritzl stated that when there was a union involved there was a cap on what they could negotiate and settle to. When there is not a union involved, then you have more latitude with what that increase will be. It was a state regulation.

Linssen stated he'd be curious to hear from the unions as to why they were in a union. He doesn't have an opposition necessarily to the $400 base wage portion of it but to the raise portion of it. Pritzl responded that right now within the department, they had many employees that received a raise done by County Board action for 2017, but then they had this group of employees that had not received one. Weininger stated they will receive the maximum amount allowed under state statute but they can't get the additional amount. Pritzl stated it was in equal between the two different groups.

Motion made by Supervisor Brusky, seconded by Supervisor Hoyer to approve. Vote taken. Nay: Linssen. MOTION CARRIED 2 to 1

7. Executive Director's Report.

Pritzl informed the committee should have received an invite for Beyond Health Summit on Oct 17th from 8 am-12pm. It was related to the community health planning assessment and he encouraged their attendance.

Hoyer questioned if Pritzl had anything to say with regard to the mental health initiatives to prepare for the budget meeting. Pritzl responded that they were looking at those carefully now because their expenditures were still trending below that allotted amount. There were a lot of questions at the Mental Health Treatment Committee about what else they could do with those dollars both in 2017 if there was a surplus as well as 2018 if they were seeing a trend of underspending. The two areas that had trended lower than structured were the detoxification services as well as the residential treatment services. They were looking for one-time funds in 2017 so they don't create a problem in 2018 that they can't sustain.

Motion made by Supervisor Brusky, seconded by Supervisor Linssen to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

a. Non-Mandated Service Contracts and Funding.

Pritzl stated this started with a question about NEW Community Shelter and why that shelter and why that amount. He felt it wasn't something they could uncover very easily but it was past committee and board approvals of those funding levels. There were other funds identified in the draft document under Appendix A (in the agenda packet) that were non-mandated and awarded dollars in the past. These were things that

helped them potentially meet mandates but they were projects or services identified at different points in time and there were efforts made to adjust that funding at different points in time with result being where it was right now.

He included a portion of funding that was non-mandated, Crisis Center Services. These would be different services that they do, which were important, but not emergency detention related. He didn't know if it had ever been fully known to the committee that they were funding that plus all the emergency detention work. He included it but they could always take it out. It was something contractually they would look at in the future of making sure that that was understood that there were two components to that contract.

This document was to try and provide some direction, Pritzl drafted a process where they could identify funds, priorities, and make decisions about dollars and how they wanted to allocate them. A little more of a method to it where they would have proposals and identify priorities as a committee and they would seek out people that could provide resources to meet those priorities.

With regard to Appendix A, Pritzl informed that those providers provided audits and activities to support how they use dollars to support their operation. Linssen requested a copy of that information or a short summary.

Pritzl felt to jump into this for 2018 would be difficult, organizations likely already started their budgeting process or concluded it or built around certain ideas or expectations. He felt they could continue to work on this until the committee is comfortable with it, where they decide the priorities are accepted, what the funding was and they timed those proposal submissions so they are added for budgeting purposes. Realistically this would have to be done in the first part of 2018 and decisions made for 2019. It would give providers a chance to adjust to this. Linssen questioned if they could do a partial year funding. His concern was they may not have the same County Board Supervisors come budget time next year to see the program through. Weininger suggested pooling all the money together and set the framework up, go with the existing providers and notify everyone that they will have to go through the process. Pritzl stated basically have them follow the process but the awards were already determined to be at the prior year levels and the following year, open it up. If they applied this to the providers currently receiving funds and they gave proposals back, that would allow them also in their contract to do an improved job of program expectations and attachments so they will be setting that up too. Linssen wasn't against it but requested that they run it past Corporation Counsel before they move forward. Weininger explained that he needed to research this a little more.

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to refer back to staff. Vote taken. MOTION CARRIED UNANIMOUSLY

8. Financial Report for Community Treatment Center and Community Programs.

Finance Manager Eric Johnson informed that as of the end of July, the budget variance was approximately $1 million, primarily purchase services related. They just closed out August and that amount had grown so they were looking into it and trying to determine what could be done before the end of the year and set the stage for next year to monitor and control those high dollar areas in particular. They do have some fund balance to work with, so their goal was to at least stay within the fund balance that's available. They do have a possible adjustment at the end of the year but it was hard to project at this point. This was all outlined in his report.

Pritzl noted they saw an increase utilization in mental health stays for both children as well as adults so this would be non-Brown County facilities that they used. That did level later in the summer, they saw utilization decrease July and August; their census even had decreased too. Pritzl didn't think that that change was going to correct what occurred in the first part of the year where they saw multiple people go to Winnebago for emergency detentions and that was a significant part of this. They also changed their views and chart interdepartmental charges on adult protective services and those charges that go to CTC from Community Services so they could see where those deficits were occurring because of adult protective services placements which also contributed to this. A lot of this was placement related.

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

9. **Statistical Reports.**
   a. **CTC Staff – Double Shifts Worked.**
   b. **Monthly CTC Data - Bay Haven Crisis Diversion/Nicolet Psychiatric Hospital.**
   c. **Child Protection - Child Abuse/Neglect Report.**
   d. **Monthly Contract Update.**

Motion made by Supervisor Brusky, seconded by Supervisor Linssen to take Items 9a-d. Vote taken. MOTION CARRIED UNANIMOUSLY

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to approve Items 9a-d. Vote taken. MOTION CARRIED UNANIMOUSLY

10. **Request for New Non-Continuous and Contract Providers and New Provider Contract.**

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

Other

11. **Audit of bills.**

Motion made by Supervisor Linssen, seconded by Supervisor Brusky to acknowledge the receipt of the bills. Vote taken. MOTION CARRIED UNANIMOUSLY

12. **Such other Matters as Authorized by Law.**

The Human Services budget meeting will be held on Oct. 10 @ 6pm.

13. **Adjourn.**

Motion made by Supervisor Brusky, seconded by Supervisor Linssen to adjourn at 7:23 pm. Vote taken. MOTION CARRIED UNANIMOUSLY

Respectfully submitted,

Alicia Loehlein
Recording Secretary

Brown County
Safe and Stable Housing Study

Prepared by
Center for Public Affairs
University of Wisconsin-Green Bay
August 2017

Principle Investigators and Report Authors
Dr. Lora Warner
Dr. David Helpap
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Purpose

- Assess the needs of Brown County consumers with unsafe or unstable housing and provide recommendations on strategies the County might use to improve housing options for these individuals.
- Increase the likelihood of successful recovery for these consumers and to reduce the risk that they return to homelessness and cycle back into intensive, restrictive, and costly services or jail.

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Scope of the Analysis

Several specific populations were identified as unlikely to have access to safe and stable housing:

- Adults involved with treatment courts with mental health and substance abuse issues
- Adults receiving outpatient case management services from Community Treatment Center under commitment orders
- Adults under supervision of probation and parole with mental health and substance use issues
- Adults exiting Brown County Jail with mental health, substance abuse issues

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Sources and Methods

Multiple methods were used to identify the needs of County consumers and the obstacles that prevent them from acquiring safe and stable housing.

- Interviews
- Surveys
- Secondary data
- Existing research and policy assessments

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Background and Context

- At a minimum, 1,512 individuals experienced homelessness in Brown County at some point in 2016.
- Brown County has one of the highest rates of chronic homelessness in Wisconsin.
- The median length of time an individual in Brown County remains homeless before achieving housing is 52 days (mean=107.6 days).
- Conservatively, over 200 Brown County consumers currently experience unsafe or unstable housing.

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Needs of Consumers: Common Themes

- General lack of affordable housing in the area.
- Personal barriers such as health concerns or addictions.
- Lack of availability of landlords willing to rent to those with high barriers to housing.
- Insufficient access to support services.
  - Examples include case management, job coaching, medication requirements, or therapy.

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Needs of Consumers with Mental Illness

- Medication supervision.
- Ongoing treatment of some kind.
- Assistance applying for Supplemental Security Income, if eligible.
- A one-size-fits-all approach is not conducive to this population.
  - Variability of housing options needed to accommodate the wide spectrum of diagnoses.

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Needs of Consumers with Substance Abuse

- Structured lifestyle that includes accountability in the form of supervision or occasional check-ins.
- A clean, sober living environment that does not isolate this population.

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Needs of Consumers of Treatment Courts or Exiting Jail

- Treatment Courts
  - Front-end safe and stable housing during and potentially after treatment.
  - Housing located near employment opportunities, public transportation, and supportive services.
- Reentry from jail
  - Immediate "front end" housing with no barriers for at least 60-90 days.
  - Support for job-seeking, planning, budgeting

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Policy Alternatives and Recommendations

- Potential policy alternatives were divided into three categories.
  - Additional Housing Units
  - Public and Private Funding Strategies
  - Supplementary Alternatives

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Additional Housing Units: Permanent Supportive Housing

- Especially needed for individuals with severe mental illness
- Affordable housing with a significant level of treatment, including possible options
  - Contracted treatment
  - County-provided staffing for treatment
- Expected to be long-term
- Scattered site or single-site

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Examples/Models

- Single site model: Thurgood Marshall
- Scattered site model: Fox Cities Housing Partnership

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Additional Housing Units: Transitional Housing

- "Temporary" Supportive Housing
- "No barrier" housing for consumers exiting jail and in treatment courts
- Options: Single-site, smaller group settings, or scattered site
- Variety of options needed for variety of consumers

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Examples/Models

- Newcap and NeighborWorks partnership
- Ecumenical Partnership for Housing
- Oxford House, Sandy Fabry House

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Public and Private Funding Strategies

- Pay for Success Model
  - Santa Clara County, CA (Project Welcome Home)
- Leverage Funding Through Partnerships
  - Milwaukee County, WI
- Expanded Use of WHEDA Programs
- Additional Grants and Funding Opportunities

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Table 5. Recent WHEDA Low Income Tax Credit Program Activity, 2012-2016

	Brown	Outagamie	Winnebago
Population	257,897	182,365	169,032
Units developed	239	319	339
Units per 10,000	9.27	17.49	20.06
Dollar value	$1,956,047	$2,899,473	$2,336,805

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Supplementary Options

- Government and Community Support
  - San Bernardino County, CA
- Public Information and Website Improvements
  - Wake County, NC (Centralized Resources)
  - Franklin County, OH (Reentry Resources)
- Comprehensive Homelessness Plan
  - Arlington County, VA
- Increase Coordination with Community Stakeholders
  - Chippewa County, WI (WestCAP CoC)

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The Opportunity for Brown County

- The root causes of homelessness and unsafe and unstable living conditions, while complex, are not insurmountable.
- A variety of potential solutions are needed.
- Brown County is in a unique position to stimulate local action.
- Brown County is in a position to leverage more dollars.
- The County has an opportunity to raise its profile and collaborate with other public and private funders, partners, and advocates.

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Safe & Stable Housing for Brown County Consumers

Needs and Policy Options

A Study Commissioned by
Brown County, WI

August 2017

University of Wisconsin Green Bay
Center for Public Affairs

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Data Provided By
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Funding Providing By
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EXECUTIVE SUMMARY AND KEY FINDINGS

The purpose of this study is to assess the needs of Brown County consumers who have unsafe or unstable housing and provide recommendations on strategies the County might use to improve housing options for these individuals. In this way, the County seeks to increase the likelihood of successful recovery for these consumers and to reduce the risk that they return to homelessness and cycle back into intensive, restrictive, and costly services or jail. This study does not focus on homelessness in Brown County *as a whole*, although it gives attention to existing conditions, stakeholders, challenges, and opportunities relating to the entire community. Rather, it focuses on the needs of Brown County consumers currently served by the Community Treatment Center Outpatient Therapy services, the four County treatment courts, and individuals exiting the Brown County Jail. The study included interviews with over 30 local and statewide experts, a survey of case managers, a rigorous literature search for best practice models used successfully in other communities, and secondary data. Analysis yielded findings and recommendations to address the needs of Brown County consumers.

Brown County has one of the highest rates of homelessness in the state, with 1,512 individuals identified as homeless at one time during the course of 2016 (and not including hundreds of other households that experience unsafe or unstable housing). Many homeless individuals participate in Brown County programs. Our survey of Brown County case managers at the Community Treatment Center, jail, and treatment courts estimated that of 391 consumers on county caseloads, slightly less than half (45%) are believed to have unstable housing or are homeless. Most experience a mental illness, over half deal with substance abuse, and three in four have very low incomes. Limits to available data precluded a direct calculation of the number of county consumers with unsafe or unstable housing. However, a conservative estimate is that at least 200 Brown County consumers currently experience housing that is insufficient to meet their needs.

The needs shown by these consumers overlap a great deal. Collectively, a large proportion of County consumers experience mild to severe mental illness with a variety of individual concerns. According to case management staff, maintaining the proper medications is particularly important because often, individuals with a mental illness who use alcohol and drugs do so to cope with symptoms. Almost all surveyed CTC case managers (92%) indicated that having longer-term treatment for mental illness or addiction was extremely important for their consumers. Some individuals with mental illnesses may need greater assistance on a permanent basis, while others may need more temporary support, such as to apply for Supplemental Security Income. For consumers with substance abuse barriers, the opportunity to foster a structured lifestyle is paramount. Many experts told us that individuals re-entering the community after a stay in jail (including individuals entering treatment courts) often have few or no housing options. These consumers are often rejected by ordinary housing providers due to their criminal records; they need a place to stay as they re-enter society and develop the skills and plans needed to achieve self-sufficiency.

The report concludes with a discussion of policy options selected for their alignment with the needs of Brown County consumers, feasibility of implementation by the county, and likely sustainability. Three sets of alternatives are provided.

Develop additional housing units for county consumers. We identified two housing strategies to expand the number of affordable housing units with supportive services. First, permanent supportive housing is needed for individuals with serious mental illnesses. Conservatively, 50-100 consumers could benefit from permanent supportive housing, where affordable units are provided either at a single or scattered sites with ready access to treatment provided by the county or contracted community agencies. Units could be financed with a combination of available sources and incentive-based approaches. Second, transitional housing is needed for consumers in treatment or recovery and those exiting jail to the community or treatment court programs. Immediate "front end" temporary housing with no barriers is necessary for

individuals leaving jail, since landlords are reluctant to house individuals with criminal records, employers are reluctant to hire them, and other homeless shelters may not be appropriate or available settings. Again, the County might consider developing a variety of options such as group homes, scattered individual units, or converted buildings given that a one-size-fits-all approach would not reflect the array of individual needs among consumers. The County could tailor housing arrangements to particular programs or services, such as the treatment courts. Securing landlords to participate has challenged a new supportive housing program in Brown County, but with county involvement, more could be willing.

Pursue public and private funding strategies. A relatively new model for providing social services, "Pay for Success," connects governments, private investors, and nonprofit service providers. In short, the County would engage with private funders, who would provide upfront resources to a service provider who then must meet specific service outcomes. The County would then repay the funders if the established goals are met. This model could include supportive treatment. Wisconsin Housing and Economic Development Authority (WHEDA) offers another key funding source. Brown County lags nearby metropolitan areas in use of WHEDA's Low Income Housing Tax Credit program to create permanent affordable housing units. While the tax credits accrue to developers, the source can be one of several financial resources that contribute to creation of affordable housing. Finally, the county could play a role in leveraging more federal funding (mostly from HUD). By partnering with the local Brown County Homeless and Housing Coalition (BCHHC) or its nonprofit member agencies, Brown County has the potential to provide the local dollar match required by HUD. By providing staff—for a permanent supportive housing program or treatment court, for example—or investing its funds to lease several scattered site units designated for Brown County consumers, the region may capture a much higher level of federal funds. This approach will indirectly assist County consumers and reduce the need for intensive and costly alternatives such as inpatient care. Several experts we interviewed pointed out that this region has a great deal of potential to increase federal funding to area programs through greater collaboration between the County and nonprofit providers.

Explore supplementary alternatives. Brown County has an opportunity to pursue other alternatives to improve access to affordable housing locally. One of the most consistent themes that emerged from interviews with community stakeholders is the need for stronger, more public support for homelessness initiatives from Brown County government and an appeal for broad, comprehensive community effort—which could have the potential to stimulate greater philanthropic support. Brown County and area nonprofits also have the potential to benefit from a more detailed, comprehensive plan to address homelessness and safe and stable housing. Similarly, the county has an opportunity to impact the problem of homelessness (and benefit its own consumers, as well as other potential consumers) through increased coordination with the BCHHC.

In conclusion, the root causes of homelessness and unstable living conditions, while complex, are not insurmountable. Other communities have taken substantive and even innovative measures to ensure safe and stable housing for residents. Brown County consumers with mental illness often require greater support in long term housing or a more temporary situation where they can stabilize. One point is clear, however, Brown County is in a unique position to act as a catalyst in the community to expand affordable housing options to benefit all area residents. According to several individuals we interviewed outside of the Brown County system, involvement by the County has the potential to bring credibility to a housing initiative, to influence other organizations, and, in general, raise public awareness about homelessness. But Brown County cannot serve all its consumers, much less the community, without collaborating with other public and private funders, agency partners, and advocates.

INTRODUCTION AND PURPOSE

The purpose of this study is to assess the housing needs of Brown County consumers who do not have access to safe and stable housing and to provide recommendations on strategies to increase safe and stable housing options for these consumers. In this way, the County's goal is to improve the likelihood of successful recovery and reduce the number of consumers who become homeless after exiting services. Brown County Human Services has identified the following key populations, many of whom do not have safe, stable housing, on which to focus this research:

- Adults involved with treatment courts with mental health and substance abuse issues
- Adults receiving outpatient case management from Community Treatment Center under commitment orders
- Adults under supervision of probation and parole with mental health and substance use issues
- Adults exiting Brown County Jail with mental health, substance abuse issues

This study does not focus broadly on chronic homelessness occurring throughout Brown County. Nor does it specifically address individuals enrolled in programs and services offered by local nonprofit organizations (NPOs). Nevertheless, a great deal of overlap exists among the needs of the chronically homeless, homeless individuals receiving services from NPOs, and the County consumers who are the focus of this study. As this study progressed, it became evident there are many people in Brown County who are not receiving County services who experience homelessness, wake up in unsafe and unstable living situations, struggle with drugs and alcohol, and cope with a mental illness every day.

DATA AND METHODS

Multiple methods were used to identify the common and specific needs of County consumers and the obstacles that prevent them from acquiring safe and stable housing. We began by reviewing the Sequential Intercept mapping Report for Brown County (released in 2016) where particpants indicated that increasing the housing options for the County's vulnerable populations was its top priority for change. Interviews with key stakeholders, surveys completed by case management staff, data gathered from County databases, secondary data from published reports, and literature searches all contributed to the findings presented in this report. The data were compiled and analyzed for relevance to the populations of interest and the County's goal.

INTERVIEWS

We interviewed community experts and key staff beginning with a list of names provided by Erik Pritzl, Executive Director of Brown County Health and Human Services Department. A snowball sample approach followed, as interviewees recommended additional individuals to interview. Most are currently employed by Brown County and community nonprofit organizations that provide direct services to the populations of interest, and several were volunteers (including all four of Brown County's treatment court judges, who were interviewed as a group). Additional interviewees work for the Wisconsin Balance of State Continuum of Care and others represent communities or organizations that are currently implementing notable practices to address the housing needs of their respective homeless populations. While most were individual, face-to-face interviews, three were conducted in small groups, and five were conducted by telephone. In total, we interviewed more than 30 individuals in June and July, 2017.

Interview questions focused on the specific and common housing needs of the populations of interest. All interviewees spoke candidly with the understanding that their responses would remain confidential.

SURVEYS

When applicable, surveys were distributed to case management staff asking staff members to report how many consumers on their current caseloads have low income, a mental illness, alcohol and other drug abuse (AODA) issues, a criminal record, and unsafe and unstable housing. Co-occurring conditions also were noted. Demographic questions pertaining to consumers' gender, age, and race were provided to determine if systemic needs existed within specific population groups.

SECONDARY DATA

Data were procured from several County databases. The AVATAR database, maintained by Brown County Human Services, was used to identify the services consumed by clients who were documented as homeless from January, 2016 to May, 2017. Brown County Jail data was obtained through the jail liaison reflecting the needs of individuals who either requested to meet with the jail liaison or were referred to the jail liaison by another case manager. Data from the probation and parole office were requested but unavailable.

Data also were pulled from a host of national and local sources including, but not limited to, the U.S. Census, 2016 Brown County LIFE Study, and the Wisconsin Balance of State Continuum of Care (the lead agency for homelessness data for Brown County). We reviewed data provided by the Brown County Basic Needs Task Force and Brown County Housing & Homeless Coalition.

EXISTING RESEARCH AND POLICY ASSESSMENTS

Extensive and targeted literature searches contributed to this study in two ways. First and foremost, these searches yielded valuable examples of what other communities are currently doing to address homelessness. Searches were used to corroborate, when necessary, statements from those who were interviewed. Second, significant efforts were made to incorporate existing studies of the effectiveness and efficiency of safe and stable housing practices in other communities. In short, the case studies uncovered through this process were instrumental to the development of alternatives ultimately suggested for Brown County.

BACKGROUND AND CONTEXT

Homelessness persists across the United States, confirmed by the Point-in-Time (PIT) Count annually. Mandated by the Department of Housing and Urban Development (HUD), the PIT is an unduplicated count of sheltered and unsheltered homeless persons that occurs on a single night in January. The 2016 PIT recorded more than 549,000 adults and children experiencing homelessness nationally.[1] This number only includes those who meet HUD's definition of homelessness and who have come into contact with the local Continuum of Care (CoC) provider conducting the count. It does not include individuals experiencing unsafe and/or unstable housing by temporarily sharing housing with friends and family.

[1] U.S. Department of Housing and Urban Development, "HUD 2016 Continuum of Care Homeless Assistance Programs Homeless Populations and Subpopulations," *hudexchange.info,* last modified Wednesday, March 15, 2017, https://www.hudexchange.info/resource/reportmanagement/published/CoC_PopSub_NatlTerrDC_2016.pdf.

A primary obstacle for many individuals experiencing homelessness is the lack of affordable housing. According to the Urban Institute, a leading research institution, "not a single county in the United States has enough affordable housing for all its extremely low-income (ELI) renters."[2] The difference between the number of units needed and what is available has increased. In 2000, for every 100 ELI renter households in the United States, there were only 37 satisfactory and affordable units available. By 2013, the number of affordable units decreased to 27. While these households are usually eligible for federal housing assistance, as noted by the Joint Center for Housing Studies of Harvard University, just over one in four truly benefit because housing assistance is not an entitlement program like Social Security, Medicaid, or Medicare.[3]

For the homeless population, the lack of affordable housing units is not the only obstacle to achieving safe and stable housing. Mental illness and substance abuse significantly impede an individual's ability to both live an independent life and remain housed. Of the individuals documented as homeless during the 2016 PIT, 202,297 (37%) were either severely mentally ill or abused substances chronically. These disorders can cause an individual to become homeless or remain in need of safe and stable housing.

Of those identified in the 2016 Point-in-Time Count, approximately 86,492 (16%) had chronic patterns of homelessness. As noted by the National Low Income Housing Coalition (NLIHC), someone is considered chronically homeless when he or she has a disability, has lived in a place not meant for human habitation for 1 year or more or has experienced at least four episodes of homelessness in the last 3 years where the combined episodes equal at least 12 months.[4] Despite the fact that this is not a large percentage of the overall homeless population, this subgroup can account for significant societal costs. As stated by the Substance Abuse and Mental Health Services Administration, chronically homeless individuals have the potential to use more than half of services provided in a given area.[5]

In Brown County, Wisconsin (population 260,401) the homeless population is considerable in size and faces many of the same challenges that exist nationally. According to the Brown County CoC, the 2016 PIT recorded 466 individuals experiencing homelessness.[6] More broadly, 1,512 people experienced homelessness at one point or another in Brown County in 2016, 56% of whom had a disability. This is the most of any of the 69 counties that form the Balance of State CoC (which excludes Milwaukee, Dane, and Racine Counties). The Balance of State CoC notes the median length of time an individual in Brown County remains homeless before achieving housing is 52 days, with an average wait time of 107.6 days.[7]

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[2] Josh Leopold, Liza Getsinger, Pamela Blumenthal, Katya Abazajian, and Reed Jordan, "The Housing Affordability Gap for Extremely Low-Income Renters in 2013," *Urban Institute*, last modified June 15, 2015, http://www.urban.org/research/publication/housing-affordability-gap-extremely-low-income-renters-2013/view/full_report.

[3] "America's rental housing expanding options for diverse and growin demand," *Joint Center for Housing Studies of Harvard*, last modified December 9, 2015, http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/americas_rental_housing_2015_web.pdf.

[4] "HUD Publishes Final Rule on Definition of 'Chronic Homelessness,'" *National Low Income Housing Coalition*, last modified December 7, 2015, http://nlihc.org/article/hud-publishes-final-rule-definition-chronic-homelessness.

[5] "Homelessness and Housing," *Substance Abuse and Mental Health Services Administration*, last updated June 29, 2017, https://www.samhsa.gov/homelessness-housing.

[6] Carrie Poser, WI Balance of State Continuum of Care, in discussion with the authors, June 2017.

[7] "System Performance Measures (10/1/2015-9/30/2016)," *Wisconsin Balance of State Continuum of Care*, accessed August 7, 2017, http://www.wiboscoc.org/system-performance-measures.html.

Those who experienced homelessness in 2016 had to meet HUD's definition of homeless and use a homelessness service provided by members of Brown County's Continuum of Care. Due to this narrow definition, 1,512 is the minimum number of people who struggled to acquire or retain housing because the definition does not take into account, for instance, individuals who did not come into contact with a local CoC provider. It also does not include those who reside in jail and will not have access to safe and stable housing upon release. Furthermore, there are several organizations in Brown County that provide programming for the homeless that do not use Service Point, the online information management system that is used to generate homeless statistics. Finally, this data does not take into account people who are forced to share housing and cohabitate in unsafe and unstable living arrangements.

The 2017 PIT revealed that chronic homelessness is a problem in Brown County. As stated in the PIT, within the Balance of State CoC, Brown County has the second highest number of chronically homeless households (5) and the highest number of chronically homeless people (32).[8] For reference, across the Balance of State CoC, the average number of chronically homeless households is 2.3 and the average number of chronically homeless individuals is 9.6. It should be noted, however, that Brown County is one of the largest and most urban communities within the Balance of State CoC.

With regard to securing affordable, stable housing, Brown County residents struggle. Per the National Low Income Housing Coalition, a Wisconsin resident earning the minimum wage of $7.25 an hour would need to work 89 hours a week to afford a 2 bedroom rental unit.[9] Federal housing assistance from HUD helps bridge the gap between what individuals can afford and the units that are available, but those in need of housing do not always meet the requirements. For instance, in Green Bay—the largest municipality in Brown County—191 applicants were denied Housing Choice Vouchers (a form of federal housing assistance) from January 1, 2016 through April 30, 2017.[10] Sixty-eight (36%) were denied vouchers because of drug related issues and 123 (64%) were denied because of specific criminal backgrounds. Additionally, due to Brown County's competitive housing market, landlords are able to be selective; having a Housing Choice Voucher does not guarantee housing.

Housing is not the only obstacle that Brown County's consumers and the general homeless population must overcome. They must also deal with the common perception that individuals from urban cities such as Milwaukee or Chicago consume and use supportive services. Throughout the interview process, case management staff and other stakeholders who work closely with Brown County's current clients and the general homeless population unequivocally categorized this notion as false. Undoubtedly, there are exceptions. But for the most part, according to stakeholders, the clients who consume supportive services from Brown County and local NPOs are long-term Brown County residents.

NEEDS OF CONSUMERS WITH UNSTABLE HOUSING

First, this report will examine common needs found across all subgroups of consumers. We surveyed 16 Brown County case managers who work with consumers of the treatment courts and Community Treatment Center (CTC) and asked them to estimate the number of persons on their caseloads who experienced selected barriers to housing. Table 1 shows that of 391 consumers served by both programs, slightly less than half (45%, n=177) are believed by staff to have unstable

[8] Carrie Poser, WI Balance of State Continuum of Care, e-mail message to authors, August 7, 2017.

[9] "How Much do you Need to Earn to Afford a Modest Apartment in Your State?", *National Low Income Housing Coalition,* accessed August 7, 2017.

[10] Robyn Hallet, Brown County and Green Bay Housing Authority, e-mail message to authors, May 26, 2017.

housing or are homeless. More than half experience substance abuse concerns (57%, n=224), with treatment court consumers more strongly impacted (75%). Excluding jail data, according to CTC and treatment court staff estimates, nearly 9 in 10 consumers suffer from a mental illness (88%, n=343), and more than three-quarters of individuals in these groups are believed to have very low income (77%, n=300).

Table 1. Number of Consumers With Barriers to Self-Sufficiency

Total caseload	Treatment Court n=135		CTC Outpatient n=256		Combined Groups n=391	
	Number	Percent	Number	Percent	Row total	Percent
Criminal record	128	95%	90	35%	218	56%
Substance abuse	101	75%	123	48%	224	57%
Mental illness	96	71%	253	99%	349	89%
Very low income	103	76%	197	77%	300	77%
Homeless/Unstable housing	62	46%	115	45%	177	45%

Source: Survey of staff, June 2017
Note: many consumers experience more than one barrier.

A similar rate of housing instability can be seen in data provided by the Brown County Jail. About half of inmates referred to the jail liaison were discharged from jail in 2016 with housing instability (101 of 198 inmates studied). Table 2 shows that of this group, 88% experienced one or more mental health or substance abuse barriers. In fact, 43% (42 individuals) of those exiting with unstable housing were characterized as having co-occurring mental health and addiction concerns. About 22% of inmates indicated mental health concerns only, while another 22% experienced only substance abuse. Co-occurring conditions were reported more frequently for female inmates (52%) than males (39%). On the other hand, males more often reported concerns related to substance abuse (28%) than females (10%). None of these gender differences were statistically significant.

Table 2. Number of Housing-Unstable Individuals Exiting Jail with Barriers, 2016

Barrier	Total	Male	Female
Mental Health Concern Only	22 (22%)	14 (21%)	8 (26%)
Substance Abuse Concern Only	22 (22%)	19 (28%)	3 (10%)
Both MH and AODA Concerns	42 (43%)	26 (39%)	16 (52%)
No MH or AODA Concerns	12 (12%)	8 (12%)	4 (13%)
Total	98 (100%)	67 (31%)	31 (31%)

Source: Brown County Jail

With the help of the Brown County Human Services staff, data from the County AVATAR database was compiled to determine the number of housing-unstable consumers who were receiving care from any County program. Data on all consumers with a current residence of "homeless" was requested. However, after reviewing the results, we could not be certain that all of these data had been accurately captured at intake. As a result, and this data source was not used to further understand the characteristics of Brown County consumers. Though requested, data from the WI Department of Justice related to Brown County individuals serving probation or parole also could not be obtained.

Consequently, we attempted to derive an approximate number of individuals served by Brown County who experienced homelessness or unstable housing. When the survey results and jail data are taken together, about half of consumers in

treatment courts, CTC outpatient care, and the jail are estimated to have significant housing concerns by case workers who know them. This amounts to an estimated 177 current consumers of the two programs and another 98 individuals who exited jail during 2016. Since the numbers reflect different time periods, we could not combine them directly. A conservative estimate is that some 200 Brown County consumers are likely to experience unsafe or unstable housing.

In addition to housing needs, Brown County consumers require ongoing treatment for mental illnesses and addictions. County case managers indicated the importance of various supportive options for consumers on their caseloads. Table 3 shows these results. Using a 5-point Likert Scale, we selected the two highest responses, "Extremely Important" and "Very Important" and combined them into a single category

Although the samples are small, the strong responses are notable. For both programs, case managers most frequently pointed to the need for ongoing financial assistance for rent. Additionally, CTC staff felt it would be especially important to have longer term, ongoing treatment available, while treatment court staff emphasized the need for temporary housing that included employment coaching, shorter-term treatment, and bi-weekly or monthly check-ins. A structured living situation (implying very close monitoring and management) was not rated as high in importance by either group.

Table 3. Percent of Staff Indicating Supportive Options as Important

	Treatment Court Staff (n=5)	CTC Outpatient Staff (n=11)
Structured living situation	60%	54%
Weekly-daily case management	80%	86%
Bi-weekly or monthly case management	80%	77%
Employment coaching or advocacy	80%	67%
Short term treatment for MI or AODA	80%	70%
Longer term treatment for MI or AODA	80%	92%
Ongoing financial assistance for rent	80%	92%

Note: Percent of staff that indicated extremely or very important
Source: Survey of staff, June 2017

Results from interviews with community and Brown County staff experts on housing and homelessness confirmed these data. Based on numerous sources, County consumers have a host of common housing needs, regardless of the subgroup. A strong theme across interviews is that all consumers need immediate "front end" (as one community stakeholder put it) housing support when they initially exit jail, start treatment court, begin probation or parole, or receive treatment at the CTC. Stated another way, clients would greatly benefit from having a place to stay for at least 60 days when reentering the community from jail or prison or at the start of their respective treatment program so that case management staff has adequate time to link individuals to supportive services and housing. Nearly every stakeholder interviewed said there was a lack of affordable housing in Brown County.

These same interviewees overwhelmingly confirmed consumers lack access to immediate safe and stable housing and an inability to quickly be moved to a safe place while using County services is detrimental to abstaining from substance abuse and criminal activity. Several stakeholders specifically mentioned the challenges single women have when attempting to find a safe, stable place to stay.

Additional challenges are associated with the process of securing a rental unit. In general, consumers, need help building up a rental history, putting down a security deposit, and paying the first month's rent. Substantial advocacy from County case managers often is need for consumers to help consumers secure their own lease. Landlords unwillingness to, in their minds, take a chance on someone they perceive may pose an increased risk to a unit can be alleviated, in part, by case managers' advocacy for their clients. However, based on discussions with interviewees, a vast majority of landlords will not rent to someone with a criminal record, mental illness, or history of substance abuse because of the high demand for rental properties within the City of Green Bay. Simply put, landlords can be picky because the highly competitive local housing market allows them to be.

The last common need among the subgroups is continuous access to support services as they transition out of care. This can take the form of case management, job coaching, medication management, outpatient therapy, and more, depending on the individual's needs. Due to clients' complex needs, coordination between services is especially crucial.

Men and women tend to have different motivations and goals according to several staff. While men often focus on employment and becoming financially self-sufficient, women top priority is commonly regaining custody of their children.

The following sections detail the needs of specific subgroups of consumers in need of safe and stable housing. The groups include consumers with mental illness, consumers with substance abuse concerns, consumers in treatment courts, and consumers exiting the Brown County jail.

CONSUMERS WITH MENTAL ILLNESS

Community experts assert that medication supervision is the foremost need for consumers who have a mental illness. Depending on the client, an individual may need to take multiple medications at different times of day. To complicate matters, sometimes consumers stop taking medications once they begin to feel better. According to case management staff, receiving the proper medications is particularly important because often, individuals with a mental illness who use alcohol and drugs are doing so to use cope with symptoms

Applying for Supplemental Security Income (SSI) is another top priority specific to this group of individuals. Depending on one's diagnosis or disability, he or she may be eligible for federal income. However, the application process may be daunting for consumers and without support and encouragement, many could miss available funding that could be used for various types of housing (e.g., permanently supported housing). There may be existing County programs to assist with this need.

Ultimately, the term "mental illness" deserves additional consideration. It is all-encompassing and used to describe an extensive range of diagnoses. Thus, there is no one size fits all solution to address this population's housing needs. Per stakeholder interviews, some consumers may be able to live in multifamily housing units while others would be best served in separate, permanently supported units. Therefore, a variety of housing options will be necessary to best serve the housing needs of this population.

CONSUMERS WITH SUBSTANCE ABUSE CONCERNS

For those with substance abuse barriers, the opportunity to foster a structured lifestyle is paramount. Over time, according to interview data, accountability in the form of supervision or occasional check-ins would benefit this population's recovery process. In the meantime, providing a safe and stable place to stay is fundamental to recovery. However, a clean

and sober living environment should not isolate this population as many individuals can benefit from social support and positive interactions that promote and advance the recovery process.

CONSUMERS OF TREATMENT COURTS

Interviewees mentioned immediate safe and stable housing as they are accepted into treatment courts is the principal need for this subgroup of consumers. Ideally, this "front end" housing would provide participants a place to stay for at least two months to help the transition from jail. This is especially true for Heroin Court and Drug Court participants where an estimated 85% or more of participants are in jail upon acceptance to the program. Due to limited housing options, treatment court participants sometimes remain in jail pending identification of available housing. A handful of individuals in this population stay at the NEW Community Shelter upon release and entry into the court program. But it is worth noting that individuals with an ankle monitor are not able to stay at this shelter due to its rules and restrictions.

Interviewees reported that individuals enrolled in Veteran's Court are able to access numerous sources of assistance, and do not face as many housing obstacles as other treatment court consumers. However, some housing situations are still not suggested for this population. Regardless of the treatment court, housing should be located close to employment opportunities, public transportation, and other supportive services. It should support development of healthy lifestyles.

CONSUMERS EXITING BROWN COUNTY JAIL

In addition to treatment court consumers, individuals leaving jail into the community would benefit from immediate "front end" housing with no barriers for several reasons. First, restrictions prohibit them from staying at NEW Community Shelter and the other primary shelters in Brown County. St. John the Evangelist Homeless Shelter, for example, is closed during summer months. Second, having a criminal record, many are unable to participate in the Housing Choice Voucher program, a Federal program that subsidizes rental payments of low income individuals. As mentioned previously, in Green Bay, from January 1, 2016 through April 30, 2017, 191 applicants were denied Housing Choice Vouchers. Sixty-eight (36%) were denied because of drug related issues and 123 (64%) were denied because of other criminal issues. Almost 200 individuals still applied for vouchers despite the fact that the application is clear that those with criminal records or drug-related issues are not elibigible for a voucher.

According to interviewees, the first few weeks outside of a correctional facility are crucial for ex-offenders. Having a safe, stable, sober place for them to reside for several months while case managers connect them to supportive services is ideal. For instance, one stakeholder spoke of a client bragging that he lasted two weeks without using drugs upon his release from jail. At the time, his only housing option was to stay with family members who used drugs daily. In short, a lack of safe and stable housing can be just as detrimental to a client's future success or recovery as being homeless.

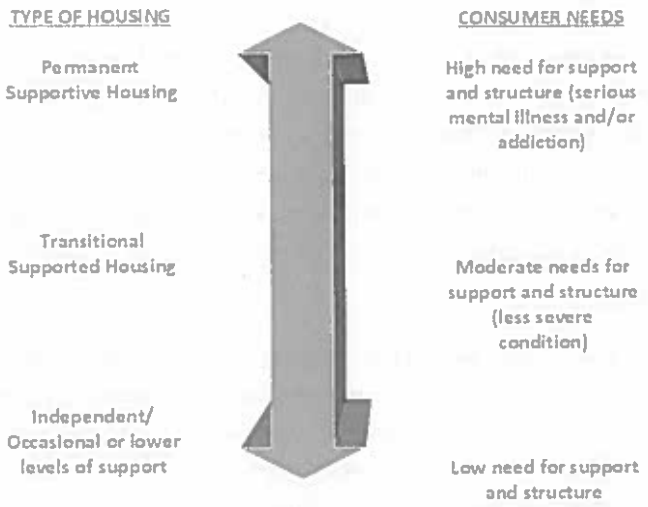
For individuals who have not been recently released from jail or prison and have been on probation and parole for some time, less is known about their specific needs. Probation and parole officers were unable to complete surveys with regard to their caseload. However, due to the similar and overlapping housing needs of the subgroups who are the focus of this study, as well as the overall lack of affordable housing in Brown County, it can be assumed that their needs are similar to those discussed above.

POLICY ALTERNATIVES AND RECOMMENDATIONS

A number of potential alternatives were examined to address the need for safe and stable housing in Brown County. Although interviews revealed an opinion that the community on the whole appears to need a greater supply of affordable housing, our recommendations reflect Brown County consumers only. All recommendations presented here were selected for their alignment with the needs of Brown County consumers, feasibility of implementation, and their potential sustainability. Suggestions provided by community stakeholders, national best practices, and existing programs and efforts in Brown County were used to develop these alternatives. Additionally, significant consideration was given to the role Brown County can uniquely play in addressing the issue.

The strategies involve immediate placement into a financially subsidized housing situation with some level of treatment and support for consumers, or both. Some individuals will require permanent support, while others may be able to transition to independence in a few months. Figure 1 illustrates that consumers experience a range of severity in needs, and housing alternatives that we have proposed align with the levels of severity. Overall, most strategies involve collaboration with private entities such as nonprofit organizations, landlords, or real-estate developers.

Figure 1.



An overview of the alternatives begin below. The proposed alternatives that follow are divided into three groups. The first group consists of alternatives that result in the addition of more housing units in Brown County. The second highlights new or expanded public/private funding strategies, and the third consists of alternatives that have the potential to assist or improve the situations of those in need of safe and stable housing—though not directly adding housing units or financial support. Comparative cases from other communities also are discussed to provide examples and a starting point for potential adoption in Brown County.

ADDITIONAL HOUSING UNITS

Below, two strategies to create additional housing opportunities for Brown County consumers are highlighted. Both consist of developing affordable housing units that provide support services. The United States Interagency Council on

Homelessness (USICH) advocates the use of supportive housing.[11] It states, "Study after study has shown that supportive housing not only resolves homelessness and increases housing stability, but also improves health and lowers public costs by reducing the use of publicly-funded crisis services, including shelters, hospitals, psychiatric centers, jails, and prisons." The USICH states that supportive housing is cost effective, but states that "there is no single model for supportive housing's design." This flexibility allows counties, municipalities, and nonprofit organizations to mold supportive housing models to match consumers' needs. Regardless of the approach, however, supportive housing models focus on providing consumers with a safe and stable home environment while matching them to the appropriate supportive services.

For this assessment, the first model addresses individuals with long-term, significant needs, while the second model focuses on the recovery of individuals with needs expected to be more temporary in nature. Each model includes some degree of supportive services.

EXPAND PERMANENT SUPPORTIVE HOUSING OPTIONS

In many cases, individuals identified as homeless in January, 2017 were impacted by struggles with mental health. These individuals with more significant illnesses often require care over the long term. Experts reported that without access to regular care, many consumers cycle in and out of homelessness, may be unable to keep jobs, and may require repeated admissions to more intensive services.

The permanent supportive housing alternative aligns with support needed by some of the County's most vulnerable consumers. Treatment and ongoing support of a consumer with mental illness can stabilize an individual's life, enabling that person to hold a job, maintain health, and live a fulfilling life. Almost all surveyed CTC case managers (92%) indicated that having longer-term treatment for mental illness or addiction was extremely important for their consumers. In addition to supportive treatment, there is a strong need for this housing to be financially subsidized or offered with low rent. Nearly every County staff member surveyed indicated that financial assistance was extremely important for those on their caseload.

Those most likely to benefit from permanent supportive housing are consumers of the Community Treatment Center, since most have a diagnosed mental illness and very low incomes. Twelve case managers at the Brown County Community Treatment Center reported the most important resources needed by their consumers were long-term treatment for mental illness and/or addictions along with ongoing financial assistance for housing. Respondents estimated that, of 256 consumers on their combined caseloads, 52% had substance abuse concerns, nearly all had mental illnesses, 75% had very low incomes, and 52% experienced unsafe and unstable housing. Based on these data, at least 125 consumers experience mental illness (at varying levels of severity) and unsafe or unstable housing. Conservatively, 50-75 CTC consumers may benefit from permanent supportive housing options.

While many Brown County consumers exiting jail or participating in treatment courts make steady progress to health and self-sufficiency, others could benefit from permanent supportive housing. Treatment court case workers and Jail Liaison staff estimated that of their 183 consumers, 75% experienced addictions, 71% had a mental illness, 76% had very low income, and 46% had unsafe or unstable housing. Conservatively, another 20-25 current consumers of the treatment

[11] "Supportive Housing," *United States Interagency Council on Homelessness,* last updated January 18, 2017, https://www.usich.gov/solutions/housing/supportive-housing.

courts may have long-term mental health and addiction challenges and could benefit from permanent or long-term supportive housing.

OVERVIEW

Supportive housing "combines affordable housing with services that help people who face the most complex challenges to live with stability, autonomy, and dignity."[12] Permanent supportive housing serves disabled individuals, including those who are mentally ill, and/or have a history of substance abuse, or both.[13] Units are leased indefinitely to clients in order to offer a safe and stable living environment. Permanent supportive housing provides more than a place to live, however. It also connects supportive services to persons on a case by case basis so they have the opportunity to live as independently as possible. These services can include therapy, counseling, financial literacy classes, and other life skills.

Nationally, permanent supportive housing models have been studied and scrutinized across the United States. For instance, in 2007, Portland, Maine examined the total cost of services used by 99 homeless individuals a year prior to being placed in permanent supportive housing and compared the costs to the following year. One year after being housed, the total cost of care savings was $944 dollars per person. In addition to vastly reducing emergency shelter use (by 98%) and the number of days spent in jail, substance abuse treatment increased by 22% (78 more contacts) and psychiatric hospitalizations decreased by 38% ($182,483). Mental health care services increased 35%. At the same time, the cost of mental health services declined by 41%, implying that, after receiving housing, consumers used less costly outpatient services.

Similarly, in 2012, researchers assessed 41 chronically homeless individuals in Knoxville, Tennesse and compared their service cost records the year prior to receiving permanent supportive housing with the year after. There was a 99% decrease in jail costs, an 86% decrease in days in jail, use of inpatient mental health services decreased by 23% ($21,418), and the number of individuals who stayed overnight in a mental health care facility decreased from eight to four.

In a review of 32 evaluations of supportive housing programs around the U.S., the Corporation for Supportive Housing (CSH) found evidence that supportive housing has positive effects on mental and physical health, employment, and other outcomes that lead to more stable and productive lives for those they serve. Not only does supportive housing improve people's lives, evidence shows that it saves communities and public agencies significant dollars in decreased use of homeless shelters, health care services, jails, and police services. Further evidence shows that these outcomes improve the safety and environment of neighborhoods.[14]

According to community experts and stakeholders, Brown County currently has limited supportive housing options available for persons experiencing barriers such as a criminal history and mental illness. Most sites disqualify persons with criminal backgrounds or for drug use, two issues that face many County consumers. Other sites provide support for older adults or persons with physical disabilities. In early 2017, NEWCAP, Inc., a social service provider, received federal funding

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[12] "What is Supportive Housing?," *Corporation for Supported Housing,* accessed August 8, 2017, http://www.csh.org/supportive-housing-facts/introduction-to-supportive-housing/.

[13] "The Applicability of Housing First Models to Homeless Persons with Serious Mental Illness," *U.S. Department of Housing and Urban Development,* July, 2007, https://www.huduser.gov/portal/publications/hsgfirst.pdf.

[14] "Evidence," *Corporation for Supportive Housing,* accessed August 7, 2017, http://www.csh.org/supportive-housing-facts/evidence/.

to provide supportive housing to 45 chronically homeless individuals with disabilities in Brown County. It is possible that some Brown County consumers will be served by this NEWCAP program, but only the few meeting the stringent HUD definition of homelessness. Furthermore, these units are projected to be full in fall, 2017.

STRUCTURE OF HOUSING FACILITIES

Permanent supportive housing can take a variety of forms, including individual scattered site units, group homes, or single-site units, where all supportive housing is located in one unit. Another alternative is a "mixed tenancy" model where a mixture of supportive and non-supportive units are located together in a single unit. Brown County may want to consider both single-site and scattered site options for subsets of individuals receiving County services.

There are numerous examples of successful models that use each approach. As noted above, NEWCAP, Inc. operates a scattered-site permanent supportive housing model, where NEWCAP holds the lease with landlords throughout Brown County, sublets to participants, and provides weekly case management services. Program participants pay 30% of income to NEWCAP as rent. The Fox Cities Housing Partnership employs a scattered site permanent supportive housing model, with its own staff serving in the role of treatment facilitator as they connect individuals with necessary services and community resources.

Although costly and more complicated to develop, a single-site unit can be an appropriate structure for those needing higher-level or around the clock supervision. Centralizing consumers into one setting enables the efficient delivery of treatment, medication monitoring, and closer supervision. Milwaukee County opened the Thurgood Marshall House in 2016, an example of permanent, supportive, single-site housing with 24 individual units for low-income adults. Residents can continue to be housed in the apartments and receive services and support indefinitely. Exhibit 1 highlights the facility and its structure. However, critics of the single-site model assert that individuals with addictions or mental illnesses should not be housed together, where they may negatively influence each other.

APPROACH TO TREATMENT

Another hallmark of permanent supportive housing is the availability of significant supportive services. Three general approaches to treatment include on-site care, community-based care, and mobile treatment. The optimal approach varies with the needs of consumers and housing structure. Single-site units typically offer treatment more frequently, while scattered sites more often provide community-based or mobile care. Brown County has the option of delivering support services itself, using existing case management staff, or contracting with a nonprofit social service organization to do so.

FINANCING AND DEVELOPMENT

According to CSH, supportive housing can be created through a building strategy or a leasing strategy. Brown County could consider building new permanent housing units, re-purposing suitable buildings, or refurbishing existing structures such as hotels. Many residents would have the ability to pay a portion of their rent costs using Social Security benefits. In fact, one form of typical support provided in this form of housing is assisting consumers to apply for benefit programs for which they are eligible. Partnering with local nonprofit housing organizations, developers, and the city of Green Bay, Brown County has the opportunity to leverage various sources of federal and state dollars to support development of permanent supportive housing. More information on collaboration and funding opportunities are discussed below.

EXHIBIT 1. PERMANENT SUPPORTIVE HOUSING
THURGOOD MARSHALL APARTMENTS, MILWAUKEE, WI

Description: Opened in October, 2016 as part of Milwaukee County's initiative to end chronic homelessness, the Thurgood Marshall Apartments provide housing options for chronically homeless people struggling with alcoholism. Residents of the 24 one-bedroom apartments can obtain around-the-clock mental health and social services on-site from Wisconsin Community Services, a non-profit organization specializing in the supportive services required by residents.

Funding: Built by Cardinal Capital Management, Inc., a national housing developer, the project was made possible by an array of public and private partners, including Milwaukee County, which provided $500K innovation grant, the City of Milwaukee Housing Trust fund contribution of $385,000, and WHEDA (with a $2.75 million low-income housing tax credits purchased by PNC).

Partners: Launched by County Executive Chris Abele, other partners that participated included the Halyard Park Neighborhood Association, local elected officials, the U. S. Department of Housing and Urban Development, and the Milwaukee County Behavioral Health Division. First Business Bank provided a $1.2 million construction loan.

Effectiveness: Similar models, implemented by Portland, Maine and Denver, Colorado have shown that permanent supportive housing leads to substantial decreases in incarceration costs, emergency shelter use, and inpatient treatment costs. In both cases, there was also an increase in participants' wages and the number of outpatient services they used.

Why it would work in Brown County: This model provides a long term housing solution for the chronically homeless who have a mental illness. It also allows for continuous care to be provided collaboratively with area nonprofits. Additional HUD funding could be leveraged by addressing this population's needs because HUD has designated chronic homelessness as a priority when awarding funding.

Additional Information:
http://www.wpr.org/milwaukee-opens-states-first-housing-development-aimed-ending-chronic-homlessness

http://urbanmilwaukee.com/pressrelease/milwaukee-county-announces-new-milestone-in-efforts-to-end-chronic-homelessness/

https://shnny.org/uploads/Supportive_Housing_in_Maine.pdf

https://www.huduser.gov/portal/publications/hsgfirst.pdf

https://shnny.org/uploads/Supportive_Housing_in_Denver.pdf

BENEFITS AND CHALLENGES OF THIS APPROACH FOR BROWN COUNTY

The County has the potential to achieve significant savings with reduced use of some of its most costly services. Research indicates that a significant percentage of consumers residing in permanent supportive housing will stabilize, reducing repeated inpatient admissions and related staff time needed for intake and processing. In fact, the Brown County Jail recently hired an additional staff person to work with individuals with mental illness and addictions, and so did at least two local homeless agencies. By providing housing and the resulting stability, Brown County has the potential to reduce the number of these individuals that wait in jail for housing, reduce resources required to assist them, thereby reduce costs and overcrowding.

Indirect benefits also are possible as a result of greater efficiencies when assisting chronically homeless individuals. Currently, the Green Bay Police Department, health care providers, landlords, homeless shelters, and others incur significant costs related to increased staffing, repeated police calls, readmissions, when unstable individuals repeatedly interact with public safety and health system in the County. Pursuing this alternative also has the potential to alleviate some pressure facing local nonprofit housing providers. According to our interviews, several nonprofit emergency shelters have added staff with expertise in mental health and treatment of addiction. These resources can be directed to other needs, including prevention and early intervention programs, which could reduce community costs.

The cost to develop or refurbish a single-site permanent supportive housing facility would require time and effort by the County staff to develop a funding strategy and supportive service delivery plan. Partners such as developers (a nonprofit or commercial builder) that might qualify for LHITC, a private lender, local housing authorities, private funders, and possibly supportive service providers or other nonprofit organizations would be needed.

Should Brown County pursue a scattered-site approach, securing landlords to participate has already proven challenging for NEWCAP, Inc. in recent months. However, the County's supervision of its consumers through treatment court programs and case management has the potential to make participation more palatable for landlords. According to numerous interviews, the housing rental market seems to be a "seller's" market in Brown County, with affordable housing opportunities obtained by more "desirable" lessees, such as individuals with cleaner records. WESTCAP, in western Wisconsin, has developed assurances and financial incentives to encourage participation by landlords, paying a doubled security deposit or paying first and last month's rent.

Developing a supportive service delivery approach may be a challenge. Brown County must analyze the implications of providing case management support directly (e.g., licensing considerations, staffing available) or consider contracting with a local agency. If permanent housing is expanded, the County may end up providing more outpatient services than previously, as some other similar programs have found. However, an increased need for outpatient services could be offset by the savings the permanent supportive housing model has the potential to generate.

EXPAND TRANSITONAL HOUSING OPTIONS

Most homeless individuals are not chronically homeless or in need of long-term support. Rather, they have experienced a life crisis that leads to the temporary loss of housing and require some time to regain stability. Brown County could expand a variety of temporary housing options tailored to its identified consumers to enable them to have short-term housing while they transition to more permanent housing options. These units could be used repeatedly by County consumers while receiving County services.

OVERVIEW

Transitional housing is the provision of affordable housing with supportive services for homeless individuals for up to 24 months, where they develop the plans, skills, and means to move on into a stable and permanent living situation. The concept of transitional housing arose with prominence in the 1980s to increase the likelihood that those released from institutions would sustain independent living in the community after having developed the skills they would need by participating in supportive programs. In recent years, HUD is increasing its focus and funding on an approach known as "rapid re-housing," or movement by homeless individuals directly into permanent, sustainable housing with some support, eliminating shorter-term transitional housing. However, we envision Brown County's strategy as one which will provide temporary use by County consumers of the same additional housing units, thus making it more of a transitional housing strategy.

Brown County survey data indicate the need for temporary or transitional supportive housing. Five treatment court caseworkers estimated that 34% (n=46) of their consumers had housing concerns, 72% had substance abuse concerns, and 59% had mental illnesses. Moreover, the Brown County Jail data showed that 26 individuals on the current caseload had housing concerns, and 90% of them had mental health, AODA, or co-occuring conditions. Finally, of the 137 CTC consumers with housing concerns, many have mental health needs that would not require permanent support, but are likely to need housing support to help them stabilize. Conservatively, Brown County could potentially provide transitional supportive housing for 125 to 150 consumers.

Interviews with local experts and secondary data indicate a need for this short-term supported option, especially for individuals transitioning out of jail or beginning treatment court. Nearly all of these consumers have criminal records, posing a well-known barrier to obtaining housing vouchers, housing rental, and employment. Currently, because of the dearth of affordable rentals available, landlords can choose to rent to individuals who have not committed a crime. In fact, the majority of local experts suggested that inadequate housing options may lead County consumers to exit jail into local homeless shelters, and in some cases, to remain in jail longer until housing can be secured. These options do not offer an environment supportive of recovery for the consumer and County resources are not used in an optimal way.

This proposed alternative provides transitional support for consumers and avoids placing the County in the position of having to secure new housing units on an ongoing basis. Under ideal circumstances, the County would provide certain consumers with permanent housing upon exit from jail or beginning of treatment by rapidly placing them into permanent housing, an emerging trend in community housing.

STRUCTURE OF HOUSING FACILITIES

The strategies to create and manage transitional housing parallel the strategies to create permanent supportive housing. Brown County could own or lease a single-site facility with multiple residential units, own or contract for a supported congregate living arrangement, or secure multiple scattered sites by purchasing or leasing well-suited units from local organizations or landlords. In fact, the County could consider deploying several of these options to align with various distinct needs of consumer segments.

This report does not map out particular housing options for consumer segments, rather we suggest that the County include staff in decisions about the best housing situation to establish for consumer groups. There is not a "one size fits all" housing approach for Brown County consumers who are becoming more stable in the sort term. Brown County has an opportunity to develop housing facilities to optimally serve defined populations. For example, several interviewees had clear ideas

about suitable housing for treatment court consumers. The treatment court programs offer an excellent opportunity for targeted housing options. Currently, 46 participants in the treatment court programs experience housing concerns. Individuals accepted into a treatment court could immediately exit jail and move into a Brown County supported transitional housing unit for several months. The County could secure a number of scattered site apartments for consumers suited for an individual living situation and also refurbish a home that houses 8-10 consumers in a more structured clean and sober congregate program suitable for them. Alternatively, the County could contract for housing units from a local nonprofit organization. The combination of approaches provides flexibility. Experts believed that providing safe and stable "front end" housing to treatment court participants could facilitate their successful recovery and move them through the program more efficiently.

APPROACH TO TREATMENT

While consumers with serious mental illnesses and addictions require permanent supervision and support, Brown County consumers viewed as most appropriate for transitional housing may require periodic case management and less structured living situations. Some will require a structured, monitored living situation for a year or more. For others, an ideal situation could place recovering alcoholics together in a setting where they keep each other accountable through sobriety programs or check-ins. The County might provide onsite around-the-clock monitoring and supervision at one site for consumers in recovery, and at another site, offer much more limited case management. Consumers that exit County jail facilities often need support to develop a plan for employment, housing, and new way of life after being in jail. They may need to build employment skills, locate a job, and establish a credit history. Treatment may include mental and behavioral health counseling and the development of life skills.

The County has the opportunity to designate its own case management staff to deliver supportive services or to partner with other community organizations. The Ecumenical Partnership for Housing (EPH), a Green Bay nonprofit organization with over 20 transitional housing units for families, owns and maintains homes while partnering with The Salvation Army to deliver case management services. The two organizations offer a coordinated and highly effective program through close collaboration. In another model, the Fox Cities Housing Partnership owns transitional housing units and its own staff members serve as case managers who help families make connections with other supportive resources.

If the County implemented a similar model, with a community organization providing the physical housing and Brown County providing treatment, federal funding could be leveraged. The allocation of County staff would count toward the match dollars required by HUD on applications for funding. According to our interviewees, community organizations have challenges fronting these match dollars, and the County might be in the best position to meet this need.

FINANCING AND DEVELOPMENT

Again, a building strategy or a leasing strategy could be used to obtain transitional housing units. Brown County could consider partnering with NeighborWorks or other developers to build new units, re-purpose suitable buildings, or refurbish existing structures such as hotels. The County could establish ongoing leases with other partners, such as existing nonprofit organizations or landlords. Neighborworks current partnership with Newcap is highlighted in Exhibit 2. According to community experts, landlords are much more likely to lease apartments to Brown County itself than to the individual consumers. The funding options discussed with regard to permanent support housing could also be applied to transitional housing.

Depending on Brown County's preference, consumers could reside in this housing rent-free for the entire time or for a few months. The County could choose to charge an affordable or graduated rental fee, in essence, sub-letting the unit to the consumer. Wages or public benefits could be used by consumers to pay affordable rental costs.

EXHIBIT 2. SCATTERED-SITE HOUSING
WISCONSIN NEWCAP & NEIGHBORWORKS, GREEN BAY, WI

Description: In 2017, Newcap, a 501(c)(3) nonprofit, received a grant from HUD to house chronically homeless individuals in Green Bay, Wisconsin. Due to a competitive housing market, however, it was difficult to find landlords willing to house clients who lacked a positive rental history or had a mental illness. However, contrary to landlords who rent a property for personal financial gain, NeighborWorks' strives to provide housing opportunities for people so that their lives may improve and the surrounding community can grow stronger. Partnering with NeighborWorks, also a 501(c)(3), allowed Newcap to provide safe and stable housing for multiple clients while simultaneously connecting them to supportive services.

Leasing a property from NeighborWorks allows Newcap to sublease the unit to a chronically homeless individual with the understanding that NeighborWorks will be reimbursed should damages to the unit exceed the security deposit. Clients also benefit because Newcap holds the lease and clients do not need to worry about paying the first month's rent in advance or about being taken advantage of by absentee landlords.

Funding: A client pays 30% of his or her gross adjusted income to Newcap and, because the client meets HUD's definition of chronically homeless, HUD pays the remainder.

Partners: Newcap provides case management and NeighborWorks contributes property management.

Effectiveness: The scattered-site housing model is an effective way to quickly build up a supply of affordable housing without having to build or own units.

Why it would work in Brown County: NeighborWorks' units are located within Green Bay, which would allow Brown County's clients access to transportation, employment opportunities, and supportive services. Brown County would not need to build any housing and it would not need to provide property management. Having a nonprofit provide property management is ideal in a scattered-site supportive housing model because, as stated by Coalition Homes and the Corporation for Supportive Housing, all partners "must have a shared commitment to the success of the community and each of the tenants that resides in the building." Finally, NeighborWorks owns a variety of properties from which to choose, and Brown County could decide how many consumers are placed in a unit and for what duration.

Additional Information:

http://newcap.org/program_category/crisis/

http://nwgreenbay.org/

http://www.csh.org/toolkit/public-housing-agencies-toolkit/primer-on-homelessness-and-supportive-housing/supportive-housing/

http://www.csh.org/wp-content/uploads/2011/12/Tool_PropertyMgmtManual.pdf

BENEFITS AND CHALLENGES FOR BROWN COUNTY

A transitional housing model could be implemented more quickly than permanent supportive housing due to the lower level of support needed. Financial opportunities and benefits are similar to benefits previously described regarding the permanent housing proposal. As discussed earlier, the County may accrue cost savings as consumers complete programs more efficiently and effectively while residing in an environment conducive to recovery. Transitional housing has the potential to improve outcomes and lower recidivism for ex-offenders, treatment court participants, and consumers with mental illness. Exhibit 3 illustrates an evaluation of a treatment court program showing these improved results for consumers. Other than the financial investment and planning required, few challenges were identified.

EXHIBIT 3. TRANSITIONAL HOUSING
DRUG COURT TRANSITIONAL HOUSING PROGRAM, SAN FRANCISCO, CA

Description: The San Francisco Drug Court was established as a means to divert drug users away from the traditional prison system and into a supervised, intensive drug treatment program. At the same time, those who are enrolled receive services to address education, job training, and housing needs. In 2008, the City and County of San Francisco expanded its housing efforts by implementing a transitional housing program for participants who were homeless or did not have access to safe and stable housing. Developed as a 15-month pilot program, participants were given rooms in a privately owned, single resident occupancy hotel. During this time, the program served 110 Drug Court participants. The program was supported by a Bureau of Justice Assistance (BJA) federal grant.

In addition to the unique nature of the program, a study was completed to assess the outcomes of the program. Participants in the programs were compared with a control group—Drug Court participants who did not participate in the housing program—using three Drug Court outcomes: retention, graduation, and recidivism. Those who participated in the housing program stayed in Drug Court 72 days longer than those in the control group and graduation rates increased by 60%. There was no difference between the two groups regarding recidivism. The average length of stay in the transitional housing units among study sample participants was 40 days. The median length of stay was 28 days (Outcome Study). Although the sample was relatively small, the study illustrates support for the transitional housing program across several important metrics.

Funding: A BJA federal grant supplied funding for the pilot program.

Partners: The Pontiac Hotel provided single occupancy rooms for participants.

Effectiveness: Graduation rates increased by 60%.

Why it would work in Brown County Multiple interview subjects insisted that participants in the treatment court lacked immediate housing. As stated by stakeholders, the lack of immediate housing interferes with clients' ability to comply with program requirements. Also, the lack of immediate housing has, at times, required treatment court participants to remain housed in Brown County Jail.

Additional Information:

http://www.sfsuperiorcourt.org/divisions/collaborative/drug-court

http://www.sfsuperiorcourt.org/sites/default/files/pdfs/2676%20Outcome%20on%20SF%20Drug%20Court%20Transitional%20Housing%20Program.pdf

PUBLIC AND PRIVATE FUNDING STRATEGIES

The following alternatives address expanded or unique strategies to finance additional safe and stable housing services. The first alternative is a discussion of the Pay for Success model. While the model has only been implemented in a few communities, it represents new and innovative way to finance the provision of social services. The second alternative focuses on the expansion of existing funding opportunities, namely WHEDA programs such as Low-Income Housing Tax Credits. The third alternative offers a broader discussion of additional grants or funding options. For example, several community stakeholders mentioned the value of obtaining private, unrestricted dollars to expand existing safe and stable housing options. The third and fourth alternatives address potential partnerships as well additional opportunities.

PAY FOR SUCCESS MODEL

A relatively new model for providing social services, pay for success, connects governments, private investors, and nonprofit service providers. The model begins with an identified social issue or need that has been historically difficult to address—reducing homelessness and improving safe and stable housing in this case. Once a problem is identified, usually by a County, municipality, or state, private funders are solicited to provide upfront resources to a service provider. Detailed, predetermined outcome measures are developed and the provider delivers services with the goal of meeting or exceeding the outcome expectations. Finally, the government repays the initial investment from the private funders only if the established outcomes are achieved (Third Sector Capital Partners, What is Pay for Success, 2017). In short, the model shifts the risk of developing new programs and services from the public sector to private investors and nonprofit service providers. Additionally, the model focuses on outcomes, rather than outputs or processes (Urban Institute, Pay for Success FAQs, 2017). Stakeholder collaboration, accountability, performance measures, and innovation are foundations of this model.

Although the number of pay for success projects across the United States is still relatively small, it has been used to address homelessness and safe and stable housing in several cities and states—additional social issues have included education, substance abuse, the environment, and recidivism, among others. To address the issues of homelessness and safe and stable housing in Brown County using a pay for success model, efforts would be needed to identify community resources to fund the initial investment and outcome measures would need to be defined. Nonetheless, the potential benefits of the project are significant and initial results in existing cases appear encouraging, particularly in Massachusetts and Santa Clara County, California. The latter is highlighted below.

EXHIBIT 4. PAY FOR SUCCESS MODEL
PROJECT WELCOME HOME, SANTA CLARA COUNTY, CA

Description: In 2015, Santa Clara County implemented the first Pay for Success initiative in the State of California. The County partnered with Adobe Services—a nonprofit service provider—to deliver housing and supportive services to roughly 150-200 chronically homeless individuals for a six year period. Those with mental health, physical disabilities, and drug and alcohol addictions were specifically targeted for the program. Selected individuals were then given permanent supportive housing, clinical services, and treatment using a Housing First strategy. Overall, according to Project Welcome Home, "The project's target impact is for more than 80% of participants to achieve 12 months of continuous housing tenancy."

As determined by the pay for success model, the County will only repay the funders if Adobe Services is able meet specific milestones. For example, for each participant who maintains continuous housing for 3 months, $1,242 is paid by the County. Subsequent milestone include 6, 9, and 12 months. The cumulative payment through 12 months is $12,420 per individual. Additional, smaller payments are made for additional months of stable housing tenancy after the first year. If the overall goal is met, the principal contribution—and associated interest—from each funder would be fully repaid. Total additional success payments are capped at $8 million. An evaluation of the project and the determination of success payments is being completed by the University of California, San Francisco.

Funding: In total, private funders provided $6.9 million with minimal to no interest requirements to begin the project.

Partners: Partners included the Sobrato Family Foundation, The California Endowment, The Health Trust, The Reinvestment Fund (TRF), Corporation for Supportive Housing (CSH), The James Irvine Foundation, and Google.org

Effectiveness: A key factor in determining pay for success's effectiveness is participating organizations ability to measure savings. Also, using a results oriented approach allows key stakeholders to determine which service providers efficiently deliver services and generate the greatest impact.

Why it would work in Brown County: Brown County, through its AVATAR database, has the capability to track benchmarks. As a whole, the pay for success approach engages government, nonprofits, and private donors; such collaboration can potentially earn additional federal funding. Finally, politically conservative and liberal groups have advocated for pay for success, making it a politically acceptable approach.

Additional Information:

https://www.sccgov.org/sites/opa/nr/Pages/ProjectWelcomeHome.aspx

http://www.thirdsectorcap.org/santa-clara-homelessness/

http://pfs.urban.org/

http://www.payforsuccess.org/learn/basics/

https://www.theatlantic.com/business/archive/2015/12/reducing-recidivism/421323/

https://www.forbes.com/sites/annefield/2016/02/27/social-impact-bonds-something-republicans-and-democrats-agree-on/#6f3b96922928

EXPANDED USE OF WHEDA PROGRAMS

Developers in Brown County appear to under-utilize a federal program that generates affordable housing relative to surrounding counties. The Low-Income Housing Tax Credit (LIHTC) program was created by the U.S. government to encourage private developers to construct or rehabilitate properties for individuals or families with low-to-moderate income, older adults, or individuals with special needs.[15] Wisconsin Housing and Economic Development Authority (WHEDA) administers LIHTC in Wisconsin, and real estate developers apply for tax credits. These tax credits enable developers to reduce the amount of lending needed for a housing project so that they are able to offer lower rents for a minimum of 30 years. Funding can be used to develop new multi-family or scattered sites units or to rehabilitate existing property.

Since the start of the LIHTC program, developers in Brown County have emphasized much needed housing for the elderly. Table 4 shows that, all told, 2,081 units have been built through the program, with three-quarters designated for older adults and only 504 units for low-income families. An additional 64 units provide supported housing. In contrast, neighboring counties exhibit higher rates of development of units serving the needs of low income families overall and per 10,000 population.

Table 4. County Low Income Housing Units by Type

Type	Brown (23 projects)	Outagamie (20 projects)	Winnebago (34 projects)
Family units	504	432	817
Elderly units	1513	983	1190
Supported units	64	0	78
Total units	2081	1415	2085
Percent of units for families	24%	31%	39%
Family units per 10,000	19.5	23.7	48.3

In addition, Table 5 shows that between 2012-2016, WHEDA awarded nearly $2 million in tax credits to Brown County developers, who built 239 new units with 50 designated for low income veterans. One project occurred in 2012, two in 2013, and one in 2014, with no new projects funded in 2015 or 2016. In 2016, no applications were proposed by local developers while in 2015, two projects that totaled almost 90 family units were proposed but not funded.[16] Over the same time period, Outagamie County developers built affordable housing units at twice Brown County's population-adjusted rate, creating 319 low income units with almost $3 million in tax credits while Winnebago County added 339 units with $2.3 million in tax credits.

[15] Ed Gramlich, "Low Income Housing Tax Credits," *National Low Income Housing Coalition,* accessed August 7, 2017, http://nlihc.org/sites/default/files/Sec5.10_LIHTC_2015.pdf.

[16] "Annual Reports," *Wisconsin Housing and Economic Development Administration,* accessed August 7, 2017, https://www.wheda.com/annual-report/.

Table 5. Recent WHEDA Low Income Tax Credit Program Activity

	Brown	Outagamie	Winnebago
Population	257,897	182,365	169,032
Units developed	239	319	339
Units per 10,000	9.27	17.49	20.06
Dollar value	$1,956,047	$2,899,473	$2,336,805

Note: 2012-2016

Brown County cannot apply for tax credits itself, but through its leadership and position of influence, can encourage greater use of this LIHTC program by developers to expand affordable housing opportunities for local families, including those using County services. NeighborWorks, Inc. is one nonprofit local developer that might apply for funding with County collaboration, designating the affordable units for a permanent housing development. This would be an indirect strategy to influence development that would have many benefits for the County. First, there would be expanded affordable housing options for County consumers. Second, Brown County could leverage these dollars to increase the likelihood that it would receive additional federal dollars for the chronically homeless, many of whom are existing County consumers. Third, this funding source could be combined with a mix of other sources to provide a significant portion of funding for larger projects.

WHEDA runs a Housing Grant Program that makes annual grants ranging from $7,000 to $25,000 to nonprofit organizations and housing authorities for the purpose of "improving the state's housing for special needs programs."[17] Aligning well with Brown County's targeted consumers, the program serves homeless individuals, alcohol or drug dependent persons, individuals with chronic mental illness, and others. Grants are used to fund upgrades to physical housing units in two categories: Emergency or Transitional Housing and Permanent Supportive Housing, the two policy alternatives recommended in this report (above). Typically, each year almost half of all applications are awarded funding. In 2016, 48 applications were received and 28 were funded, with $500,000 in grants distributed. Only one Brown County organization received funding during 2014, 2015, and 2016– a collaborative grant to an organization that provides services in three counties.

LEVERAGE FUNDING THROUGH PARTNERSHIPS

Whether mounting a major development initiative to create new units or raising funding for other projects, combining a variety of sources can pull together the necessary resources to complete the project. In 2016, a collaborative approach to funding enabled the Thurgood Marshall House in Milwaukee to obtain millions of dollars through a mix of revenue sources to build a 24-unit single-site permanent supportive housing facility. The funding plan utilized federal tax credits, local government sources, HUD funding, a mortgage loan, and grants from private sources.

A large percentage of community stakeholders representing housing-related nonprofit organizations and experts from other communities suggested the need for more projects that include collaboration between Brown County government and Brown County Homeless and Housing Coalition (BCHHC) nonprofit agencies. An expert with in-depth knowledge of

[17]"Housing Grant Program," *Wisconsin Housing and Economic Development Administration,* accessed August 7, 2017, https://www.wheda.com/Housing-Grant-Program/

HUD programs noted that the housing system in Brown County significantly under-utilizes several key grant programs, stating "when you don't have key players at the table, key opportunities will be missed." HUD offers a wide array of funding opportunities for a variety of different purposes, niche consumer groups, and organizations. Simply understanding the funding opportunities requires experience and expertise and pursuing them requires planning and time to collaborate with partners to maximize chances. By pursuing additional funding for housing, Brown County would expand opportunities for its own consumers, increasing their chances of success.

In Brown County, HUD funding is distributed through the Brown County Balance of State CoC and led by the BCHHC. According to our interviews, at times, funding opportunities (mostly from HUD) cannot be pursued due to insufficient local matching dollars. Local agencies are not typically able to produce the level of funding needed for the required local match. Brown County, however, has the potential to meet the match level required due to its resources, caseload, and scope of services. Brown County could achieve this local match by providing staff—for a permanent supportive housing program or treatment court, for example—or investing its funds to lease several scattered site units designated for Brown County consumers.

Most funders now require at least minimal collaboration and shared effort by applicants. In addition, most funding is awarded to nonprofit housing organizations, although in some cases local governments can apply. HUD publishes notices of funding available through its competitive grant program each year and has established chronic homelessness as a priority in awarding funding for its competitive grant programs. In 2017, grants included capacity building projects, continuum of care rapid rehousing initiatives, lead abatement grants, and others. Local nonprofit organizations have staff members with knowledge of these funding streams and opportunities. By partnering, the County would not only increase its chances of obtaining additional funding, but it could develop supportive programs for individuals in Brown County, many of whom currently move between County and nonprofit organizations for shelter and services.

Another potential partner for collaboration is the city of Green Bay. In particular, the City receives HOME Investment Partnerships funding, which funds "a wide range of activities including building, buying, and/or rehabilitating affordable housing...or providing direct rental assistance to low-income people."[18] Jurisdictions may provide tenant-based rental assistance contracts of up to two years. From 2015-2019, Green Bay will receive almost $2 million in HOME funding, including $1 million in Community Development Block grants in 2017 to, for example, "provide decent housing and a suitable living environment, and to expand economic opportunities, principally for low- and moderate-income persons."[19] Green Bay must develop a consolidated plan for development but, in recent years, this plan has not specifically focused on addressing chronic homelessness. Brown County could work with the city to tackle the issue of chronic homeless or housing for persons with addiction or mental illness.

ADDITIONAL GRANTS AND FUNDING OPPORTUNITIES

Funding may be available for specific purposes. An example of this is the WI Department of Justice grants for Treatment Alternatives Diversion and Enhancement. Six million dollars will be awarded to counties in Wisconsin to fund projects

[18] "Home Investment Partnerships Program," *U.S. Department of Housing and Urban Development,* accessed August 7, 2017, https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/programs/home/.

[19] "Green Bay, WI," *U.S. Department of Housing and Urban Development,* accessed August 8, 2017, https://www.hudexchange.info/grantees/green-bay-wi/?program=2.

related to treatment courts based on a competitive process. Applications are typically due in the summer, and a 25% local cash match is required for all projects. Three categories of funding include planning/implementation, implementation, and enhancement. Proposals should focus on evidence-based strategies to improve program effectiveness. Brown County should explore the possibility of including some of the costs of providing transitional housing programs for treatment court consumers under this grant.

Brown County has an opportunity to partner with other nonprofit organizations to seek significant private funding for housing and homelessness-related projects. The U.S. Venture Open Fund for Basic Needs is a special fund dedicated to addressing the causes of poverty, developing solutions to move people from poverty, and to directly assist individuals who struggle with meeting basic needs, including the low-income elderly or significantly disabled. Locally, the Greater Green Bay Community Foundation (GGBCF) administers the program. Collaborative grants of up to $25,000 fund planning activities while implementation grants can request up to $300,000 over three years. Foundation staff indicated that a collaborative project with involvement by Brown County partners would be viewed positively by this funder.

SUPPLEMENTARY ALTERNATIVES

In addition to policy options that directly address the shortage of affordable, safe and stable housing units in Brown County and new or expanded sources of funding, there are other alternatives available to the County that could improve the status quo. Stated another way, they do not directly add or pay for existing services, but their impact could be important, nonetheless. These alternatives could be adopted and implemented on their own, or they could supplement additional, larger options similar to those discussed above. Regardless, the options generally require limited to no additional costs for the County or taxpayers. The first alternative highlights the importance of government and community support. The second addresses the potential need to expand available information on homelessness services in the County, and the third involves the development of a comprehensive homelessness plan.

GOVERNMENT AND COMMUNITY SUPPORT

Beyond the need for more available housing units, one of the most consistent themes that emerged from interviews with community stakeholders is the need for stronger, more public support for homelessness initiatives from Brown County government and an appeal for broad, comprehensive community support and understanding. These individuals indicated a general lack of concern for homelessness among Brown County residents or a belief that it is not a problem. According to data collected for the 2016 Brown County LIFE Study, nearly 75% of surveyed Brown County residents indicated the County was fair, good, or excellent as a place where people with low incomes can meet their basic needs for things such as food and housing.[20] Additionally, roughly 22% of community leaders placed a high priority on expanding housing opportunities for low income residents—one of the lowest priorities among those reported. In short, most members of the community believe enough is being done to address homelessness and there appears to be little support to do more.

According to those interviewed for this analysis, clear and public support from Brown County government would improve public awareness of the problem and potentially stimulate additional philanthropic support from the community. Efforts to expand public and community support could include a multitude of strategies. For example, the County could work with local nonprofits to expand and highlight existing Brown County Hunger and Homeless Awareness Week events in

[20] UW-Green Bay Center for Public Affairs and St. Norbert College Strategic Research Institute, "LIFE Study," *The Greater Green Bay Community Foundation,* accessed August 8, 2017, http://www.greatergbc.org/media/16805/LIFE%20Study%20Full%20Report.pdf.

November. Another possible option could include a County-community partnership to develop an annual homeless summit to address needs and potential solutions. A case from San Bernardino is highlighted below. Regardless of the strategy, community stakeholders agree that additional, highly visible County leadership on the issue would be a low-cost, but highly valuable strategy to further addresses homelessness as well as safe and stable housing.

EXHIBIT 5. PUBLIC AND COMMUNITY SUPPORT
ANNUAL HOMELESS SUMMIT, SAN BERNARDINO COUNTY, CA

Description: On November 9, 2016 the San Bernardino County Homeless Partnership (SBCHP) hosted its 10th Annual Homeless Summit. During the one-day event, roughly 300 people representing a wide spectrum of community stakeholders met to discuss the current state of homelessness in the County, best practices, and new approaches to the problem. Guest speakers included nationally recognized experts on homelessness and safe and stable housing as well as several County supervisors. Topics ranged from causes of homelessness and coordinated entry workflow to supportive housing models. The annual event is free of charge for attendees.

All of the presentations from the summit are available online, at the San Bernardino County website. The presentations include PowerPoint presentations, videos, handouts, infographics, and links to supplementary information. Additionally, the website includes indicators of potential homelessness from each municipality located within the County. Examples include basic demographics, housing supply, affordability, health, and welfare benefits received by residents.

The County (i.e., Office of Homeless Services) has played a significant and clear leadership role in the SBCHP, annual summit, and the management of data and information online. In addition to these efforts, San Bernardino County has been instrumental in the development of long-term planning documents, the implementation of annual point-in-time counts, and the coordination of additional homelessness partnerships. In short, bringing partners to the table cultivates an environment of cooperation and collaboration throughout the community.

Funding: Not availale at this time.

Partners: Community stakeholders, including state and local governments, nonprofits, businesses, educators, faith-based organizations.

Effectiveness: Approximately 300 people attended the 2016 Annual Homeless Summit.

Why it would work in Brown County: What can Brown County do as a county that no one else can do? It can be a pioneer by bringing decisionmakers and leaders from all sectors together to collaborate and engage and inform the community about homelessness. A similar event may be well received in Brown County. According to the 2016 LIFE Study, 39% of respondents did not feel that they could have an impact on the decisions of community leaders.

Additional Information:

http://wp.sbcounty.gov/dbh/sbchp/community-projects/annual-homeless-summit/

http://www.greatergbc.org/media/16805/LIFE%20Study%20Full%20Report.pdf

PUBLIC INFORMATION AND COUNTY WEBSITE IMPROVEMENTS

For those in need of safe and stable housing in Brown County, there are various sources from which they can receive information and resources. Initial contact points could include, for example, the Brown County Homeless & Housing Coalition (BCHHC), Brown County United Way 2-1-1, Family Services Crisis Center, or any of the shelters located in the County. The BCHHC, in particular, provides information and links for different types of housing needs (e.g., transitional, permanent).

In other communities, county governments also play a significant role in the effort to disseminate information about homelessness and safe and stable housing. Expanding the amount and type of information on the County website would be one of the most straightforward and cost-effective strategies. For communities that have already adopted this strategy, robust websites essentially serve as a centralized location for housing services available in the County, whether through nonprofit providers, the County, or municipalities. The websites are easy to navigate, provide information on specific needs and, in some cases, present the information using language that conveys understanding and compassion. In other cases, the websites of community partnerships, coalitions, and councils are essentially built into the County website.

Following this strategy, Brown County could expand its current website to directly address homelessness and include strong support for reducing homelessness in the community. A portion of the website could be dedicated to providing information for those in need of housing services. Additional, specific sections could be added to address different populations such as veterans, those who are being released from jail, and those with AODA or mental health barriers. Beyond the cost of initially creating the web pages and collecting information, the ongoing cost to the County would be relatively small. Two cases are presented below. The case from Wake County, NC addresses homelessness and housing specifically, while the Franklin County, OH case addresses housing from the perspective of a specific group—those transitioning back into the community from correctional or rehabilitative institutions.

COMPREHENSIVE HOMELESSNESS PLAN

Homelessness and the need to expand safe and stable housing in Brown County has received considerable attention from various stakeholders that include nonprofit service providers, foundations, and public agencies. The majority of those interviewed for this analysis could easily describe a multitude of specific efforts made to improve and expand the overall system of care over the last several years. To continue this momentum, Brown County and area nonprofits have the potential to benefit from a more detailed, comprehensive plan to address homelessness and safe and stable housing. Long-term planning is familiar to many government and public agencies, as 10-year capital improvement plans are a common method of addressing long-term capital needs, for example. A similar approach to addressing housing needs in Brown County could be developed with assistance from existing community partners and providers.

EXHIBIT 6. PUBLIC INFORMATION AND COUNTY WEBSITE IMPROVEMENTS
CENTRALIZED RESOURCES, WAKE COUNTY, NC

Description: Located under its Department of Human Services, Wake County provides a centralize location for homelessness and housing resources in the county. The website includes information, contact methods, and links to services such as supportive housing, rental assistance, homeless services, and affordable housing. Although a primary focus is placed on the services offered by the county specifically, additional links are provided for federal state, municipal and nonprofit organizations that provide related services.

Another unique aspect of the Wake County website is the language it uses to describe homelessness in the community and the efforts currently underway to address it. The description acknowledges homelessness as a problem in the community and the many factors that can contribute to the need for safe and stable housing. For example, the description includes the following:

"Homelessness is a sad reality for some citizens. Men, women, families and youth experience homelessness for a variety of reasons, such as lack of affordable housing, low-paying jobs, substance and alcohol abuse, mental illness and family conflict. Criminal records, bad credit, poor employment histories and deficient independent living skills are additional causes...A concentrated effort is under way to solve the problem of homelessness in Wake County. After many years of discussion and growing frustration with [previous approaches] ...this comprehensive plan is now being implemented across the community."

Funding: Compared with other alternatives, a webpage renovation is a relatively inexpensive one time cost.

Partners: N/A

Effectiveness: Addressing homelessness on the Brown County Human Services web page is a cost effective way to consolidate and disseminate information to consumers. A stakeholder interviewed for this study described Brown County as "resource rich," but lamented at the lack of coordination of services. An updated webpage addresses this concern.

Why it would work in Brown County: Currently, Brown County's website lacks information pertaining to homelessness and homelessness specific resources.

Additional Information:
http://www.wakegov.com/humanservices/housing/services/Pages/homelessness.aspx

Several hundred municipalities and counties across the United States have developed multi-year plans to address homelessness and broader housing concerns. Examples include Washington County, OR, Middlesex County, NJ, Orange County, CA, and the city of Portland, OR. Generally, these plans include similar components such as guiding principles, a discussion of existing conditions and costs, and a general plan with multiple strategies. To ensure accountability, plans generally assign specific roles to community stakeholders, including public agencies and NPOs, to ensure proper implementation. Some communities also develop annual reports that detail progress, trends, updated statistics, and challenges. In most cases, county government takes a leading role in the development and implementation of the plan, which is often included on the county website.

EXHIBIT 8. COMPREHENSIVE HOMELESS PLAN
10 YEAR PLAN TO END HOMELESSNESS, ARLINGTON, VA

Description: Now in its ninth year, Arlington County launched its 10 Year Plan to End Homelessness in 2008. Developed by over 100 community stakeholders—more than half of the planning committee consisted of County employees—the goal of the plan was to effectively end homelessness in Arlington County. While it covers a multitude of services often needed by homeless populations (e.g., supportive services, recovery assistance, mental health care, education, prevention, and employment), the first goal of the plan was to address affordable housing. Of the 24 action steps recommended to achieve this goal, examples include increasing the supply of permanent supportive housing units, increasing the number of slots available in the existing Transitional Housing Program, and improving rapid re-housing initiatives. For nearly all of these steps, the Arlington County Department of Human Services is assigned a key role.

A unique and important feature of the homelessness and housing plan in Arlington County is an annual progress report that highlights data, trends, successes, and challenges. In particular, the report details the percentage of individuals that have left shelters to live in permanent or stable housing. Since 2013, the most notable increases have occurred among those coming from domestic violence and individual shelters. The number of people served with permanent supportive housing and rapid rehousing also has increased dramatically. Overall, without the initial 10 year plan and subsequent annual reports, the ability to track, use, and present this type of data likely would be much more difficult.

Funding: The committees that were formed to enact the 10 year plan "work in concert to ensure that available federal, state, and local resources are used strategically to meet the needs of Arlington homeless households."

Partners: Five committees, comprised of both County employees and continuum of care providers, support the implementation of the 10 year plan to end homelessness. As a whole, Arlington County Department of Human Services (DHS) works cohesively with the local CoC. For example, in 2016, Arlington County DHS submitted an application for HUD funding on behalf of the CoC.

Effectiveness: As part of its 10 year plan to end homelessness, Arlington succeeded in housing 100 of its most vulnerable homeless persons.

Why it would work in Brown County: Arlington's plan corroborates several themes Brown County stakeholders consistently highlighted as top priorites. First, it coordinates and cooperates with the local CoC. Second, through committees and collaboration, it brings together decisionmakers from various sectors. Last, the plan puts an emphasis on increasing the number of housing units available.

Additional Information:

https://publicassistance.arlingtonva.us/10yp/

https://publicassistance.arlingtonva.us/10yp/100-homes/

INCREASE COORDINATION WITH COMMUNITY STAKEHOLDERS

The County may have an opportunity to increase effectiveness and efficiency both internally and externally. Based on interviews with numerous internal County personnel, there may be ways to improve the process of moving consumers out of jail and into safe and stable housing, treatment court, or other treatment. Moreover, others stated a desire to have more formal awareness of their Brown County partner program roles and functions, housing resources and programs in

the community, and how they might collaborate. The proposed "additional housing" alternatives in this report might facilitate increased coordination.

Regarding external collaboration, Brown County may benefit from an expanded role with the Brown County Homeless and Housing Coalition, working as a key stakeholder to support the role of the BCHHC. In doing so, Brown County will have the opportunity to catalyze local partners to apply for funding and address the issue of homelessness in the area in a more coordinated and intentional way, thus benefiting Brown County consumers directly and reducing the need for inpatient services and jail. Several individuals we interviewed from outside the area observed that Brown County is known for having a fragmented approach to housing and homelessness, a perception also acknowledged by local interviewees. Often, two or three local organizations collaborate at a time. Occasionally, local agencies compete for the same dollars. If Brown County participated meaningfully in joint planning, encouraged the involvement of other housing agency decision-makers, and partnered with the BCHHC in meaningful planning, the community has a whole would benefit.

The County may want to examine the activities of West Central CoC led by WestCAP. Chippewa County Human Services staff participate regularly and have a coordinated approach to applying for grants. According to an individual we interviewed, "everyone is staying in their lanes but working together." Moreover, the group brought together several sources of public and private funding for a staff position to manage the point of entry system. They have plans to hire a housing navigator position to work as an advocate with landlords and speed up the process of determining eligibility and moving people into programs. The BCHHC has an opportunity to replicate that process or adapt it locally, or pursue other community-benefiting projects. Brown County's involvement could catalyze this coordinated planning.

CONCLUSION

The root causes of homelessness and unsafe and unstable living conditions, while complex, are not insurmountable. Other communities have taken substantive measures to address both the housing needs and other inherent obstacles that prevent their community members from obtaining safe and stable housing. In fact, there is a myriad of potential policy options which to choose.

By examining the needs of consumers and actions taken in other communities, several feasible solutions emerged and should be considered by county leaders to support consumers. A common theme, reiterated by a vast majority of stakeholders, is that consumers who have been diagnosed with a mental illness need the most assistance. Asking this population, as well as those with AODA barriers, to meet a series of requirements prior to obtaining safe and stable housing is generally ineffective. Implementing an affordable, supportive housing model that provides a living environment conducive to recovery, while simultaneously connecting consumers to the services they need, has been shown to reduce chronic homelessness as well as the cost to service providers and taxpayers.

Tried and true funding sources exist to finance these alternatives, but without proposals that blend public and private financing, these revenue sources will continue to bypass the Brown County community. Innovative new approaches and the possibilities created by the promise of unrestricted dollars have potential, but the community must work together to plan and create options for affordable housing for its people. The community also must be willing the acknowledge the problem of homelessness to a greater degree and be willing to commit additional efforts to improving the lives of these individuals. With the credibility to influence other organizations and, in general, raise public awareness about homelessness, Brown County is in a unique position to stimulate this local action. The County has an opportunity to raise its profile and collaborate to a greater extent with other public and private funders, partners, and advocates.

APPENDICES

APPENDIX A: LIST OF ORGANIZATIONS WHOSE REPRESENTATIVES PARTICIPATED IN INTERVIEWS

- Brown County Community Treatment Center Staff
- Brown County Homeless and Housing Coalition, Inc. Board
- Brown County Housing Authority Staff
- Brown County Jail
- Brown County Treatment Court Staff
- Brown County Treatment Court Judges
- Ecumenical Partnership for Housing
- Family Services of Northeast Wisconsin, Inc.
- Greater Green Bay Community Foundation, Inc.
- Green Bay Housing Authority Staff
- Housing Partnership of the Fox Cities
- NeighborWorks, Inc.
- New Community Shelter, Inc.
- Newcap, Inc.
- Green Bay Police Department
- Green Bay Department of Community and Economic Development
- Oxford House, Inc.
- WestCAP, Inc.
- Wisconsin Balance of State Continuum of Care
- Wisconsin Department of Corrections

APPENDIX B: GLOSSARY

Continuum of Care (Coc): The Continuum of Care (CoC) Program is designed to promote communitywide commitment to the goal of ending homelessness; provide funding for efforts by nonprofit providers, and State and local governments to quickly rehouse homeless individuals and families while minimizing the trauma and dislocation caused to homeless individuals, families, and communities by homelessness; promote access to and effect utilization of mainstream programs by homeless individuals and families; and optimize self-sufficiency among individuals and families.

Homeless: defined by the U.S. Department of Housing and Urban Development, an individual is considered homeless when an (1) individual and families who lack a fixed, regular, and adequate nighttime residence and includes a subset for an individual who resided in an emergency shelter or a place not meant for human habitation and who is exiting an institution where he or she temporarily resided; (2) individuals and families who will imminently lose their primary nighttime residence; (3) unaccompanied youth and families with children and youth who are defined as homeless under other federal statutes who do not otherwise qualify as homeless under this definition; and (4) individuals and families who are fleeing, or are attempting to flee, domestic violence, dating violence, sexual assault, stalking, or other dangerous or life-threatening conditions that relate to violence against the individual or a family member.

Housing First: an approach to quickly and successfully connect individuals and families experiencing homelessness to permanent housing without preconditions and barriers to entry, such as sobriety, treatment or service participation requirements. Supportive services are offered to maximize housing stability and prevent returns to homelessness as opposed to addressing predetermined treatment goals prior to permanent housing entry.

Permanent Supportive Housing (PSH): for persons with disabilities and rapid re-housing. Permanent supportive housing is permanent housing with indefinite leasing or rental assistance paired with supportive services to assist homeless persons with a disability or families with an adult or child member with a disability achieve housing stability.

Rapid re-housing (RRH): emphasizes housing search and relocation services and short- and medium-term rental assistance to move homeless persons and families (with or without a disability) as rapidly as possible into permanent housing.

Supplemental Security Income (SSI): a Federal income supplement program designed to help aged, blind, and disabled people pay for basic needs such as food, clothing, and shelter.

Safe and Stable Housing: a term used to describe housing that is affordable, and not overcrowded and doubled up with friends and family members.

Transitional housing (TH): is designed to provide homeless individuals and families with the interim stability and support to successfully move to and maintain permanent housing. Transitional housing may be used to cover the costs of up to 24 months of housing with accompanying supportive services. Program participants must have a lease (or sublease) or occupancy agreement in place when residing in transitional housing.

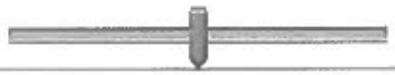
Wisconsin Balance of State Continuum of Care (WIBOSCOC): a 501(c)3 non-profit organization serving all the counties in Wisconsin, except Dane, Milwaukee, and Racine. Its purpose includes (but is not limited to):

- Ensuring the efficient and effective delivery of housing and supportive services to individuals and families experiencing homelessness or at risk of homelessness;
- Promoting community-wide commitment to the goal of ending homelessness;
- Providing funding for efforts by nonprofit providers, States, and local governments to re-house individuals and families experiencing homelessness rapidly;
- Promoting access to and effective use of mainstream programs by individuals and families experiencing homelessness

APPENDIX C: SURVEY OF BROWN COUNTY CASE MANAGERS

This survey is being conducted by the UW-Green Bay Center for Public Affairs on behalf of the Brown County Safe and Stable Housing assessment. Your answers are anonymous and will be combined with others to present a broad estimate of needs of Brown County consumers who experience housing challenges.

1. Which position do you hold?
- Treatment court case manager or supervisor
- Treatment court judge
- Community Treatment Center case manager or supervisor
- Probation and parole officer
- Jail liaison
- Police Officer
- Other _____
2. What is the current number of individuals on your active caseload?
3. Approximately how many of individuals on your active caseload are served in the following programs? (one person may be in more than one program)

Treatment court (any)	
Brown Co Community Treatment Center Outpatient Services	
Probation/Parole	
Other	

4. Approximately how many of individuals on your active caseload experience the following needs (one person may have several needs)

Criminal record	
Drug or alcohol addiction	
Mental illness	
Current/potential for unstable or very low income	
Homeless, unstable, or unsafe housing situation	

5.How important/unimportant would some of the following program options be for those individuals that you serve?

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
Group living situation	•	•	•	•	•
Weekly or daily case management	•	•	•	•	•
Bi-weekly or monthly case management	•	•	•	•	•
Employment coaching or advocacy	•	•	•	•	•
Short-term treatment for mental or addiction concerns	•	•	•	•	•
Long-term treatment for mental or addiction concerns	•	•	•	•	•
Ongoing financial assistance for rent or other housing-related need	•	•	•	•	•
Other	•	•	•	•	•

6. What is the one most important change you'd like to see in our community that would help your consumers transition to and remain in safe and stable housing situations?

Critical Reviews of Health Canada Study

Comments to the Editor
JASA (Journal of the Acoustical Society of America)
May 10, 2016

Subject: Concerns regarding Health Canada's Community Noise Health Study (CNHS) design and conclusions in March 2016 Special Edition of JASA

Dear Editor,

We the undersigned represent a group of physicians, acousticians, and an audiologist with expertise in wind turbine noise and adverse effects. We have reviewed with interest the six papers published in the March 2016 issue of the Journal of the Acoustical Society of America by Dr. David Michaud and members of his research team. Each paper reflects a tangential analysis of data collected as part of an effort by Health Canada (HC) to investigate adverse health effects related to living in proximity to industrial wind turbines (IWTs).

We focus on the data and analysis presented in the paper entitled: *"Exposure to wind turbine noise: Perceptual responses and reported health effects."* [1] We have also reviewed materials presented or published by Michaud et al in other venues, as well as publicly available information relating to the study design appearing on various Canadian Government web sites.

We note that the study, by design, excluded children and teens, those aged above 79, and, in its studied locations, some 434 buildings that were deemed "out of scope" by Statistics Canada. It is stated that some 96 of these homes were inhabited by residents over 79 years old, 138 were unoccupied, and 8 had been demolished. [2]

Given the numerous media and anecdotal reports of home abandonments in Ontario related to inability to tolerate residing in proximity to IWTs, [3] the failure to survey the owners of the unoccupied or demolished homes is a significant omission, as is the exclusion of the children, teens, and the elderly from consideration. These are recognized as "vulnerable groups" by the various health professions, as well as the World Health Organization. Together they comprise approximately 25-30% of the general population in Western nations. Including the vulnerable groups would be essential if the purpose of the HC CNHS was to provide conclusions meaningful for and applicable to a general population.

Despite the medically disqualifying exclusion of the most noise-vulnerable portion of the population from the study, we were still able to discern adverse effects among the people who were included as respondents for the study, and these effects seem to demonstrate a dose (distance)-response relationship.

We examined several health indicator rates for the HC study respondents presented in Table 5 of the JASA paper. [1] We graphed only the groups from 25-30 dBA through 40-46 dBA alongside known prevalence rates of these same health conditions in the general population.

Excluding the abnormally high prevalence rates for the least-exposed group (<25 dBA) from analysis reveals a clear trend. As the modeled sound level increases, (presumably as distance between IWTs and homes decreases), the prevalence rates increase. The unusually high prevalence rates for the least-exposed group may have obscured the trends present when comparing the remaining groups in the published paper.

In the low IWT noise exposure group (25 to 30 dBA), the prevalence of migraines (+10% above general population), tinnitus (+10% above general population), and dizziness (+2.5% above general population)

is higher for the Health Canada study respondents than for the general population. The rate increases in the high IWT noise exposure group (40-46 dBA) to +13% (migraines), +15% (tinnitus), and +10% (dizziness) over the general population.

The JASA paper's conclusion that wind turbine noise is not associated with adverse health effects below sound levels of 46 dBA appears to be contradicted by the data for these important adverse effects. Unfortunately, we can only speculate what those graphs would have shown had the vulnerable groups been included.

One key question is: why is the prevalence of adverse symptoms for migraines and tinnitus for the lower noise group (25-30 dBA) roughly twice the prevalence rate in the general population? Can it be that the population tested was inordinately and disproportionately in poor health? Given the rather large sample of over 1200 individuals, and the exclusion of the "elderly," who are more likely to experience health problems, this seems unlikely. However, if the study respondents were in poorer health than the general population, and the researchers simply used convenience sampling, the results would have to be considered unique to this group of respondents and not generalizable to other populations, even setting aside the issue of the exclusion of key vulnerable groups.

In summary, the exclusion of vulnerable groups, the failure to appreciate that the prevalence of certain adverse effects in their respondents were occurring at rates significantly higher than in the general population, and the increasing prevalence of selected symptoms as distances between homes and IWTs are reduced, renders the Heath Canada study's conclusions unsuitable for drawing conclusions regarding siting distances, and may explain why the conclusions are at odds with other studies of IWTs and community noise. [4,5,6] They are also contrary to the codified understanding of the medical and acoustical community that nighttime noise levels above 40 dBA will adversely affect health in a significant minority of people (WHO, 2009). [7]

We additionally have some concerns regarding the use of simple modeled dBA sound levels in lieu of detailed measurements. Models are only useful if accurate and the value being produced by the model is of medical relevance. Modeling excludes from consideration certain factors that may increase real-world sound levels over those being modeled, as well as qualitative aspects of IWT noise that may have physiological implications. These issues may contribute to the higher prevalence (compared to the general population) of the examined adverse effects in the lower-modeled noise levels.

HC researchers have stated in other public forums [2] that their results were specific to the sites examined, may not be generalized to other locations, and do not support conclusions about causality. However, this was not disclosed in the JASA paper under discussion. In the paper, the authors conclude: "Beyond annoyance, results do not support an association between exposure to wind turbine noise up to 46 dBA and the evaluated health-related endpoints." [1]

Given the above, no critical siting decisions can ethically be based on the HC study as currently reported.

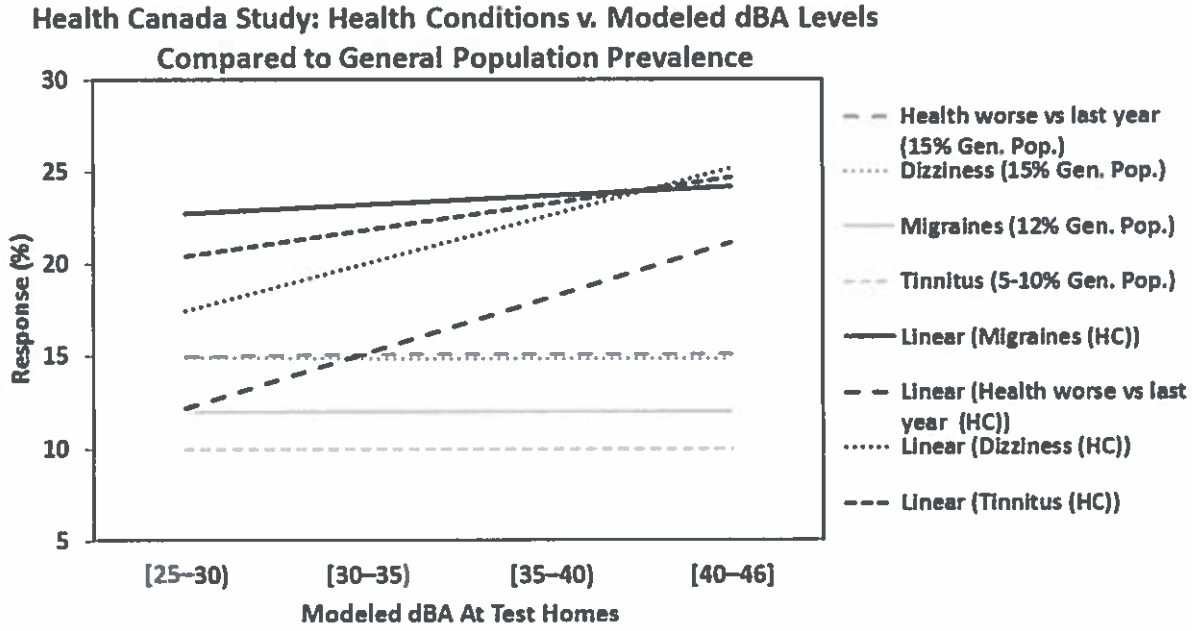
We look forward to the full, accessible release of all raw respondent and site data, including specific turbine locations and sizes.

The following support the statements above:

Stephen Ambrose, Bd. Cert. INCE, ASA
Steven Cooper, ASA, AAS, INCE
Chris Hanning, BSc, MB, BS, MRCS, LRCP, FRCA, MD
Richard James, INCE

Roy Jeffery, MD, CCFP, FCFP
Sarah Laurie, BMBS
RY McMurtry, CM, MD, FRCS, FACS
Michael A. Nissenbaum, MD, FRCP(C)
Jerry Punch, PhD, CCC-A, ASA
Robert Rand, INCE, ASA

Figure



HC Data Source:
"Exposure to wind turbine noise: Perceptual responses and reported heath effects," TABLE V: Sample profile health conditions, Variables"Migraines," "Dizziness," "Tinnitus,"and "Health worse vs last year" versus modeled dBA sound level, D. S. Michaud et al, Health Canada, Journal Acoustical Society of America (JASA) 139 (3), March 2016.
General Population Prevalence:
Self Reported Health: Canadian Journal Of Public Health, Volume 98, No. 2, P. 154, K. Wilson et al, Table III
Dizziness: Dizziness-and-Balance.com
Migraines: Migraine Research Foundation
Tinnitus: Hearing Health Foundation

10 May 2016. RJames, INCE, RRand, INCE, ASA

References

1. Michaud, D. S., Feder, K., Keith, S. E., Voicescu, S. A., Marro, L., Than, J. et al. (2016). "*Exposure to wind turbine noise: Perceptual responses and reported health effects*," J. Acoust. Soc. Am., 139(3), 1443-1454.
2. Michaud, D. S. (2015). "*Self-reported and Objectively Measured Outcomes Assessed in the Health Canada Wind Turbine Noise and Health Study: Results Support an Increase in Community Annoyance*," Proceedings InterNoise 2015. San Francisco.
3. Jeffery, R. D., Krogh, C. M. E., and Horner, B. (2014). "*Industrial wind turbines and adverse health effects*," Can. J. Rural Med. 19(1), 21-26.

4. Pedersen, E., and Persson Waye, K. (2007). *"Wind turbine noise, annoyance and self-reported health and well-being in different living environments,"* Occup. Environ. Med. 64, 480-486.
5. Nissenbaum, M. A., Aramini, J.J., and Hanning, C. D. (September-October 2012). *"Effects of industrial wind turbine noise on sleep and health,"* Noise & Health, 14, 237-243.
6. Berglund, B, Lindvall, T., and Schwela, D.H. (1999). *"Guidelines for Community Noise."* Geneva, Switzerland: World Health Organization.
7. World Health Organization. (2009). *"Night Noise Guidelines for Europe."* Copenhagen, Denmark.

National Wind Watch
December 6, 2012
Blogs, Canada

Health Canada sought private meeting with CanWEA before announcing health study

December 4, 2012, Ontario Wind Resistance

Federal Access to Information documents reveal that on May 3, 2012 members of Health Canada's Wind Turbine Noise and Health Study contacted the Canadian Wind Energy Association (CanWEA) to solicit a meeting and discuss the yet to be announced Health Canada led study investigating the health impacts of wind turbines.

Health Canada's initiative to seek a meeting with CanWEA occurred over two months before the Canadian public were advised on July 10, 2012 of Health Canada's Wind Turbine Noise and Health Study.

Why would members of the Health Canada's Wind Turbine Noise and Health Study seek a meeting with CanWEA?
CanWEA is a trade association representing the wind energy industry.
CanWEA is lobbyist organization which advocates to remove barriers to wind energy development across Canada.
CanWEA is a federally registered lobby organization.

Members of Health Canada's Wind Turbine Noise and Health Study initiated discussions about their yet to be announced study with an industry trade association and registered lobbyist.

Has Health Canada sought similar meetings with Canadians who are reporting negative health impacts from exposure to wind turbines?

Has Health Canada sought similar meetings with Canadians who have abandoned their homes due to exposure to wind turbines?

Has Health Canada sought similar meetings with Canadians who have reached financial agreements with wind energy developers?

What has Health Canada discussed in private with CanWEA?

Who is Health Canada trying to protect: the health of Canadians or the health of the wind industry?

Please send message to your MP and MPP's and council. Important; Cc local media.
Industrial wind turbines should be shut down until a public inquiry/investigation is completed!

info@ombudsman.on.ca
The Honourable Leona Aglukkaq
Minister of Health
minister_ministre@hc-sc.gc.ca
The Right Honourable Stephen Harper
Prime Minister of Canada

pm@pm.gc.ca

For your MP, MPP and local media addresses, see: http://ontario-wind-resistance.org/mpp-contact-information/

[Transcribed from documents released under the Access to Information Act, by courtesy of Ontario Wind Resistance [1]]
From: Tara Bower [mailto:tara.bower@hc-sc.oc.ca]
Sent: Thursday, May 03, 2012, 10:07 AM
To: *****
Cc: David Michaud
Subject: Meeting with HC

Hello *****

I hope all is well with you.

Dr. David Michaud and I would like to meet with you/CanwEA to discuss a forthcoming HC-led study investigating health impacts and exposure to wind turbine noise as well as other HC efforts in this area. We're proposing next Friday May 11th at your Ottawa office. If this date works for you, can you please confirm a 1 hour timeslot between 9 and 2, as well as provide the location of your office ?

Sincerely,
Tara

Tara Bower, M.SC.
Director/Directrice – Office of Science Policy, Liaison and Coordination/Bureau des politques scientifiques, de la liaison et de la coordination
Environmental and Radiation Health Sciences Directorate (ERHSD)/Direction des sciences de la santé environnementale et de radioprotection (DSSER)
HECSB/DGSESC – Health Canada/Santé Canada
269 Laurier Ave., West, 8th Floor, AL. 49080
Ottawa ON, K1A 0K9
Tel: (613) 957-6371

From: *****@canwea.ca
To: "tara.bower@hc-sc.gc.ca"
Cc: "David.Michaud@hc.sc.gc.ca" , "*****" <*****@canwea.ca>, "*****" <*****@canwea.ca>
Date: 2012-05-03 10:27 AM
Subject: Re: Meeting with HC

Hi Tara –

Thanks for reaching out to us.

Unfortunately the 11th won't work for us, as both myself and the other CanWEA staff cc'd on this note are out of town on that day. How does the 15th work for you and David as an alternative date?

Kind Regards,
******

From: Tara Bower [mailto:tara.bower@hc-sc.oc.ca]
Sent: Thursday, May 03, 2012 10:31 AM
To: ******
Cc: ******; 'David.Michaud@hc-sc-gc.ca' ; *****
Subject: Re: Meeting with HC

The morning of the 15th works for us. Please confirm a time and location. I've indicated an hour but if more time is needed we can accommodate this as well.

Thanks *****

Regards,
Tara.

Tara Bower, M.Sc. [etc.]
Director/Directrice-Office of Science Policy, Liaison and Coordination

URL to article: **https://www.wind-watch.org/news/2012/12/06/health-canada-sought-private-meeting-with-canwea-before-announcing-health-study/**

URLs in this post:
[1] Ontario Wind Resistance: **http://ontario-wind-resistance.org/2012/12/04/letter-shows-health-canada-seeks-meeting-with-canwea-on-study-why/**

Industry Led – Government Supported
Following Canada's Wind Technology Roadmap
and
Health Canada's Wind Turbine Noise and Health Study

Carmen Krogh, BScPharm
Brett Horner, BA CMA

November 10, 2014

On November 6 2014 Health Canada posted on their website *"Wind Turbine Noise and Health Study: Summary of Results"*.[1]

We have been contacted by individuals from around the world who have expressed concern over content and the quality of this Health Canada web posting.

"Wind Turbine Noise and Health Study: Summary of Results" states:

> "WTN annoyance was found to be statistically related to several self-reporting health effects including, but not limited to, blood pressure, migraines, tinnitus, dizziness, scores on the PSQI, and perceived stress" as well as related to "measured hair cortisol, systolic and diastolic blood pressure."

These findings are additional evidence which support the health effects "conclusively demonstrated from exposure to wind turbine noise" identified by Health Canada and disclosed by the Honourable Rona Ambrose in a June 30, 2009 letter.

In the upcoming weeks and months, it is our intention to release a series of commentaries and disclose information on the *"Wind Turbine Noise and Health Study: Summary of Results"* and the Health Canada Wind Turbine Noise and Health Study.

In the meantime we have compiled the following relevant information to help inform those interested in Health Canada's Wind Turbine Noise and Health Study.

Personal disclosure: We declare no potential conflicts of interest and have received no financial support with respect to the research and authorship of this commentary.

This commentary is public and may be shared.

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About Our References

This commentary provides references to support statements contained within.

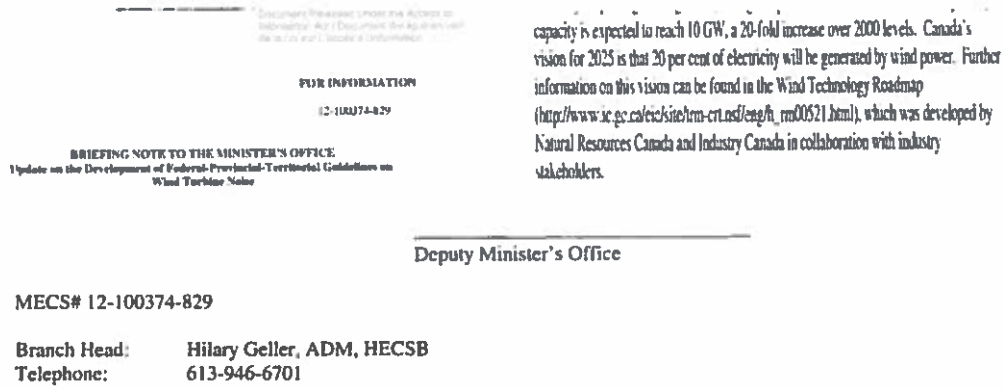
References provided include:

- Peer reviewed references;
- Non peer reviewed references including grey literature;
- Statements and references authored by Health Canada and/or Health Canada representatives;
- References prepared for, or by, the Canadian Wind Energy Association and/or the American Wind Energy Association;
- References authored by consultants for members of the wind energy industry;
- Government and other documents obtained through Federal Access to Information and Privacy (ATIP) requests; and
- Other references.

Following Canada's "Industry Led – Government Supported" Road Map

Over the past decade the Government of Canada has encouraged and provided substantial support and funding to members of the wind energy industry. This support has included, but is not limited to, funds for annual wind energy industry trade shows, promotional fact sheets, production subsidies.[2,3,4,5,6,7,8,9]

A 2012 Assistant Deputy Minister briefing note to the Minister of Health's Office states "Canada's vision for 2025 is that 20 per cent of electricity will be generated by wind power…"[10] The briefing note cites the Wind Technology Roadmap stating it was "…was developed by Natural Resources Canada and Industry Canada in collaboration with industry stakeholders."[11]



FOR INFORMATION

12-100374-829

BRIEFING NOTE TO THE MINISTER'S OFFICE
Update on the Development of Federal-Provincial-Territorial Guidelines on Wind Turbine Noise

capacity is expected to reach 10 GW, a 20-fold increase over 2000 levels. Canada's vision for 2025 is that 20 per cent of electricity will be generated by wind power. Further information on this vision can be found in the Wind Technology Roadmap (http://www.ic.gc.ca/eic/site/trm-crt.nsf/eng/h_rm00521.html), which was developed by Natural Resources Canada and Industry Canada in collaboration with industry stakeholders.

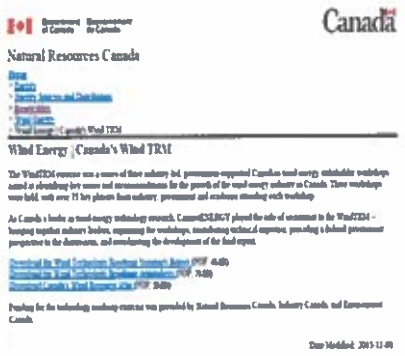
Deputy Minister's Office

MECS# 12-100374-829

Branch Head: Hilary Geller, ADM, HECSB
Telephone: 613-946-6701

Natural Resources Canada defines the Wind Energy Road Map to be an "…industry-led, government supported initiative that has developed a long-term vision for the Canadian wind energy industry and identified the major technology gaps and priorities to achieve a major increase in deployment of wind energy in Canada."[12]

The Wind Technology Road Map can be found at various Natural Resources Canada web sites.

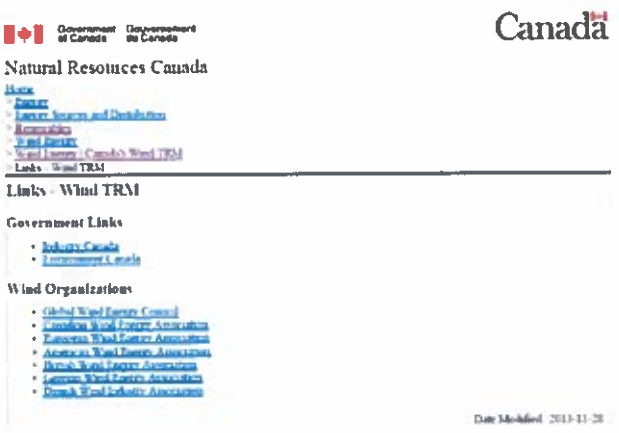


Canada

Natural Resources Canada

Wind Energy | Canada's Wind TRM

The Natural Resources Canada website also provides links to wind energy industry trade associations including the Canadian Wind Energy Association who they collaborated with to develop the Wind Energy Technology Road Map.


Government of Canada / Gouvernement du Canada

Canada

Natural Resources Canada

Home
Energy
Energy Sources and Distribution
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Wind Energy - Canada's Wind TRM
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Links - Wind TRM

Government Links

- Industry Canada
- Environment Canada

Wind Organizations

- Global Wind Energy Council
- Canadian Wind Energy Association
- European Wind Energy Association
- American Wind Energy Association
- British Wind Energy Association
- German Wind Energy Association
- Danish Wind Industry Association

Date Modified: 2013-11-28

The "industry-led, government-supported"[13] Wind Technology Road Map outlines a "… common vision where Canada becomes a global wind energy leader that meets more than 20% of its electricity needs through wind energy by 2025."[14]

The Natural Resources Canada web site provides rationale for the Wind Technology Road Map and states "Canada needs an action plan that will identify realistic pathways to the resolution of technology, markets and socioeconomic challenges."[15]

The Wind Technology Road states "Through a series of workshops, participants developed the vision, identified the barriers to achieving the vision, and articulated an action plan for overcoming those barriers."[16]

Industry, Government, and Road Map Action Items

The "industry-led, government-supported" [17] Wind Technology Road Map states "Members of the Steering Committee, government and our industry will be using this roadmap to direct the actions that are necessary for Canada to develop its vast wind resources."[18]

To achieve the Wind Technology Road Map vision the "industry-led, government-supported" [19] initiative identifies "key action items" that require collaboration between stakeholders including Government and Industry. [20]

Major action items listed in the Wind Technology Road Map "… are anticipated to cost several hundred thousand dollars each." [21]

One of the "key action items" detailed in the 2010 Wind Technology Road Map includes an action item for Government and Industry collaboration to develop and maintain government documents that address concerns raised about wind energy projects including that of noise, infrasound and other. [22]

Wind Technology Road Map

Action item	When	Who
Create a centralized repository of peer reviewed studies		
a) Develop and maintain an authoritative set of government documents, based on global literature reviews that address key concerns raised about wind energy projects (e.g., noise, infrasound, ice throw, structural failure, effects on wildlife).	6 months and continuing to the Long-term	Government, industry, NGOs and academia

Road Map Next Steps and Health Canada's Membership on the Interdepartmental Wind Technology Road Map Committee

The Natural Resources web site outlines next steps for achieving the Wind Technology Road Map vision including the creation of the Interdepartmental Wind Technology Road Map Committee.

Government of Canada / Gouvernement du Canada

Canada

Natural Resources Canada

Home
> Energy
> Energy Sources and Distribution
> Renewables
> Wind Energy
> Wind Energy | Canada's Wind TRM
> Next Steps

Next Steps

This technology road map creates a clear vision for the future. Moving forward requires the collective effort of all stakeholders.

On behalf of industry, CanWEA is facilitating the creation of an industry implementation process with the assistance of members of the Industry Steering Committee.

On behalf of the Government of Canada, Natural Resources Canada has facilitated the creation of an Interdepartmental Working Group.

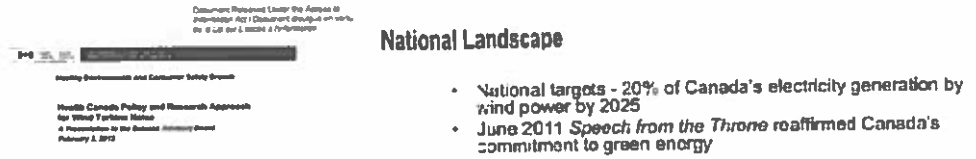
Discussions on implementation of the roadmap are underway in both groups.

For more information on the industry implementation process, please contact CanWEA.

Date Modified: 2013-11-07

Natural Resources Canada Chairs the Interdepartmental Wind Technology Road Map Committee and maintains the Office of Energy Efficiency (OEE) which is "mandated to strengthen and expand Canada's commitment to energy efficiency in order to help address the Government of Canada's policy objectives".[23]

A February 2012 Health Canada document entitled "*Health Canada Policy and Research Approach for Wind Turbine Noise*" cites the Wind Energy Technology Road Map "National targets" of 20% of Canada's electricity generation by wind power by 2025. [24]



The February 2012 "*Health Canada Policy and Research Approach for Wind Turbine Noise*" also discloses that Health Canada (HC) is a member of the Interdepartmental Wind Technology Road Map Committee.[25]

In June 2012 Health Canada announced the Wind Turbine Noise and Health Study which it stated had limitations, would be not be definitive and was designed to "inform policy"[26]

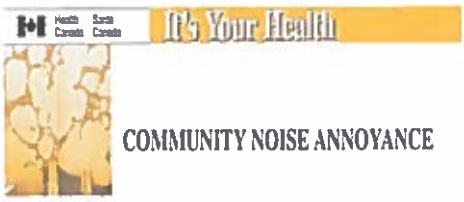
A 2013 report written by the Principal Investigator of the Wind Turbine Noise and Health Study reaffirmed the study has limitations.[27]

The Health Canada Wind Turbine and Noise Study does not make reference to helping Canadians maintain and improve their health.

The Health Canada Wind Turbine and Noise Study team includes members who are from Natural Resources Canada or have other connections to the wind energy industry.

Health Canada: Noise Annoyance is a Health Effect

Health Canada (2005)[28] and other references acknowledge that annoyance is an adverse health effect.[29,30,31,32,33,34] *Excerpt from Health Canada (2005)below:*



Health Risks of Community Noise

The most common effect of community noise is annoyance, which is considered an adverse health effect by the World Health Organization. But noise may also

The Principal Investigator of the Wind Turbine Noise and Health Study has also stated that "noise-induced annoyance is an adverse health effect".[35]

The World Health Organization (WHO) acknowledges noise induced annoyance to be a health effect[36],[37] and the results of WHO research "...confirmed, on an epidemiological level, an increased health risk from chronic noise annoyance...With this background, it is urgent that noise in residential areas is reduced to an acceptable level."[38]

In western European countries noise induced sleep disturbance and annoyance are estimated to account for 903 000 and 587 000 disability-adjusted life years respectively.[39]

Health Canada's Justification to Increase the Percentage Highly Annoyed

Some individuals exposed to wind turbines report adverse effects including annoyance, sleep disturbance, stress-related health impacts and reduced quality of life.[40] [41] [42] [43] [44] [45] [46] [47] [48] [49] [50] [51] In some cases, Canadian families have effectively abandoned their homes, been billeted by wind energy developers or negotiated financial agreements with developers.[52]

In 2009 the In a June 30 2009 letter Honourable Rona Ambrose, disclosed

> "Health Canada provides advice on the health effect of noise and low-frequency electric and magnetic fields from proposed wind turbine projects, particularly for environmental assessments done under the Canadian Environmental Assessment Act. To date, their examination of the scientific literature on wind turbine noise is that the only health effect conclusively demonstrated from exposure to wind turbine noise is an increase of self-reported general annoyance and complaints (i.e., headaches, nausea, tinnitus, vertigo)."[53]

Excerpt from the Hon. Rona Ambrose June 30, 2009 letter:

Honourable Rona Ambrose, P.C., M.P.
L'honorable Rona Ambrose, C.P., députée

Member of Parliament for Edmonton – Spruce Grove
Minister of Labour

Députée d'Edmonton – Spruce Grove
Ministre du Travail

JUL 3 0 2009

Carman Krogh Pharm

Health Canada provides advice on the health effects of noise and low-frequency electric and magnetic fields from proposed wind turbine projects, particularly for environmental assessments done under the Canadian Environmental Assessment Act. To date, their examination of the scientific literature on wind turbine noise and health is that the only health effect conclusively demonstrated from exposure to wind turbine noise is an increase in self-reported general annoyance and complaints (i.e., headaches, nausea, tinnitus, vertigo).

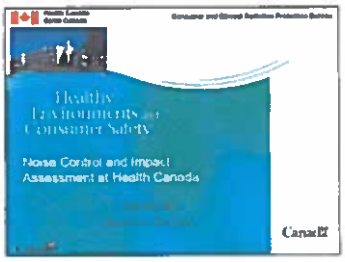
The Hon. Rona Ambrose is currently the Minister of Health.

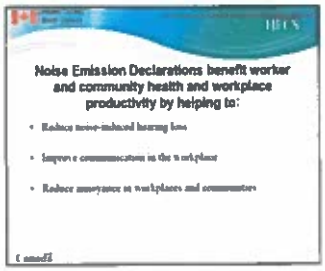
Prevention of health effects is a fundamental principle of public health policy[54] and noise management.[55]

"Health Canada is the Federal department responsible for helping Canadians maintain and improve their health, while respecting individual choices and circumstances."[56]

Specifically Health Canada (HC) states it is responsible for protecting the health and safety of Canadians against unsafe radiation emitting devices including noise from wind turbines.[57]

The 2004 Health Canada presentation below, acknowledges community health benefits from a reduction in annoyance.





The following 2010 Health Canada document is "Published by authority of the Minister of Health."[58] and states:

Useful Information for Environmental Assessments

"Health Canada considers the following noise-induced endpoints as health effects: noise-induced hearing loss, sleep disturbance, interference with speech comprehension, complaints, and change in percent highly annoyed (%HA)."[59]

It would be reasonable to expect that Health Canada would help Canadians maintain and improve their health by protecting them from wind turbine noise annoyance.

However for years now Health Canada employees including the Principal Investigator of the Wind Turbine Noise and Health Study propose/recommend wind turbine noise criteria which they predict will result in adverse health effects. (i.e. result in an increase percentage highly annoyed).[60],[61],[62]

Health Canada's "justification"[63] for their wind turbine noise criterion fails to employ critical accepted noise principles. Specifically the Health Canada authors propose a noise criterion which:

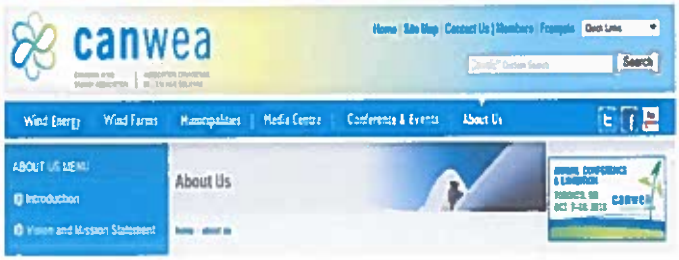
- is not based on a dose response relationship specific to wind turbines;
- does not adjust (+5dB) to reflect IWT are usually a newly created source of noise;
- does not apply adjustments for audible amplitude modulation;
- does not apply adjustments for audible low frequency noise;
- is not to be considered a strictly applied limit.
- is predicted to result in adverse health effects (i.e. an increase in percentage highly annoyed).

More recently a 2013 report written by the Principal Investigator of the Wind Turbine Noise and Health Study states that in regards to wind turbine noise "...more attention should be directed towards low frequency noise (16-160Hz), tones and amplitude modulation and how to better model these impacts, including how these change across the seasons."[64]

CanWEA, The Road Map, and Wind Turbine Noise Annoyance

The Canadian Wind Energy Association (CanWEA) is a wind industry trade association.

CanWEA is a lobbyist organization which seeks to advocate for their members and remove barriers to wind energy development across Canada.



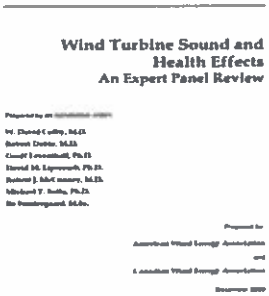
Policy Development and Advocacy

Across Canada, electricity generated from wind is already providing clean, safe and reliable power to over 1 million homes. But we have only just scratched the surface of our potential.

CanWEA's policy development and advocacy work is driven by a desire to maximize the economic, industrial and environmental benefits of wind energy in Canada. CanWEA caucuses and committees examine policy issues, and develop and advocate for key proposals to remove barriers to wind energy development across the country. Our caucuses operate federally and in provinces across the country – our voice is your voice. It's our job to make sure member concerns are heard and action plans are regularly put in motion.

CanWEA is also a member of the Wind Technology Roadmap Industry Steering Committee.[65]

In 2009, The American Wind Energy Association and The Canadian Wind Energy Association "…established a scientific advisory panel …"[66] and funded a literature review, Colby et al. (2009).



The authors of Colby et al. (2009) discuss acknowledge wind turbine symptoms and report that symptoms such as headaches, nausea, tinnitus, vertigo "… are not new and have been published previously in the context of "annoyance"…" and are the "… well-known stress effects of exposure to noise …"[67]

In 2009 the president of the Canadian Wind Energy Association stated; "… the sound of wind turbines can be annoying for some individuals and that may cause them to feel some stress etcetera."[68]

HGC Engineering is a listed member of CanWEA.[69]

HGC Engineering

2000 Argentina Road, Plaza 1, Suite 2003
Mississauga, ON
L5N 1P7
URL: www.hgcengineering.com

In December 2011 the Ontario Ministry of Environment released a report prepared by then Canadian Wind Energy Association member,[70] HGC Engineering.

HGC

LOW FREQUENCY NOISE AND INFRASOUND
ASSOCIATED WITH WIND TURBINE GENERATOR SYSTEMS
A LITERATURE REVIEW

Principal

HGC (2010) states in the conclusions:

> "The audible sound from wind turbines, at the levels experienced at typical receptor distances in Ontario, is nonetheless expected to result in a non-trivial percentage of persons being highly annoyed. As with sounds from many sources, research has shown that annoyance associated with sound from wind turbines can be expected to contribute to stress related health impacts in some persons."[71]

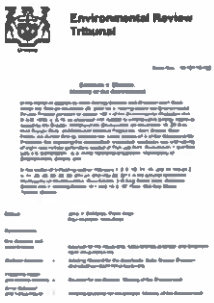
A 2011 Canadian Wind Energy Association media release advises those impacted by wind turbine annoyance stating

"The association has always acknowledged that a small percentage of people can be annoyed by wind turbines in their vicinity. … When annoyance has a significant impact on an individual's quality of life, it is important that they consult their doctor."[72]

> *Authors Note: it appears this CanWEA media release is no longer available on the CanWEA website. Please contact CanWEA for a copy or contact us for a PDF version of the CanWEA media release.*

Health Canada Summary of Results and Serious Harm to Human Health

A 2011 Ontario Environmental Review Tribunal (ERT) considered evidence and testimony under oath and found that wind turbines can harm humans if they are placed too close to residents.[73] The ERT decision states:



"This case has successfully shown that the debate should not be simplified to one about whether wind turbines can cause harm to humans. The evidence presented to the Tribunal demonstrates that they can, if facilities are placed too close to residents. The debate has now evolved to one of degree." [74]

The ERT decision also found that ""serious harm to human health" includes … indirect impacts (e.g., a person being exposed to noise and then exhibiting stress and developing other related symptoms). This approach is consistent with both the WHO definition of health and Canadian jurisprudence on the topic." [75]

A 2014 review article published in the *Canadian Journal of Rural Medicine* states in its conclusion:

> "There is sufficient evidence to support the hypothesis of Colby and colleagues that documented symptoms can result from annoyance to audible IWTs. Amplitude modulation of IWTs, audible LFN, and tonal, impulse and nighttime noise can contribute to annoyance and other effects on health. In addition, there is emerging evidence that suggests inaudible LFN or infrasound from IWTs may result in negative health effects…
>
> Based on current knowledge, we expect that, at typical setback distances and sound pressure levels of IWTs in Ontario, a nontrivial percentage of exposed people will be adversely affected."[76]

The 2014 *Canadian Journal of Rural Medicine* review article also states:

> "In 2013, research funded by the Ontario Ministry of the Environment indicated a statistically significant relation between residents' distance from the turbine and the symptoms of disturbed sleep, vertigo and tinnitus, and recommended that future research focus on the effects of wind turbine noise on sleep disturbance and symptoms of inner ear problems." [77]

On November 6 2014 Health Canada posted on their website *"Wind Turbine Noise and Health Study: Summary of Results"* [78] stating:

- WTN annoyance was found to be statistically related to several self-reported health effects including, but not limited to, blood pressure, migraines, tinnitus, dizziness, scores on the PSQI, and perceived stress.
- WTN annoyance was found to be statistically related to measured hair cortisol, systolic and diastolic blood pressure.

Authors note: WTN is the acronym for "wind turbine noise".[79]

Time for Definitive Action

The World Health Organization states "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."[80]

Health Canada has reportedly spent over 2 years and 1.8 million dollars to report findings which further support the conclusion that if placed too close to residents wind turbines can harm humans.

It is now time that Health Canada fulfill its stated responsibilities and take definitive action to protect Canadians exposed to wind turbine noise and help them maintain and improve their health.

Please look forward to our future series of commentaries and information on the *"Wind Turbine Noise and Health Study: Summary of Results"* and the Health Canada Wind Turbine Noise Study.

Respectfully submitted,

Carmen Krogh, BScPharm
Brett Horner, BA CMA
Ontario, Canada

End Notes

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[10] Briefing Note to the Ministers Office, Update on the Development of Federal-Provincial-Territorial Guidelines on Wind Turbine Noise
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Adverse Health Complaints at Shirley Wind

Summary Table

&

Sample of 2017 Complaints

Written Recorded Statements Health Effects Shirley Wind Farm

Total Reported People Affected by Shirley Wind Farm	89	All statements are written and recorded/not included were the verbal statements by other individuals	Public Service Commission (PSC) Board of Health (BOH) Affidavits Personal Written Accounts Glenmore Records	68 Adults 21 Children	The first part shows records from neighboring families. The second part shows non neighbors.
Names	**Number of People Affected**	**Recorded Statement**	**Record Found**	**Adult/Children**	**Residents(R) Neighbors**
	4	Ear Ringing/Headaches/ medical changes	PSC	2A/2C	R
	1	Dizziness/static in head	PSC/BOH/Affidavits	1A	R
	4	Sleep Disturbance/Dizziness He and his wife have all experienced problems related to turbines	PSC/BOH/Affidavits	2A/2C	R
	4	Headaches/Sleeplessness /Ear pressure and pain dizziness	PSC/Gov. Emails/BOH/Affidavits	2A/2C	R
	4	Headaches/Migraines/ affecting their whole family's nervous system/anxiety	PSC/Affidavits/Glenmore Public records	2A/2C	R
	1	Ear pain/nausea and head pressure as well as panic attacks	PSC/Affidavits	1A	R
	5	Headaches/sleep issues	PSC/BOH	2A/3C	R
	1	Blurred Vision, unsteadiness, nausea,anxiety	PSC/Affidavits	1A	R
	2	Headaches/earaches/ muscle spasms/panic attacks	PSC/Affidavits	1A/1C	R
	1	Headaches/joint problems/grouchy	BOH/Affidavits	1A	R
	6	Sleepless night/headaches/fatigue	Affidavits	2A/4C	R
	1	Restless nights	Affidavits	1A	R
	1	Continual Sinus Infections/lowered immune system/head and joint paint/anxiety	BOH	1A	R
	2	Heart issues/wakes up at night	Affidavits	1A/1C	R
	4	Sleeplessness/anxiety/ headaches/memory loss	Affidavits	2A/2C	R

Written Recorded Statements Health Effects Shirley Wind Farm

	1	Headaches/ear pressure	Personal Accounts	1A	R
	1	Headaches/ear pressure, high blood pressure	Personal Accounts	1A	R
	2	Anxiety/ear pressure/ dizziness/ dog seizures	Affidavits	2A	R
	1	Restless sleep and fatigue	Affidavits	1A	R
	1	Ears draining at night	Personal Account	1A	R
	4	Anxiety/sleeplessness	PSC/Affidavits	4A	R
	1	Joint pain/arthritis	Affidavits	1A	R
	2	Headache/feeling off balance/ringing ears	Personal Account	2A	
	2	Sleep and possible hearing issues	Personal Accounts	2A	R
	1	Muscle Aches/Unsteadiness	Personal Accounts	1A	R
	2	Ear issues	Personal Accounts	1A/1C	R
	1	Unsteadiness strange headaches		1A	R
	2	Dizziness/headaches	Glenmore Records	2A	R
	1	Sleeplessness/headache	Glenmore Records	1A	R
	1	Temple pressure and headaches	Glenmore Records	1A	R
Total Shirley Wind Farm Neighbors	64			**44 Adults 20 Children**	

Name	Number of People Affected	Recorded Statement	Record Found	Adult/Children	Non Residents(NR)
	1	Headache/nausea/ear pain/general sense of not feeling well	PSC	1A	NR
	1	Ear issues/anxious	PSC	1A	NR
	1	Pounding head/sick feeling	Personal Accounts	1A	NR
	1	Ear pressure/queasiness/ Headache	Personal Accounts	1A	NR
	2	Head cold like symptoms/headache/ Dizziness	Personal accounts	2A	NR
	1	Pressurized Ears	Personal Accounts/Affidavits	1A	NR
	1	Pressure in head/ear pressure	Personal Accounts	1A	NR
	2	Sleeplessness/poor grades/wanting to leave the house	BOH/Affidavits	1A/1C	NR
	1	Like carbon-monoxide poisoning	Green Bay Press Gazette	1A	NR
	1	Nausea/headache/dizziness	Shirley Wind Report	1A	NR
	1	Headache/altitude sickness	Personal Account	1A	NR

Written Recorded Statements Health Effects Shirley Wind Farm

	1	Nauseous and dizzy/headaches	Affidavits	1A	NR
	1	Ear Pressure	Affidavits	1A	NR
	1	Sudden ear pain or headaches	Affidavits	1A	NR
	2	Ear pressure/dizziness	Personal Accounts	2A	NR
	1	Slight Headache	Personal Account	1A	NR
	1	Ear Pressure	Glenmore Board	1A	NR
	1	Queasy, bit off like motion sickness	PSC	1A	NR
	1	Nausea/Headache	Personal Accounts	1A	NR
	1	Nausea/Headache	Personal Accounts	1A	NR
	1	dizziness	Personal Accounts	1A	NR
	1	Ears/feeling of water	Glenmore Records	1A	NR
Total Non Neighbors	25			**24 Adults 1 Child**	Record of people visiting or driving through Shirley Wind Farm

Below is the BCCRWE open records request to the Town of Glenmore for copies of all statements submitted to the Town of Glenmore between May 1, 2017 and August 1, 2017 that include statements regarding adverse health impacts related to the operation of the Shirley Wind project. A sampling of the responses provided by the Town of Glenmore are attached.

From: James Vanden
To: glenmoreclerk@yahoo.com
Cc: glenmorechair@yahoo.com; robert.gagan@wilaw.com; rrgagan@new.rr.com; blurr910@yahoo.com; glenmorezoning@yahoo.com
Sent: Tuesday, August 1, 2017 9:33 PM
Subject: Open Records Request

August 1, 2017

Dear Clerk Ossmann,

It is my understanding that the Town of Glenmore Planning Commission has begun, or will soon begin, a 5-year review of the Shirley Wind Conditional Use Permit. It is my understanding that the Planning Commission has been accepting information from interested parties for consideration as part of this CUP review. I am aware of the fact that numerous persons living in the environs of the Shirley Wind project have submitted statements regarding adverse health impacts that they believe or suspect are related to the operation of the Shirley Wind project. I further understand that many (or all) such persons also submitted, along with such statements, a release form, titled, "***Acknowledgement Relating to Voluntary Submission of Health Information to the Town of Glenmore***". This release form includes the following statements, as drafted by Glenmore Town Attorney Robert Gagan (highlighting added):

1. I understand that my health records relating to medical care I receive is generally confidential and that the confidentiality of medical records is protected by state and federal law.
2. I understand that health information that I voluntarily provide to the Town of Glenmore is not protected by state or federal law. To the extent appropriate under state or local law, information I submit to the town may be shared with related local or state agencies, boards, commissions, or committees.
3. I further understand that the Town of Glenmore is (and any Wisconsin municipal or state agencies, boards, commissions, and committees are) bound by Wisconsin public records law. Accordingly, health information that I submit as part of any comments or complaint relating to a matter of Town or State regulatory concern cannot be expected to remain confidential.

Accordingly, I am making an open records request for copies of all statements submitted to the Town of Glenmore (whether submitted to the Glenmore Town Clerk or any member of the Glenmore Planning Commission or Glenmore Town Board), during the time period May 1, 2017 through August 1, 2017, that include statements regarding adverse health impacts related to the operation of the Shirley Wind project, provided a release form as described above was also provided by such persons.

Please contact me when copies of the requested records are ready to pick up, letting me know what the cost is as well as when and where I can pick them up.
Thank you,
Jim Vanden Boogart
President: Brown County Citizens for Responsible Wind Energy

Acknowledgment Relating to Voluntary Submission of Health Information to the Town of Glenmore

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Tammy Brantmeier

Printed Name

Tamy B

Signature

6/26/17

Date

BCCRWE Note: The Brantmeier residence is located just over 1000' from one of the Shirley Wind tubbines

June 26, 2017

In 2012, I wrote a letter to express our concerns about the 8 wind turbines near our house in Glenmore. I believe we are still having the same issues although they may have gotten worse over the 5 years. I have gone to a psychiatrist many times because I've had issues with mood swings and feelings of depression/anxiety. My children or husband have become extremely irritable + moody + I feel sometimes like my family is falling apart. I definately blame the wind turbines for this. They have affected our nervous system in various ways. Some days I feel like I need to just run away from here. It's a scary feeling. Please do something about this. We've lived like this for so long + would love to live a normal life. Thank you for your time. I appreciate you considering this.

Thank you,

Tammy Brantmeier
5801 Glenmore Rd
Depere, WI 54115

Oct 14, 2012

I am writing this letter to express my concerns regarding the eight wind turbines we have near our house in Glenmore. We have had issues with having a shadow flicker from the two turbines closest to us. The shadow flicker goes through our whole house & I instantly feel dizzy & get a headache. I've had sleep issues also. Some nights it's midnight before I fall asleep. [redacted] I also think my headaches are a lot worse since the turbines have gone up. Mine are also migraines at times. I also think that my whole family has been affected by it as far as our mood swings. We used to be a loving family & since the turbines have been put up, we are all very moody & on edge also. It's affected our nervous systems. Nobody knows what it's like until you live here. It's a shame that one human being can put something near our

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Rita Gagnon

Printed Name

Rita Gagnon

Signature

June 26, 2017

Date

June 24th, 2017

To the Brown County Health Department and town of Glenmore:

Two of the Shirley wind turbines are less than a mile from my house and all 6 are less than 2 miles from us. Shortly after the wind turbines were put in and running I have been experiencing problems sleeping and/or getting a good night of sleep. Most of the time I sleep, but after nearly after 7 ½ hours I barely feel like I slept at all and then some nights I may only get a few of sleep if I am lucky. I feel tired all day and every day. Some mornings I even wake up with headaches. I told my husband I really do not want to stay her after we retire so we will have to put up with them a few more years. At least for now I still work and get away from here for at least 9 hours a day Monday – Friday. When I sit down in the evening I am falling asleep in my chair shortly after that.

I can tell you that when those turbines were off, I got up the next day feeling well rested and energetic and was wondering why the change and then I found out. This is the same way I feel when we spend a couple nights somewhere else like our son's house near Madison.

I am not sure if anything will EVER be done about these turbines that are affecting the people's health in the neighborhood, but I think something should!

Rita Hagman

6487 County Road X
De Pere, WI 54115

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DARRELL ASHLEY

Printed Name

Darrell Ashley

Signature

6-15-17

Date

June 15, 2017

Comment:

Since wind turbines have been in operation near our home, I have experienced more unusual headaches, ear pain, bad balance, and very disturbed sleep.
I can rest and feel better when I am away from the area.
All feelings are consistant with Wind Turbine Syndrome.

Darrell Ashley

Darrell Ashley

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Sarah Cappelle

Printed Name

Sarah Cappelle

Signature

12-29-17

Date

To the town of Glenmore,

My name is Darrel Cappelle, my wife and I lived in the town of Glenmore until early 2012. When Shirley Wind began operations within our neighborhood life became miserable. After trying to work with the company and the town to remedy the situation we were left completely unsatisfied. Shirley wind dismissed our claims and ultimatly ignored us without any honest attempts to fix their operating errors. We had shadow flicker on our house years after startup wich was against CUP Regulations, the town did nothing. We had constant noise, some of it documented over the 50 decibal limit in the CUP, the town did nothing. last and most important was the health problems that Sarah and our youngest son seemed to be experiencing. The Sleepless nights headaches, anxiety, and general discomfort that they had to endure became to much.

Now although we have moved farther away and the symptoms have faded, we are not exactly fine. We still work near shirley and experience things that are likely attributed to the wind system. I have developed an ear issue, there is constantly the feeling that I have water in them and occasionally ringing sensations. Sarah is prone to migraine headaches and we don't fully know what if any permanent damage may be occuring or already done by being to close to these machines for far to long.

The town of Glenmore had the ability, and still does, to SHUT THEM DOWN. Shirley wind has violated the CUP repeatedly in the past, is still in violation now and will continue to operate illeagally until The Town does their job and requires accountability.

Darrel and Sarah Cappelle

Darrel Cappelle

Sarah Cappelle

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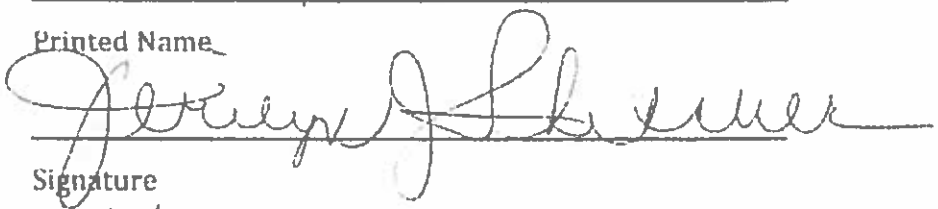
Jerilyn J. Fletcher

Printed Name



Signature

6/28-17

Date

Jerilyn J. Fletcher
6215 County Road W
Greenleaf, WI 54126
920-864-7262

June 28, 2017

Cindy Ossman, Clerk
Town of Glenmore
3932 Hickory Lane
De Pere, WI 54115

Dear Glenmore Town Board & Plan Commission:

This is to reaffirm my notarized statement dated September 18, 2016 (attached with Release Form) relative to my health issues from the Shirley Wind Turbines.

The closest turbines to my home are approximately 1.5 miles to the east off School Road. When the turbines are running, I experience an uncomfortable increased pressure in my temples resulting in headaches. When the turbines are shut down, I do not have the problems. Unfortunately, they are running more than they are shut down.

Since the Conditional Use Permit (CUP) of the Shirley Wind project, granted by the Glenmore Town Board on May 20, 2007 is coming up for review, I cannot stress enough the importance that the continuation of the CUP be denied.

It is imperative that the health of our townspeople, especially those so badly affected by these turbines, take precedence over everything else!

Sincerely,

Jerilyn J. Fletcher
Town of Glenmore Resident

Release Form

I, the undersigned, grant unlimited permission to the leadership of the non-profit organization BCCRWE (Brown County Citizens for Responsible Wind Energy) to release all of my information, reports, complaints, and/or testimony in regard to perceived adverse health impacts related to the operation of the wind turbines at the Shirley Wind turbine project in the Town of Glenmore, Brown County, Wisconsin, to all parties, including but not limited to private persons, government officials, researchers, experts, organizations, publications, and websites.

Name (printed): Jerilyn J. Fletcher

Name (signed): Jerilyn J. Fletcher

Date: Sept 18, 2016

August 5, 2016

To Whom It May Concern:

Relative to the recent shutdown of the Shirley Wind Turbines from July 25-28, 2016 - I reside at 6215 County Road W, Greenleaf, WI 54126, approximately 1.5 miles from the turbines off School Road. When the turbines are running, I experience an uncomfortable increased pressure in my temples resulting in headaches. While the turbines were shut down during that time frame, I did not have the problems, however they resumed once the turbines were started up.

Jerilyn J Fletcher
6215 County Road W
Greenleaf, WI 54126
920-864-7262

Signed before me on 11th day of September 2016. State of WI, Brown County

KERRI J SCHMIDT
Notary Public
State of Wisconsin

Commission expires: 9/18/17

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Terry R Desotelle

Printed Name

Terry R Desotelle

Signature

June 29 2017

Date

BCCRWE Note: Some Shirley Wind residents submitted adverse health statements they had previously made to reaffirmed that they continue to experience the same symptoms. This page is an example. It was submitted by Terry Desotelle in June 2017 along with her release form shown above.

October 14, 2012

To Whom It May Concern:

Since the Wind Mills have started up in Glenmore, I have experienced several problems with my health as listed below:

- Loss of sleep, when we go up north my sleep is more restful. The same can be said when I traveled to Indiana in September. I felt very good after spending 5 days in Indiana. I wake up in the middle of the night here and lay there for hours. Therefore I feel sleepy during the day and I don't even seem to be able to take a nap any more.
- I have gained weight and I was doing very good at keeping the weight off and now it seems to be an ever ending battle.
- Headaches daily
- Ear problems, occasionally dizziness, nausea. At night when I go outside I can hear an audible hum and a vibration.
- Have lots of muscle and joints pain.
- Mood problems. My husband has been complaining that I lose my temper very quickly over very minor things. I have always have quick smile and it getting hard to do that.
  I have problems with anxiety and I don't want to stay in the house. When Our daughter was staying here; we found reasons to go to town just about every day. Again my husband mentioned that several times.

We live approx. 4,000 ft. approx. from the nearest wind mill. I can see 6 of them from my windows on the west side of the house.

Terry R. Desotelle

4423 Shirley Road

Denmark, WI 54208

State of Wisconsin, Brown County

Subscribed + Sworn before me on this 14th day of October, 2012.

KERRI J SCHMIDT
Notary Public
State of Wisconsin

My Commission expires - 10-20-13

Sept 11, 2016

Name: Terry R Desotelle

reside at 4423 Shirley Rd

Glenmore, WI

When the windmills were down, from July 25 to July. I noticed some disconcert in my feelings. I was a bit anxious all at the time, when the wind are running I will wake up and lay there in bed worrying about anything or everything. Sometimes I get up & wonder about the house.

In August I went to Texas from Aug 4 to Sep 4th while I was there I didn't have the anxious feeling. Slept better during that time.

Terry R Desotelle

Signed before me on the 11th day of September 2016.
State of WI. Brown County
Kerri J Schmidt

KERRI J SCHMIDT
Notary Public
State of Wisconsin

Commission expires: 9/18/17

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Dora Ashley

Printed Name

Dora Ashley

Signature

6-15-2017

Date

Submitted: 10/10/2012 5:33:19 PM

COMMENTS FILED ELECTRONICALLY IN

Application of Highland Wind Farm, LLC, for a Certificate of Public Convenience and Necessity to Construct a 102.5 Megawatt Wind Electric Generation Facility and Associated Electric Facilities, to be Located in the Towns of Forest and Cylon, St. Croix County, Wisconsin

2535-CE-100

Commentor Information:

Name: Dora Ashley
Address: 3712 Shirley rd
City: Depere State:WI. Zip:54311
E-mail: d.mr@live.com
Phone: 920-864-7455

Comment:

A few years ago I was completely ignorant about wind turbines. Since they have invaded my community I have learned how awful they are. The turbine companies do an exhorbant amount of damage. Within weeks of turbines running I was ill. At first did not know why or what. __Now _I need to leave daily for relief of their affects. Blood pressure, blood sugar rise, the dizziness, feeling of 'static' in my head are unbearable. Ears fill up and go down very painfully. Sitting at my table one quiet day, (turbines were off) I was cutting apples for pie; had severe ear pain---glanced out window to see them running; had just been turned on. Sleep is rare even with the use of many perscription drugs. Feel like I could fly without a plane often!
Families are disrupted. I can no longer have friends or grand children to visit my home. We no longer entertain anyone here.
I walked a country lane to discover there is no wildlife near us any more. Deer would eat from apple tree. Farmers cows die, many are born maimed.
Our home is no longer a place to live in. Full of unwanted air pollution and Lord knows what else!
I truly hope you get rid of all turbine companies. This IS A World Wide Problem. People all over the world Leave their Homes because they can't stand the effects!
Dora Ashley Town Of Glenmore

I affirm that these comments are true and correct to the best of my knowledge and belief.
Dora Ashley

Statement of Wind Turbine distress

While wind turbines are in operation, I am nervous, jumpy, cannot concentrate well. I am most dizzy if I bend over to pick something up from floor. During the days the turbines were shut down, I was relieved of this nervous energy affecting me. I was able to work in garden July 26th & 27th without feeling dizzy as I pulled weeds. I did not need to take a break to sit down. No extra headache for 3 days. I came home from volunteer jobs and was able to think. When wind turbines are running I come home and need to lay down.
What a difference a Day makes!

BCCRWE Note: The timeframe here referenced, July 26th and 27th, were days in 2016 when the Shirley Wind project had a total power down for electrical workl

Dora Ashley
3712 Shirley rd
Depere, Wi 54115

920-864-7455

Dora Ashley 9/7/16

Signed before me on 7th of September 2016.
State of WI, Brown County

Kerri J Schmidt

KERRI J SCHMIDT
Notary Public
State of Wisconsin

My commission expires - 9/18/17

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Pamela Schauer

Printed Name

Pamela Schauer

Signature

June 25 2017

Date

Pam Schauer
6225 Highview Rd
Denmark, WI 54208

In regard to the Shirley Wind Turbines, my wind turbine related issues have not resolved. In fact, they have gotten worse. Below is an update on my current health conditions and some new symptoms that I have been experiencing since my last statement with the Brown County Board of Health.

I continue to sleep in the basement to help ease my chronic sleep deprivation from the wind turbines, but sleeping in the basement has not resolved all of my symptoms completely. When I am away from the wind turbines, I am able to get better sleep; whether I am sleeping in a hotel bed or on the ground in a tent. My youngest son and I went on a 4 day trip to Michigan in 2015. I was able to sleep less hours, wake more rested, and physically have more energy when I was away from the turbines. I was also able to experience this when the turbines were down on July 25-28, 2016 and again in January 2017, when they were not spinning for almost 2 days after the ice storm. **The only time I have been able to get restful sleep since 2007 is when I am away from my home or when the turbines are not rotating! Please do on/off studies (on for 2 weeks, off for 2 weeks) so people can give you input on the effects of the turbines. Duke states the wind turbines causes no effect on people; they should not have an issue with the studies.**

Headaches, chronic fatigue, ear pain, and vertigo remain. More and more frequently, there are days where I can barely have enough energy do the simplest of tasks. My headaches used to affect me only for an hour or two. There are days that I have a migraine all day and these days are also becoming more and more frequent. Nothing in my life has changed to cause an increase in these symptoms except that I continue to be exposed to the low frequency of the wind turbines and my body is starting to wear down from this constant bombardment of low frequency.

Lab results. My provider continues to be concerned about my blood work levels increasing/decreasing. My thyroid levels now have to be monitored. I have had **NO THRYROID ISSUES IN THE PAST!!!** This, along with all the other labs that are continually monitored, have been getting worse over the past 9 years. She has asked if anything has changed in my life to cause these results to worsen. I explained that nothing has changed: my personal life, continue to work for the same company, and my social life continues to remain the same. I explain to her that 6 wind turbines, each being 500 feet in height, continue to rotate within 1 ½ miles of our home. **Every single lab that my provider is worried about, all fell in the normal range prior to 10 years ago when the turbines starting spinning.**

I attest that the statements submitted today and have submitted in the past to be accurate and true.

Pamela Schauer

Pamela Schauer

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Michael Schaver

Printed Name

Michael Schaver

Signature

6/25/17

Date

Michael Schauer
6225 Highview Rd
Denmark, WI 54208
June 25, 2017

Town of Glenmore
Town Board and Planning Commission
3932 Hickory Lane
DePere, WI 54115-9761

Dear Town Board and Planning Commission:

During the past 5 years since the last conditional use permit, I routinely experience headaches, sleep deprivation, ear ringing and ear pain, nausea, racing pulse, chest pain and occasionally disorientation/panic attacks directly related to the Shirley Wind Turbines. Whenever I am experiencing these symptoms and leave the premise; my symptoms ALWAYS GO AWAY within 20-30 minutes of being greater than 5 miles away from the turbines. There is a direct cause and effect. I have included back up testimony that I made to the Brown County Board of health and logs that my parents have kept on me documenting the times and dates of the occurrences. Unfortunately, I sometimes forget to tell my parents when I am having these problems at night.

Sincerely,

Michael Schauer

Michael Schauer

Enclosure

Brown County Board of Health Meeting Minutes 1-12-16

Date/ Time log

Sleep journal
Mike 3-12-14 could not sleep 1:30-2:30 a.m.
Pam problems sleeping throughout the night. Woke up more tired then usual.

Pam 3-14-14. Woke up from a sound sleep at 2:00 a.m. She was wide awake and could not get back to sleep. Went into the basement after 30 minutes and fell asleep instantly.

Alex 3-23-14/3-24-14. Woke up at 11:45 P.M. and could not get back to sleep until after 1:00 A.M.

Mike 4-10-14. Woke up at1:15 a.m and could not fall asleep until 2:00 a.m.

Mike 5-1-14. Kept waking up on and off all night. Did not get a good night sleep.

Mike 5-7-14 woke up at 4:00 a.m. And couldn't go back to sleep until 5:45 a.m.

Mike 5-8-14 woke up at 3:00 a.m and couldn't sleep until 3:30 a.m.

Mike 5-8-14 could not fall asleep at 10:30. Layed awake until 4:00 a.m on 5-9-14.

Mike 8-29-14. Could not fall asleep for 3 1/2 hours. Finally fell asleep after 2:00 am. Pam slept for 9 hours and woke up tired.

9-9-14 [redacted], Pam, Lance all got severe headaches at 6:00 pm. Headaches stayed for several hours despite Advil.

10-1-14 Michael was awake between 2 AM and 3 AM due to the wind turbines. He could not get back to sleep during that time and had trouble waking up on and off during the rest of the night.

10-7-14 Pam was awake from 2:43 a.m until 4:05 a.m. She could not sleep during that time.

10-16-14 Pam had trouble sleeping last night. Kept waking up throughout the night.

10-25-14 Pam woke up at 3:30 am and couldn't get back to sleep until 4:30 am

10-27-14 Pam had trouble sleeping. Waking up on and off all night long.

11-3-14 Lance had a bad headache at 8:00 pm that wouldn't go away until he went into the basement. Once in the basement, his headache went away in 5 minutes without any pain medication. He slept in the basement for two hours.

11-13-14 Mike had problems sleeping last night. He kept waking up all night long.

12-1-14 Lance had headaches from 7:00 pm until he went to bed at 10:00 pm. Pam went to bed at 9:30 pm and could not fall asleep. 1 1/2 hours later she went into the basement in order to sleep.

12-4-14 Mike could not sleep from 3:00 am until 4:00 am and woke up again at 5:00 am.

12-15-14 Pam woke up 11 times during the night.

12-16-14 Mike woke up at 3:45 am and couldn't get back to sleep for an hour.

12-17-14 Pam and Mike kept waking up all night long.

12-18-14 Pam and Mike kept waking up all night long; they were up for over a half hour between 4:00 am and 4:40 am.

1-20-15 Mike woke up at 4:00 am and couldn't go back to sleep until 6:00 am

2-12-15. Pam woke up at 3:15 am and couldn't get back to sleep until after 4:05 am

2-17-15 Pam, [redacted], and Lance all got headaches with in a half hour of being home from shopping and School. Once they got the headaches they did not go away until they went into the basement, or left the house for an hour or two.

3-17-15 Mike was awake from 4:15 am until 5:15 am. He couldn't sleep during that time and woke up very tired.

3-30-15 Lance got a headache around 8:15 PM. He went into the basement headache went away and then he fell asleep there for four hours.

3-31-15 Pam kept waking up all throughout the night, she got terrible sleep and end up having to take a nap during the day.

4-17-15 Michael kept waking up on and off all night long. He had trouble sleeping during the entire night.

4-28-15 Pam was awake from 2:30 am until 3:30 am. She had to leave the bedroom to get some sleep.

4-30-15 Mike could not sleep from 12:00 am until 1:00 am

5-2-15 Pam was awake from 3:30 am until 4:30 am.

5-26-15 Michael got a headache at 6:30 pm that only went away when he went into the basement.

5-29-15 Michael was awake from 4:30 am until 5:00 am.

9-9-15 Michael was awake from 5:00 am until 6.00 am

9-10-15 Michael was awake from 5:00 am until 6.00 am

9-11-15 Michael was awake from 5:00 am until 6:00 am

9-20-15 Michael had in Anxiety attack at approximately 11:00 PM for no apparent reason. We left the house at 11:15 PM and went to Festival Foods once we got to Festival Foods he was calm, relaxed and fell asleep in the vehicle. He was back to normal after being away from the wind turbines for 15 minutes.

10/15/15 Michael kept waking up throughout the night due to the wind turbines.

11-19-15 Michael kept waking up, on and off up Wednesday night / Thursday morning due to the wind turbine low frequency noise. For Duke energy, not due to our grounding issue, the power was turned off in his room.

12-3-15 Michael woke up at 4:30 am and could not get back to sleep for over an hour.

1-5-16 Michael woke up at 5 AM this morning and could not get back to sleep due to the wind turbines.

1-25-16 Michael's heart began racing while seating in a chair at 4:45 PM. He went into the basement and then his heart began beating normally.

1-26-16 Michael, Lance and Pam all kept waking up between 3:00
Am and 6:00 am

1-27-16 Michael's heart began racing at about 8 Pm and not go back to normal until he went in the basement

3-10-2016 Michael woke up at approximately 4:00 AM in the morning and could not get back to sleep. At the same time Pam woke up at 3:00 AM in the morning with a severe stomach aches and could not get back to sleep until she went into the basement away from the wind turbines and then she was able to fall back asleep.

3-11-2016 Michael again woke up about 3:30 AM/4:00 AM in the morning and could not get back to sleep.

3-29-16 Alex had a headache at 9:00 pm that only went away when he went in the basement.

3-29-16 Pam has had to sleep in the basement for the last two weeks. When she tries to sleep upstairs she wakes up every hour with stomach pains.

3-30-16 Michael woke up at 5:13 AM and could not get back to sleep again.

3-31-16 & 4-1-16. Michael could not fall asleep from 11:00 pm until 2:20 am. Did not have anything that was bothering or worrying him at the time- no tests, no class issues, no friend or bully issues.

4-20-16 Michael's heart started racing at around 9:00.

5-7- 16 Michael's got a severe headache that went away when he went into the basement.

5-25-16 Michael woke up at 4 AM and could not get back to sleep until 6 AM. He went to bed at 11:50 PM the prior night so he was exhausted at 4:00 am and wanted to fall back asleep

7/3/16 Michael woke up at 4 AM and could not get back to sleep until 5 AM.

7/24/16 – 7/28/17 Shirley Wind Turbines have been turned off for unknown reasons. However, the health of everyone has increased dramatically. Pam does not have to sleep in the basement. She is sleeping upstairs in the master bedroom and waking up refreshed and not tired. Both Pam and Lance are NOT experiencing any headaches. Michael DOES NOT have any sleep issues, anxiety attacks or stomach problems. Michael, Alex and Lance are waking up earlier in the morning and have more energy throughout the day.

9/8/16 Michael woke up at 4:50 am and couldn't get back to sleep.

12/26/16 Lance had chest pain's at around 7:30 PM went in the basement to see if you got better. After being in the basement for five minutes chest pains went away anyways all right prior to that the chest pains were acting up for about 10 minutes. Would not go away by coughing or any other method.

1/5/17 Michael has been up since 3 AM this morning unable to go back to sleep he went to bed last night around midnight. This is highly unusual for him. Normally I have to wake him up to get him out of bed for school at this time.

2/6/17 Michael had a severe headache at 9:00 pm that didn't go away until he went into the basement at 9:30 pm. His headache went away 10 minutes later.

4/3/17 Michael got a headache around 4:30 PM. He went into the basement is her neck slowly start going away Lance got a headache around 4:45 PM. He also went to the basement for a short time or his headache started going way too. Both of them did not take any medication when they went into the basement. Upon returning from the basement the headache started to return.

4/20/17 Michael went to sleep on April 19 around 11:50 P.M., he woke up at 4:00 am and could not get back to sleep even though he was tired.

6/12/17 Michael went to sleep at 1:00 am. He woke up at 4:30 am and could not fall back asleep even though he was extremely tired.

6/19/17 Michael felt like his ear drums were vibrating around 7:15 pm

6/22/17 Michael was up until 4:00 am unable to fall asleep even though he was exhausted

6/25/17 Pam Update – Pam has slept the past 16 MONTHS in the basement. If she tries to sleep upstairs she wakes up throughout the night.

Acknowledgment Relating to Voluntary Submission of Health Information to the Town of Glenmore

1. I understand that my health records relating to medical care I receive is generally confidential and that the confidentiality of medical records is protected by state and federal law.

2. I understand that health information that I voluntarily provide to the Town of Glenmore is not protected by state or federal law. To the extent appropriate under state or local law, information I submit to the town may be shared with related local or state agencies, boards, commissions, or committees.

3. I further understand that the Town of Glenmore is (and any Wisconsin municipal or state agencies, boards, commissions, and committees are) bound by Wisconsin public records law. Accordingly, health information that I submit as part of any comments or complaint relating to a matter of Town or State regulatory concern cannot be expected to remain confidential.

In acknowledgment of the above, I hereby attest that any personal health-related information I have submitted to the Town of Glenmore relating to its Wind Turbine Review has been voluntarily submitted by me.

I understand and acknowledge that any such information described above, as well as any comment(s) and/or complaint(s) pertaining to Shirley Wind that I have submitted to the Town of Glenmore in the past or shall submit to the Town of Glenmore in the future, whether or not such comment(s) and/or complaint(s) include personal health-related information, may be retrieved by the Town of Glenmore and distributed to all members of the Glenmore Town Board, Plan Commission, and the Zoning Administrator, for use in the Town of Glenmore's Wind Turbine Review

Lance Schauer

Printed Name

Pamela Schauer - Parent

Signature

June 25, 207

Date

Articles Regarding Nuisance Lawsuit Filed Against Duke Energy

JAN 29
2014

23 Texas wind farm hosts sue over noise, nuisance

Human impacts, Wind turbines

Add comments

In what may be an unprecedented move, 23 Texans who host wind turbines on their property have filed suit against two different wind farm developers, claiming that companies "carelessly and negligently failed to adequately disclose the true nature and effects that the wind turbines would have on the community, including the plaintiffs' homes."

The plaintiffs host hundreds of turbines on projects developed by Duke Energy and E.ON, and as a Duke spokesman noted, they did consent to the placement of the turbines. However, the lawsuit stresses that the companies told residents the turbines "would not be noisy, would not adversely impact neighboring houses and there would not be any potential health risk."

This court challenge stands apart from most previous nuisance suits, nearly all of which been filed by non-participating neighbors of wind farms (ie, local residents who are not hosting turbines themselves). Most annoyance surveys suggest that wind farm hosts are less likely to be bothered by turbine noise than non-participating neighbors, and many wind projects make an effort to spread the financial benefits to include some non-host neighbors, because of suggestions that broader project participation will increase community acceptance. In this case, however, the plaintiffs are receiving lease payments and tax benefits that will exceed $50 million over the life of the projects.

Among the plaintiffs are Willacy County Commissioner Noe Loya, who is said to "no longer enjoy sitting outside because of the loud noise," with turbine noise inside and outside his home "disturbing the peace and making it difficult to enjoy living there." Another plaintiff, a local Justice of the Peace, "has difficulty sleeping, cannot have his windows open (and) cannot enjoy the sound of nature, due to loud noise from wind turbines." The lawsuit also claims that some residents have abandoned their homes. In addition to noise issues, the suit includes visual impact, property value, and health effects claims.

E.ON spokesman Elon Hasson, says the company is reviewing the suit. "We develop all of our wind farms in a safe, state-of-the-art and responsible manner. . . We believe these claims will be shown to have no validity."
UPDATE, 1/31/14: Spokesmen from both companies issued statements noting that one claim of the suit—that the companies had no plans to remove the turbines at the end of their useful life—is false, and stressed their ongoing monitoring and maintenance of the machines. They more generally dismissed the other accusations, as well.

The suit was filed in State District Court in November. In December, the companies requested that it be moved to federal court, where U.S. District Judge Hilda Tagle has called for a response from the companies by February 6.

Ed. note: Some wind development leases I've seen explicitly preclude hosts from filing nuisance suits. There is limited information online about this case, and it's unclear whether the plaintiffs' contracts include such restrictions; if they do, then the legal case may be open-and-shut, or it may be that the crux of the legal challenge is the veracity and completeness of information provided to hosts prior to signing contracts. (It may be worth noting that lease agreements don't usually include "gag clauses" against speaking publicly about noise or other post-construction experiences; confidentiality clauses usually cover only financial terms and development plans.)

1. Joe McKenzie Says:
   January 31st, 2014 at 8:35 am

   I can attest to the noise disturbance inside and outside of my home, as I live just mere feet of the setback radius ordinance, for non-participating occupants at the Twin Ridges Wind Farm operated by Everpower, located in Southern Somerset County, PA. Please stress to our local Somerset County Commissioners that these are definitely a nuisance for communities who house the turbines. In our quest for resolve, a year ago at start up, we were told by Everpower officials that they had a manufactures guarantee that the turbines sound no louder than a refrigerator and that is totally false. I don't know what part of the turbine that guarantee refers to but not the overall noise that is created by these things. Our township also developed an agreement with the recommendations from Everpower for a 50 decibel limit on noise. It was not explained in layman's terms to the officials accepting the agreement that the 50 decibels was not overall noise heard, it was just the noise that the turbines created. A noise study was performed at our home May-June 2013 and was determined to be below 50 decibels after all background noise was filtered out fro the turbine noise. I might add that I know by way of what is heard from these things that a 50 decibels noise limit is not low enough or acceptable in our situation. When I purchased my land of approx. 200 acres it was for my love of being in the outdoors and the serenity of the surroundings. At that time Everpower was already working on permitting in for this area which was unbeknown to me. I built my home with my own hands taking approx. 5 yrs to complete. Then the turbines were erected and the value of something that took my entire life to work for has now been de-valued. No one in there right mind would want to purchase this property if I decide to flee.

Court waits on wind farms' response to suit

By FERNANDO DEL VALLE Valley Morning Star | Posted: Wednesday, January 29, 2014 12:45 pm

Wind farm

RAYMONDVILLE — Two wind farms have until next week to answer a lawsuit in which residents accuse wind turbines of creating noise, devaluing property and posing possible health risks, federal court records show.

Records show U.S. District Judge Hilda Tagle requested that Duke Energy and E.ON Climate & Renewables North America and other defendants answer accusations by Feb. 6.

The companies requested Dec. 27 that the lawsuit originally filed Nov. 27 in 197th State District Court here be moved to federal court.

Twenty-three residents including Willacy County Commissioner Noe Loya and Precinct 3 Justice of the Peace Juan Silva Jr. filed the lawsuit, arguing the companies built wind turbines on their properties that created "nuisances."

Elon Hasson, spokesman for E.ON in Chicago, said the company was reviewing the lawsuit.

"We develop all of our wind farms in a safe, state-of-the-art and responsible manner," Hasson said in an email. "We believe these claims will be shown to have no validity."

Tammie McGee, spokeswoman for Duke in Charlotte, N.C., declined comment but added the plaintiffs consented to the placement of turbines on their properties.

The companies built "hundreds" of wind turbines that stand 467-feet high and weigh 7 tons on the properties of plaintiffs who received or will receive money and tax benefits that will exceed $50 million, the lawsuit states.

The lawsuit states the companies "carelessly and negligently failed to adequately disclose the true nature and effects that the wind turbines would have on the community, including the plaintiffs' homes."

The companies told residents that the wind turbines "would not be noisy, would not adversely impact neighboring houses and there would not be any potential health risks," the lawsuit states.

But the wind turbines create noise, reduce property values, interfere with television, telephone, satellite and Internet reception and destroy "scenic countryside," the lawsuit states.

The lawsuit states the wind turbines create "acoustic pressure pulsations that affect peoples' health."

Some residents were "even forced to abandon their homes," the lawsuit states.

The lawsuit states "permanent and irreparable harm will be caused to the area" because the companies and county did not plan to remove the turbines when their approximately 20-year lifespan expires.

Loya "can no longer enjoy sitting outside because of the loud noise," the lawsuit states. "The turbines also cause noise both inside and outside of the home, disturbing the peace and making it difficult to enjoy living there. (Loya) also experiences problems with his television reception. The wind turbines have also had a negative impact on the value of the property, among other losses," the lawsuit states.

The lawsuits states Silva "has difficulty sleeping, cannot have his windows open (and) cannot enjoy the sound of nature, due to loud noise from wind turbines."

fdelvalle@valleystar.com