

AGENDA

CHARTER TOWNSHIP OF MERIDIAN ENVIRONMENTAL COMMISSION REGULAR MEETING

Jun 1, 2022 7 pm

Town Hall Meeting Room, 5151 Marsh Rd, Okemos

- 1. CALL MEETING TO ORDER
- 2. PUBLIC REMARKS
- 3. APPROVAL AGENDA
- 4. APPROVAL OF MINUTES
 - A. March 2, 2022 Minutes (Revised)
- 5. NEW BUSINESS
 - A. Climate Sustainability Plan Updates
 - Current plan available at https://bit.ly/climatesustainabilityplan
- 6. REPORTS AND ANNOUNCEMENTS
- 7. PUBLIC REMARKS
- 8. ADJOURNMENT



Environmental Commission Meeting: March 2, 2022 (revised 5-26-22)

SUMMARY

The Environmental Commission (EC) reviewed its goals for 2022, the wetland education campaign, green grants, and more. The EC also discussed how to update climate sustainability plan and conducted elections for 2022.

AGENDA & MINUTES

Agenda and Minutes were approved.

2022 GOALS

A copy of the Goals was distributed in the packet. The Food to Compost Goals need to be updated. Vice Chair Colby suggested adding "Increase the amount of food that is gleaned in the Township." Commissioner Frazier suggested adding "Participate in the Green Communities initiative" under general goals. Goals will be shared at a general meeting of all commissions in April. The EC unanimously approved the 2022 Goals with these additions. There may be minor amendments at the next meeting. (Note: Staff merged a newer version from Google Drive, with the simplified older version that was in the packet, incorporating comments above).

WETLAND EDUCATION CAMPAIGN

Commissioner Grasseschi reviewed the history of the wetland education campaign, sharing the wetland brochure and letter distributed earlier last year. Trustee Wisinski described her efforts to garner Township support (funding). The Wetland Education Team (WET) is now assembling resources to help people "build back the buffer" and make ecofriendly landscaping choices. These include native plant sales, wetland walks, classes, garden designs, a plant guide, another letter, etc. There are approximately 10 people involved with WET. Grasseschi asked about how we might get the word out about phosphorous restrictions. Commissioner Luca Wisinski offered to share at Okemos High School. Colby mentioned that the wetland "blurb" in tax notices might be reviewed to be more helpful. Grasseschi also confirmed that the wetland letter went to households adjacent or on wetlands.

GREEN GRANTS

Okemos Radmoor, Okemos Library, Okemos Public Montessori, and Haslett Community Church submitted proposals. There is also interest from Haslett High School. Projects included a barnyard classroom, pollinator gardens, signage, etc. Grasseschi suggested we ask for applicants to use native plants in their plans, which is part of our build back the buffer campaign. Transparency was discussed. Moving forward with green grants was approved. McConnell dissented. Trustee Wisinski is excited about the expansion of the number of projects and suggests that we might ask for additional funds in the future (it will be helpful to have specifics and expressions of interest). A special report to the Board may be helpful as well. Sarver suggested that we'd like to get started early this year. Colby also mentioned an interest in working with schools on food and food waste in future years. Jackson also reminded us that past projects are viewable on HOMTV. Colby offered a motion to accept all the proposals pending successful negotiation. Seconded by Frazier. Unanimously approved.

CLIMATE SUSTAINABILITY PLAN

EC members are invited to check in with their study groups/team (Wetlands, Energy, Food to Compost, Green Team, etc.) to determine a timeline for changes to sections related to their area of focus. The Food to Compost Committee will share a rough draft in April. Our intent is to have a draft document in August. Teams can use Google Drive or other tools to share and develop working documents amongst themselves. Teams are also invited to gather input from experts and others who may have insights.

SILVERLEAF

Harvey mentioned Planner Shorkey's memo in the packet and shared update on the Silverleaf Development. The Planning staff is open to forwarding comments to the developer though the permit (SUP) was approved earlier in the week. A large amount of environmental consideration, design, and amenities have already gone in to this development and that the wetlands have been determined to be minimally impacted. Harvey distributed a 1-page review (attached).

Grasseschi asked about why we don't see Wetland Use Permits more frequently. McConnell described that when a WUP may be required (and the \$3000-7000 permit cost + \$1500-4500 for the delineation), applicants seek ways to work around the wetlands. If a buffer is infringed upon, they are more likely to seek a variance from the Zoning Board of Appeals. (this cost likely is why we typically only see WUPs for larger development projects). Grasseschi mentioned a need for greater communication between commissions (for example – ZBA and EC). McConnell also mentioned that the site approval is conditional upon the Drain Commission's office. Colby suggested that it was too late to move forward with sending information to the developer. McConnell suggests that we might have a deeper conversation about ways the EC might facilitate eco-friendlier "developments" or protections earlier in the process.

NOMINATIONS & ELECTIONS

Sarver nominated Grasseschi for Chair. Grasseschi declined and nominated McConnell. McConnell expressed willingness unless someone else was interested. McConnell also described the role of the Chair. Beyond chairing meetings this includes setting agendas formal communication with other commissions and Twp manager or supervisor, creating and appointing study groups, and cancelling meetings. McConnell was unanimously elected Chair. Grasseschi offered to serve as Vice Chair and was unanimously elected. Sarver nominated Grasseschi to serve as a representative/liaison to the Land Preservation Advisory Board. McConnell seconded and was unanimously elected. Grasseschi nominated Luca Wisinski agreed to serve as a Student Commissioner. Approved with C. Wisinski abstaining. Sarver also invited both Audrey and Luca to recruit other students. Graham Diedrich's application was also discussed. Harvey will contact Diedrich. Sarver asked Harvey to inform the Clerk's office of the elections. Trustee Wisinski agreed to inform the Board.

COMMISSIONER & STAFF NEWS

Colby mentioned that the Food Group has talked about procurement and ways to incentive larger groups (such as schools) to purchase "good food" (environmental sustainability, valued workforce, local economy, animal welfare, nutrition, etc.). Jackson mentioned a recent Brownfield Redevelopment Authority meeting which included the Okemos Redevelopment Project. Jackson also just had solar panels installed on his house. McConnell reported that the Transportation Commission and Corridor Redevelopment Authority have recommend pedestrian facilities/refuge islands at Campus Hill, Washington Heights, and Meijer/McDonalds. There also was an update on easements for the MSU to Lake Lansing Pathway. C. Wisinski thanked Saver and Colby and congratulated McConnell and Grasseschi. She is also serving as a liaison to the Land Pres. Board. Pat Jackson has been appointed as Supervisor. Trustees are accepting applicants for the Board of Trustees. She heard from Planning Director Schmitt about willingness to discuss coordination between the Climate Sustainability Plan and the Master Planning Processes. Harvey reported on the Saturday Recycling/Composting event. It was a chance for the Earth Club, Hammond Farms, the Green Team, the Market Manager, and others to connect. He reported a walk through with solar contractors of the carports at the Public Safety Building, Hirchert-Walton reported on the Sustainable Fashion Committee (Earth Club) "upcycled clothing" booth at the Market. This committee is also discussing what to do with the old "Chiefs" gear including "cat mats" for a local animal shelter. She reports that the Earth Club is also doing a tree sale. Sarver reported the Solarize meridian kick-off earlier in the day. A recording is available. Several workshops are planned in the next month.

Watch the video recording at https://meridianmi.new.swagit.com/videos/155560

Topic	Committee	Description	
Green Grants	Green Grant Committee	 Assist with Green Grants Program Select projects that will highlight green infrastructure opportunities 	
Wetland Education/Outreach	Wetland Education Committee	 Create and Conduct a comprehensive Wetland Outreach Educational Campaign Collaborate with township, state, and community partners 	
Food, Food Waste, and Organics Recycling	Food-to-Compost Committee	 Decrease food waste & increase food recovery Include food/food recovery/waste reduction in Climate Action Plan and local ordinances Network with area nonprofits (addressing hunger) to increase gleaning Start a pilot food scrap collection Engage in education outreach with our local schools, residents, businesses, and institutions 	
Climate Action	Energy Team and Others	Review, Revise, and Pursue Climate Action Plans (add green infrastructure, food topics, etc.)	
Recycling Events	Green Team	 Conduct large events in the spring and fall Conduct events at the Farmers Market Consider other recycling opportunities and improvements. 	
Green Neighbors Network	GNN Committee	 Continue to expand Green Neighbor Network Use GNN for wetland education, Solarize Meridian 2.0, and other initiatives 	
Student Action	Student Commissioners	Facilitate collaboration between schools & Environmental Commission	
Ordinance Changes (Green Infrastructure)	Environmental Commission	Implement green infrastructure audit recommendations	
Environmental Justice/ Equity	EJ Study Group	Create/Implement consistency in policy, protocol, and procedures	
Other?		 Hold Environmental Stewardship event to recognize volunteers and staff Identify a point person for each topic Discuss staff assignments/roles Discuss Commission roles Improve communication/collaboration 	

Ongoing

- Participate in the Green Communities Network and Challenge
- · Participate in regional collaboration
- · Continue Study Groups on Environmental Justice and other topics
- · Host Green Theme Presentations
- Review Wetland Permits
- · Communicate with other Commissions, Boards, Trustees, and the Public
- · Adapt and revise goals as needed
- · Strive for consistency in policies and procedures

Additional Comments on the Silverleaf Condominium Development –from L. Harvey

The Meridian Environmental Commission (E.C.) and staff appreciate the opportunity to comment on the Silverleaf Condominium development project. It is clear that Silverleaf has benefited from hundreds of hours of professional review (including a 100+ page <u>natural features inventory</u>) and design consideration by the developer, architects, engineers, wetland consultants, EGLE, and others. Final approval by the Planning Commission will also be subject to approval by the Drain Commissioner.

The project has many positive environmental qualities:

- Stormwater is managed on-site with minimal impact on wetlands.
- A 22 acre natural area will be donated to Meridian's Land Preservation Program.
- As a planned unit development, this has allowed more open space preservation, much of which will be used for stormwater management/natural catch basins
- Not mentioned in the plans, but significant, is that Mayberry has committed to <u>Energy Star certification</u> <u>in 100% of its new housing developments</u>

We may wish to encourage some additional environmental suggestions and resources:

- native plant suppliers, native seed suppliers, raingarden and native landscape designs, contractors who do ecological design (being developed as part of our Wetland outreach)
- information on green building strategies, green infrastructure, renewable energy, etc.
- traffic calming suggestions (76 homes will add traffic to Bennet Rd.)
- examples of signage and outreach to protect the built in features such as wetland buffers, rain gardens, historic trees, connective pathways, etc.
- examples of eco-friendly plantings in catch basins

On another note, we may wish to use this experience to inspire a "conservation conversation" about how we might influence future development – in timely ways. A consistent theme that has emerged on the E.C. is that we often review plans after they are made. We could invite Mayberry's staff recommendations to us about how might work more proactively to encourage and reward "green building", low-impact development, and make positive environmental impacts.

Other ideas:

- Explore incentives for green development practices.
- Review the list of amenities allowed for Planned Unit Developments and provide guidance and resources for developers seeking to go above and beyond.
- Work with other municipalities to collaborate on Green Building Guidelines and Green Infrastructure Policy/Code improvements
- Review recommendations in the <u>Green Infrastructure</u>
 <u>Audit/Code Review</u> that might be applicable in Silverleaf.
- Explore new <u>Redevelopment-Ready Community Guidelines</u>. See example here including Green Infrastructure, flexible parking, density, housing diversity, concentrated development, alignment with Master Plan, etc.

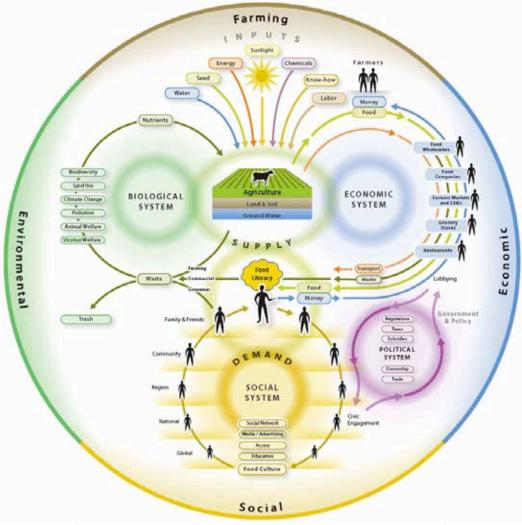
	CERTIFIED EXPECTATIONS
	dinance includes regulations for THREE or if the following:
	ow impact development techniques rain gardens, bioswales, etc.)
□R	lain water collection (blue roofs, cisterns, water harvesting, stormwater vaults, etc.)
	ireen roofs
□ P	ermeable pavement
□s	teep-slope protections
□ s	treet-tree planting standards
DI	ree preservation or replacement standards
□P	arking lot internal landscaping standards
	Open space preservation development i.e., cluster housing)
□R	lequired native or low-maintenance plantings
□ R	enewable energy
	suffering standards around water bodies or other natural resources
	Off-site stormwater regulations allowing site developers to participate in district-scale

stormwater management plans

GOAL: ENABLE/CONTRIBUTE TO/FOSTER/SUPPORT/ESTABLISH A SAFE, HEALTHY, LOCAL FOOD SYSTEM - A NEW CATEGORY FOR 2022

2022 Update Meridian Climate Sustainability Plan

FOOD SYSTEM GRAPHIC Food Production, Distribution, Processing, Consumption, Loss/Waste/Recycling etc



(See https://westoahu.hawaii.edu/ekamakanihou/?p=5767 for Source information)

•

Objective #1: Reduce Food Waste & Food Insecurity Within the Township - The Township aspires to the U.S. EPA, U.S. Department of Agriculture, and U.S. Food and Drug Administration shared commitment to achieve a 50% reduction in food loss by 2030.

FOOD WASTE GRAPHIC Environmental Impacts of U.S. Food Waste: & EPA FOOD RECOVERY HIERARCHY What resources go into a year of food loss and waste in the U.S.? Greenhouse gas Enough water ons of more and energy to than 42 coal-fired power plants 50 million bornes fertilizer used in the agricultural land U.S. to grow all plane equal to California based foods for U.S. and New York uman consumption

"Food insecurity isn't driven by scarcity, it's a distribution issue." EPA Report Highlights Climate Impacts of Wasted Food NRDC (2021)

Strategies:

- 1. Understand, promote, utilize and support current gleaning/food capture initiatives within the Twp.
 - Work with Meridian Cares, known pantries and others to understand the landscape of food assistance within the Township
 - · Measure and report annual donation metrics to create a baseline and growth over time.
- 2. Identify and help fill gaps to enable increasingly effective gleaning/food capture programs in the Township [which distributes quality, surplus food to local and regional food banks, food pantries, soup kitchens, etc. for consumption.]
 - Meridian Farmers Market
 - Capture excess or unmarketable food from the Market and direct it to pantries, food banks and other food assistance organizations
 - i. Pilot: 12/21 12/22 Work with farmers & other vendors to capture excess/unmarketable food and deliver to City Rescue Mission, South Side Community Kitchen https://doi.org/10.20 Meridian Parks Dept. deer culling cooler from April September for over-the-weekend storage which has been a broken link in partnering with the M F pantry system. Utilizing this refrigeration space to store excess produce from the Township Farmers Market to be distributed to a local soup kitchen (Southside Community) which values locally grown/nutritious/diverse products to add to their menu as well as other organizations. With the help of local volunteers, the program will expand to more gleaning opportunities with more non-profit partners who help feed the hundry.
 - 2. Initiate a "Support a Pantry" program at the Market to encourage customers to purchase Market products for the purpose of donation to pantries and soup kitchens.
 - Food Related Businesses in the Township:

3/14/22- Organic Waste Management – Food to Composting Continuum

- Educate businesses about food donation opportunities and address liability concerns. (Example: Good Samaritan Food Donation Act, which protects businesses donating food products from liability and provides additional food donation liability protection for food donors who donate food in good faith and practice safe handling.
- Incentivizing more food donation by businesses. (Example: township offering tax credits beyond
 the current limited federal tax deductions for farmers and transporters of donated food to
 increase the amount of food that is donated rather than unharvested or landfilled, or grants
 /incentives programs /other resources to support diversion initiatives, with additional funding
 dedicated to food loss and waste reduction.)

Objective #2: Increase Production & Sourcing of Sustainably Grown Food Products by Township and Residents

Strategies:

- 1. Support-township residents and businesses and institutions within the township, such as public schools and childcare centers to increase the proportion of sustainable and locally grown foods that they procure.
 - Incentivize, encourage, or educate on sustainable food practices, the environmental impact of food, and
 opportunities to increase sustainability of food purchases, such as by promoting
 - a. the 10 cents a meal program that would defray some costs for schools using locally/Michigan sourced foods
 - Increase-the amount of food assistance dollars being spent on sustainable and locally grown foods
 - a. Increase Food Assistance Program use at the Farmers Market by 100% by 2030
 - Collaborate with Meridian Cares to understand barriers to use of Farmers Market and food assistance at the Market by more food insecure residents
 - Increase outreach, education and promotion of Food Assistance programs at the Farmers Market
 - Work to destigmatize food assistance programs through E-Token and other program experiments
 - b. Reduce Barriers to Use of the Farmers Market
 - 1. Delivery/Shuttle Programs Work with volunteers to explore transport to help shut ins and less able people get to the market or get foods from the market delivered to them
 - 2. Organize Market awareness/education programs in Meridian Cares target communities such as "Meet a Farmer" and cooking demonstrations
 - 3. Explore Food Box drop-offs in Meridian Cares target communities
 - 4. Work to add a bus stop adjacent to the Farmers Market

2. Support the production of locally grown food and local food businesses within the township

- Encourage and where possible support the development of farm to school and school garden programs in Haslett, Okemos and other school districts in the Township
- Reduce barriers to initiating and continuing farm businesses within the Township
- Initiate/Revisit farmland conservation/preservation collaboration with County or locally to keep more farmland in farming locally to help support the market and local food needs. Township master plan should incorporate farmland preservation/protection and encourage viable use of farmland where possible
- Identify and address barriers to the incubation and citing of local food-based businesses within the community
 - Explore the idea/City an incubator kitchen in the Township to support/develop local food-based entrepreneurship

Commented [AFC1]: These are nice things but they aren't going to be particularly impactful for the environment. Neither will the next bullet point but because educating children on our food system is so important for our future, I support leaving this one in

3/14/22- Organic Waste Management – Food to Composting Continuum

Objective #3 (<u>Shared with the Green Team</u>): - Minimize Waste Generation & Promote Waste Diversion Practices.

Strategies:

- 1. Reduce organic materials going to the landfill by ?%within 5 years.
 - Collaborate Regionally/Encourage joint cooperation with neighboring municipalities wherever possible to address systemic organic waste challenges
 - Initiate Food Scrap/Organic drop off service at several convenient locations around the Township as soon as possible.
 - Pursue the feasibility of an anerobic digester for Meridian Township which may include partnering with adjoining jurisdictions.
 - Increase recycling/organic waste management in co?mmercial establishments like restaurants, independent living facilities, nursing homes, grocery stores and convenience markets.
 - Work with interested local schools to conduct one- or two-day cafeteria food audits with student volunteers to include periodic feedback and follow-up between school and Environmental Commission to improve/ensure sustainability of recycling efforts.
 - 2. Work with schools and school groups to build community-wide interest in lunchroom recycling and food waste recovery that can be applied to other cafeterias in the Township.
 - 3. Increase education/outreach to increase/improve organic recycling in our community, including home composting and vermiculture education
- 2.Revise Twp. Ordinances, policies and practices within Township departments to encourage organic waste management where possible.

b. Renewable Energy

Renewable energy systems continue to become more cost effective as technology advances lead to increased efficiencies and system cost decreases, while the cost of traditional power sources continue to increase. Meridian Township will develop and identify opportunities to install solar and other renewable energy systems at Township facilities, and encourage and facilitate residential and commercial installations in Meridian Township. The focus will be on solar energy because there are many opportunities.

Past and Current Progress:

Meridian Township adopted a wind energy ordinance in May 2011 (Ord. No. 2011-05) to provide standards and regulations pertaining to the location, construction, design, maintenance, and abandonment of wind energy systems and anemometer towers.

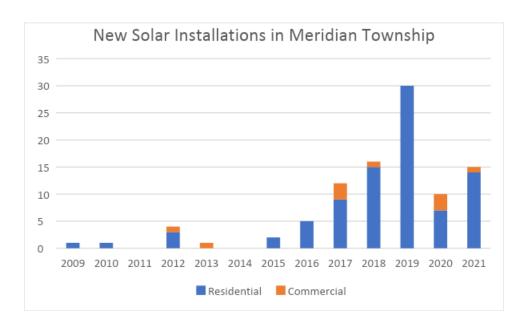
The Township worked with Peninsula Solar, Michigan Energy Options, U.S. Dept. of Energy, and Consumers Energy to create a solar demonstration and educational project at Harris Nature Center. The demonstration included a solar-powered webcam system and a grid-connected solar system.





The Lansing Board of Water & Light (LBW&L) has developed a 300 kW Community Solar project in Burcham Park on the border of Meridian Township. Since the Township does have LBWL street lighting accounts, the Township Board authorized leasing ten 300 watt solar panels at the Burcham Park solar array. The Township will receive utility bill credits for 25 years based on the electric production from the leased solar panels.

After the Township Board approved the Climate Sustainability Plan in October 2017 including a commitment to obtain 100% of the township government's electricity from renewable energy by 2035 and 25% of the total community electricity from renewable energy by 2025, the Meridian Energy Team developed a workshop program to encourage and make it easier for homeowners, businesses, and churches to install solar electric systems on their buildings. The Meridian Energy Team worked with local civic organizations and houses of worship to hold a series of solar workshops in 2018. There were 11 workshops that reached 272 persons and there was a significant increase in new solar system installations in 2018 and 2019. We cannot attribute all new installations to the Solarize Meridian project, but it is reasonable to assume that the project was a major influence in increasing the number of solar installations in the township. <add neighborhood/community influence study from MSU a few years go>.



Meridian Township has also been working on achieving the 100% Renewable Energy Goal for Electricity for Township Operations. The Township has installed solar arrays at 4 municipal buildings and a fifth 40 kW solar array is planned for the Public Safety Building in 2022.

2018	Municipal Building	17.4 kW
2020	Fire Station 3	36.5 kW
2020	Marketplace on the Green	3.8 kW
2021	Service Center	142.0 kW
Total		199.7 kW







The Township's 100% goal takes into account that a significant portion of the electricity from Consumers Energy will come from renewable energy resources (40%) by 2035 and that it is important to use energy efficiency to reduce electric consumption (30%). The goal includes obtaining 30% of electricity used for township operations from on-site solar and the Township is already more than half way to achieving that goal.

Objective b.1: Develop Township policies and procedures that encourage the use of renewable energy.

Strategies

- 1. Revise Township ordinances and procedures to ensure that they encourage energy conservation and the use of renewable energy.
- 2. Develop renewable energy and other practices that reduce greenhouse gas emissions that can be included in the list of amenities allowed in mixed use and commercial planned unit developments (PUDs).
- 3. Encourage policies for electrification of buildings, vehicle fleet, and appliances so that more renewable energy can be utilized for energy.
- 4. Encourage policies that will make buildings solar-ready.

Objective b.2: Increase the use of renewable energy at Township facilities.

Strategies

- 1. Obtain 50% of Township electricity from renewable energy by 2025 and 100% by 2035.
- 2. Pursue the installation of solar electric systems at Township facilities . .
- 3. Participate in Community Solar or other green purchasing programs where possible.
- 4. Identify and seek grant funding for demonstrations of new renewable energy technologies.
- 5. Identify opportunities for non-grid connected applications like solar street lighting and solar lighting for signs.

Objective b.3: Provide educational opportunities regarding renewable energy options and encourage the installation of renewable energy at private and public facilities throughout the Township.

Strategies

- 1. Increase the number of solar installations in the township from 97 in 2021 to 250 by 2025.
- 2. Provide educational opportunities on current and proposed policies, programs and incentives that could help Township residents, businesses, and institutions utilize renewable energy.
- 3. Share information about funding and vendors with residents and business owners.
- 4. Provide incentives to developers to employ renewable energy in site plan and construction of new development. Identify and adopt incentives to encourage greater use of renewable energy, e.g. incentives for net zero homes or solar systems, elimination of permit fees for solar systems.
- 5. Inventory, highlight, and promote Meridian homes and businesses that feature net-zero, renewable, LEED, and related features.
- 6. Educate homeowners' associations about solar power and encourage less restrictive covenants that inhibit the installation of solar energy systems.

d. Transportation

Transportation produced 27% of greenhouse gases in 2020 ¹. Public and non-motorized alternatives can reduce the impacts from these greenhouse gases. The most accessible alternative to petroleum is often overlooked -- walking and biking. Transportation fuel use reduction measures decrease emissions, save the Township and residents money, enhance environmental quality, and promote public health. The Township will focus on its own fleet, walking and biking, and land use decisions. Land use decisions that lead to infill development and a greater use of public and non-motorized transportation can significantly impact petroleum use.

Past and Current Progress:

A Complete Streets Ordinance was adopted by the Meridian Township Board on Sept. 18, 2012. The ordinance is intended to provide safe, convenient, and comfortable routes for multiple modes of transportation including but not limited to walking, bicycling, personal vehicles and public transportation.

The Township has 20 miles of trails and 80 miles of pedestrian/bicycle paths. The development and maintenance of the trails and pathways are funded through the Park Millage and Pedestrian/Bicycle Pathway Millage. They are maintained by Township Parks and Grounds Maintenance Staff. The purpose of the pedestrian/bicycle pathway system is to provide a network of interconnected pathways throughout Meridian Township that connect destination points including schools; libraries; parks; public buildings; commercial areas; and connecting routes outside the Township.

The Meridian Transportation Commission began meeting in January 2017. The purpose of the commission is to review transportation services, both public and private, within the township as to their efficiency, sufficiency, and costs and make recommendations, if necessary, for improvements.

Objective d.1: Encourage Township employees and citizens to be smart commuters year round.

Strategies

- 1. Continue to expand and close gaps in the bike and pedestrian pathways network. Promote the bike and walkways.
- 2. Incentivize and encourage employees to be smart commuters year round.
- 3. Partner with Capital Area Transportation Authority and others to promote "Clean Commute" options and identify efficient paratransit and Redi-Ride efficiency improvements.
- 4. Encourage bike/ebike transportation by offering secure parking at local stores/restaurants.
- 5. Consider engineering safe, separated/protected bike lanes to link residential areas to commercial districts.
- 6. Consider closing down lanes to bike/pedestrian traffic only on a periodic or permanent basis to encourage bike/pedestrian use and recreation.

Objective d.2: Decrease the use of petroleum in the Township vehicle fleet.

¹ https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions downloaded 5/19/22

Strategies

- 1. Choose the cleanest and most fuel-efficient vehicle that meets the department's needs.
- 2. 2035. Use electric or hybrid vehicles whenever possible.
- 3. Implement the installation of charging infrastructure necessary to achieve these goals.
- 4. Identify and seek funding for alternative fuel vehicles and electric charging infrastructure.
- 5. Use efficient trip-planning to reduce the use of fuel.

Objective d.3: Use land-use planning to reduce vehicle miles traveled and petroleum use.

Strategies

- 1. Continue implementation of the Township's Complete Streets policy to ensure that entire roadways are designed and operated with all users in mind including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.
- 2. Use the Urban Services Boundary to reduce vehicle miles traveled and encourage infill and redevelopment.
- 3. Encourage cluster developments, mixed use and other compact residential choices closer to shopping, public transit and other services.
- 4. Offer incentives for sustainable developments.

Objective d.4: Provide educational opportunities on transportation alternatives that can reduce petroleum use.

Strategies

- 1. Provide educational opportunities concerning public transit, car sharing, smart commuting, and transportation-efficient communities.
- 2. Provide educational opportunities on biking, walking, and driving safely, especially around bikers and walkers.
- 3. Continue membership in and partnerships with Greater Lansing Area Clean Cities (http://michigancleancities.org) and providers of efficient vehicles, equipment, and fuels.
- 4. Provide web sites and apps that identify charging stations for electric vehicles. Map locations of public charging stations. Identify funding and opportunities for electric car charging stations.
- 5. Promote the employee and volunteer bike-sharing program.



CONNECT LEARN CONSERVE



STEWARDSHIP SATURDAYS

These workdays occur every other Saturday year round.

• Location TBD; these workdays will be dedicated to planting native species grown from seeds harvested from parks & preserves last fall. We may also remove invasives that we find!

PLANTING A NATIVE MERIDIAN

Join us as we install floating islands at Central Park Pond for stormwater management! We will be planting over 200 native species, so bring your garden gloves!

WEEKDAY WARRIORS: Occurs every other Thursday

- We will work on smaller invasive species infestations in high quality priority areas, as well as litter pickup.
- June 9th: Hartrick Park to pick herbaceous invasives
- June 23rd: Trash pickup @ Central Park South

TRAILSIDE ECOLOGY TUESDAYS

Learn about our local flora & fauna, get to know our parks & preserves personally!

• Meet us at Ted Black Woods to ID a diversity of native plants, & learn about the rich history of this gem.

WETLAND WALKS: Every 1st Wednesday of the month

 Join us at Tihart-Cornell Wetland Preserve to take a species inventory of any plants, wildlife, or insects we find. This wetland has been subject to mass dumping - thousands of pounds of trash was removed by the MCC last fall. Let's keep helping this wetland heal!

STEWARDSHIP

