



AGENDA
CHARTER TOWNSHIP OF MERIDIAN
ENVIRONMENTAL COMMISSION
REGULAR MEETING
March 1, 2023 7 pm

Town Hall Meeting Room, 5151 Marsh Rd, Okemos

1. CALL MEETING TO ORDER
2. PUBLIC REMARKS – Visitors are welcome to introduce themselves.
3. CHANGES TO/APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
5. NEW BUSINESS
Manager Frank Walsh and Supervisor Pat Jackson invite a conversation about “How can they be helpful?” and other topics of mutual interest.
6. OLD BUSINESS
Climate Sustainability Plan
Draft at <https://sites.google.com/view/climate-sustainability-plan/home>

Approve Student Alternate Amelia Saffron
Discuss Commission Opening/Applicant(s) and process
7. REPORTS AND ANNOUNCEMENTS
Committees, teams, Okemos Earth Club, staff, and Liaisons invited to share brief updates.
(See a staff update here: <https://bit.ly/update-leroy>)
8. PUBLIC REMARKS
9. ADJOURNMENT

Environmental Commission Minutes (draft)

January 4, 2023

Changes to Agenda: Grasseschi suggested adding nominations added to agenda under new business.

Corrections to Minutes: Approved with minor typo changes.

2023 Meeting Schedule: Approved with removal of July meeting.

Officer Elections and Liaison Appointments:

- Sarver nominated McConnell. Seconded by Grasseschi. Unanimously approved.
- Colby offered to be Vice Chair. Unanimously approved.
- McConnell nominated Grasseschi to the Land Preservation Advisory Board. Unanimously Approved.
- Harvey will pass these changes on to the Clerk's Office.

Climate Sustainability Plan:

- Changes on the Transportation Commission may slow down their comments.
- McConnell suggests that staff add the Energy Sections to the Twp. Board.
- Grasseschi and Jackson have been making edits to the water section. Yu March was suggested as a possibility for reviewing the water section(s).
- Harvey asked about the divisions of the water section. Potential areas include wetlands, green infrastructure, groundwater, stormwater, lake/shoreline, etc. C. Wisinski mentioned that the Groundwater Management Board might provide input on that subsection.
- The Food/Composting section will be discussed in February.
- Sarver and McConnell mentioned that the pumping of fresh water and sewage potentially could be addressed in the energy section. The MSU Energy Study may also shed some light on possible energy/water goals. The Directors of the Water Treatment Plants could be helpful as well.

New Student Application: Amelia Saffron's application was included in the January packet. Saffron mentioned her interest in native plants and water issues. McConnell invited input from Saffron and others in to the Climate Sustainability Plan.

Reports and Announcements

Energy Team: Solarize Meridian and EV charging. Grant application to the Public Service Commission. Opsommer signed a letter of support. The focus is upon collaboration between Lansing, East Lansing, and Meridian Township

Green Team: Harvey shared the upcoming activities at the Marketplace (also in the Packet). The next meeting will be on Jan 12 at 4pm at Chapbook Café if interested.

Good Food to Smart Recycling: Lafferty shared a written update. Colby mentioned that the next meeting will be Friday. There will be presentation from 3 officials from Canton Twp and a representative Metro Food Rescue in Wayne County to discuss composting and food rescue/gleaning initiatives.

Wetlands: World Wetland Day is on February 2nd. Emma Campbell (Meridian Conservation Corps) will be doing an event at Nancy Moore Park on that day (more at www.worldwetlandsday.org), Emma and Rebecca are working on wetland signage. Over the past year a brochure, a letter, a notice to residents, and a notice to contractors have been distributed. Grasseschi asked if we might add a line or educational materials to the tax notice/assessment. At a minimum, the website (<http://www.meridian.mi.us/wetlands>) could be added to the bottom of the notice. C. Wisinski will ask. Grasseschi suggested that February would be a good time to send the contractor mailing.

McConnell discussed a project at the Commons Church on Marsh Rd. which includes an "infiltration/detention basin" as part of a parking lot expansion. It includes buried drain pipes to help channel extra water that has not infiltrated.

McConnell will continue to “dig in” to retention solutions and how they compare with other treatments he has proposed in the past such as native plantings, etc.

Planning Commission: McConnell reported that the Commission met on Dec. 12 and discussed the MSU-Lake Lansing trail and a facelift at Douglas J. and special use permit which included some fill in a floodplain.

Township Board: C. Wisinski mentioned that the budget went in to effect. She asked if we might discuss a spending plan at a future meeting. McConnell asked for a recap of spending from 2022 and discussion at our next meeting about a 2023’s budget.

Earth Club: Andrechek mentioned that a Sustainable Fashion Committee has been selling “upcycled” clothing on-line at <https://www.depop.com/ohssustainablefashion>. She expects some funds will be used to deal with pests in their student greenhouse at OHS.

Brownfield Redevelopment Authority: Jackson will continue to serve on the Brownfield Redevelopment Authority.

Staff Report: Harvey invited commissioners to review his report on-line and ask any questions they might have. <Http://bit.ly/update-leroy>

Meeting adjourned at 8:05 pm

Full recording available at <https://meridianmi.new.swagit.com/videos/196197>

2023 Environmental Commission (draft)

BILL MCCONNELL (12/31/25, 3 year term) CHAIR	517.763.7824 mconn64@msu.edu
ANNA FISCHER COLBY (12/31/23, 3 year term) VICE CHAIR	314.221.7829 anna.j.colby@gmail.com
EMMA ANDRECHEK (12/31/23, 1 year term) STUDENT	517.512.3146 emma.andrechek@gmail.com
TOM FRAZIER (12/31/2023, 3 year term)	517.974.5584 Fraziertom58@gmail.com
KENDRA GRASSESCHI (12/31/23, 3 year term) (LPAB LIAISON)	517.282.0679 kendrathelen@gmail.com
NED JACKSON (12/31/23, 3 year term) (BRA LIAISON)	517.285.4319 jackson@chemistry.msu.edu
JOHN SARVER (12/31/23, 3 year term)	517.290.8602 johnsarver3@gmail.com
LUCA WISINSKI (12/31/23, 1 year term) STUDENT	517.435.5985 lwisinski23@gmail.com
COURNEY WISINSKI (TRUSTEE LIAISON)	517.410.1527 wisinski@meridian.mi.us
OPEN (Student Alternate Commissioner)	
OPEN (one regular Commissioner position)	
STAFF: LEROY HARVEY	517.505.2809 harvey@meridian.mi.us

2023 Environmental Commission Meetings (approved 1/5/23)

Jan 4

Feb 1

Mar 1

Apr 5

May 3

Jun 7

Aug 2

Sep 6

Oct 4

Nov 1

Dec 6

Draft of 2022 Expenditures

2022 Green Grants	Grant	Paid	Balance
Haslett Community Church Pollinator Garden	\$ 3,000	\$ 1,500	\$ 1,500
Okemos Public Montessori Butterfly Garden	\$ 3,000	\$ 1,500	\$ 1,500
Montessori Radmoor Barnyard Classroom	\$ 3,000	\$ 3,000	\$ -
Okemos Public Library Three Sisters Native American Garden	\$ 1,000	\$ 500	\$ 500

Wetland Mailing

Printing	\$ 2,044.17
Postage	\$ 1,012.49
Envelopes	
Total	\$ 3,056.66

(does not include contractor mailing)

Healthy Food Systems

Food waste contributes to more annual greenhouse gas emissions than 42 coal-fired plants. Experts estimate that up to ___% of food never gets consumed. Improving the health of our food system can reduce waste, save energy, save money, and reduce food insecurity (lack of access to healthy food).

Objective #1: Reduce Food Waste & Food Insecurity

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

Strategies:

1. Support, promote, utilize and expand current gleaning/food rescue initiatives within the Twp.
 - a. Continue gleaning fresh produce at the Meridian Farmers Market for distribution to area food kitchens/pantries.
 - b. 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 with novel ideas like, "Support a Pantry" program at the Market to encourage customers to purchase Market products for the purpose of donation to pantries and soup kitchens.



Image Credit: US EPA

3. 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.)

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

Strategies:

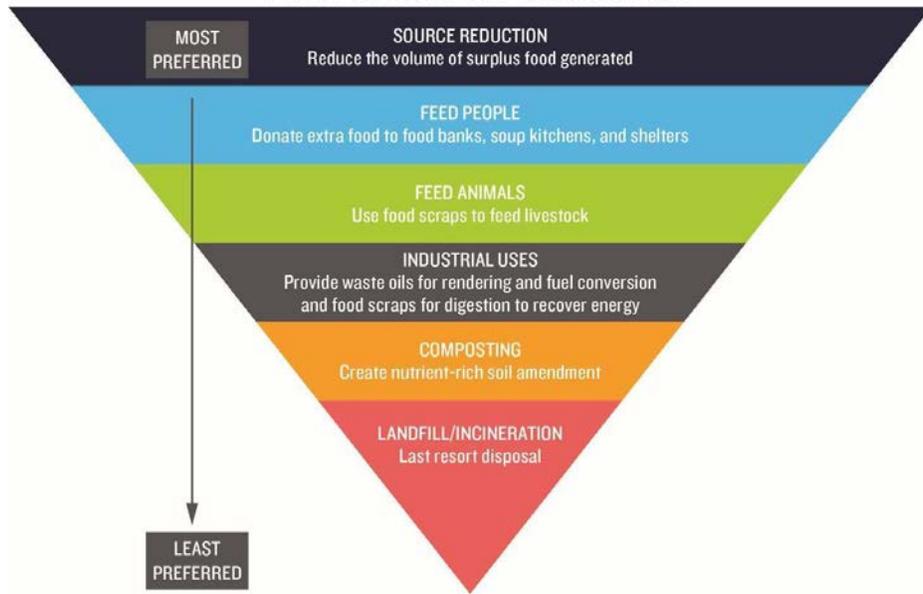
1. Support-township residents and businesses and institutions within the township, such as public schools and childcare centers to increase the proportion of sustainable and locally grown foods.

- 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
 - Consider incentivizing schools to use locally/Michigan sourced food.
 - Reduce Barriers to Use of the Farmers Market
 - 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
 - Organize Market awareness/education programs in Meridian Cares target communities such as “Meet a Farmer” and cooking demonstrations
 - Explore Food Box drop-offs in Meridian Cares target communities
 - 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

Objective #3: Minimize Waste Generation & Promote Waste Diversion Practices.

1. Reduce organic materials going to the landfill.
2. Collaborate Regionally/Encourage joint cooperation with neighboring municipalities wherever possible to address systemic organic waste challenges
3. Initiate Food Scrap/Organic drop off service at several convenient locations around the Township.
4. Explore the feasibility of an anerobic digester for Meridian Township which may include partnering with adjoining jurisdictions.
5. Increase recycling/organic waste management in commercial 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.
 - 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.
 - 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.
6. Promote healthy soil/composting by requiring a percentage of fill in the permitting process to include a commercial grade of compost.
7. Revise Twp. Ordinances, policies and practices within Township departments to encourage organic waste management where possible.

FOOD RECOVERY HIERARCHY





To: Members of Planning Commission
From: Brian Shorkey, AICP, Senior Planner
Date: February 10, 2023
Re: 2023 Master Plan – Public Comment Themes

Staff wanted to share the results of the feedback that we have received thus far from our outreach. To date, we have received 48 survey responses, as well as two letters.

<u>Public Comment Themes</u>	<u>Time Mentioned</u>
1. Green burial	9
2. Wetland/open space/natural area protection and preservation	6
a. Van Atta Road	
3. Non-motorized transportation viability/safety	3
4. Lake Lansing/Marsh/Haslett improvements	3
5. Redevelopment of Meridian Mall	3
6. Park Improvements	2
a. Pickleball Courts	1
b. New dog park	1
7. Affordable housing	2
8. Increase of mixed-uses	2
9. Downtown Okemos improvements	2
a. Clean it up until it is developed	1
10. Form based code for Grand River corridor	1
11. Tree preservation ordinance	1
12. Eliminate minimum parking standards	1
13. Saginaw Highway corridor improvements	1
14. Increased eateries/small businesses	1
15. Park preservation	1
16. Decreased commercial space	1
17. Grocery store near Jolly/Marsh	1
18. Faith Lutheran Church map update	1
19. Don't change USB	1

One of the comments regarding the potential redevelopment of Meridian Mall was received from the owner. They look forward to working with us in the future.

Conservation & Protection of Water Resources

This section describes science-based policies and actions that can be adopted to reduce water usage, increase pollution prevention measures, **protect our source of drinking water**, and mitigate the causes and effects of flooding. Protecting and ensuring our community's water resources remain clean and abundant is an integral part of municipal climate action planning. This will require an assessment of water quality and includes stormwater management and fresh/drinking water consumption. Communities all around the world are engaged in planning to reduce the effects of increasingly extreme weather events. Green Infrastructure is a cost-effective way to build protective measures into our cityscape by working with the environment instead of against it. In the context of water conservation, it means that when we build, we are building so that water is filtered and absorbed **and filtered** by the soil where it falls. **By promoting absorption of rain fall into the soil, this then helps to recharge our local groundwater resources.** With larger storms and floods predicted for Michigan in the future, investing in city-wide green infrastructure projects will help to ensure Lansing is a safe and **resilient city**

Current Efforts

City of Lansing staff work diligently on the maintenance required by the National Pollutant Discharge Elimination System (NPDES) permit to operate and discharge from its Municipal Separate Storm Sewer System (MS4). The City is engaged in many pollution prevention and sustainability activities to maintain compliance with this permit. Green infrastructure projects such as rain gardens and a bioretention swale system can be found in Lansing. There are also local and regional education and outreach efforts on topics such as use of fertilizers, picking up pet waste, proper car washing practices, and proper disposal of toxic and potentially polluting products. **Additionally, the City published their updated wellhead protection plan in April 2021. This plan is part of a voluntary program through the State of Michigan to protect public water supply systems that use groundwater from potential sources of contamination. As a community who relies almost exclusively on groundwater for drinking water needs, these plans help to protect the quality and quantity of local groundwater resources.**

Recommended Actions

Objective 4.5 Continue to Implement the Goals of the City of Lansing's Wellhead Protection Plan

- **Identify existing and future threats to groundwater resources and take action to eliminate or minimize these threats.**
- **Educate the community on where their drinking water comes from and how to protect it to gain their support and participation in the process.**
- **Coordinate with other organizations, wellhead protection teams, and stakeholders to assure protection of regional drinking water sources.**
- **Plan for water supply emergencies by keeping Emergency Response Plans up to date and coordinating with the local large water users group in case of emergencies.**
- **Incorporate wellhead protection into the planning process for the City of Lansing to protect existing and future drinking water well site locations.**

Comments from Deb Guthrie (2/22)

LeRoy,

Thank you for all you do to protect the environment. I'm submitting this email as feedback for the Climate Sustainability plan.

1. I would like to see our ordinances require less impervious surface for new developments.
2. I would like to see a plan that reduces our current impervious surface and replace with rain gardens, or green space.
3. I would like the urban service boundary protected from any future development.
4. I would like to see blighted abandoned areas like the old Baryames site on Grand River turned into a nature area/rain garden.
I would like to see a road diet on Mt. Hope rd. be reduced to three lanes with dedicated bike lanes to encourage bike use.
5. I would like to see continued move towards digital.
6. I would like the products being used to redo township buildings to have climate sustainability in mind.
7. I would like to see more indoor plants to reduce are co2's inside like our neighbors at tech smith who have intentional plant walls and gardens.
8. Continued and increased consumer education.

Thank you,

Deborah Guthrie
Resident and board member
2575 Dustin rd.
Okemos, mi.

Comments from Charles Cox (2/22)

Hello LeRoy:

Thank you for providing Meridian Township residents the opportunity to provide input to the Climate Sustainability Plan, which might be alternatively titled the, "Resident Quality of Life, Climate Sustainability Plan", since if enacted, these actions will vastly improve the quality of life for everyone in the community.

There is no doubt that the current plan should be enacted, but unfortunately there does not appear to be any definite timeline, or prioritization for the action items. What needs to be done first, and how will it be accomplished? Who will oversee the implementation of the plan? There needs to be accountability to ensure that the overall plans goals are achieved.

I have a few suggestions that I hope will be incorporated into the plan:

- * Phase out use of gas powered leaf blowers. This will decrease CO2 emissions, as well as decrease noise pollution. This is being done nationwide.
- * **Enact a Tree Ordinance.** This has been brought up from time to time, but still no action. Evanston, Illinois has an exemplary plan.

* Do not approve any new subdivisions in Meridian Township. Period. Developers have had free rein, and greenspace is disappearing. Traffic, CO2 emissions, noise, and road rage are the results. **The goal of the Planning Commission, should be re-examined.** What can they do to improve the quality of life for current residents, rather than seeking to accommodate developers in for the quick buck? **New housing should only be built on re-purposed land—not greenspace.**

* **Lower the speed limit on the major township arteries** to no higher than 40 mph. We currently have a Township devoid of traffic enforcement. This needs to be examined as to why police are *not enforcing* speed limits. Commercial areas, such as the Grand River corridor, and Marsh road need to have **lower speed limits.**

* Aggressively pursue a **“reforest Meridian” program.** Make large sized trees available to homeowners at the Farmers Market, **at cost**, and provide planting assistance, species selection help, site selection. The Township should publicize this program, and **financially subsidize this program.** All Township streets inventoried, as to current tree status. The goal is to make our streets treelined avenues, not the barren, paved over heat islands present in many neighborhoods. Grand River Avenue should receive a complete re-landscaping makeover, once road construction has been completed. Grand River Avenue is what most people see of Meridian Township, and its face is quite grim.

* There has been much noise regarding the status of Meridian Township as a **“Bicycle Friendly Community”.** Our roads are dangerous. No one should attempt to ride a bicycle on any of the Township roads, especially children. The Township would need to **hire a consultant** to work with engineering, educators, and bicycling advocate organizations. An enormous transformation needs to occur before any claim of "Bicycle Friendly" can be made.

I will stop there, LeRoy. I hope to see some of these ideas put in place, however idealistic they may be. Nevertheless, all of the suggestions that I am making would help reduce the current negative impact Meridian Township is having on the climate, as well as improve the quality of life for its residents.

Sincerely,

Charles Kotz
cdkotz73@gmail.com

More from Mr. Kotz: (2/23)

Hi LeRoy-

This is an example of what we need to incorporate into the Township Sustainability Plan. Meridian Township needs to join the growing trend of drastically limiting gas powered leaf blowers. Please include this in our revised Sustainability Plan.

Thank you,

Charles Kotz

https://library.municode.com/il/evanston/codes/code_of_ordinances?nodeId=TIT8HESA_CH26LEBL_8-26-6PEHOLEBLUS

Shorter URL to the link above <https://tinyurl.com/leaf-blower>

Notes for special Mer. Twp. Transp. Comm meeting 2/23/23

by Tim Potter

- I'd like to encourage the Twp. to consider putting a higher priority on maintenance of our Twp. pathway system for the benefit of our residents and visitors who rely on walking/ biking and other modes of micromobility to get around the township either by choice or for lack of \$\$ to afford other options or for ADA reasons. Some communities recognize the importance and critical nature of their pathways/ sidewalks for their residents/ visitors and place their pathway/ sidewalk maintenance priority higher than motor vehicle travel lanes, since people in motor vehicles have much more inherent safety from their vehicles than people walking/ biking in bad weather (eg. ice storms, blizzards, etc). Such a recognition of non-motorized travel as a critical and important part of the overall transportation network would result in a network that becomes more and more viable and attractive to everyone as a safe, doable option for getting around. Without this recognition our pathway/ sidewalk network will remain something that people consider as optional, for recreational purposes and not a dependable way to get around throughout the year.

- I'd like to encourage the Twp. to install side guards (aka "lateral protective devices" and "underride guards") on all of its large vehicles to greatly reduce/prevent underride type crashes with pedestrians, bicyclists and also smaller motor vehicles which have killed and/or seriously injured thousands of people over the 100+ years that large vehicles have been operating on our public streets. Here's a US DOT web page with more info. about these:

<https://www.volpe.dot.gov/LPDs>

One quote from that web page gives a pretty clear reason why this is important to address: " While large trucks comprise 4 percent of registered vehicles, large trucks are involved in 10 percent of pedestrian and bicyclist fatalities. In 2018, these nonmotorist fatalities rose to 541, the [highest since 1990](#)." A video from a webinar I attended recently on the topic that shows the problem and how it can be resolved:

https://drive.google.com/file/d/1JSRoX238fVJO97EpyN_yJltWomMeBUh/view?usp=share_link

I'm including a couple screenshots from the webinar for a bit more info about this.

- I'd like to encourage the Twp. to add something like the following to the Twp. ordinance re: bike parking at new or renovated businesses/ buildings: "Maintenance of the bike parking facilities, to assure that the facilities are in good working order and not full of abandoned bikes, shall be done at least once per calendar year. Bike parking facilities are required with new and renovated businesses/ buildings to encourage bicycling in the township. If they fall in to disrepair or fill up with abandoned bikes they are no longer usable by active bicyclists defeating the purpose and intent of the bike parking ordinance. Violations of this part of the ordinance will be identified by Twp. staff, warnings will be issued and then corrected by Twp. staff and billed to the owner of the building to include staff time and materials at the going rate." See this folder of photos and videos of near-campus bike parking facilities as an illustration of the

problem that is plaguing many apartment complexes but also commercial districts in the area:
<https://photos.app.goo.gl/C62VcB6k3BAHAdeW8>

- I'd like to encourage the Twp. to require that the Ingh. Co. Road Dept. include bike lane paint and signs with every new road project where legal bike lanes are constructed by the county. I further request that staff work with the Ingham Co. Road Dept. staff to identify all existing roads in the Twp with paved shoulders that are wide enough to be legally considered "bike lanes" (see [this FHWA document for those Federal guidelines](#)) and then properly paint and sign the Twp. bike lanes as such. This will encourage more people to bike in them and will help inform motorists that bicyclists are to be expected there and not only on the sidewalks/ paths (per Michigan law). Twp. bike advocates are also ready to volunteer to help do the necessary audit of the roads to determine which ones are eligible to be painted and signed as bike lanes.

- I'd like to encourage the Twp. to purchase some e-cargo bikes to be used as a way to move smaller loads of stuff around the Twp. reducing the need for larger motor vehicles for such trips. These e-cargo bikes can safely use the off-road pathways like between the Service Center and the Twp. Hall making the trip even quicker than using a motor vehicle. Adding some e-bikes to the Twp. fleet would also likely encourage more staff trips by bike vs. motor vehicle further reducing GHGs. This vendor in Ann Arbor has the biggest selection of e-cargo bikes/ e-bikes & e-trikes in the Midwest and has some on sale now: <https://urbanrider.bike>

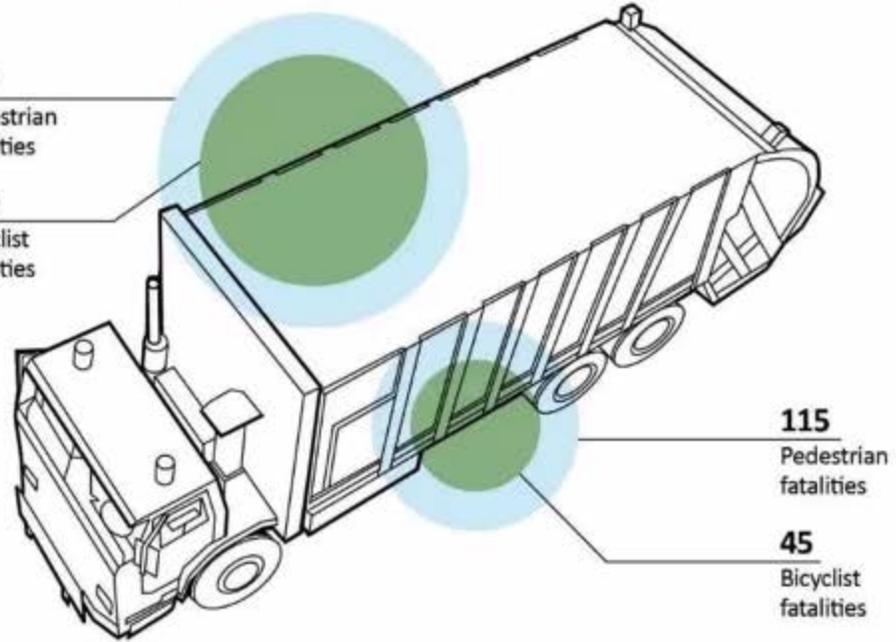
During a recent 5-year period, 1,746 pedestrians and bicyclists in the U.S. were killed from impacts with large trucks

32% of these happened after an initial impact with the side of a truck.

257
Pedestrian fatalities

139
Bicyclist fatalities

37% of bicyclist fatalities happen on the right side when trucks impact bicyclists.



U.S. DOT/Volpe Image

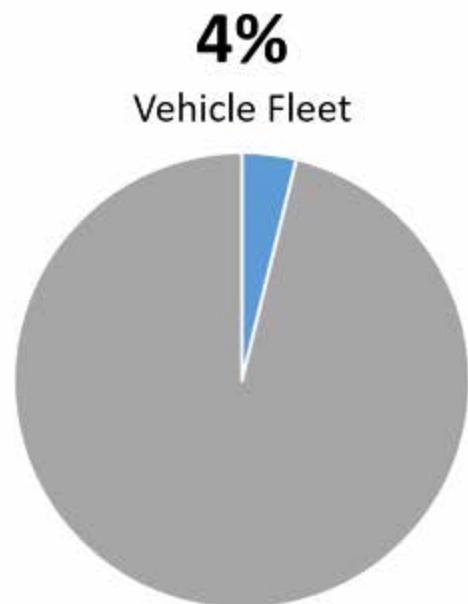
Based on this:

Countermeasure:



Large Truck Safety Context

U.S.



7%
Pedestrian Fatalities



11%
Bicyclist Fatalities

569 truck-VRU fatalities in 2019

<https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2022-01/FMCSA%20Pocket%20Guide%202021.pdf>

https://www.nyc.gov/html/dot/downloads/pdf/nyc_ped_safety_study_action_plan.pdf
<https://www.nyc.gov/html/dot/downloads/pdf/bicyclistfatalities.pdf>