

# SEAS Master's Project Final Report

## Community Engagement for Developing Scio Township's Environmental Sustainability & Climate Action Plan (ESCAP)

*Research Team: K. Dwyer, A. Kawamoto, A. Ostermeier, Z. Scancarello, W. White*

*Faculty Advisor: Raymond De Young*

*Client: Scio Township Planning Commission's Environmental Sustainability Task Force*

*Date: April 14th, 2022*



## Acknowledgements

Our research team extends our deepest gratitude to Jan Culbertson and Jane Vogel for their consistent and unwavering collaboration, leadership, mentorship, appreciation and kindness as our Project Clients. We also extend our sincere thanks to the entirety of Scio Township’s Environmental Sustainability Task Force for leading the creation of the ESCAP, valuing feedback from the community, and for their trust in our team’s involvement. Furthermore, many thanks to members of Scio key interest groups who we interviewed for this project, as well as Scio residents who took the time and care to complete the public input survey. Finally, we extend our sincerest gratitude to Dr. Raymond De Young, our Faculty Advisor who has provided guidance, feedback, and support throughout the project process.

## Table of Contents

Project Introduction .....	2
Reports 1 & 2 Overview .....	2
Public Input Survey Report .....	3
Key Interest Group Interview Report .....	23
Report 3 Overview .....	48
Ongoing Engagement Recommendations Report .....	48
Full Project Conclusion & Scio Township’s Next Steps .....	58
Appendix 1: Public Input Survey Questions .....	59
Appendix 2: Ongoing Engagement Resources .....	72
Appendix 3: Annual Implementation Report Template .....	74

## **Project Introduction**

This final report is a culmination of a team of five Master's students partnership with the Scio Township Environmental and Sustainability Task Force. The student team worked with Scio Township's Working Groups beginning in December 2021 and completed their collaboration in April 2023. The working group topics include: Energy and Buildings, Transportation and Mobility, Natural Ecosystems and Sustainable Food Systems, Materials and Waste, and Community Resilience and Emergency Preparedness. Each team member worked directly with a Working Group. The team determined the engagement strategies most effective for reaching key interest groups in the community to maximize participation and promote greater diversity and inclusion throughout the process to contribute to a well-developed Environmental and Sustainability Climate Action Plan (ESCAP). Community feedback played a key role in the creation of the ESCAP and will play a critical role in the plan's implementation. The team's facilitation of community engagement promoted the plan's capacity to address community members' distinctive concerns related to climate change. The team researched other relevant climate action and engagement plans to inform outreach strategies. The two primary forms of engagement undertaken for the creation of the ESCAP were a public input survey and a series of key interest group interviews.

## **Reports 1 & 2: Recommendations from Scio Residents and Key Interest Groups**

The five Working Groups in the Task Force created a list of initial goals, strategies, and actions for the ESCAP which the student team used to design their public input survey. The purpose of their survey was to gather feedback and information about public knowledge on and support for the Working Group's goals, strategies, and actions. In addition to survey input from Scio residents, it was also necessary for the student team to gather feedback from key interest groups within Scio Township. The student research team collaborated closely with Task Force members and interviewees to identify key interest groups and individual interview contacts. The Survey and Interview Reports, which can be seen below, include background information on survey design and distribution, respondent demographic data, context about the interviews and how they were conducted, and a summary of results as they pertain to each of the different working group's original goals.

# Scio Township Public Input Survey Report

*Date Written: November 3, 2022*

## Introduction

Throughout 2022, Scio Township continued developing the inaugural Environmental Sustainability and Climate Action Plan (ESCAP). To support this work, a team of Master's students from the University of Michigan's School for Environment and Sustainability (SEAS) have collaborated alongside Scio's Environmental Sustainability Task Force to engage with the community in developing the ESCAP. The SEAS team is providing feedback from the community to the task force from (1) their public input survey and (2) stakeholder interviews. A separate report is dedicated to the interviews. This report covers the survey design, distribution, and results.

## Survey Design

Throughout the beginning of 2022, each of the five working groups in the task force created a list of initial goals, strategies, and actions for the ESCAP. Based on these initial drafts of the plan's goals, the SEAS team designed a public input survey to gather feedback and information about public knowledge and support for various aspects of the ESCAP. The survey consists of 8 sections - general questions, a section for each of the five working groups, community involvement, and demographics. In total, there are 43 questions in the survey. Respondents were not required to answer any questions and were able to skip questions if they chose to.

## Distribution

The survey was available online via the online survey platform Qualtrics from June 3, 2022 to September 6, 2022 for a total of 96 days. Once public, the survey was shared with Scio Township residents through a variety of methods to encourage greater participation and diversity of perspectives. The task force was asked to share the survey with their friends, family, coworkers, and community members that they had personal connections with. The SEAS team reached out to homeowners associations, of which many residents are a part of, and requested that they include the survey information and link in their newsletters and other forms of communication within their community. The team reached out to as many homeowners associations as they could find a contact person for. Not all homeowners associations that were contacted responded or shared the survey with their community. The team also connected to co-housing communities, the manufactured home community, and multifamily housing owners to get the survey shared with their residents. Below is a table of the homeowners associations and neighborhood groups that were contacted in order to share the survey around Scio Township. To incentivize participation, survey respondents were able to enter a raffle for one of ten \$20 gift cards.

In person, the SEAS team tabled at a variety of events during the summer. They tabled at the Ann Arbor Green Fair alongside the 2030 District representatives. On the last day of elections this summer, the SEAS

team shared the survey link and information about the ESCAP with residents voting or dropping off ballots at 2 different polling sites. These polling sites included Washtenaw Intermediate School District and Scio Farms Community Club House. For the rest of the polling locations, yard signs with the survey information were put out.

In addition, the survey was included in the Township Newsletter which is mailed to all residences. The survey was shared via the Township Facebook page and published on the Township website. A variety of local community groups on Facebook and a local newsletter shared the survey with their audiences.

Homeowners Associations & Neighborhood Groups Contacted	
Arbor Chase of Scio Condominiums	Polo Fields
Bridgewood Hills	Saginaw Hills
Country French Estates	Scio Farms
Gallery Park Condominiums	Scio View
Great Oak Cohousing Condominiums	Sunward Cohousing
Hometown Village of Ann Arbor	Touchstone Cohousing Condominiums
Kirkway of Scio	Trailwoods Washtenaw Condominiums
Lakestone Apartments	Uplands of Scio Ridge
Loch Alpine Improvement Association	Walnut Ridge
Parkwood Condominium Association	

## Responses & Demographics

In total, 283 residents responded to the survey during the roughly 3 months that it was open. Of those, not all completed the full survey. 209 of the respondents completed 98% or more of the survey. To understand who in the community responded to the survey, the team collected demographic information from respondents. Questions 35 through 43 related to demographic information. It's important to note that this survey does not perfectly reflect the views of those in the township and it should be considered how the results are affected by who participated in the survey process.

In Scio Township, 17% of residents are over the age of 65. 39% of survey respondents were 65 and older. Another 22% were between 55 to 64 years old. On the other hand, only 9% of respondents were 34

years old or younger. Overall, survey respondents represent an older demographic than the general Scio Township community.

Scio Township residents are 77% white alone. Four percent (4%) of residents are Black, less than 1% American Indian, and 3% Hispanic. Comparatively, survey respondents tended to be white and Asian or Pacific Islander more than would be expected for Scio Township's actual population. Survey respondents are 87% white or Caucasian, 3% Black, 2% Hispanic or Latino, 2% Native American or Alaskan Native. Six percent (6%) identified as Asian or Pacific Islander and another 4% identified as another race or ethnicity. The list of responses for those that identified as another race or ethnicity is included in the Appendix 1 (Question 36).

Respondents tended to have higher incomes than is proportional to the overall township population. Currently, 4% of Scio's actual residents are in poverty. Of survey respondents, over 40% have an annual household income greater than \$150,000. Another 17% make \$120,000 to \$150,000 annually. On the other hand, 5% of respondents earned less than \$35,000 per year, with another 7% earning between \$35,000 and \$50,000. Most respondents live in a two-person household.

The majority of respondents (81%) live in a single-family home. 6% live in an apartment and 5% live in a manufactured home. The remaining respondents stated that they lived in some other type of housing, such as a townhouse or a condominium. These results are in the Appendix 1, Question 41.

The majority of respondents (93%) own their home with the remaining 7% currently renting in Scio Township. Regarding where in the township respondents live, residents from all precincts of the township participated in the survey process. We also had responses from over 25 homeowners associations, cohousing communities, and other neighborhood associations. The majority of respondents live in precincts 8 and 3, and the least number of respondents live in precincts 1, 2, and 5 (see Responses by Precinct and the associated precinct map below). Finally, 64% of respondents plan to live in Scio Township for over 6 more years.

Responses by Precinct & Map	
Area	Number of Responses
Precinct 1	8
Precinct 2	11
Precinct 3	36
Precinct 4	29
Precinct 5	14
Precinct 6	23
Precinct 7	29
Precinct 8	45

Precinct Map Image Source: [Precincts and Polling Places 2022-31 | Township of Scio, MI \(sciotownship.org\)](https://www.sciotownship.org/Precincts-and-Polling-Places-2022-31)

Responses by Homeowners Association and Neighborhood Communities			
Name	Number of Responses	Name	Number of Responses
Arbor Point	2	Merlin/Marshall	1
Country French Estates	3	North delhi	1
Gallery Park Homeowners Association	1	Polo Fields Homeowners Association	8
Great Oak Cohousing	1	River Woods	1
High Hollow	1	Scio Farms	2
Hometowne Village	1	Scio Hills	15
Hunters Crossing	1	Scio Sunrise Homeowners Association	1

Huron woods	1	Scio Farms Estates	1
Kirkway of Scio	3	Sommerset Pointe Condominium Association	1
Kramer Triad	1	Sunward Co-Housing	3
Loch Alpine Improvement Association	8	Touchstone Cohousing Association	3
Loch Highland Lake Assn.	1	Trailwoods	1
Marshall Lakes POA	1	Uplands	1

## General Questions

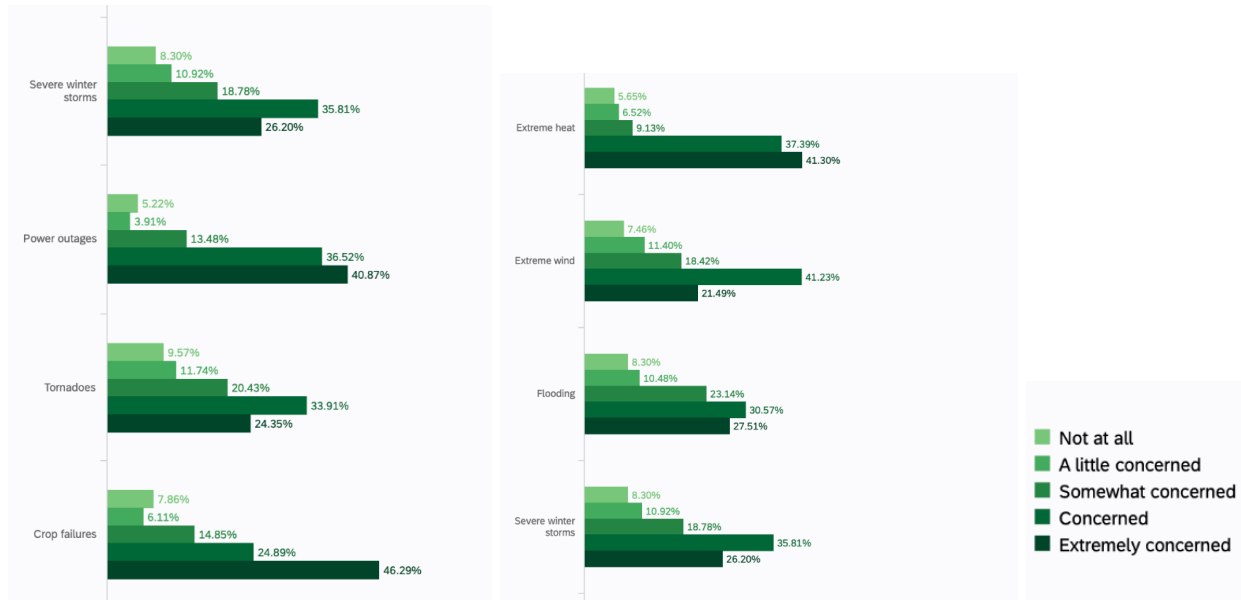
Prior to asking about specific goals related to each of the five working groups, survey questions 1 through 4 asked the community about their general understanding of and concern regarding climate change. All respondents expressed some understanding of the causes and consequences of climate change. No respondents stated that they didn't understand. Nearly 80% of respondents understand quite a bit or a very great deal. The general consensus around climate change sets a solid foundation for the township to take actions that will address local climate-related challenges.

Through a resolution passed on July 26, 2022, Scio Township declared a climate emergency and set goals for a just transition towards environmental sustainability. In this declaration, Scio Township set the goal to reach net zero carbon emissions for township government operations by 2030 and for the entire township by 2035. In the survey question asking about residents' support for this goal net zero emissions were clarified to mean that any carbon dioxide released into the atmosphere from the township's activities is balanced by an equivalent amount being removed. It was also stated in the survey that this goal is consistent with the goals already set by the state and county. 80% of respondents support or extremely support this goal, with over 50% of respondents extremely supporting it. This demonstrates the high level of support that the township has for addressing climate change impacts.

Regarding the impacts of climate change locally in Scio Township, over 70% of residents are concerned or extremely concerned. Only 6% of respondents were not concerned at all about climate change in the township. In particular, people expressed the most concern about crop failures, extreme heat, and power outages.



Question 4: Please indicate your level of concern for each of the following climate change impacts:

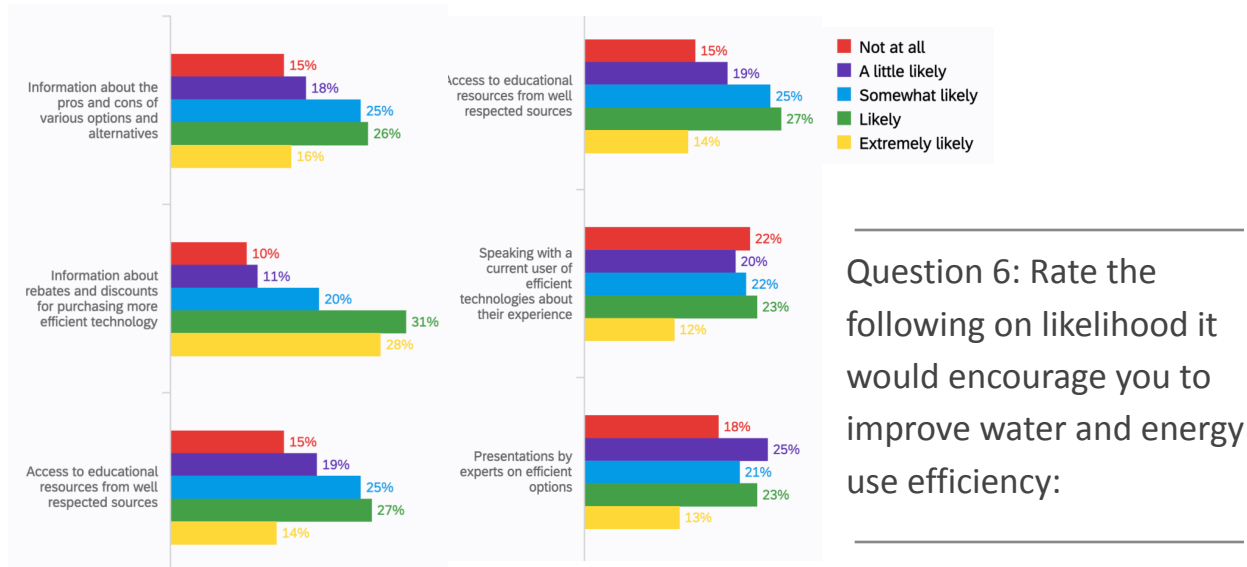


## Energy & Buildings

The Energy and Buildings working group focused on three main goals - electrifying and switching to renewables, improving water efficiency, and improving energy efficiency. Questions 5 through 8 related to these goals. Already most township residents have taken action to decrease their home's emissions. 58% of respondents have improved water efficiency through actions such as installing low flow fixtures, replacing water intensive lawns with native plants, or installing a rain barrel. Over 75% have improved energy efficiency by taking steps such as completing an energy audit of home, purchasing Energy Star appliances, adding insulations, or switching to all LED lighting. Over 25% of respondents have electrified their home through actions like replacing their furnace with a heat pump or switching to electric outdoor equipment and tools. Another 25%+ have switched to renewable energy by installing solar panels or participating in DTE's MIGreen Power Program. Only 10% of residents have not taken any action to reduce their home's emissions. Respondents had the opportunity to list any other actions they had taken to reduce their home emissions. These responses are in the Appendix 1. Many included reducing energy use through behavioral changes including heating their home less and turning lights off when not in use.

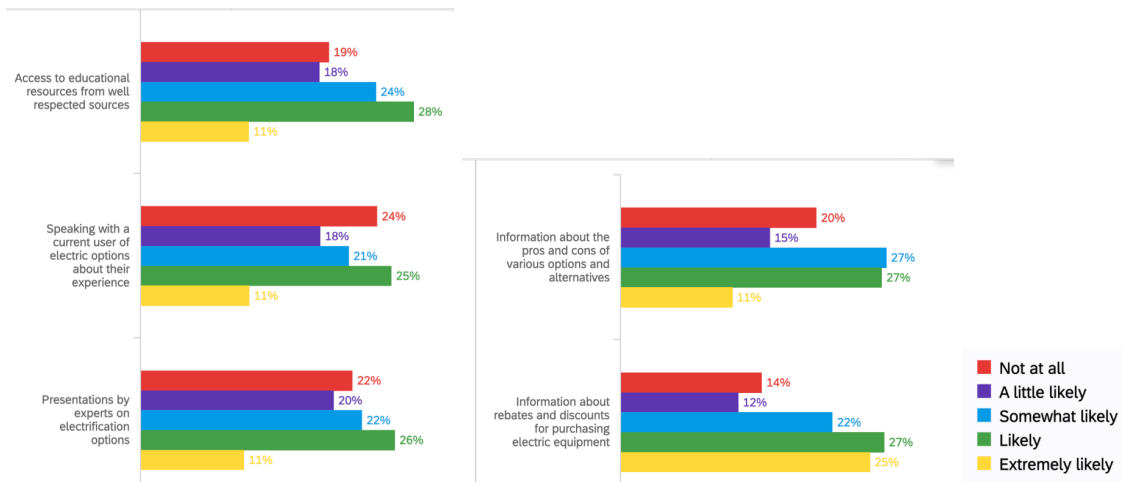
With many residents already taking action to reduce their energy consumption and emissions, there are a variety of ways that the township can support residents in further decreasing their home's emissions.

To improve their efficiency, survey respondents considered information about rebates and discounts for purchasing more efficient technology to be the intervention most likely to spur change. 59% of respondents considered it likely or extremely likely to change their behavior.



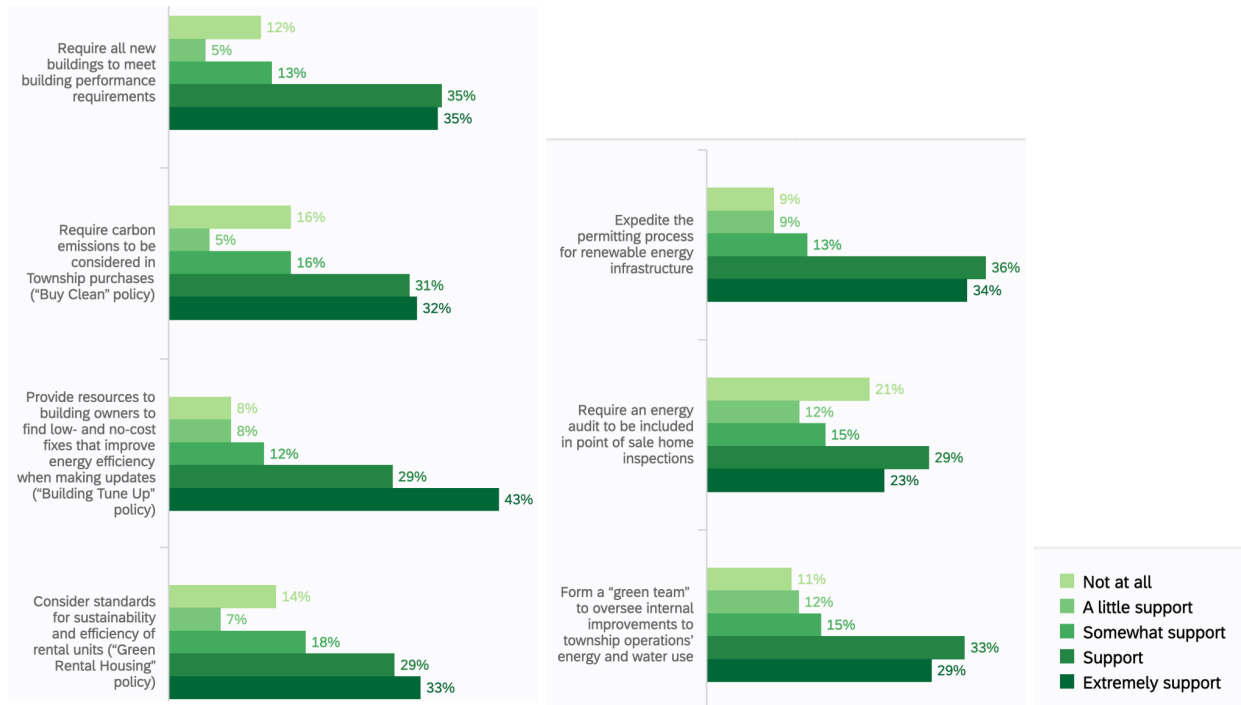
The results are similar for interventions to encourage home electrification. The survey question explains that electrification is the process of replacing technologies that use fossil fuels (coal, oil, and natural gas) with technologies that use electricity. Respondents were most likely to further electrify their homes when provided with information about rebates and discounts for purchasing electric equipment.

Question 7: Electrification is the process of replacing technologies that use fossil fuels (coal, oil, and natural gas) with technologies that use electricity. Rate the following on likelihood it would encourage you to increase the electrification of your home:



Beyond what individual residents can do to decrease their emission, there are a variety of policies that the township can adopt to reduce emissions related to energy use and buildings in Scio Township. Seven policies were briefly described and respondents shared their level of support for each. All policies were supported by the majority of respondents. The most well supported policy is to provide resources to building owners to find low- and no-cost fixes that improve energy efficiency when making updates, also known as a “Building Tune Up” policy. The next most supported policies are to require all new buildings to meet building performance requirements and to expedite the permitting process for renewable energy infrastructure. On the other hand, requiring an energy audit as a part of home inspections received the most negative feedback with 32% saying they had little or no support for this policy.

Question 8: Scio Township will consider new actions to reduce emissions related to energy use and buildings. Rate your level of support for each of the following actions:



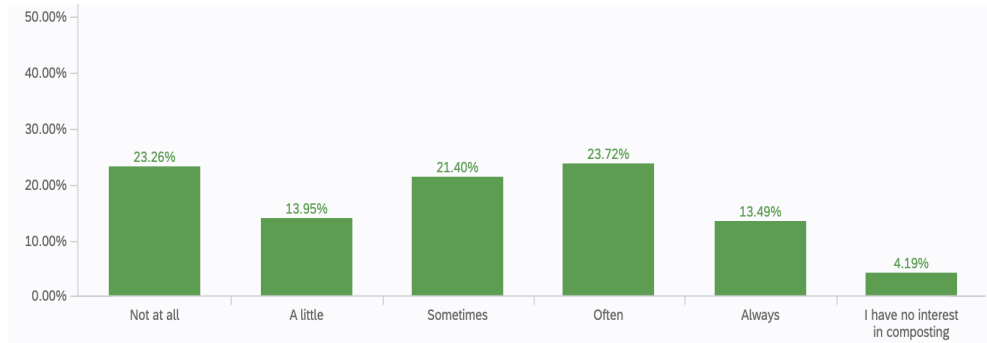
## Materials & Waste

Survey questions in regard to materials and waste focused primarily on composting, community gardening, recycling, and community cleanups, as these were the primary focuses of this subgroup prior to the creation of the public engagement survey. In regard to composting and gardening, the working group wanted to gauge interest in setting up community sites for residents to use along with implementing educational programs to improve residents' knowledge about these issues. Survey questions 26 through 29 aimed to collect information on the prevalence of both composting and gardening in the township, along with methods that could incentivize residents to engage with both further. It was found that 38% of respondents already compost regularly at home, whereas 35% do not compost at all. 43% of respondents were found to garden regularly at home, with 15% not gardening at all. When asked whether or not they would make use of a community composting facility, 37% of respondents indicated that they would frequently make use of such a facility, whereas only 15% claimed they would make use of a community garden in the Township. Based on this information, we recommend that the task force implement low-cost strategies such as educational opportunities in regard to composting and gardening, which could aid residents in their ability and willingness to

effectively compost and garden at home. This could be done through township-run classes or information made available on the township website or newsletter. Given that about a third of the respondents showed interest in a community composting facility, this could also be a useful way of achieving this working group’s composting goals.

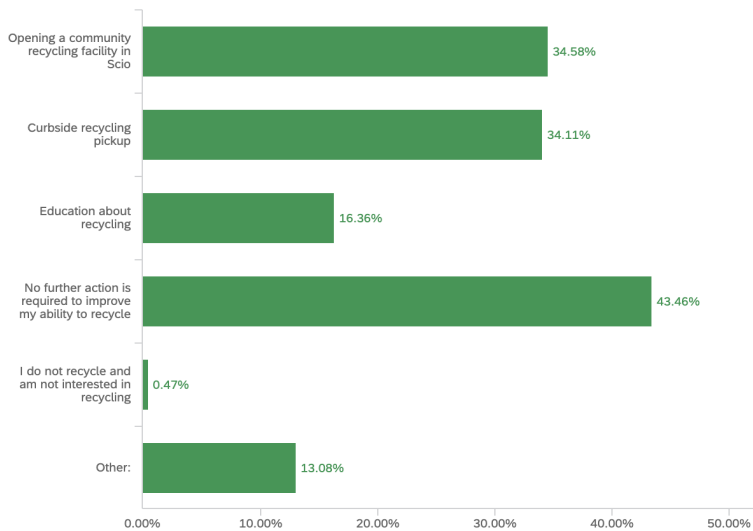
---

Question 29: If made available, would you make use of a community composting facility?



---

In regard to recycling, the materials and waste group set the goal of meeting recycling standards that align with the Washtenaw Regional Resource Management Authority and Recycle Ann Arbor along with generally increasing the coverage of at-home recycling pickup. Question 30 addresses these goals and determines what measures could aid residents in increasing their ability to recycle. 43% of respondents claimed that no further action was required to aid in their ability to recycle, likely indicating that they are already serviced by at-home recycling pickup. However, 35% respondents indicated that the opening of a community recycling facility would increase their ability to recycle, and 34% indicated that curbside recycling pickup would do the same. Some respondents also expressed interest in the township providing information on what materials can and cannot be recycled along with increasing the amount of materials that are able to be recycled. Given the fact that the materials and waste group has already opened up a dialogue with Recycle Ann Arbor to improve the coverage of curbside recycle pickup in Scio Township, we recommend that this be pursued further in order to obtain a cost-effective strategy to increase recycling in the township. Also providing information on what materials can be recycled and making this accessible to residents via the township website or newsletter may be useful as well.

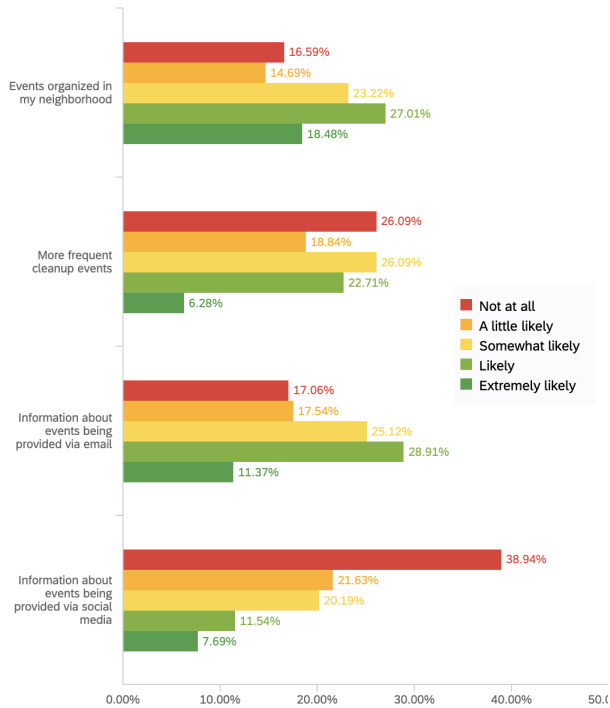



---

Question 30: Which of the following would increase your ability to recycle? Select all that apply.

---

The final question in the materials and waste section of the survey was in regard to increasing township participation in community cleanup events. Respondents were asked to rate the likelihood that a handful of different interventions, selected in collaboration with the materials and waste working group, would impact the respondent's likelihood to partake in township cleanup events. These interventions included cleanup events organized at the neighborhood level, more frequent cleanup events, email notification about cleanup events, and even information being provided via social media. The results of the survey indicated that the two interventions that would potentially increase community involvement the most would be events organized and executed at the neighborhood level and email notification for township cleanup events, with 45% and 40% of respondents indicating that these interventions would likely or extremely likely increase their involvement respectively. Of the four interventions, only the final one regarding cleanup event information being distributed via social media received mostly negative feedback, with less than 20% of respondents indicating it would likely or extremely likely increase their involvement in cleanup events. Based on these results, we recommend that the task force pursue a greater amount of small-scale cleanup events focused at the neighborhood level, potentially by contacting and organizing these events through homeowners association, apartment buildings, and cohousing contacts. On top of this, the creation of a comprehensive email-distribution list to notify residents about township cleanups and other related events could go a long way in increasing participation and engagement with these events and other task force initiatives.



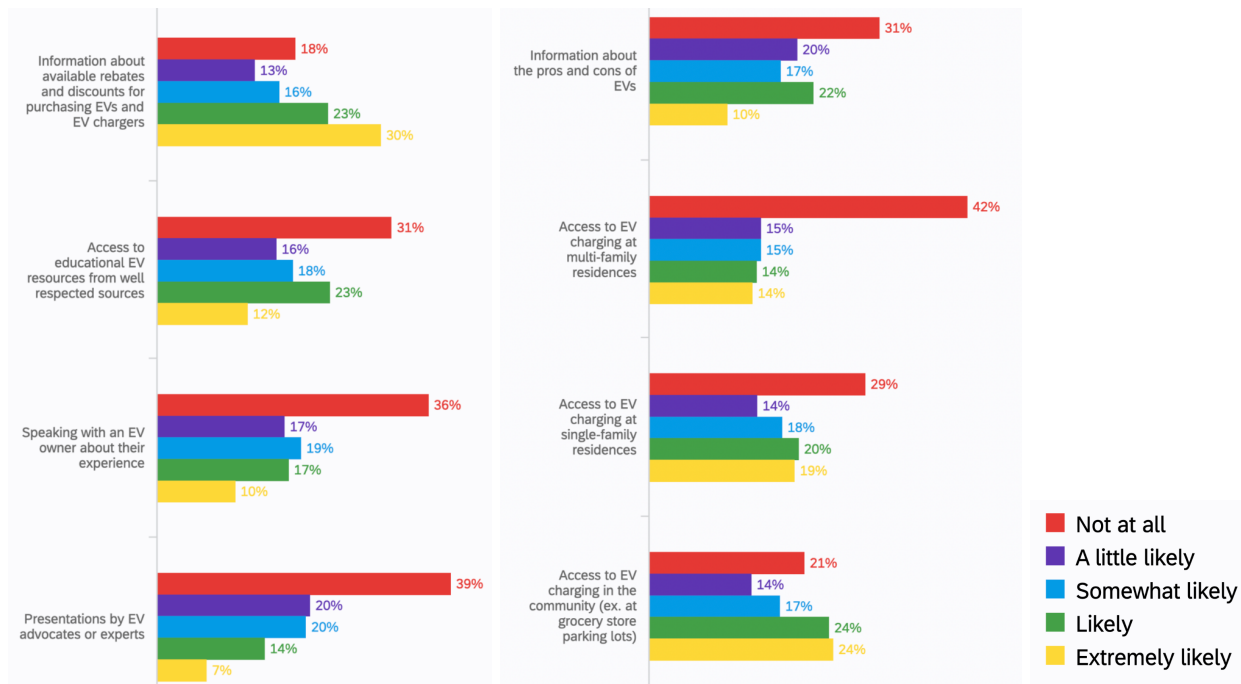
Question 31: Rate the likelihood that the following would encourage you to take part in regular community litter cleanup events

## Transportation & Mobility

Transportation and Mobility goals centered around reducing the number of miles driven in personal vehicles and increasing electrification of transportation. Questions 21 through 25 relate to these goals.

As a baseline, 12% of resident respondents already have an electric vehicle (EV). A variety of options for encouraging residents to use an electric vehicle were proposed to survey respondents. Information about rebates and discounts for purchasing EVs and EV chargers was most likely to increase resident’s likelihood of using an EV. Access to EV charging stations at their homes and in the community are also likely to get residents to consider using an EV. Of recommended steps to take, viewing a presentation and speaking to an EV owner were the least likely to spur change.

Policy options to increase EV use in the township were also presented to survey respondents. Respondents support all of the proposed policies to increase EV use in Scio Township. These policies included allowing and encouraging installation of EV charging stations throughout the township, including in residential and commercial areas. Residents also supported requiring new residential construction, both single-family and multi-family, to be capable of installing an EV charger and require that a portion of newly constructed parking lots are EV-charging capable. EV-charging capable indicates that EV charging stations can be more cheaply and easily installed in the future but do not necessarily need to be installed immediately. Encouraging and requiring the installation of public EV charging stations throughout the township is also strongly supported by respondents.



### Question 23: Rate how each of the following would increase your likelihood of using an EV:

Decreasing miles driven in a personal vehicle is one way to lower emissions. Nearly half (47%) of respondents consider it a reasonable goal for Scio residents to decrease the amount they drive in personal vehicles by less than 25%. They did not generally support setting a goal for reducing driving by a more significant percentage with only 32% supporting a reduction goal of 25% to 50%. Nearly 15% of respondents favored no reduction in personal vehicle miles driven..

There are a number of steps that the township can take and advocate for that would decrease the miles residents drive in personal vehicles. Respondents voiced that expanding public transit was most helpful. 46%+ of residents identified the expansion of safe, accessible, and comprehensive public transit systems within Scio Township and connecting this system with transit in neighboring jurisdictions as most likely to decrease resident’s likelihood of driving a personal vehicle.

Additionally, expanding bike lanes and walkways would increase their capacity to walk and bike more. The creation of more safe, protected bike lanes (45%) and installation of safe, attractive walkways (43%) were also likely to decrease resident’s likelihood of driving a personal vehicle.

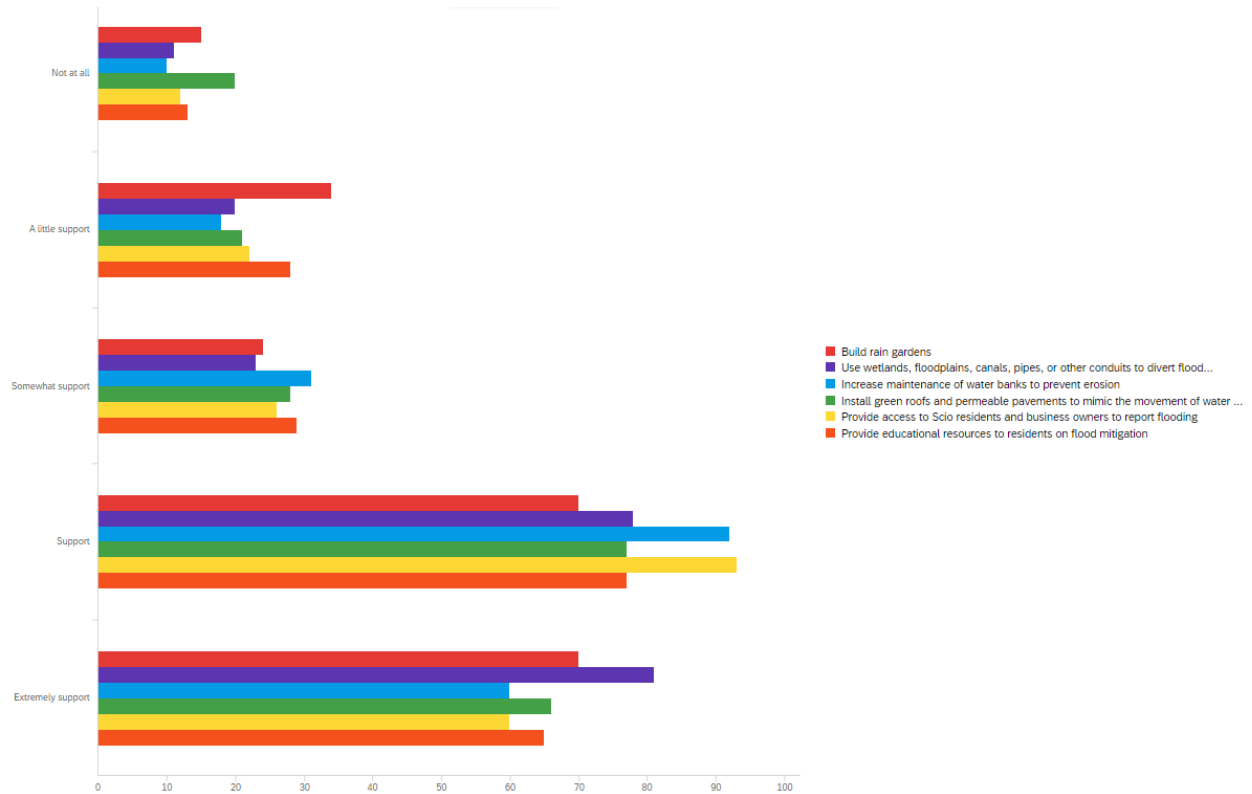


## Natural Ecosystems and Sustainable Food Systems

The Natural Ecosystems and Sustainable Food Systems working group's goals and strategies focused on climate change mitigation and adaptation strategies for the natural ecosystem that could be employed by the township or by residents, such as increasing tree coverage and green space. Questions 12 through 14 related to natural ecosystems and questions 15 and 16 asked about food systems, including Scio resident's connection to food production and techniques for conserving farmland.

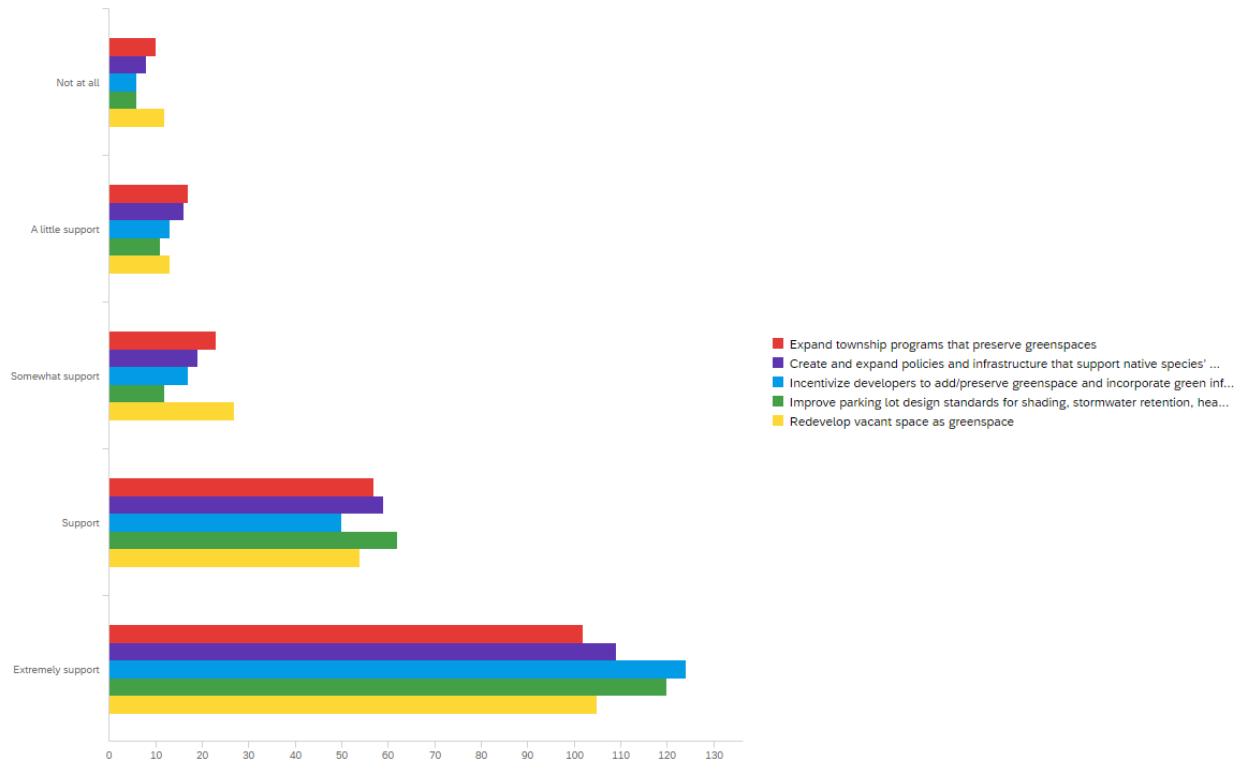
The first survey question for the Natural Ecosystems section asks residents to rate their level of support for policies and actions that will mitigate flooding impacts. The survey results below show that the majority of respondents either support or extremely support each of the policies and actions to mitigate flooding impacts in Scio Township. 75% of respondents support diverting flood water via wetlands, floodplains, canals, pipes, or other conduits. 72% support increasing maintenance of water banks to prevent erosion. 72% support providing access to residents and business owners to report flooding. 67% support installing green roofs and permeable pavements to mimic the movement of water in nature. 67% support providing educational resources to residents on flood mitigation. 66% of respondents support building rain gardens.

Question 9 - The township will consider new actions to mitigate flooding impacts on Scio residents and businesses. Rate your level of support for each of the following actions:



The next set of survey questions asked residents about their support for increasing green space in Scio Township. The survey results show that 88% of respondents either support or extremely support increasing the quantity of green space in the township (66% of respondents extremely support). The following survey results (graph included below) show respondent support for policies and actions that will increase the quantity and quality of greenspace in Scio Township. The results show that 86% of respondents support designing parking lots for shading, storm water retention, heat mitigation, and planting trees. 83% support incentives for developers to preserve and incorporate green spaces. 80% support policies supporting native species' habitats. 76% support programs preserving green spaces. 76% of respondents support redeveloping vacant space as green space.

Question 13 - The township will consider new actions to increase the quantity and quality of greenspace within the community. Rate your level of support for each of the following actions:

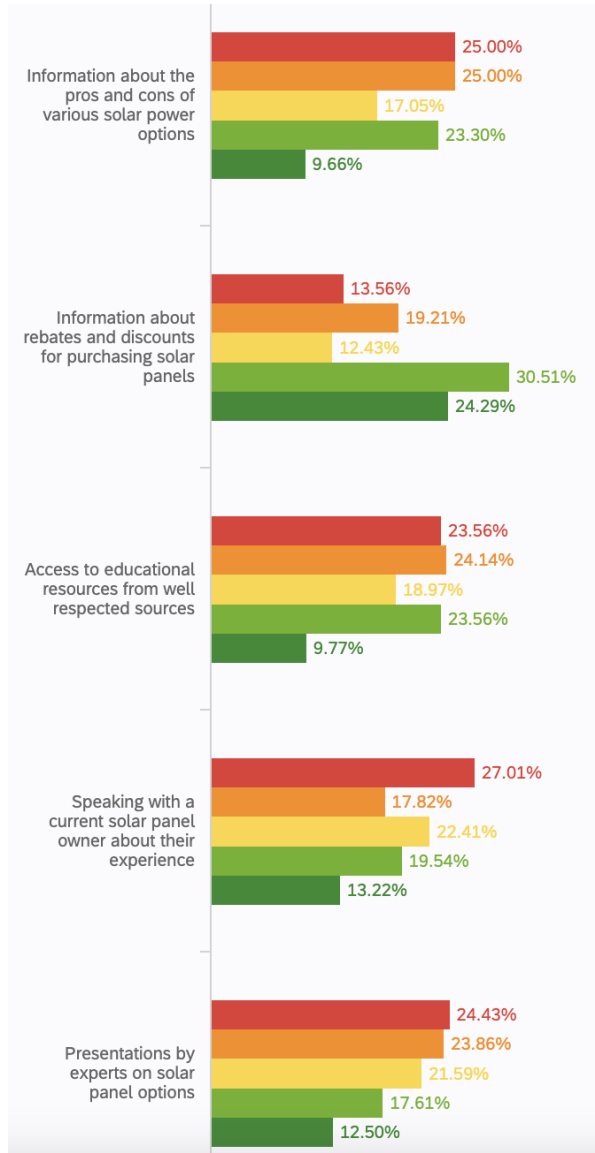


In relation to green space, the survey results show that 86% of respondents support increasing tree canopy coverage in the township. The survey results also show that respondents do not support township policies and actions to increase the use of low-flow water fixtures. This is likely due to the fact that the majority of respondents (71%) already have them installed.

The final section of survey results for the Natural Ecosystems working group pertains to sustainable food systems and land use. The first survey question asked respondents to rate the importance of knowing where one's food comes from. The survey results show that 71% of respondents answered that knowing where their food comes from is important. The second of these survey questions explain that healthy food systems rely on farmers conserving farmland via conservation techniques, and asks whether respondents support utilizing these techniques. The survey results show that 86% of respondents support utilizing land conservation techniques.

## Climate Resilience and Emergency Preparedness

Questions 17 through 20 concern the goals of the climate resilience and emergency preparedness working group. The first questions in the Climate Resilience and Emergency Preparedness section of the survey pertained to solar panel installation, more specifically the percent of respondents with solar panels already installed at their home along with asking respondents without solar panels already installed to indicate which potential interventions would increase their likelihood of installing them. These interventions included providing information on the pros and cons of solar power options, providing information about rebates and discounts for purchasing solar panels, access to educational resources from respected sources, speaking with current solar panel owners, and presentations by experts on solar panel options. Based on the results of the survey, it appears as though the most useful intervention would be providing residents with information on solar panel rebates and discounts, as 55% of respondents indicated that this would be likely or extremely likely to increase the likelihood of them installing solar panels on their home. In total only 27% of respondents without solar panels already installed indicated that they would be likely or extremely likely to install solar panels on their homes in the future, indicating that further education on the benefits of solar may be a useful and cost-effective strategy for the task force to pursue as well.



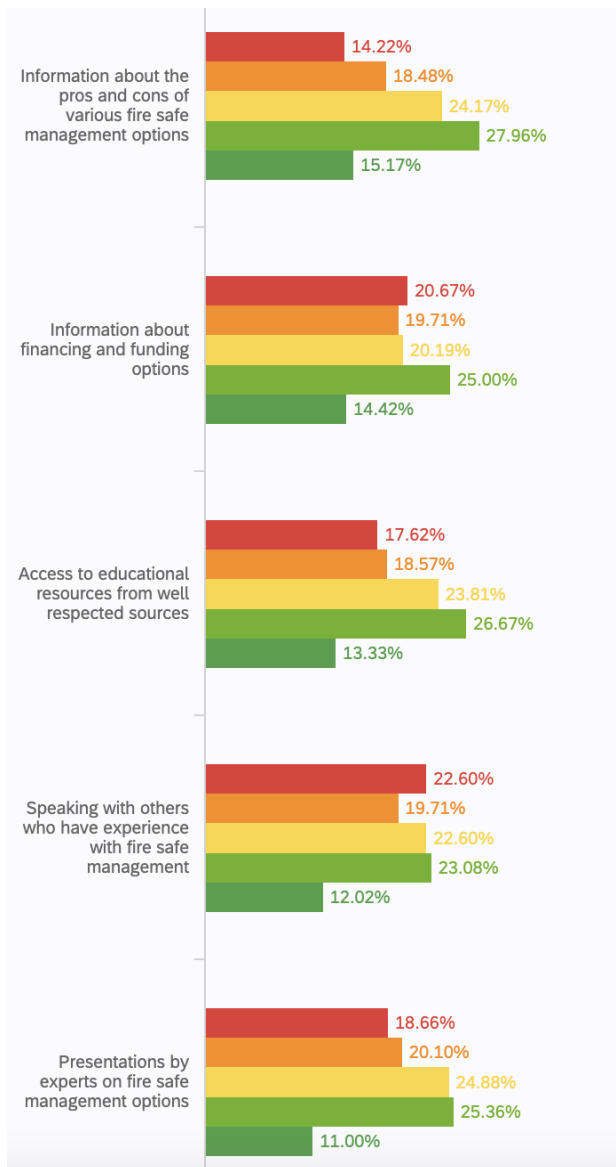

---

Question 18: Rate how each of the following would increase the likelihood of you choosing to install solar panels on your home.

---

The last two questions in this section were intended to gain insight on fire safe management practices and how respondents felt about these being implemented at township owned properties and their own homes. Respondents reacted positively to fire safe management practices being implemented at township properties, with 68% of respondents indicating they would support or extremely support fire breaks, prescribed burns, and the clearing of excess vegetation at these properties. The second question intended to gauge the usefulness of five different interventions on the likelihood that they would encourage respondents to practice fire safe management at their own homes. These interventions included providing information on the pros and cons of various fire safe management options, providing information on financing and funding for these options, access to educational resources from respected sources, speaking with others who have experience with fire safe management, and presentations by experts on fire safe management options. Of these five interventions, it appeared as though providing information on the pros and cons of different fire safe management options received the most positive

feedback, with 43% of respondents indicating this would be likely or extremely likely to encourage them to practice fire safe management practices at their homes. Access to educational resources and information about financing and funding options also generally received positive feedback, indicating to us that making educational resources about the pros and cons of management options and information about financing available on the township website and possibly in newsletters or in-person education events could be cost effective and beneficial to increase fire safe management practices in Scio.




---

Question 20: Fire safe management involves providing fire breaks in large plots of land, using prescribed burns, and cleaning excess brush. Rate how each of the following would increase the likelihood of you managing your yard/land in a fire safe way.

---

## Community Member Involvement in Township Operations

Questions 32 and 33 The final topic in the survey considered community member involvement in township governance and operations. Currently 75% of respondents identified themselves as not being involved in the township's governance or operations. Thirteen percent (13%) of respondents volunteer on a township committee of some sort. No staff members from the township completed the survey. Five percent (5%) of respondents hold an elected or appointed office in the township. Respondents were able to share other ways that they are involved in township governance and operations. Some shared that they had previously volunteered in the township. Others participate actively by staying engaged and attending Board of Trustees and other committee meetings. All of the responses to this question can be found in the Appendix 1.

Respondents also spoke to how they would like to be involved in sustainability and climate action in Scio Township. The vast majority of respondents, 79%, would like to be involved in their personal life through individual actions such as recycling, composting, and driving an electric vehicle. Many (54%) would like to be involved locally within their neighborhoods and communities through activities like participating in community cleanup events. A quarter expressed interest in getting involved in their workplace, with a similar number interested in engaging with organizations like a community garden or an environmental nonprofit. Over 20% of respondents were interested in engaging with township governance by attending public meetings or joining the Task Force. On the other end, 12% were not interested in involvement with climate action and sustainability. Residents were also able to share other ways that they'd like to be involved; those responses are in the Appendix 1 (Question 33).

## Conclusion

This public input survey offers a snapshot of the views and opinions of Scio Township residents. While not perfectly representative of the community, this survey offers insight into residents' priorities when it comes to addressing climate change. These results will be useful in further refining and developing the goals, strategies, and actions for each of the five working groups as they solidify what will ultimately become the ESCAP.

# Scio Township Key Interest Group Interview Report

*Date Written: November 3, 2022*

## **Interview Context**

Our research team performed ten semi-structured interviews with individuals from eight key interest groups to gather expert input on the Scio Sustainability Task Force's first iteration of goals, strategies and actions for the Environmental Sustainability and Climate Action Plan (ESCAP). Key interest groups included Scio Township operations, the Fire Department, the Parks and Recreation Advisory Board, the Transportation Alternatives Planning Committee (TAP), the Land Preservation Commission (LPC), and local farms. In this report, interviewees will remain entirely anonymous except for the key interest group they are a part of to provide context for their comments.

All members of our team carried out interviews during the summer of 2022 utilizing an interview guide (list of questions) and a list of existing goals and strategies that were most relevant to the interviewee's area of expertise. It was unrealistic to provide a comprehensive list of all goals and strategies to each interviewee, therefore the following document is not all-encompassing of every goal and strategy created. Moreover, the information provided for each working group is not uniform, as feedback and input from interviewees was not even between working groups. Therefore each working group section may have more, fewer, or different subsections. Finally, given that interviews were carried out in the summer of 2022, the information provided is limited to that time period. Therefore, there may be updated information that this report does not capture.

## **Current Sustainability Practices**

This section includes all sustainability practices already underway in Scio Township, organized by the working group they most relate to. The sustainability practices listed may not be all-encompassing of Township efforts, as they include only what interviewees discussed.

### **Buildings & Energy**

#### **Green Team Attempt**

A Scio Township staff member described how Jan Culbertson attempted to engage staff in a green team. The interviewee commented: "we're just so bare bones here. We weren't able to really do it." However, the staff member indicated that they are hopeful they can get this initiative going as Jan works to improve the energy efficiency of lighting in township-owned buildings.



## Transportation & Mobility

### **Transportations Alternative Planning Committee (TAP) Initiatives**

Two TAP staff members described the committee's sustainability initiatives:

- **Zeeb Pathway**

A TAP staff member described how progress is underway on the Zeeb road pathway extension towards the Huron River, eventually connecting it to the B2B Trail, which extends through the entire county. According to the interviewee, TAP is looking forward to concluding the Zeeb pathway and especially improving pedestrian and bike friendly transit over I-94 on Zeeb.

- **Parks and Pathways Millage**

One TAP staff member explained that the Parks and Pathways Millage allows TAP and the Parks and Recreation Advisory Board to expand and maintain parks and pathways. This interviewee predicted the millage will continue to be supported by Scio voters. Another TAP staff member described how the millage was passed by voters in 2019 and designated funding for trails, pathways, and parks in Scio Township. They commented: "I think that was a big step forward to making parks and trails and pathways a priority in Scio Township...this community supports that stuff...if we can just get it before the voters in Scio, it's something they're going to support." This same TAP staff member explained that with millage funding TAP wants to be sure they're spreading the money across the whole township.

- **Building environmentally friendly trails**

A TAP staff member described the steps TAP takes on some of their trail projects: When putting down paths, they attempt to replace any trees they cut elsewhere. They use concrete instead of asphalt, which results in less heat generation because concrete reflects rather than absorbs heat. Trail builders can also include erosion control and infiltration trenches (infiltrates and cleans the water, and reduces runoff, which mitigates the impact of large storm events). The interviewee said that TAP's ability to take these steps is impacted by the amount of space they have to work with.

### **Sustainable commuting**

A TAP staff member comments that biking, walking, and busing as transportation to and from work is possible in Scio Township as a more sustainable alternative to driving. The staff member says they commute this way.

## Materials & Waste

### **Waste and recycling approach**

A Scio Township staff member describes how the prior township board established a single waste hauler approach to waste recycling, and recycling removal. All residential waste hauling in the township was included as well as curbside recycling.

## Community Resilience & Emergency Preparedness

### **Scio Fire Department Initiatives**

A Fire Department staff member and a Scio Township staff member described the department's sustainability initiatives:

- **Fire Station Improvements**

A Fire Department staff member described how: "Just in our building, we've done a number of improvements that help reduce our energy usage...We've gone through a renovation where we completely redid the station." They explained how the department improved the station's insulation and installed all energy efficient appliances and LED lighting. They have plans to equip all staff vehicles as EVs and charge them in-house, and are out to bid on a solar project that would power the building (may be in place by Fall 2022). When an electric fire engine becomes available, they also hope to purchase one and charge it in-house.

- **Fire Department Education and Outreach**

A Fire Department staff member said that the Fire Marshal works with homeowners on controlled burns and educates and trains business owners and citizens on basic fire extinguisher use and safety. They also work with companies to issue permits for controlled burns. This prevents fires from starting and spreading. A Scio Township staff member described how the Scio Fire Department is working with businesses to manage their hazardous wastes and has discovered some challenges in properly disposing of hazardous wastes.

## Natural Ecosystems & Sustainable Food Systems

### **Scio Parks and Recreation Department Initiatives**

A Scio Parks and Recreation staff member described the department's sustainability initiatives:

- **Public access to green spaces**

Scio's land preservation millage has secured large amounts of green space (forest canopy, woodlands, etc). and has created public access to these green spaces by opening public nature preserves.

- **Minimally invasive green spaces**

In creating public nature preserves, the department aims to be minimally invasive. For example, when making a decision about where a parking lot will be, they make sure minimal trees are removed and consider how it will impact the watershed.

- **Natural features study**

In the summer of 2021, University of Michigan School for Environment and Sustainability interns did a comprehensive natural features study to create a baseline for existing properties.

- **Educational programming**

They have offered some light educational programming: monthly Saturday morning walks open to the public, where some members of the group are naturalists and help educate the public.

- **Reduce vehicle emissions**

One broad base initiative is to minimize the use of vehicles so people can get from point A to B to C using alternative transportation with a lower carbon footprint.

- **Reaching carbon neutrality**

This Parks and Recreation Department staff member sees the department's role in protecting many green spaces as an important part of reaching the carbon neutrality goal: "...when you can create some responsible public access that motivates people to continue to want to protect green space and maintain the rural character of Scio Township, because if you can enjoy that green space, you're probably more inclined to vote for a millage that will help protect the green space."

### **Farming practices in line with the National Organic Program**

A farm owner described how their farm is "not a certified organic farm, but does everything by the National Organic Program...[we] don't use any chemicals that are prohibited in the organic law, rotate our fields, use cover crops, utilize a no-till system, use a lot of compost, [and utilize] deep mulching."

### **Sustainable Farm Initiatives**

A farm owner described what their farm has done to integrate sustainability into their operations:

- **Use of organic growing practices**

The farm is scaled according to human beings' ability to do the work, including hand harvesting and tilling. The produce is distributed and sold locally, within a 20 mile radius and about 80% of produce is a perennial polyculture. They use root cellars, which is a passive, zero energy way of utilizing the cold weather to store about 20 tons per acre of root crops.

- **Farm landscape is conducive to flooding**

In case of flooding, the wetlands on the farm can take most of the moisture due to high, sandy ground. Due to the human scale, people can walk through muddy terrain and continue to farm and complete tasks larger machinery couldn't do.

- **Solar panels**

600 solar panels were installed that generate 100% of the power for one of their sites. All the refrigeration and heat pumps are solar powered.

### **Land Preservation Commission (LPC) Initiatives**

LPC staff members described what the LPC has done so far to promote sustainability through the following initiatives:

- **Use of Buy-Protect-Sell**

A LPC staff member commented that: "The LPC utilizes this program to buy the whole property and protect it for the purpose of sustainable agriculture. In the past, we leased the property back to farmers. By owning the land, the LPC has more control over the agricultural practices performed on the land."

- **Soil health scholarship**

The LPC is offering a \$10,000 scholarship that teaches people about soil health.

- **LPC Millage:**

A Scio Township staff member described how the land preservation millage is coming up on 20 years of effort to preserve open space and keep land in agricultural use.

### **Utilizing data of bio reserves in Scio**

A Scio Township staff member described how about 20 years ago, there was a study done in conjunction with the Huron River Watershed Council that identified where the bio reserves were located within Scio. This information has been used by the township since then, and the land that has been conserved is consistent with those identified reserves.

## **Overarching Goal Feedback**

This subsection provides key pieces of feedback from interviewees in reaction to the current proposed overarching goal for the Environmental Sustainability and Climate Action Plan:

### ***Overarching Goal: Reach net zero carbon emissions for township government operations by 2030, and for the entire township by 2035.***

Several interviewees, including a Scio Township staff member and Fire Department staff member simply commented that they feel this goal is feasible. Other interviewees either felt the same and elaborated further, or had other opinions (described below).

#### **In support of the goal**

A Scio Township staff member commented: “There's general support for taking action locally to try and do our part.”

A TAP staff member indicated a high level of support from the Board of Trustees and TAP. They commented: “...typically, we all share the acknowledgement that it's really an important issue that we need to address.”

#### **The goal will be difficult to accomplish**

A TAP staff member believes that reaching this goal will be a “real challenge”. They believe the process starts by making small steps (such as replacing light bulbs, improving insulation, and considering more solar energy). They commented: “I think it's not going to be an easy transition. I think it's going to be difficult.”

Another TAP staff member believes the goal is possible to achieve but “it's gonna be pretty tough to get there.”

#### **Uncertainty about the goal's feasibility**

A Scio Township staff member commented: “...as things change consistently, it is unknown whether it's achievable, even with support.”

A TAP staff member feels Scio hasn't done much for the last 50 years, and therefore has a lot to do in the next 8 years. The interviewee is unsure of how many steps the Township has taken at this point to reach

the overarching goal. They commented: “But I think it's good to have those goals. And then we'll have to sort of evaluate as we go and proceed.” Later on in the interview, they also commented: “...it's a long term goal that if we start now talking about it, we have an opportunity to get there in 2030, 2035, 2040. But if you don't start talking about it now, you're never gonna get there in five years, or ten years.” An LPC staff member feels these goals seem virtuous and necessary, but from the perspective of the LPC, they are unsure how the Taskforce arrived at these specific goals. They commented: “So I don't know where we stand in reaching those goals. We may be almost there or we may not be. One of the interesting things, being a market researcher, is asking where are we now? And so I think it will be useful to do the research.”

#### **Goal is not realistic or feasible**

A TAP staff member said they feel this goal is unrealistic and unfeasible, as most people cannot give up their cars and purchasing an EV is too expensive. They are concerned that five years from now is too short of a timeline to implement and achieve this goal. They also feel the township doesn't have the budget to be able to pay for it. They think it's important that the township knows how much it will cost and to utilize that budget realistically.

## **Buildings & Energy Working Group Relevant**

This section includes all interviewee comments, descriptions, and input relevant to the Buildings & Energy Working Group.

### **Opportunities**

This subsection includes loose potential strategies or goals (opportunities) related to Buildings & Energy that may be worth exploring, but may not be specific to an existing goal or strategy.

#### **Contracting standards for the prevailing wage**

A Scio Township staff member sees an opportunity to create contracting standards for construction and road projects that would require firms they work with to pay their employees the prevailing wage. While not related directly to environmental sustainability, they have a hunch that the firms who pay prevailing wage likely have better environmental practices.

#### **Consider installing solar panels on Township buildings**

A Scio Township staff member described how Andy Houde applied for a grant for solar panels to be installed on the fire station. The interviewee thinks this could be a good opportunity to influence other members of Scio to renovate the Township using solar.

#### **Promote neighborhood solar discounts**

A TAP staff member described an email they received from some residents trying to recruit others to install solar systems. If they got over 10 households, the cost would be reduced by 10%. The interviewee suggested these types of discounts could be shared through the Scio website.

### **Promote Potential DTE Energy Audit**

A TAP staff member described how several years ago DTE Energy had a program where they came to their house to do an energy audit. They replaced all light bulbs, removed old appliances, and located energy leakages, free of charge. They suggested sharing this option with township residents.

### Areas of Concern

This subsection includes concerns expressed by interviewees relevant to the Buildings & Energy Working Group.

#### **Not enough bandwidth to implement goals**

A Scio Township staff member commented on the fairly small number of employees available to implement the Energy & Buildings Working group goals. They mentioned that Scio township relies a lot on volunteers and appointees to different Commissions, causing him to question how doable it is.

### Measurement of Goals

This subsection includes interviewee suggestions for how the plan's goals could be measured.

#### **Measuring funds, expenses, and human resources**

A Scio Township staff member said the Township Clerk can manage measurement of funds, expenses, and human resources. This could include green purchasing, implementing incentives for hiring, commuter work, commuter programs, and more.

#### **Measuring Fire Department energy usage**

A Fire Department staff member said their department maintains records of current and past gas and electricity usage. This could support measurement in these areas for their department.

## **Transportation & Mobility Working Group Relevant**

This section includes all interviewee comments, descriptions, and input relevant to the Transportation & Mobility Working Group.

### Overall Comments

This subsection includes interviewee comments that are not related to one particular goal or strategy, but instead apply to the overall creation and implementation of this working group's goals and strategies.

#### **One solution won't solve all the problems**

A TAP staff member commented that the created goals are good and necessary, but electrifying the township won't solve all the problems. They suggested that the Township must look at this much more

holistically, instead of as one solution fits all.

### **Implement the Parks and Recreation Master Plan**

A TAP staff member commented that TAP's main focus is on implementing the Parks and Recreation master plan, and then the multimodal transportation options that are being incorporated within that. They commented: "We are creating these recreational, non motorized corridors, which can also double as transportation corridors."

### **Leaders of Scio must walk/bus these routes**

A TAP staff member commented that in order to create meaningful transportation opportunities in the township, leaders must take time to walk, bus, and bike these corridors to gain a better understanding of what residents need, especially disabled residents.

## Recommended Modification to Strategies

This subsection includes suggested modifications interviewees proposed for existing strategies. Corresponding goals and strategies are included to provide context.

***Goal: Reduce the number of miles driven by Scio Residents in personal vehicles each year.***

***Strategy: Supplement existing strategies established by TAP committee by continuing to advocate for a network of safe, attractive, well-maintained multi-use pathways throughout the township for both recreational and general transportation purposes that residents can use as a means of personal transportation.***

Modification: A TAP staff member recommended increasing the number of non-motorized pathways (sidewalks, bikeways, and bike paths) so Scio residents can access stores, services, and jobs in Ann Arbor by bike and by foot. They commented that stores and services in Ann Arbor should be well-connected to Scio Township through more than one corridor (the pathway along Jackson Road). Additional non-motorized corridors could be along Liberty Road and Scio Church Road. The interviewee believes this cannot be achieved in a single year, but perhaps five years.

***Strategy: Advocate for a safe, accessible, and comprehensive public transit system within Scio Township that is well-connected with transit in neighboring jurisdictions.***

Modification: A TAP staff member said that this strategy should include extending the bus service to population dense areas where people would use it most. This would include extending the bus service all the way out on Jackson Road to Scio Farms (beyond where it currently stops by Meijer).

***Strategy: Educate residents on existing local and regional public transportation options.***

- ***Specific Action: Create a page on the township website dedicated to educating residents about public transit. The page could include:***
  - ***Links to existing local and regional transit provides resources***
  - ***Transit maps, routes, timetables, and costs***
  - ***Information on the benefits and costs of public transit, as well as how***
  - ***residents can go about making appropriate changes in their daily***
  - ***transportation choices.***

Modification: A TAP staff member is in support, but feels the information should be shared in a simple and straightforward way so it's not too complicated or overwhelming. They recommend including the two Scio Township bus routes, main pedestrian and bike routes that are in place, and then perhaps something that shows what's being planned for the next 5 years (so people understand that even if something doesn't connect now, it could connect in the future).

**Goal: Increase the number of Scio Township residents, businesses, and organizations that own and operate BEVs (Battery Electric Vehicles) and PHEVs (Plug-in Hybrid Electric Vehicles).**

**Strategy: Propose changes to the Township Code of Ordinances that will 1) encourage and/or require the development of public EV charging stations throughout the township and 2) require new residential construction, both single-family and multi-family, to be "EV-Ready".**

Modification: A TAP staff member suggested that recommendations and requirements on a new construction/for developers should also include bike racks, even if the bike path doesn't reach that development yet. They said Scio Township should use the opportunity when going through the planning process, especially as it wouldn't be a huge expense. However, the interviewee mentioned that there may be some exceptions where it wouldn't make sense to include a bike rack. Example: If a local farm sells grain to other farmers for horse and cattle feed, it wouldn't make sense to have bike access as a bike wouldn't be adequate for picking up grain.

## Recommended Additional Strategies

This subsection includes additional strategies interviewees proposed to support existing goals. Corresponding goals are included where possible to provide context.

**Goal: Increase the number of Scio Township residents, businesses, and organizations that own and operate BEVs (Battery Electric Vehicles) and PHEVs (Plug-in Hybrid Electric Vehicles).**

Additional strategy: Subsidize electrification of homes - A TAP staff member commented: "There is a need for the township to subsidize it for individual residents. The township needs to look into if there are tax credits at the state, county, or federal level. This information must also be relayed to residents so that they are aware."

**Goal: Reduce the number of miles driven by Scio Residents in personal vehicles each year.**

Additional strategy: Look into the American Community Survey for goal related info - A TAP staff member suggested that Scio Township could work with the Metropolitan Planning Organization (MPO), the Transportation Management Association (TMA), and the American Community Survey. The American Community Survey conducts intercept surveys randomly around the country that helps feed the interim data collection from the census, which includes travel demand modeling. The interviewee commented that Streetlight is one the programs that is already collecting that information from our cell phones, though it's expensive to purchase professionally.

Additional strategy: Creating safe spaces for bikers and pedestrians - A TAP staff member commented that Scio Township must finalize the Zeeb road pathway to the north and the connection to the south.



They also said that Scio must: “create gap infill projects of either sidewalks or non-motorized facilities such as trails or sidewalks, like in the Scio Ridge community, where there are gaps to existing bus stops.” Additional strategy: Create bus pull-outs - A TAP staff member said: “Scio Township needs a bus pull out, especially in newer developments where construction is happening now. Bus pull outs in heavily traveled corridors provide a safe opportunity for the buses to get out of the way and set the stage to prioritize bus movement.”

Additional Strategy: Install bike racks in parks and preserves - A TAP staff member suggested that the Township puts bike racks in parks and preserves to encourage people to get off their bikes and take a hike. They commented that bikes can degrade paths within the parks and preserves.

***Overarching Goal: Reduce carbon emissions produced by transportation in Scio Township.***

Additional Strategy/Specific Action: A Scio Township staff member suggested that the township could partner with local auto dealers to stop running their inventory cars during winter (this keeps snow melted so people can see the new cars, but has a significant carbon footprint).

Additional Strategy: A Scio Township staff member recommended that Scio work with the Ann Arbor Area Transportation Authority (AAATA) on the Township bus millage as it comes up for renewal. They said this could include funding electric buses and other sustainability improvements.

## Opportunities

This subsection includes loose potential strategies or goals (opportunities) related to Transportation & Mobility that may be worth exploring, but may not be specific to an existing goal or strategy.

***Goal: Increase the number of Scio Township residents, businesses, and organizations that own and operate BEVs (Battery Electric Vehicles) and PHEVs (Plug-in Hybrid Electric Vehicles).***

***Strategy: Propose changes to the Township Code of Ordinances that will 1) encourage and/or require the development of public EV charging stations throughout the township and 2) require new residential construction, both single-family and multi-family, to be “EV-Ready”.***

Opportunity: Board of Trustees can influence developers - A TAP staff member commented that the Board of Trustees can ask developers about their sustainability plans during meetings with them. This could include questions about EVs and charging stations.

***Strategy: Electrify Scio Township’ vehicle fleet as EVs appropriate to their tasks become available, using any available grants to fund vehicles and EV charging equipment (EVCEs).***

Opportunity: Partner with Tesla Dealership to improve affordability and accessibility - A Fire Department staff member explained that the biggest challenge of electrifying the fleet is how expensive EVs are. They said this is especially the case for an electric fire truck. They commented that there could be an opportunity to partner with the incoming Tesla dealership on obtaining an electric fire truck and other EV fleet vehicles. This could improve accessibility of these vehicles for the Township and be a good public relations opportunity for Tesla.

**Opportunity: Project and Message Framing**

A TAP staff member provided some insight on how strategic framing of projects can increase support of those projects. They commented that a project that can contribute to net zero can also be framed as good for recreation and public safety. Framing can differ based on the audience when there are multiple benefits to a given project. For example, they said: “Road diets are where you take a four lane road, repave it, restripe it, and put bike lanes on it...they're quite a bit safer for the drivers...the numbers show you can reduce crashes by 30% or so.” They commented that if some communities may not be particularly in support of bike lanes, they may be more receptive to a public safety and resurfacing project framing versus a bike lane project framing, even if the road diets project actually does both.

#### **Opportunity: Mapping sidewalks, sidewalk gaps**

A TAP staff member said it would be useful to have a map of infrastructure (specifically referring to sidewalks) already in place in Scio. Different neighborhoods do or do not have sidewalks, and there’s a lack of uniformity because in the past some subdivisions were required to put in sidewalks and some were not. They commented that now TAP is faced with having to retrofit some communities with sidewalks. In some cases there are different developments in different places that were never connected, so there are gaps. The interviewee said that in order for a sidewalk to be put in by a developer, they would need to be required to do that. A map of what currently does and does not exist would be useful for planning ahead for future projects to fill in gaps.

### Measurement of Goals

This subsection includes interviewee suggestions for how the plan’s goals could be measured.

#### **Measuring Township EV Ownership**

A Fire Department staff member suggested that one measurement for increasing ownership and use of EVs could be to look at the Township’s fleet and track changes (how many vehicles with internal combustion engines, how many EVs, etc). They commented that it would be easy for each department to do this tracking of their respective fleet, so the measurement could happen on a department by department basis.

### Relevant Policy

This subsection includes policies interviewees discussed that are relevant to this working group.

#### **Parks and Pathways Millage**

A TAP staff member described how the Parks and Pathways Millage allows TAP and the Parks and Recreation Advisory Board to expand and maintain parks and pathways. The millage will be up for renewal soon and the interviewee predicts the millage will continue to be supported by Scio voters. They commented: “...historically, the voters have been generous and have seen the value of, of alternative transportation as well as parks and pathways.” The same interviewee also commented that in the past, the Township has leveraged local funds with matching grants from the state or federal government. They said: “...leveraging the revenue generated locally, to make a large impact that we can all benefit from here.” Another TAP staff member explained that the millage was passed by voters in 2019 and

designated for funding trails, pathways, and parks in Scio Township. They commented: “I think that was a big step forward to making parks and trails and pathways a priority in Scio Township...this community supports that stuff...if we can just get it before the voters in Scio, it's something they're going to support.”

## Areas of Concern

This subsection includes concerns expressed by interviewees relevant to transportation and mobility.

### **EVs and electrification are too expensive**

A TAP staff member commented that there's a perception that electrification is just another choice for really wealthy people; it's a choice that a lot of people don't have. They also said that many people don't have a transportation choice, because they either don't have a car or they're sharing a ride with someone. The interviewee feels there's a need to be cognizant of the census information and really what is achievable and doable in the short, medium and long term. They ask: “How can we get people on board?”

### **Lack of EV home charging areas**

A TAP staff member commented that having a car garage is a luxury that not everyone has. They are concerned that if residents don't have a garage, there is nowhere to put charging stations that are protected from the elements.

### **Budgeting is new for TAP**

A TAP staff member mentioned that this year was the first year TAP actually tried to put together a budget, which was difficult because they never had a budget before.

### **People have unrealistic expectations about the timeline of pathway projects**

From their work with other townships, a TAP staff member explained how people have expectations that they can get several miles of trails done right away, when really that may be more of a 10 year project that's built “segment by segment, piece by piece”, especially for townships that have never done even a quarter mile trail. The interviewee described the importance of educating people on this to create realistic expectations. They commented: “...you've got to start somewhere. And then eventually you piece all those things [segments] together, and it becomes a network.”

### **Unsafe Bus Stops in Scio**

A TAP staff member described how creating bus stop infrastructure makes riding the bus safer and more desirable. When this infrastructure is missing, as is the case for some Scio neighborhoods (Example: Scio Ridge Uplands), people have to walk in the shoulder or ditch. Furthermore, they commented that parents may prefer to drive their kids to school partially because they feel bus stops are not as safe. This results in far more cars on the road, bigger parking lots, and wasted money on buses that only pick up a few kids. The interviewee commented that TAP is working on improving bus stop safety. For Scio Ridge Uplands they had a project for summer 2022, under design for next year to make it so the Ann Arbor

Area Transportation Authority (AAATA) bus stop will have safe areas for people to stand in (currently people are standing next to the road to wait for the school bus).

## **Materials & Waste Working Group Relevant**

This section includes all interviewee comments, descriptions, and input relevant to the Materials & Waste Working Group.

### **Recommended Modification to Goals**

This subsection includes suggested modifications interviewees proposed to existing goals. Corresponding goals and strategies are included to provide context.

***Goal: Mandate tree harvesting for future township projects***

***Strategy: Work with the Board of Trustees (BOT) and the Planning Commission (PC) to write Ordinances for mandating harvesting of trees in plans that come up for approval***

Modification: A Scio Township staff member was unsure of what tree harvesting is. A potential modification could be to better explain what tree harvesting is so that non-experts understand what this goal and strategy mean.

### **Recommended Modification to Strategies**

This subsection includes suggested modifications interviewees proposed for existing strategies. Corresponding goals and strategies are included to provide context.

***Goal: Set up a community composting site and record weight of materials composted***

***Strategy: Provide a central location for composting in the township or within neighborhoods***

Modification: A Scio Township staff member thinks a composting effort could work, but that composting sites would need to be in dispersed locations rather than central locations. For example, private owners who would be willing to let their neighbors contribute to their compost pile.

Modification: A Fire Department staff member thinks providing a central location is a great idea and that it would be a good resource to those who want to compost. The interviewee suggested the following potential site locations:

- Site on Wagner Road
- Obtaining a composting site could be part of a land preservation project. For example, if there was a site they wanted to preserve and keep in more of an agricultural role, they could use a section for composting. This is comparable to what the Fire Department did with a protected piece of property on Wagner Road purchased by the township for the fire station and water infrastructure. Another option could be to partner with the farmer that eventually purchased the property for their farm, if they would be willing to use a few acres for a composting site.

***Goal: Increase Township and community involvement in Materials and Waste Reduction through reusing, reducing, recycling and composting***

**Strategy: Set a recycling goal that aligns with WRRMA and Recycle A2**

Modification: A Scio Township staff member doesn't think it's feasible for Scio to move to Recycle Ann Arbor from GFL, though has been an advocate for this switch.

**Strategy: Provide a central location for composting in the township or within neighborhoods**

Modification: A Fire Department staff member does not think setting up a centralized community gardening site would garner much interest. They think that Scio is rural enough in many places that people who want to garden will do so anyway on their own property (containers on a porch/deck, or a backyard garden plot). The interviewee commented that might make a community garden more beneficial to the community is requiring new residential developments to include one lot as a community garden space. The interviewee thinks people would be much more willing to participate if they could walk a couple blocks to maintain their garden rather than drive across the community.

## Recommended Additional Strategies

This subsection includes additional strategies interviewees proposed to support existing goals. Corresponding goals are included to provide context.

**Goal: Increase Township and community involvement in Materials and Waste Reduction through reusing, reducing, recycling and composting**

Additional strategy: Provide public-access recycling dumpster - A Fire Department staff member noticed their home recycling bins get full too quickly. Currently pickup is already once per week, so it isn't necessary to increase frequency, but the interviewee thinks Scio Township could consider maintaining a publicly accessible recycling dumpster if people have overflowing bins. This could be outside of Town Hall.

Additional strategy: Fill gaps in current recycling system - A Scio Township staff member feels there needs to be a drop off station for items that are not recyclable curbside. The interviewee explained how there is money budgeted to do a pilot project with drop off stations, which needs a subcommittee's support. The staff member commented: "People fall through the cracks, and there's categories of recycling that also fall through the cracks that aren't included in curbside recycling...There is a need for an arrangement for drop off station service for Scio residents that isn't completely redundant with curbside recycling so it actually fills a need that recycling doesn't meet."

## Measurement of Goals

This subsection includes interviewee suggestions for how the plan's goals could be measured.

### **Composting site measurement**

A Fire Department staff member describes how measuring the success of a community composting site could be as simple as measuring materials in and materials out. Over time, one could assess effectiveness simply by seeing how amounts change. The interviewee comments that this may not be a township function, but perhaps a private agency.

### **Tree canopy measurement**

A Scio Parks and Recreation staff member commented that the Land Preservation Commission may have data on tree canopy coverage, but they were uncertain of this. It seems that data has not been established or updated, or perhaps isn't accessible. The Township could potentially use a consultant to help with this – however cost may be a barrier.

## **Community Resilience & Emergency Preparedness Working Group Relevant**

This section includes all interviewee comments, descriptions, and input relevant to the Community Resilience & Emergency Preparedness Working Group.

### **Recommended Modification to Strategies**

This subsection includes suggested modifications interviewees proposed for existing strategies. Corresponding goals and strategies are included to provide context.

#### ***Goal: Harden utilities.***

***Strategy: Require all new utilities be placed in the ground to protect them from severe weather.***

***Strategy: Look at ingrounding any exposed above-ground utilities such as those on poles, look at outage data to help prioritize. If primarily a utility decision, look at assisting them in doing so.***

Modification and anticipated barrier for hardening utilities - A Scio Township staff member said hardening utilities is going to be the most challenging, but still feasible. Because so much of it is privatized, the interviewee thinks Scio Township needs to produce some incentives. This could be a leadership role for the Fire Department as well. This could include not just looking at outage data, but also knowing where key intersections and access routes are.

#### ***Goal: Fire Prevention***

***Strategy: Establish best practices for fire safe management of open spaces at properties owned and managed by Scio Township. Fire safe management refers to: fire breaks in large plots of land, prescribed burns, clearing excess brush, etc.***

Modification: More partnership with Fire Department - A Scio Township Parks and Recreation Advisory Board staff member would like the Parks and Recreation Department to work more with the Fire Department on fire prevention to do controlled burns (with the dual benefit of controlling invasive plants), potentially include firewalls/fire breaks, and implement other basic strategies. They see this as an area of improvement where this collaboration could increase the feasibility of this goal.

### **Recommended Additional Goal**

This subsection includes additional goals interviewees suggested.

#### **Welcome climate refugees to Scio**

A Scio Township staff member would like to include an additional goal to welcome climate refugees with Scio Township being a sanctuary community given its relative wealth and geographic safety. They

commented: "...we have so much wealth and privilege here, what can we do to be ready to support more of our community where there are families who are being affected... I think we need to become much more welcoming, and much more tolerant, and be very careful when we go into this emergency preparedness to not become too inwardly focused."

#### **Additional strategies to support the above goal**

To support the above goal, the Scio Township staff member provided a few ideas. These included creating programs around social services and funding them. Social services the interviewee mentioned were: violence prevention, intimate partner violence prevention, and human trafficking prevention. The interview also mentioned Scio Township could purchase land and buy/build housing to be used by a social service agency (there are public uses allowed by law that would not require paying a tax on the property – this would decrease expenses). They also mentioned that when developments such as hotels come into and operate in Scio, the Township could assess what ongoing community benefit they could provide. Potential barriers to the above goal could be affordability and negative resident attitudes towards outsiders.

### Relevant Policy

This subsection includes policies interviewees discussed that are relevant to this working group.

#### **Fire department millage**

A TAP staff member mentioned that the Fire Department has plans to propose expanding their millage so the Township can afford another fire station to serve the community more efficiently (faster emergency response time). If the new proposed millage goes through, the Township has some land set aside for that. They commented that the design for the station should contribute to the carbon neutrality goal of the Township.

### Areas of Concern

This subsection includes concerns expressed by interviewees relevant to Community Resilience & Emergency Preparedness Working Group.

#### **The Gelman dioxane plume**

A TAP staff member discussed the Loch Alpine Sanitation Authority (LASA) and said it's a necessary utility for any community that wants to grow, especially in the presence of the Gelman dioxane plume where people with their own wells are in the process of testing them to see if they've been impacted by the pollution. They commented that consumers of water that's been treated by LASA do not need to worry about that pollution. This TAP staff member explained that the pollution is extending north and could potentially reach the Huron River, which is the source of drinking water for Ann Arbor and for Scio township, as Scio gets a large portion of its water and sewage service from Ann Arbor

#### **Environmental and economic concerns**

A Scio Township staff member is most concerned about power outages, food insecurity, and heat waves. They feel food insecurity is an ongoing issue which appeared more when COVID hit Scio. The interviewee

indicated concern about the “hidden poor” in Scio and the growing number of seniors. This includes people who live in Scio farms and Thornton farms, two developments where there’s poverty that is hard to see. The interviewee feels there’s a lack of jobs and housing balance. They commented: “I just think that we’ve got kind of two categories of economic insecurity, here, we have people who are poor and working class, and then we have a lot of seniors who can afford their homes, they’re on a fixed income, their house is paid off. But if they have to downsize because one spouse dies, they’ve got nowhere to go.”

**Goal: Harden utilities.**

**Strategy: Look at ingrounding any exposed above-ground utilities such as those on poles, look at outage data to help prioritize. If primarily a utility decision look at assisting them in doing so.**

Concern: Difficulty implementing goals and does Scio have the authority? - A Scio Township staff member believes that this goal will be difficult as they are unsure what authority/power Scio Township has over utilities and placement of lines. And if Scio lacks authority, how could the township initiate negotiations to try and persuade the utility to do things a certain way?

Concern: Issues with incentivizing people - This same Scio Township staff member also addressed the issue of building in incentives over time. Even when the township does have some kind of legal authority over a situation, they explained it's difficult to enforce.

Concern: Demand for EV is greater than supply - A Scio Township staff member expressed that the fire department seems like it is buying vehicles all the time and the utilities department is also buying vehicles and power equipment of different types. Their sense is that the demand for electric vehicles and electric power equipment is greater than the supply, which is an issue that needs to be addressed.

## **Natural Ecosystems & Sustainable Food Systems Working**

### **Group Relevant**

This section includes all interviewee comments, descriptions, and input relevant to the Natural Ecosystems & Sustainable Food Systems Working Group.

### **Recommended Modification to Goal**

This subsection includes suggested modifications interviewees proposed for existing goals. Corresponding goals and strategies are included to provide context.

**Goal: Public education on sustainable agriculture and healthy local food systems**

**Strategy: The township can supply this virtually, through the website, or host educational sessions led by local experts in sustainable agriculture.**

Modification: Lack of staffing to fulfill goals - A Scio Township staff member did not believe that a sustained education and communication effort in Scio Township is feasible due to lack of staffing and overall very lean operations. They believe the Township does not have the capacity. The interviewee does however think that a one time effort informed by experts would work (Example: Plant X amount of



X type of tree and it will cost you X amount). The interviewee thought that Scio could rely on the City of Ann Arbor and the County for educational resources. They also felt that there isn't really a need for additional education in Scio; they commented: "I feel like the people who want to be educated have the resources."

**Goal: Increase township-wide tree canopy coverage by 3% of 2018 values.**

Modification: Goals need to be more substantial - A Farm owner expressed a need for more radical/influential goals if Scio wants to combat climate change.

## Recommended Modification to Strategies

This subsection includes suggested modifications interviewees proposed for existing strategies. Corresponding goals and strategies are included to provide context.

**Goal: Increase township-wide tree canopy coverage by 3% of 2018 values.**

**Strategy: Establish city plans and policies in support of tree canopy and ground cover goals.**

**Strategy: Support and empower community partners, businesses and residents in meeting tree canopy goals.**

Modification: Better use the Township tree ordinance - A Scio Township staff member felt there's a lot of potential for increased tree coverage in Scio because the Township has a tree fund based on a tree ordinance. However, they feel the Township has never really used the ordinance properly. They feel the Township should penalize developers more for cutting down trees and focus more on restoration (such as replanting trees where they're supposed to be).

Modification: Difficult understanding the percentage - A Scio Township staff member felt the "3% of 2018 values" was difficult to understand. They recommended including a sub goal or some explanatory text that says something like "township residents will plant X amount of trees in X amount of time".

**Goal: Create strategies and baseline measures for water contaminants**

**Strategy: Partner with Huron River Watershed Council and other resource partners**

Modification: Water Quality is an area of importance - A Scio Township Parks and Recreation Advisory Board staff member feels this is an area for improvement and emphasized the importance of collaborating with the Huron River Watershed Council as well as County Parks and Preserves to ensure everyone is on the same page. Scio could also work with the Village of Dexter and Ann Arbor, and perhaps even the state to some degree. They commented: "...when you're all working together for a common message and a common goal, I think that can really help [with] reaching the goals."

**Goal: Improve affordability of land and tools needed for new farmers to be successful.**

Modification: Necessary goal, but difficult to implement - A Farm owner mentioned that making land more affordable is difficult, but necessary. Farmers don't want to sell their land if they can make money farming, but when the development gets strong, and it's encouraged by the township, then people are more apt to sell. Providing educational tools, mentorships for young farmers, and having an incubator farm like Ann Arbor are all things to help new farmers be successful.

## Recommended Additional Goal

This subsection includes additional goals interviewees suggested.

### **Ban wastewater treatment facilities**

A Scio Township staff member would like the Township, so far as it can, to ban community wastewater treatment facilities (private sewer treatment) due to concern about septic fields. They said the Township still allows private, large, multi-residential treatment systems which are notorious for leaking and not being well-regulated by the State. They think Scio should require that people connect up to the Ann Arbor system for water and sewer.

### **Need for perennial crops**

A Farm owner felt that the best way to mitigate, protect against, and survive the climate disaster is going to be through the use of perennial cropping and polyculture. Their 50 year plan is to shift to 80% perennials. Perennial plant based proteins should be utilized more and farmers should emphasize looking at what is native to this place and what is adapted to this climate.

### **Normalize farming profession**

A Farm owner expressed that the township needs to normalize agriculture as a profession and evaluate it in their master plan. It's a valuable asset to the people that live here and the marketing around farming needs to change in order to allow people to see its value.

## Recommended Additional Strategies

This subsection includes additional strategies interviewees proposed to support existing goals. Corresponding goals are included where possible to provide context.

### **Additional strategy: Grow 80% perennials, 20% annuals**

A farm owner explained that 80% of crops should be perennial so farmers don't have to replant annually and there are less off-farm inputs, such as petroleum. Benefits of perennials include their 10-20 foot root systems, their bacteria and the mycorrhizal fungi build soil, culture material, withstand droughts and floods, and are much more resilient than the annual crops.

### **Additional strategy: Implement perennial nurseries**

A farm owner mentioned that perennial plant nurseries could provide food to people in their own yards.

**Goal: Reduce stormwater and micro heat island impacts.**

**Strategy: Reduce impervious surfaces**

**Strategy: Increase water uptake capacity of impervious surfaces**

Additional strategy: Improve groundwater/stormwater runoff - A Scio Township staff member explained that residents' basements are flooding, because groundwater is coming up from below. There is a need to address these issues.

**Goal: Increase township-wide tree canopy coverage by 3% of 2018 values.**

**Strategy: Establish city plans and policies in support of tree canopy and ground cover goals.**

**Strategy: Support and empower community partners, businesses and residents in meeting tree canopy goals.**

Additional strategy: Use the Tree Mitigation Fund - A Scio Township staff member felt that there's an opportunity to increase the tree canopy, if the township utilizes the tree mitigation fund. This money has been collected by Scio township from developers who have to remove trees in order to build their development. It can't replace the trees on site. So in lieu of replacing the trees on site, they pay a fee for however many trees they're removing, into this fund. This interviewee mentioned that there's over \$200,000, in this fund that hasn't been utilized or allocated yet. They also emphasized the importance that wherever a tree is planted using this fund, that there needs to be a plan for caring for it.

## Opportunities

This subsection includes loose potential strategies or goals (opportunities) related to Natural Ecosystems & Sustainable Food Systems that may be worth exploring, but may not be specific to an existing goal or strategy.

### **Incentivize farmers to lease their land**

A farm owner explained that if there is a financial incentive for people to lease out their land for 30 years, they can collect more money than they could ever make farming.

### **More sustainable and local food-centric holidays/events**

A farm owner contemplated the idea that there should be a creation of a maternity ward for environmental action for people to plant trees, and even something like having a local food holiday or an ecology day. Due to the lack of good food holidays between Fourth of July and Halloween, they felt that there's a big blank space where Scio could have a harvest festival day of local perennial crops

### **Buy-Protect-Sell**

A farm owner highlighted the use of the Buy-Protect-Sell program and the success in utilizing it.

### **Open to being educated on more sustainable practices**

A farm owner has considered converting their tractor from diesel to electric and their farm is powered by solar. But other than that, there is a need for education on more sustainable farming practices. They are unsure of what else their farm could do.

## Measurement of Goals

This subsection includes interviewee suggestions for how the plan's goals could be measured.

### **Goal: Develop incentives to conserve water use in irrigation**

**Strategy: Encourage best practices such as rain gardens, drip irrigation, etc.**

Interviewee measurement recommendation - A Fire Department staff member believes that measuring success for rain gardens and other projects of a similar nature could be led by the Planning Commission.

They could also encourage these in commercial residential projects where developments are infiltrating on site.

## Relevant Policy

This subsection includes policies interviewees discussed that are relevant to this working group.

### **Parks and Pathways Millage**

A TAP staff member described how the Parks and Pathways Millage allows TAP and the Parks Advisory Board to expand and maintain parks and pathways. The millage will be up for renewal soon and the interviewee predicts the millage will continue to be supported by Scio voters. They commented: "...historically, the voters have been generous and have seen the value of, of alternative transportation as well as parks and pathways." The same interviewee also commented that in the past, the Township has leveraged local funds with matching grants from the state or federal government. They said: "...leveraging the revenue generated locally, to make a large impact that we can all benefit from here." Another TAP staff member explained that the millage was passed by voters in 2019 and designated for funding trails, pathways, and parks in Scio Township. They commented: "I think that was a big step forward to making parks and trails and pathways a priority in Scio Township...this community supports that stuff...if we can just get it before the voters in Scio, it's something they're going to support."

## Areas of Concern

This subsection includes concerns expressed by interviewees relevant to Natural Ecosystems & Sustainable Food Systems.

### **Concern about farmers wanting to be more sustainable**

A farm owner expressed the need for changes to be profitable for farmers in order for them to make sustainable changes. If not, they won't want to make those changes.

### **The biggest threat to farming**

A farm owner explained that the biggest threat to farming in this area isn't just climate change, it's development. They asked what can the township do to maintain their healthy goals for growth and value agriculture at the same time? This interviewee felt that Scio may have to incentivize farmers to not sell off and see a value in keeping that land, whether it's funding land preservations, or utilizing organizations that can buy back the land and development rights. This farm owner thinks development is the biggest hurdle right now, which makes land prices prohibitive for anybody getting into farming.

### **Main threat to farming is economy**

A farm owner believes that while weather severity is a big problem for farmers, one of the concerns of their farm is the cultural and social factors that influence their ability to be successful in our economy. There is no longer the desire for families to cook for themselves and their children. They also commented that the biggest environmental danger is the concept that we can't grow the economy infinitely. They said the environmental issues are just a symptom of our culture and our economy.

### **Regarding developments in Scio**

A TAP staff member believes that drainage is a big issue in Scio due to developments with impermeable surfaces. They explained that there's a lot of wet areas in the Township, making it difficult to balance the needs of homeowners that are worried about water runoff and the developers' needs for building houses. They explained that promoting good drainage is a big issue in Scio and rain gardens are one potential mitigation strategy.

### **Climate change impacts**

A Scio Township Parks and Recreation Advisory Board staff member is most concerned about flooding (related to decisions about wetlands and the watershed) as well as high winds and severe storms. These impact the safety and user experience of trails. From a management perspective, these need to be addressed immediately.

### **Issues with solar panels**

A farm owner mentioned that one of the problems with solar panels is that they absorb arable land. In Holland, they have their panels spaced out so they can still grow underneath.

### **Pollution coming from Honey Creek**

LPC staff members described how Honey Creek is one of the major contributors of pollution through agricultural and suburban runoff to the Huron River due to the ongoing dioxane issue in Scio Township. The pollution is moving north and will begin to affect the Ann Arbor water supply.

## **Education, Engagement, & Communications**

This section includes interviewee input regarding education, engagement, and communications.

### **Township communications to residents**

A Scio Township staff member explained that the Township communicates to provide information to taxpayers and voters. They did not feel there's a need for additional education.

### **Interviewee comment on Township engagement**

A Scio Township staff member said they would like to see the Township engage with renters and people who speak English as a second language more. They would like to see more diverse Township Representatives.

### **Fire education and outreach**

A Fire Department staff member explained that the Fire Marshal works with homeowners on controlled burns and educates and trains business owners and citizens on basic fire extinguisher use and safety. They also work with companies to issue permits for controlled burns. This prevents fires from starting and spreading.

### **Land Preservation Commission offering hikes and education programs**

LPC staff members discussed how the LPC is interested in offering hikes and public education programs, because they recognize the virtue in simply protecting land for the purpose of protecting it and involving the public in understanding it and appreciating it. Also, there is interest in giving people an opportunity to see how working farms or livestock operations function, as well as allowing for volunteers.

### **Parks and Recreation Educational programs**

A Scio Township Parks and Recreation Advisory Board staff member outlined how Parks and Recreation has offered some light educational programming: Monthly Saturday morning walks open to the public, where some members of the group are naturalists and help educate the public. The interviewee believes that creating, maintaining, and providing public access to green spaces also means people will be more inclined to vote for a millage to protect more green space (creating a feedback loop).

### **Need for better promotion of solar power, parks, and pathways**

A TAP staff member thinks Scio could do a better job of promoting solar power for residential homes on the website and communicating the availability of parks and pathways.

### ***Transportation Working Group Strategy: Educate residents on existing local and regional public transportation options.***

- ***Specific Action: Create a page on the township website dedicated to educating residents about public transit. The page could include:***
  - ***Links to existing local and regional transit provides resources***
  - ***Transit maps, routes, timetables, and costs***
  - ***Information on the benefits and costs of public transit, as well as how***
  - ***residents can go about making appropriate changes in their daily***
  - ***transportation choices.***

Clearer explanation of goals and incorporation of transportation routes - A TAP staff member supports this strategy, but feels the information should be shared in a simple and straightforward way so it's not too complicated or overwhelming. They recommend including the two Scio Twp bus routes, main pedestrian and bike routes that are in place, and then perhaps something that shows what's being planned for the next 5 years (so people understand that even if something doesn't connect now, it could connect in the future).

## **Leaders & Partners**

### **Current or Potential Sustainability Leaders**

This subsection includes leaders in the fields relevant to working groups that were suggested by interviewees.

### **Possible help with Township operations**

A Scio Township staff member stated that the Scio Township Clerk could help with initiatives, especially in terms of township operations but also in terms of purchasing and procurement policies. They said the clerk could be a leader in measuring money and people. This could include green purchasing, hiring incentives, commuter work programs, and what kinds of businesses are supported by the township.

### **Interviewee Suggestions on Sustainability Leadership in Scio**

A Scio Township staff member said to look for leaders that will stay constant. So rather than a supervisor, clerk, treasurer or trustee, or planning commission chair (whose re-election is in the same year rather than staggered terms), the Township should look for leaders in utilities and fire. This interviewee mentioned there should be a designated climate change officer. This could be done by ordinance: “sort of like we have an ordinance enforcement officer that the board has appointed, kind of an official. We need to have someone. It can be an existing staff person, a consultant, a volunteer, someone designated as the sustainability officer or climate change officer, whatever the right title is, who is empowered to have certain responsibilities on behalf of the township...” They commented that the Fire Department can have a leadership role in terms of hardening utilities and dealing with hazardous wastes.

A Scio Township Fire Department staff member suggested Scio Township Fire Marshal, which would be a good leader for anything related to the Fire Department, and the County Buildings Department.

A Farm owner suggested the Michigan Nut Growers Association, MSU’s Dennis Fulbright, and Rocky Mountain Institute.

LPC staff members suggested the LPC Commission member who lives in Alpine, Lisa Papa, who is familiar with surveys, and Chris Nordstrom, who is involved with Parks and Recreation.

A TAP staff member offered the Board of Trustees, which is in support of the carbon neutrality goal. Based on their position in the township, they have power to move goals and strategies in the Climate Action Plan forward.

### **Potential Collaborators**

This subsection includes organizations and individuals who our interviewees mentioned the township could collaborate with.

A Scio Township staff member stated Scio could rely on Ann Arbor and the County to work with auto dealerships to lessen vehicle emissions, work with AAATA on millage proposal to further extend bus routes, and utilize a County Planning Commission to lead a joint planning effort between other municipalities (Pittsfield and Scio, and Ann Arbor and the city of Dexter together, you know, and Webster township, etc) . This could include work on redoing zoning ordinances for greener buildings.

A Scio Township Fire Department staff member suggests that there's an opportunity to work with the new Tesla dealership on improving access to EVs

A Scio Township Parks and Recreation Advisory Board staff member wants Scio Township to collaborate more with the Fire Department on controlled burns, fire breaks, and other basic strategies. They also want more collaboration with the Huron Watershed Council, County Parks and Preserves, the Village of Dexter, Ann Arbor, and perhaps even the State.

### Organizations and Contacts of Interest

This subsection contains organizations and contacts of interest for Scio Township suggested by the interviewees.

A Scio Township staff member suggested David Read, who "was a trustee for 12 years, was on the planning commission, was deputy clerk, land legacy. He's done a lot of land preservation. He does prescribed burns all the time." This interviewee also mentioned Lew Kidder.

A Scio Township Fire Department staff member provided the following contacts of interest: the new Tesla Dealership, County Building Department, and the Downtown Development Authority (DDA).

A Scio Parks and Recreation Advisory Board staff member offered Huron Watershed Council, County Parks and Preserves and several project engineers (who Scio has hired to do work in the past).

A TAP staff member suggested LASA (Loch Alpine Sanitation Authority). They commented that LASA is essentially a water and sewage treatment plant that provides drinking water and sewer treatment for thousands of people in Scio.

A farmer owner stated that the Nature Nurture farm with Levine and Eric Cantor would be beneficial to speak to.

A Scio Township staff member offered Steve Wyzgoskii in the utilities department, and the parks preserves and pathways director who is a recent graduate of SEAS, Anna Cohn.



## Report 3: Ongoing Engagement Recommendations

Along with the survey and interview recommendations, the team's Ongoing Engagement Recommendations document is also included in this final report. The document addresses gaps in the project team's engagement strategy and data collection. It also offers new suggestions, including an increase in engagement with underrepresented communities, incorporating equity and justice into township operations, and improving education efforts. This document is crucial for Scio Township to continue the work done by the SEAS Master's team.

# Scio Township Ongoing Engagement Recommendations

*Date Written: February 14th, 2022*

## Introduction

### Overview of the SEAS Project

To support the development of Scio Township's Environmental Sustainability and Climate Action Plan (ESCAP), a team of Master's students from the University of Michigan's School for Environment and Sustainability (SEAS) has collaborated with Scio's Environmental Sustainability Task Force from December 2021 through April 2023. The SEAS team developed and implemented a community engagement strategy, which included a public input survey and key interest group interviews. This document, the Ongoing Community Engagement Recommendations, will address lessons to be learned from the initial engagement strategies and outline recommendations for future community engagement efforts.

The survey, compiled in partnership with the task force, asked community members about their current sustainability practices and their views on potential township actions. The high response rate from the survey provided useful data about the level of broader resident support for sustainability efforts. By connecting with community members throughout their survey dissemination process, the SEAS team developed an extensive list of contacts, including homeowner's association leadership, co-housing representatives, and key interest groups. These connections, if well maintained, will help with future engagement efforts. The team also connected more residents to Scio Township's website and Facebook page, which will increase transparency and dialogue.

With the SEAS team completing their consultation, the following recommendations will serve as a guide for the township to determine future practices for engaging the community in reaching its climate and sustainability goals.

## **Gaps in Past Engagement Inform Future Engagement**

The following section will address gaps in the project team's engagement strategy and offer new suggestions, including an increase in engagement with underrepresented communities, incorporating equity and justice into township operations, and improving education efforts. Although overall a success, the original survey did have some gaps and biases in regard to demographics that can help guide future engagement in the township. Of the 283 respondents, 39% were 65 years of age or older, which is in contrast with Scio's actual 65 and older population which makes up only 17% of total residents. Another 22% of respondents were between the ages of 55 and 64, and only 9% were 34 years old or younger, meaning that the survey respondents skewed towards the older residents of Scio Township and failed to get proportional input from young people. Moreover, there was a larger number of white respondents than expected, as 77% of Scio residents are white which is in contrast to our survey respondent demographics which indicated that 87% of respondents identified as white or Caucasian.

Respondents tended to have higher incomes in comparison to the overall township population, with 40% claiming annual incomes greater than \$150,000 and another 17% with annual income between \$120,000 and \$150,000. Along with this, only a small portion of respondents rent or live in manufactured homes, with 81% of respondents living in single-family homes and 93% owning their own homes.

Based on our survey demographic data, it is clear that for future engagement it is important to prioritize groups that were missed or underrepresented in this round of engagement. Young people in Scio should be a focus for future engagement, as it is clear that older residents are more likely to take the time to engage with surveys and other forms of community engagement, making young people the most difficult age demographic to reach. Lack of an online and social media presence for the previous survey could be one reason for this, and using social media and other online resources for future engagement could be beneficial for gaining feedback from and engaging with this demographic.

An effort should also be made to reach more residents who rent or live in manufactured homes, as these too were groups that were underrepresented according to the survey demographic results. Reaching out to apartment complexes and prioritizing Scio Farms could be beneficial for getting more feedback from these groups in the future, as well as possibly getting more engagement with lower income individuals who made up only a small percentage of survey respondents.

Overall, for future engagement it is important to prioritize groups that were underrepresented and less likely to engage with the survey and other township initiatives. Providing easily-accessible educational materials and having a presence at community events could go a

long way in improving community engagement going forward and ensuring that feedback is heard from a representative sample of Scio Township's true demographics.

## Tiered Engagement Recommendations

The following recommendations are presented in a tiered system based on the amount of time, resources, and capacity required to execute the engagement strategies outlined. Within each tier, recommendations fall within the following categories: Equity, Partnerships & Collaboration, Human Resources, Feedback & Evaluation, Education & Communication, and Engagement Events. This system will allow township leaders to easily adjust and adopt strategies depending on the township's changing access to time, resources, and capacity. All resources referenced within the recommendations are available in Appendix 2 and 3.

### Tier 1 Engagement

These strategies require the least time, resources, and capacity.

#### Equity

##### **Surveying Missing Demographics**

In order to ensure that the task force is including and receiving feedback from all populations within the township. It is also important to note that repetition of the surveys done by the SEAS Master's Team is needed to reach underrepresented communities, specifically those described in the introduction of this document. Doing so will ensure that Scio Township is committed to having frontline communities at the forefront of all operations and efforts regarding sustainability. These efforts are necessary to lead to successful climate change mitigation and sustainability practices and should be complemented by background research on engaging frontline communities. The Municipal Research and Services Center provides an [excellent tool](#) for integrating equity into engagement for climate response. Ann Arbor's Equitable Engagement Steering Committee also has an [Equitable Engagement Report](#).

#### Partnerships & Collaboration

##### **Increase Communication with Surrounding Communities**

There is a need for the task force to have greater and more intentional collaboration with surrounding communities, including surrounding townships, Ann Arbor, and Washtenaw County. These communities offer expertise, feedback and networking opportunities as well as the chance to reach communities of different demographics and backgrounds. This increased communication and collaboration should be continual and scheduled quarterly at a minimum. For example, the township should continue its engagement as a member of the Ann Arbor 2030 District.

## **Human Resources**

### **Temporary Project-Based Volunteers**

Volunteers bring skills and energy to climate and sustainability action while increasing community ownership of these efforts. Recruiting and engaging temporary, project-based volunteers is one way to mobilize Scio residents in meaningful action for their community. These one-time or casual, drop-in style opportunities require low commitment from volunteers and often require little or no training. These lower commitment opportunities provide in-roads for residents who are newly getting involved in efforts, as well as for residents who have been engaged in past efforts. The Community Toolbox provides an [in-depth guide](#) to engaging volunteers, which can be adapted based on the volunteer coordinator's capacity. Based on survey feedback, many residents would be interested in community clean up volunteer opportunities, especially if located in their own neighborhood. Coordinating volunteers requires having a main point person who has the capacity and skills for this leadership role. Before deciding to host project-based volunteers, it's important to designate an individual as the volunteer coordinator and ensure that they have the capacity and skills to do so.

### **Collaboration with Students**

Scio's proximity to the University of Michigan in Ann Arbor provides a multitude of opportunities for engaging university students. Many students have a field work or capstone project requirement built into their academic program, such as the SEAS capstone project. Student collaboration could be long term (1 year or more) for a capstone project, but could also be short-term, through collaborating with a faculty member to provide students with a course field work opportunity. Student collaborations can overlap with temporary project-based volunteer opportunities. The downside of collaboration with students is that they tend to be transient, and therefore can provide only temporary commitment and support.

## **Feedback & Evaluation**

### **Annual Implementation Report**

Annual implementation reports are a useful way to demonstrate what progress has been made towards sustainability goals and evaluate what changes may be necessary. These reports are common practice among communities that have begun to implement a climate action plan. Implementation reports can vary in their level of detail. One example is the City of La Mesa in California. Their [annual reports](#) are accessible online. The annual report can include a combination of qualitative and quantitative information. For example, the Materials and Waste section may include a description of progress made towards making composting more accessible in the township as well as the number of clean ups held and an estimate of the pounds of trash removed. There may also be some analysis of why the township was successful or what unexpected challenges arose that prevented progress. A template including some possible data points is included in Appendix 2. To keep the creation of the report simple, measurements can be based on information that is already available to township employees.

## **Education & Communication**

### **Website**

Updating the website is a no cost option for sharing information within the community and it does not need to be undertaken frequently. Website updates can include updates on what has been done in the township e.g. ordinances passed, calls for volunteers, a contact/feedback form, or links to sustainability related articles and resources. The goal of updates should be to educate residents, share resources and opportunities, and get feedback.

### **Newsletter**

The township newsletter should include a section reserved for ESCAP related news and updates. Every quarter's newsletter should aim to communicate to residents the progress that the township has made on various sustainability initiatives and what opportunities there are to get involved during the upcoming quarter. The newsletter should educate residents on what they can do to live more sustainably and what resources are out there. There are resources to help with crafting the language to be used in the newsletter. Useful [communication guides](#) are available through EGLE. The Institute for Local Government has a [guide](#) for local leaders wanting to engage with the public.

## **Engagement Events**

### **Tabling**

Tabling requires few resources and can be done at many public community events. Tabling is a method of strategically engaging members outside of the Township's usual "choir", depending on the events attended. In-person encounters may be more impactful than online outreach, as they provide an opportunity for interpersonal relationship building. Tabling is most effective when the physical tabling materials are eye catching, interactive, and 3-D. Materials that can help achieve this include: a branded tablecloth, colorful printed materials (brochures, handouts, business cards), a large poster or banner, an email sign up sheet, objects that can be picked up and examined, food/drinks, and games. Games are especially useful for family-oriented events. Events of interest may include: the Ann Arbor Green Fair, Top of the Park, and the Scio Township Fire Department Halloween Party. Tabling can also be done at community gathering locations such as coffee shops, music venues, places of worship, schools, and community centers.

### **Public Meetings**

Public meetings provide transparency for local government operations and provide in-roads for everyday residents to learn about and engage in the planning and implementation process of the ESCAP. Sustainability Task Force meetings are easily made public and accessible by being held via Zoom. As implementation of the ESCAP begins, the task force may choose to provide additional public meetings for project-specific initiatives. With proper township communications, they could both support and expand volunteer engagement in ESCAP implementation. The Municipal Research and Services Center (MRSC) provides [public meeting tips, tools, and techniques](#).

## Tier 2 Engagement

These strategies require a moderate level of time, resources, and capacity.

### **Equity**

#### **DEI Workshops**

In this tier, Scio's task force could participate in a series of diversity, equity, and inclusion (DEI) focused workshops run by a hired consultant of justice-centered engagement, for example EcoWorks workshops in Detroit. These workshops will aid each working group in the necessary skills and knowledge to center their work around equity in hopes of ensuring marginalized and frontline communities are included and valued in all aspects of task force operations.

### **Partnerships & Collaboration**

#### **Building on Key Interest Group Relationships**

As the SEAS Master's Team interviewed prominent key interest groups in the Scio community, continual relationship building and conversations with identified and potential partners and key interest groups is recommended, such as with the Land Preservation Commission. These relationships will ensure that task force operations are validated and improved upon by experts in their respective fields.

### **Human Resources**

#### **Provide Internships**

The Township can provide part-time or full-time internships to university students over the summer and/or during the school year. Internships can be funded through township funds, external internship or grant funds, or through fellowship programs. Beyond the funds listed below, Scio Township leaders should research and collaborate with university faculty members to identify other internship funding resources.

Internship funds through SEAS: [Sussman Fund](#), [Weinberg Fund](#)

Fellowship program: [Catalyst Leadership Circle Fellowship](#)

### **Feedback and Evaluation**

#### **Quantify Emissions Reductions**

With the availability of more time and resources, a more thorough annual implementation report can be compiled by including metrics that rely on calculations and data available from outside of the township. Some examples include calculating the amount of carbon reduced by taking certain actions or the amount of carbon sequestered by certain land management practices.

This [greenhouse gas calculator](#) from the EPA estimates the amount of carbon emissions prevented based on gallons of gas, Kilowatt-hours, and therms of natural gas not used. The

Climate Change Resource Center offers the [CUFR Tree Carbon Calculator](#) for estimating the amount of carbon sequestered by trees planted.

## **Education and Communication**

### **Township Facebook Page**

For no cost and relatively little time, a Facebook page, or other social media account, can be utilized to host sustainability related events, updates, and announcements. This can be a place to share expertise and resources as well as share events with interested community members. Facebook offers [guidance for government organizations](#) seeking to create a page. It's ideal to identify one to two people to be the administrators of the page and to post there semi-regularly. This action would require a moderate amount of time and effort to share the page with residents and post semi-regularly.

## **Engagement Events**

### **Green Fair or Open House**

Hosting a Green Fair or Open House is an opportunity to exhibit Scio's current sustainability initiatives and to provide engagement avenues for residents. Exhibitors could include neighborhood groups, non-profits, township entities, and businesses. Exhibitors should be encouraged to provide interactive displays and demonstrations to encourage greater interest and involvement from attendees. The [Ann Arbor Green Fair](#) provides a model of what this event could look like. The [City of Austin has a guide](#) which can help ensure the event itself is organized and carried out with environmental sustainability in mind.

### **Community Workshops or Lecture Series**

Community workshops or lecture series can expand community engagement by providing Scio residents with the skills and knowledge needed to live sustainably and to meaningfully participate in ESCAP actions. Events can be organized in collaboration with local leaders and organizations that can provide topic-specific expertise and resources (both educational and physical). Encouraging township residents to lead workshops (and supporting them in developing the workshops) can increase resident leadership, buy-in, and overall agency in the implementation of the ESCAP. Holding these events may be a good compliment to a volunteer program.

Here are several examples of what these events could look like:

- Hold neighborhood meetings to discuss climate change impacts, including impacts on human and environmental health, and what individuals can do. These meetings could include at least one session focused on eco-anxiety, climate grief, or other feelings that can emerge as residents face climate and ecological crises.  
Note: only presenting information about the issues without actionable steps can lead to hopelessness and turn residents off from future participation.
- Host workshops with hands-on demonstrations for community members to learn how to take specific actions (e.g., building a rain barrel, dehydrate food as part of emergency

preparedness, build and use compost bin, use an electric bike, construct a rain garden, assemble an emergency kit, install less resource intensive landscaping).

- Host events for community project(s) to bring people together to work towards mitigation and adaptation (e.g., building a community rain garden, working on a trail, making signs for bike/pedestrian routes, pulling ivy, planting climate resilient plants, and constructing community pea patch).

The Saanich municipality in British Columbia provides [examples](#) for what these workshops could look like.

## Tier 3 Engagement

These strategies require the most time, resources, and capacity, but may be most impactful.

### Equity

#### **Equity-focused Working Group**

Under this tier, the task force would include a new Equity-focused working group. This working group will provide expertise and ideas for initiatives like the other five working groups. The addition of this working group ensures that task force members are dedicated to the inclusion of frontline communities, while holding the other working groups accountable for the inclusion of equity in their work. Other benefits include frontline community members having access to decision-making in the township, diverse communities' needs being valued, and a shift in the Scio Township culture that prioritizes communities of color and low-income communities.

### Partnerships & Collaboration

#### **Joining a Coalition**

To achieve this tier of engagement, Scio Township's task force should join a coalition (e.g., the Clean Energy Coalition) that is dedicated to addressing the climate crisis and utilizing equity to do so. This action will put the task force at the forefront of the movement. By doing so, the working groups will be knowledgeable of current updates in the field and have the opportunity to implement those advancements in their own work. The benefits of joining a coalition include collaboration with other experts in the field, knowledge sharing, and exposure to innovative approaches and initiatives.

### Human Resources

#### **Full-Time Sustainability Coordinator**

The Sustainability Coordinator would be responsible for coordinating the implementation of the ESCAP and for community engagement in that implementation. ICLEI–Local Governments for Sustainability USA provides [guidance](#) for what a Sustainability Coordinator's responsibilities could be:



- Develop and manage ESCAP implementation timelines
- Ensure buy-in from the chief local elected official(s) and department directors
- Act as the primary point of contact within the local government and externally
- Convene and coordinate the Environmental Sustainability Task Force
- Convene and facilitate interdepartmental and the task force working group meetings
- Develop the outreach strategy and coordinate the outreach process
- Coordinate the research and analysis for the sustainability assessment, goal setting, and analysis and vetting of the measures
- Manage the writing and production of later iterations of the plan
- Coordinate the implementation of the plan
- Monitor and report on implementation progress

### **Ongoing Volunteer Program**

An ongoing volunteer program would allow the township to build capacity for implementing projects related to ESCAP actions, while also building leadership, engagement, and agency of community members. A project and team-based approach will be most effective for ensuring volunteers are engaged in meaningful and impactful action, and for fostering a greater sense of commitment, support, and agency. This approach can be scaled up or down, depending on the facilitation capacity of township sustainability leaders. The township should consider engaging adults as well as youth through collaborations with local schools and youth groups. One example close to home is the A2Zero Ambassadors program in Ann Arbor. Each year, the program recruits a small cohort of ambassadors that are highly committed and represent the broader community (geographically, socioeconomically, racially, educationally, etc.). Once ambassadors are accepted, they are required to sign a commitment pledge and undergo 12 weeks of training in equity, environmental justice, the climate action plan itself, and other specific topics such as energy, water, local food, transportation, and community resilience. Once trained, ambassadors and city staff propose projects and there is a project selection process. Ambassadors are put into teams based on interest and capacity, and lead their selected project with support from city staff in overcoming any obstacles to project success. Each year, the cohort of ambassadors graduates from the program and may choose to continue their project independently. As part of the A2Zero Plan, Ann Arbor is looking to develop a youth ambassadors program as well. For more details on the process, contact Bryce Frohlich, the Community Resilience Specialist at the Ann Arbor Office of Sustainability & Innovations, at [bfrohlich@a2gov.org](mailto:bfrohlich@a2gov.org). Other examples of what an ongoing volunteer program could look like include [Philadelphia's Block Captain Program](#) and [Austin's Community Climate Ambassadors](#).

## **Feedback and Evaluation**

### **Greenhouse Gas Inventory**

A greenhouse gas inventory for the township is essential for understanding how and when the township will achieve new zero emissions. Scio Township can utilize Washtenaw County's data for an inventory because DTE does not provide information at the township level. The [stabilization wedge method](#) may be useful for approximating how the township will reach zero. The wedge method considers multiple approaches to reducing emissions and assigns them

values based on their capacity to reduce emissions. The township can identify how many approaches will be needed to reach the township's goal and how each working group topic can contribute to the goal. Ideally a greenhouse gas inventory and/or quantified analysis of reductions is conducted between every 1 to 3 years.

## **Education and Communication**

### **Utilize CoUrbanise Platform**

Many residents don't have the time and resources to attend township meetings. Utilizing a public engagement tool such as [coUrbanize](#) can allow residents to engage in the process of sharing their priorities, interests and concerns. Some residents may even be familiar with this platform, since Washtenaw County used it for community engagement during their own climate action planning process. Identifying and setting up a public engagement tool like coUrbanize and sharing it with the public will require quite a bit of time and potentially some funding.

## **Engagement Events**

### **Create a Resilience Hub with Ongoing Community Programming**

According to the Urban Sustainability Directors Network (USDN), a [resilience hub](#) is a community-serving space modified to support specific resident needs, coordinate communication, distribute resources, and reduce carbon pollution while enhancing quality of life. This space can address community resilience, emergency management, climate mitigation, and social equity, while providing meaningful participation and community connection opportunities for residents. The resilience hub can provide continuous community programming, such as workshops, social events, and community services. This programming should be heavily informed by the needs and values of the community, especially those most vulnerable to and impacted by climate change. The resilience hub can be housed in a newly erected building or in an existing community space such as a neighborhood center, library, or place of worship. Brick and mortar resilience hubs can be very expensive. A lower cost alternative is a resilience network which is a network of community members trained in climate resilience and emergency preparedness, who act as ambassadors to the rest of the community. This approach is described in greater detail in the Ypsilanti resilience hub Project 2 linked below. The USDN provides a [comprehensive resource](#) on creating a resilience hub. The [Northside Community Center and Resilience Hub](#) in Ann Arbor is one local example and several student teams at the University of Michigan have done Master's Projects on implementing resilience hubs in Ypsilanti ([Project 1](#), [Project 2](#)).

## **Conclusion**

The engagement strategy employed by the SEAS team during the development of the ESCAP uncovered a variety of opportunities for meaningful and equity-minded community engagement in Scio Township. Achieving the goals outlined in the ESCAP will require the active participation of community members. The various recommendations outlined in each of the above three tiers,

offers a unique opportunity to connect and build relationships among residents. Next steps should include a timeline analysis of the recommendations, which will clarify which recommendations should be prioritized. Next, Scio should reach out to neighboring municipalities and counties to see if they are already working on some of the recommendations in this document. If Scio's timelines match with the neighboring municipalities' and counties', then Scio should consider coordinating with them to maximize time and resources. Referencing this document will increase community involvement at every level of Scio Township decision making, creating a more inclusive, equitable, and democratic process.

## **Full Project Conclusion & Scio Township's Next Steps**

Overall, the project provided an excellent learning experience for the SEAS Master's team through their participation and support of this small-scale municipal planning process that centered community engagement. The SEAS team was able to have a lasting impact on the trajectory of Scio Township's ESCAP. Findings from the public input survey and key interest group interviews ensure that the ESCAP is informed by experiential and expert knowledge from throughout the township. The process of gathering feedback in itself has helped establish overall trust and support of the ESCAP creation process, which in turn has built a more solid foundation for the implementation of the plan. Furthermore, the Ongoing Engagement Recommendations will provide useful waypoints for continuing to center community engagement as the plan gets underway and evolves.

According to Scio's Environmental Sustainability Task Force (ESTF) leadership, next steps for the Township as the SEAS team's role wraps up include obtaining community feedback on the ESCAP draft and then seeking approval from their Planning Commission and Board of Trustees by May of 2023 to finalize the plan. The Township will then define the next phase of the ESTF's work and engage Township leadership to integrate ESCAP goals into their operations, leadership, and education. This may include establishing a permanent sustainability committee within the Township with a Board of Trustee representative. Next, the Township will begin a policy and ordinance review and revision process with the Planning Commission and Board of Trustees. They will also work on improving the Scio Township website to ensure it is a useful education and communication tool. By next October, they will hold their first annual sustainability event, with planning efforts happening through the summer with intern support. The SEAS team is excited to see the ESCAP plan in action, and how the community will continue to be an integral part of its success.

# Appendix 1: Public Input Survey Questions

Survey Questions (1-43)		
General Questions	1	To what extent do you understand the causes and consequences of climate change?
	2	To what extent do you support the following Scio Township goal? Goal: Reach net zero carbon emissions for township government operations by 2030 and for the entire township by 2035. (Note: Net zero emissions means that any carbon dioxide released into the atmosphere from the township's activities is balanced by an equivalent amount being removed. This goal is consistent with the goals already set by the state and county.)
	3	How concerned are you about the impacts of climate change in Scio Township?
	4	Please indicate your level of concern for each of the following climate change impacts:
Energy & Buildings	5	Have you done any of the following to decrease your home's emissions? Select all that apply.
	6	Rate the following on likelihood it would encourage you to improve water and energy use efficiency:
	7	Electrification is the process of replacing technologies that use fossil fuels (coal, oil, and natural gas) with technologies that use electricity. Rate the following on likelihood it would encourage you to increase the electrification of your home:
	8	Scio Township will consider new actions to reduce emissions related to energy use and buildings. Rate your level of support for each of the following actions:
Sustainable Ecosystems & Food Systems	9	The township will consider new actions to mitigate flooding impacts on Scio residents and businesses. Rate your level of support for each of the following actions:
	10	Do you have low flow water fixtures (e.g., toilets, faucets, and shower heads that use significantly less water and energy) installed in your residence?
	11	Rate how each of the following would increase your likelihood of installing low-flow water fixtures (e.g., toilets, faucets, and shower heads that use significantly less water and energy) in your residence:
	12	Rate your level of support for increasing the quantity of greenspaces (e.g., grass, shrubs, trees, other vegetation for recreational and/or aesthetic purposes) to improve air, soil, water quality, and human health:
	13	The township will consider new actions to increase the quantity and quality of greenspace within the community. Rate your level of support for each of the following actions:
	14	Tree canopy coverage is the amount of land covered by trees. Greater amounts absorb more carbon, reduce runoff, improve air quality, and keep neighborhoods cool during hot months. Scio Township goals include increasing township wide tree canopy coverage by 3% of 2018 values. Rate your support for this goal:

	15	How important is it to you that you know where your food comes from (i.e. if your food is grown locally, nationally, internationally)?
	16	Healthy food systems rely on farmers conserving farmland via conservation techniques. To what degree do you support utilizing land conservation techniques (e.g., permaculture, crop rotation, natural pest management, no-till farming) to protect farmland?
Climate Resilience & Emergency Preparedness	17	How likely are you to install solar panels on your home?
	18	Rate how each of the following would increase the likelihood of you choosing to install solar panels on your home:
	19	Rate your level of support for implementing fire safe management practices of open spaces at Township-owned/managed properties: (Fire safe management can include fire breaks in large plots of land, prescribed burns, and clearing excess brush)
	20	Fire safe management involves providing fire breaks in large plots of land, using prescribed burns, and clearing excess brush. Rate how each of the following would increase the likelihood of you managing your yard/land in a fire safe way:
Transportation & Mobility	21	Switching to an electric vehicle (EV) can lower your emissions from transportation. Rate your level of support for each of the following actions:
	22	Do you own an electric vehicle (EV)?
	23	Rate how each of the following would increase your likelihood of using an EV:
	24	A reasonable goal for Scio residents is to decrease the amount they drive in personal vehicles by:
	25	Which of the following would decrease your likelihood of driving a personal vehicle? Select all that apply.
Materials & Waste	26	Do you currently compost at home?
	27	If made available in/near you neighborhood, how much would you make use of a community composting facility?
	28	Do you currently garden at home?
	29	If made available, would you make use of a community gardening facility?
	30	Which of the following would increase your ability to recycle? Select all that apply.
	31	Rate the likelihood that the following would encourage you to take part in regular community litter cleanup events:
Involvement & Action	32	How are you involved in township governance or operations? Select all that apply.
	33	How would you like to be involved in sustainability and climate action in Scio Township? Select all that apply.
	34	What are some other ways Scio Township can further sustainability and climate action?

		(open-ended)
Demographics	35	What is your age?
	36	What racial/ethnic groups do you belong to? Select all that apply.
	37	What is your annual household income?
	38	How many people live in your household?
	39	Which Scio Township precinct do you live in? (See Map Above)
	40	Which homeowner's association (HOA) are you a part of? If you do not belong to an HOA, please leave blank.
	41	What type of home do you live in?
	42	Do you own or rent your home?
	43	How much longer do you plan to live in Scio Township?

<p>Question 5: Have you done any of the following to decrease your home's emissions? Other:</p>
Live in apartment
Very interested in a heat pump, availability in getting the heat pump and someone to install it has been challenging.
Composted on a regular basis for over a decade, minimized frivolous purchases of clothing, goods
Your questions don't take into account anyone with a well isn't very concerned about low flow filters. Likewise, with a septic field, everything that goes down the drain is compost. You're going to get answers that don't mean what you think they mean.
We would love a grant to do so. Financially we are not able.
Energy efficiency does not have to be coerced by fear tactics.
We are mindful of the energy we use for electrical devices and always try to keep our indoor climate reasonable rather than dialing to extremes
Not yet. Recently moved to a condo assn
Shade trees on south side of home
I allow the temperature to float up pretty high during the summer

Insulation
Electric vehicle for local trips
Emissions? Cut back on fertilizer
I am conscious of how much resources I use.
Programmable thermostat, efficient with electricity and water
new home, already energy efficient
Decrease use of lights and appliances, line drying of laundry
looking seriously into installing geothermal
We have Geothermal
heat exclusively with wood collected from dead and downed trees from neighbors/roadside

Question 30: Which of the following would increase your ability to recycle? Other:
Ability to recycle more things
I recycle!
I would like to know what percent of Washtenaw/Ann Arbor/Scio recycled material is actually recycled. Providing this on a consistent basis would help identify issues with current recycling or support their use
A contact person to verify questionable items for recycling, i.e. prescription bottles, plastic coated cardboard soup cartons, etc.
End the GFL garbage monopoly and find a company that doesn't send recycling to landfills.
foam recycling
I'd like Scio to work with GFL to accept plastic bags and styrofoam
Our trash company, GFL, is only marginally effective in their job. Often trash and recyclables blow out of the truck and are left on the ground.
A real market for recycled materials
There already is a community recycling facility in Scio, on Jackson Rd.
Being able to recycle all of the same items that I could when I lived in the city of Ann Arbor.
No public service currently due to the fact I live in multifamily housing (condominium community)

I live in the Touchstone Cohousing community. Touchstone and Great Oak cohousing got together to get a large Recycle Ann Arbor dumpster where we can put our recyclables. This required initiative on the part of some resident(s) to make this available. I appreciate being able to make use of it.ive on the part of some resident(s)
We already have curbside recycling pick up - which we use.
Hazardous material recycling like for electronics is needed
More concerned that collection of recycling does not result in recycling.
Let me switch back to Waste Management instead of GFL as my trash/recycling service provider
Expand materials collected, I use GFL
Require residents to categorize their recycling to decrease contamination of paper products.
Accept more (plastics bags, etc).
Currently recycle with GFL. Scio hasn't a good facility or manpower to manage one
It's not clear how well my curbside recycling service actually recycles. Better info on what actually gets recycled and how to keep the recycling stream clean and usable
you did not explain community composting
support Recycle Ann Arbor so that they can recycle more materials--for example, I just got turned away with hard plastics because of market forces
Provide factual information on how to safely recycle soft plastics (i.e. wrappers, ziploc bags, cellophane, etc).
we already have extensive recycling availability in Scio Township

Question 32: How are you involved in township governance or operations? Other:
In the past I've volunteered on a township committee
I vote
I attend meetings and talk with other residents
Tax Payer
Active resident and part of the not so silent majority.
i try to at least be aware of some of what is going on



I would like to be on certain committees but am not currently...I watch all the bot meetings and sometimes make suggestions...this environmental survey is very poorly structured and does not give opportunities for real answers....
Have been on committees
I am involved in my township
previously volunteered
Voter
I'm an election inspector
Scio township doesn't consider Input from residents re
Attend many township meeting by zoom
I'm a resident interested in official abuse
I'm a concerned Scio resident who tries to stay updated on what's happening in our township
Spouse was previously employed by Scio and served on any committees

Question 33: How would you like to be involved in sustainability and climate action in Scio Township? Other:
Ages 91 & 95
I would love to see the Township offer 'webinars' to residents regarding how to access materials and products that would affordable help them use less energy. I drive a hybrid mostly because of the costs and glitches that exist with EVs. I look forward to moving into that arena when I feel more confident about the performance and access to reliable plug in areas.
Best practices on my own property.
These choices are lame...
Scio cannot manage their money I don't have confidence in their ability to do the right thing
Scio resident voting

Question 34: What are some other ways Scio Township can further sustainability and climate action?
have personnel who understand the impact of our actions on the environment

<p>This was a good survey. Though, it seems to really be directed at the home owners of Scio. More and more, our residents are renters, not owners. Many of the ideas were on individual level--not township policy ideas. The tree cover goal of 3% seems way too low--I would like to understand how you came to these percentage goals. Without more info, I can't gauge how ambitious that is. Thanks again. Looking forward to speaking in July.</p>
<p>I live in Scio to be in a community governed by the principles of rugged individualism &amp; personal responsibility. I have solar panels and 2 EV's and don't use NG. That was MY choice and I don't need Scio to be involved. I resent the attempt to use any authority, regulation or funds of any kind to promote your agenda &amp; ideals. And I will work to oppose any candidate or policy attempt to change that</p>
<p>Build non-motorized paths that link Scio Township to the City of Ann Arbor with multiple locations, since biking and walking are transportation modes with zero carbon footprint.</p>
<p>none</p>
<p>Ensure preservation of existing green spaces and preserves</p>
<p>Endorse only developments consistent with the master plan and ones that do not contribute to environmental degradation such as worsening flooding.</p>
<p>Require neighborhoods, communities like condos, apartments &amp; businesses to recycle and provide reasonable rates. Many places don't recycle because of the cost; educational educators can be assigned to shift the focus &amp; educate our community on the value of recycling &amp; composting. Do outreach programs in low income communities;</p>
<p>Greatly improve the bikeability and safety when biking. It'd be great to be able to get into Ann Arbor and Dexter safety and back home on a bike.</p>
<p>Stop the housing projects eating up the land and ruining our township</p>
<p>Let the marketplace dictate. Let the "invisible hand" do its work. Don't want more wasteful government spending programs. They are never efficient and just lead to more bureaucracy.</p>
<p>!!connect the sidewalks!! On Staebler. Expand the sidewalks on Park Rd. These gaps are huge barriers to walking/biking</p>
<p>Scio Twp bot TOTALLY INTELLIGENTLY INVOLVED WITH APPROPRIATE ACTION</p>
<p>Community solar or other initiatives to reduce reliance on fossil fuels for electricity generation; Better info on recycling streams; Curbside pickup of electronic waste would help but not essential; Bike paths off-road to keep safer - it's too dangerous for seniors and kids to ride on many bike paths because they're on roads where cars drive too fast.</p>
<p>Continue education; respond to the most serious threat -dioxane, rather than ignoring my concerns about white foam in our well water.v</p>

Do whatever is necessary but avoid using the climate situation to take money from the community to benefit companies or to give subsidies. Regulate the new developments, new businesses, and rental units, do not provide monetary incentives.

Elect a responsible board of directors who are cohesive in their points of you addressing these issues.

Instead of making things mandatory... a common sense approach is needed. We do not have the infrastructure to go all electric. And has anyone thought of power outages? All electricity doesn't support life during extended power outages. Plus 60% of electricity is made from coal and/or natural gas.

Consider all viewpoints both for and against from real world studies and knowledge leaders; incentivize the inclusion of these sustainable elements for new development and retrofitting

Thank you for doing this survey. I would like to see the Township partner with UM and the City of Ann Arbor in their sustainability efforts. I feel the information coming from these sources would enhance the conservation for Scio residents. Thank you!

I'm very concerned that green efforts have taken a wrong turn at national and local levels. Solutions being mandated are premature based on current technologies, environmental resources, and feasibility. Additionally, mandating that others comply with cherry picked regulations while those creating and voting in these regulations continue to use a disproportionate share of carbon resources as individuals and professional entities is hypocritical. Instead, I'd like to see proven technologies continue to be implemented. For example, I don't think EVs are the answer. They require rare earth metals that the US can't source w/o war and/or environmental destruction to acquire them. They also require more semiconductor chips that currently have supply shortages with the issue likely to explode as Taiwan loses independence. Lastly, EVs just move most carbon use to generation sites which still use a huge amount of carbon sourced energy. The grid is also not currently, nor in the near future, capable of meeting demands of a massive increase in EV use. It's taxed and will be more so as renewables are added due to their fluctuating availability. That pathway is a good one, but should be implemented in a more measured manner so that the grid and resources don't fail. It is clear from CA's trial that pushing beyond scientifically feasible goals is hugely detrimental and imperils the most vulnerable in our communities. Admission reduction technology was making huge leaps in improvements when it was hijacked by premature transition to renewables. TACTICAL SUGGESTIONS FOR THE TOWNSHIP: (1) Planning commission: It's great that some high density housing is being built to conserve land and acknowledging some people have no interest in yards/gardening. Increased effort to prevent new builds in flood plains/along rivers and streams, and destruction of wetland habitat is key. PLEASE: stop allowing water retention ponds to be placed behind/next to a large number of houses. This almost necessitates blanket pesticide treatment so mosquitoes don't swarm back yards. Even worse is when water retention ponds spill into natural water where their highly treated water kills wildlife. (2) Planning Commission and HOA partnership: Stop requiring trees to be planted at roadside, then paying for them to be destroyed by the city and township with "trimming". Either require them further off the road or don't bother. Discourage fountains and water features in community builds. To remain

visibly pleasing by current standards, they have to be treated and end up environmentally barren spaces. (3) Township planting (or selling?) ban on the most aggressive invasive species (barberry, Bradford pears, etc.), require all township plantings to be native (4) Newsletter: Help further understanding that native trees and plant are necessary for ecosystem function, non-native plantings reduce ecosystem function. Honey bees are not native, 80% of pollination is by native bees (USGS), raising honey bees forces natives to compete for common resources and should be discouraged (6) I REALLY like the idea of local clean ups. I've thought about asking for permission, an orange vest, and going at it myself. I hate the trash along our road sides and expressway entrances. (5) Park/land rights purchasing committee: farms are not environmentally friendly; they have monocultures, strip natural land cover, eliminate natural animal and insect life, disproportionately use water, typically use pesticides and fertilizers that run off, etc. I hope the group that manages land/land rights purchases on behalf of the township can evolve from a focus on farm preservation to more environmentally protective purchases (6) It seems like there's an opportunity for some gentle conscious checking in our community; the large proportion of massive vehicles in parking lots all over this township indicate a disconnect between advocacy and personal actions. Could a personal carbon footprint assessment tool be developed? Something that compares a person's choices (house size, car, work travel habits, driving habits, clothes shopping habits, food sourcing and packaging (restaurant vs home prep), gas using hobbies (boating, motorcycling, air travel, ATVs, etc.) vs a national average or linked to climate goals divided by the US population might trigger some personal reflection.

It's important to invest in listening to the fears of people who oppose this initiative, and skillfully providing them with more accurate info.

solar power is not the only choice. There is wind and geothermal, hydrogen fuel, heat pumps and energy storage solutions that have to be discussed, too. DTE needs to switch to Zero Carbon energy production otherwise the whole electrifying discussion is useless - my e-car wouldn't run on fuel, but on coal from the plant... . Discussing roofing parking lots with solar panels is necessary and the impact on the environment what damage the new technology will cause - mining for lithium etc. Discussion about hydrogen fuel vs electric cars is necessary.

Obtain competent scientific advice to replace the current eco-slant.

Do not allow any more high density housing developments especially south of Jackson Road and strictly limit the number of any housing developments.! Increase the number of permanent protected farmland trusts so that we do not completely lose our semi-rural character..

Climate has changed all throughout the earth's existence.

Discourage any new developments no abatements for anything

I met a resident who had trouble getting a permit for a roof rain garden. Why would Twp. stand in the way of a sustainable roof? Also, I found some questions difficult to answer because there was no "not applicable" option.

Help those of us in HOAs who can't get solar panels due to aesthetic reasons.

give tax credits for solar installations
Provide tax breaks for incentives
GFL composting if garbage wasters we did in Seattle, free compost, free wood chips, info/sales of electric mowers, rental of electric gardening tools, fire extinguisher sales, gel installing smoke detectors, dead animal removal, killing of severely injured animals esp deer,
Sustainability education and donate baby trees to increase green canopy.
Provide free EV plug installation or a rebate on EV plug installation
Energy efficiency does not have to be coerced by fear tactics. Avoid the "Climate Change boogeyman". We have enough incentive to conserve natural resources, increase green spaces, decentralize and economize energy, and to reduce natural gas consumption. Converting from a high efficiency natural gas furnace to a wood burner does not reduce carbon emissions! Consider permitting more localized small scale wind projects and promote options that work on larger properties ( $\geq 2$ acres).
decrease single use plastics, composting services
work to stop the weather modification technology! learn to live with the natural cycles of the planet
Bike lane on Liberty, protected bike lane on Jackson, run the bus up Zeeb, connect Arbor Point to Meijer for walkability, connect subdivisions for bike traffic, force HOAs to approve solar panels, run the bus up Zeeb Rd
Education, education, education!! Do not force people, but educate them.
Grants to implement changes for homeowners
Bury underground utility cables. Stop WCRC from killing our trees and ruining our yards. Clean out/clear the drainage ditches, plant low growing clover and other low plants in green space(roundabouts, freeway entrances and exits) ) to stop all the mowing, burning or weeds.
Scio is an urban-sprawl area, with policies and regulations that encourage that - single-family McMansions, big-box stores, everything set up so you have to drive to go anywhere. That is destructive of sustainability, the environment, & the climate. Turn this around. Redo policies to encourage denser, clustered housing, designed and zoned so that shopping, services, and employment are reachable on foot or by bike, reserving the rest of the land for public, natural space.
pressure DTE to add more renewable energy sources
Township-wide communication and public events
I strongly believe social justice needs to be part of any plan on sustainability and climate action. I would like to see something in Scio township similar to the City of Ann Arbor's neighborhood resilience hubs involving organizing of neighborhoods to allow sharing of resources and support

<p>especially during times of a natural disaster or extreme weather event. I also think neighborhood organizing could help with education about native plant landscaping, invasive species, solar panels, electrification, recycling, composting, etc. I'm sure there is a wealth of knowledge in each neighborhood and people willing to share and learn. The social justice aspect must include that there is funding to support low-income residents with making changes in their homes. I have done what I can with implementing changes in my home, but at some point I can only afford to do so much even with tax rebates.</p>
<p>Ban on single use plastics, noise pollution ordinances, require electric lawn equipment, education around use of lawn equipment as a huge source of carbon emissions, get the border to border trail finished, designate 'quiet' parks/trails</p>
<p>A critically important goal for Scio Township is to dramatically increase its percentage of conserved lands (currently at 12%)<sup>1</sup> The Township should adopt a goal of conserving 50% of Scio Township through a combination of fee simple purchases by Scio Township and conservation easement purchases by Scio Township and complete this goal within 10 years of adopting this goal. Emphasis on wetland and upland forests and on lands with prime agricultural soils. 2) Increase education and advocacy efforts through community-based presentations. Providing a way for communities to share with other communities what activities and policies they are adapting to take actions to address climate change and make our communities sustainable.</p>
<p>Implement many of the ideas included in this survey; Be an advocate and leader in green actions; Plant many shade trees along the Border-to-Border trail that were cut down last year on Huron River Drive.</p>
<p>I think expanding bike paths would go a long way in promoting non-automobile transportation. There aren't really any good routes To go from the township to downtown Ann Arbor . Taking your life in your hands on most of the roads, I've driven many roads when I use to commute to work and it was not fun.</p>
<p>Vote YES for Scio Township's land preservation millage in November 2022.</p>
<p>This is a really stupid idea. Since you are all grad students and supposed to be smart, I want you to calculate and send to me the total CO2 emissions from Scio Township on an annual basis. Then I want you to calculate what percentage that is of the total annual flux of the carbon cycle. If you cannot derive either of those numbers, then I want you to resign, because you have provided evidence that you have no idea whether what you are doing can accomplish anything except the Californication of Scio Township.</p>
<p>Plan or a commuter or light rail line using the existing train track from Dexter to Ann Arbor, and focus high-density development at points where future rail transit stations could be built (e.g., 3741 E Delhi Rd and 2800 Zeeb Rd); have convenient transit from the cohousing communities (like Touchstone) and Lakewood Apartments to downtown Ann Arbor; Urgently address the Dioxane plume</p>
<p>Lobby for community solar and removal of solar cap (DTE)</p>

<p>Building protected pathways for bikes and pedestrians along roadways, like Liberty, will reduce car use. We currently have to drive to Saginaw woods to walk the dog, even though it is close by, because it is too dangerous to walk on Liberty. It would also be great if sidewalks and pathways interconnect with retail and the B2B path. Training HVAC companies on electric options may boost use of electric options. A Scio farmers market would be nice too, maybe White Lotus could have an outpost market somewhere.</p>
<p>You need to consider where all the extra electricity is going to come from to power all the added electrical appliances and vehicles</p>
<p>My next vehicle will 100% be a full EV. Charging infrastructure is very important to me.</p>
<p>Increase density along Jackson road corridor and preserve agricultural and natural habitats</p>
<p>Incentives to electrify would be amazing! The only reason I haven't pulled the trigger on electric lawn equipment and solar panels is cost.</p>
<p>Perhaps expand the number of commuter parking lots, so that those of us who are nowhere near bus lines could drive part way and then take mass transit.</p>
<p>Support residents in making investments with information and incentives. Working as an advocate for residents with DTE.</p>
<p>Scaling and decentralizing in smaller areas or neighborhoods, e.g., community-based energy generation or neighborhood geothermal systems. Thinking beyond the economics of making these changes. Change the language we use to the climate crisis, because that is what it is.</p>
<p>Plant large, fast-growing shade trees all along the new border-to-border trail to make it enjoyable and comfortable to walk from point A to point B instead of driving</p>
<p>really make solar available. Encourage farmers to switch to organic and support them financially to do so. Ban the use of lawn pesticides and herbicides. Make it mandatory that condo associations allow us to hang laundry on the line. Encourage and financially support community solar installations. Like neighborhood level solar farms.</p>
<p>Work with Sun Homes to require curbside recycling, and to encourage water saving lawn practices and more pollinators friendly landscaping. Sun is out of step with current environmental practices in the demands made on owners for water intensive lawn care, and failure to provide basic curbside recycling.</p>
<p>Use social media such as Nextdoor to promote their action plans. Send out periodic educational material in mail and/or via social media to educate the residents.</p>

Question 36 : What racial/ethnic groups do you belong to? A race/ethnicity not listed here (please specify):	
Who cares	Italian American
American	human race
Why make this racist?	None of your business
Human	

Question 41: What type of home do you live in?
Attached Townhouse (2 responses)
Condominium (7 responses)
Mind ya business
Townhouse condo

## Appendix 2: Ongoing Engagement Resources

### Ann Arbor Green Fair:

<https://www.a2gov.org/departments/sustainability/Newsletter-Events/Pages/Green-Fair.aspx>

### Ann Arbor's Equitable Engagement Steering Committee's Equitable Engagement Report:

<https://www.a2gov.org/services/Documents/Equitable%20Engagement%20Report%202010-2023%20with%20Appendices.pdf>

### Carbon Mitigation Initiative - Stabilization Wedges:

<https://cmi.princeton.edu/resources/stabilization-wedges/introduction/>

### Catalyst Leadership Circle Fellowship:

<https://graham.umich.edu/clcf>

### City of Austin Green Events Guidebook:

[https://www.austintexas.gov/sites/default/files/files/CityStage/GreenEventsGuidebook\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/CityStage/GreenEventsGuidebook_2017.pdf)



**City of Austin’s Community Climate Ambassadors Program:**

<https://www.austintexas.gov/page/community-climate-ambassadors>

**City of La Mesa Climate Action Plan Annual Implementation Reports:**

<https://www.cityoflamesa.us/1488/Climate-Action-Plan>

**City of Philadelphia Block Captain Program:**

<https://www.phila.gov/services/trash-recycling-city-upkeep/become-a-block-captain/>

**Community Toolbox Guide to Recruiting and Training Volunteers:**

<https://ctb.ku.edu/en/table-of-contents/structure/volunteers>

**CoUrbanize Community Engagement Platform:**

<https://www.courbanize.com/community-engagement-platform/>

**CUFR Tree Carbon Calculator:**

<https://www.fs.usda.gov/ccrc/tool/cufr-tree-carbon-calculator-ctcc>

**Edna Bailey Sussman Internship Fund:**

<https://seas.umich.edu/student-services/financial-aid/funding/edna-bailey-sussman-fund-environmental-internship-program>

**EGLE Resources for Communicating with Catalyst Communities:**

<https://www.michigan.gov/egle/outreach/catalyst-communities/residents>

**EPA Greenhouse Gas Equivalencies Calculator:**

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

**Facebook Best Practices for Government Organizations:**

<https://www.facebook.com/gpa/best-practices/government-organization>

**ICLEI–Local Governments for Sustainability USA Sustainability Coordinator’s Responsibilities:**

[https://www.hud.gov/sites/documents/20399\\_ICLEI\\_SUSTAINABIL.PDF](https://www.hud.gov/sites/documents/20399_ICLEI_SUSTAINABIL.PDF)

**Institute for Local Government Guide to Effective Public Engagement through Strategic Communication:**

[https://www.ca-ilg.org/sites/main/files/file-attachments/effective\\_public\\_engagement\\_thru\\_strategic\\_communication\\_march\\_2015.pdf?1497551966](https://www.ca-ilg.org/sites/main/files/file-attachments/effective_public_engagement_thru_strategic_communication_march_2015.pdf?1497551966)

**Marshall Weinberg Internship Fund:**

<https://seas.umich.edu/student-services/financial-aid/funding/marshall-weinberg-internship>

**Municipal Research and Services Center (MRSC) Public Meeting Tips, Tools, and Techniques:**

<https://mrsc.org/explore-topics/governance/engagement/community-engagement-resources#meetings>

**Municipal Research and Services Center (MRSC) Equity and Engagement in Climate Response:**

<https://mrsc.org/explore-topics/environment/sustainability/climate-equity-and-engagement>

**Northside Community Center and Resilience Hub:**

<https://www.a2gov.org/news/pages/article.aspx?i=731>

**Saanich Community Workshop Examples:**

<https://www.saanich.ca/EN/main/community/sustainable-saanich/climate-change/climate-action-works-hop-series.html>

**Urban Sustainability Directors Network (USDN) - Resilience Hub Basics:**

<http://resilience-hub.org/>

**Urban Sustainability Directors Network (USDN) - Resilience Hub Guide:**

<http://resilience-hub.org/core-components/>

**Ypsilanti Resilience Hub Project 1:**

<https://deepblue.lib.umich.edu/handle/2027.42/167216>

**Ypsilanti Resilience Hub Project 2:**

<https://deepblue.lib.umich.edu/handle/2027.42/172195>

## **Appendix 3: Annual Implementation Report Template**

### **Introduction**

#### **Energy, Buildings & Infrastructure**

- **Energy Savings: Number of...**
  - Homes weatherized through DTE program
  - Battery storage permits issued
- **Averages of**
  - Energy used per resident
  - Gallons of water used per resident/building/home

#### **Materials & Waste**

- **Waste Diverted: Lbs of...**
  - Recycling diverted from landfill
  - Compostables diverted from landfill

#### **Transportation & Mobility**

- **Bicycling: Number of...**

- Miles of new bike path installed or approved for funding
- Safe driving/biking workshops held
- **EV Adoption: Number of...**
  - EVs sold by local dealership(s)
  - New public chargers
  - EVs purchased for township operations
  - Public chargers installed
- **Public Transit: Number of...**
  - Bus shelters installed
  - New bus routes
  - New connections between routes

#### **Natural Ecosystems & Sustainable Food System**

- **Urban Tree Canopy: Number of...**
  - Trees planted
- **Conservation: Number of...**
  - Acres of land conserved
- **Stormwater Management**
  - New rain gardens in the township

#### **Climate Resilience & Emergency Preparedness**

- **Local Solar Power: Number of...**
  - Solar permits issued
  - Megawatts of solar installed
  - Battery storage permits issued

#### **Community Engagement**

- **Number of...**
  - Residents surveyed
  - Participants in volunteer program
  - Community members that participated in workshops or events

#### **Conclusion**