

Greening Worcester

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Abstract

Worcester, Massachusetts has a record of poor air quality. This is likely due to Worcester's Post-Industrial urban landscape. We found that the development of green space was an effective solution, but required more resources than we had to bear. Therefore, our group created pamphlets to educate the citizens of Worcester on implementing green space into their homes to address this problem.

Background

- 3.7 million annual deaths are linked to air pollution.
- Most of these contaminants fall into two broad categories: dioxides and particulate matter.
- One technique for reducing air pollution is the development of urban green space.
- We intend to target communities with vacant lots that'll be easier to convert.

Objective

Educate the citizens of Worcester on the benefits of green infrastructure:

- Community gardens
 - Parks
- Distribute an educational pamphlet that details information such as:
- Dangers of pollution
 - Benefits of urban vegetation
 - Guidelines for promoting green space

Challenges

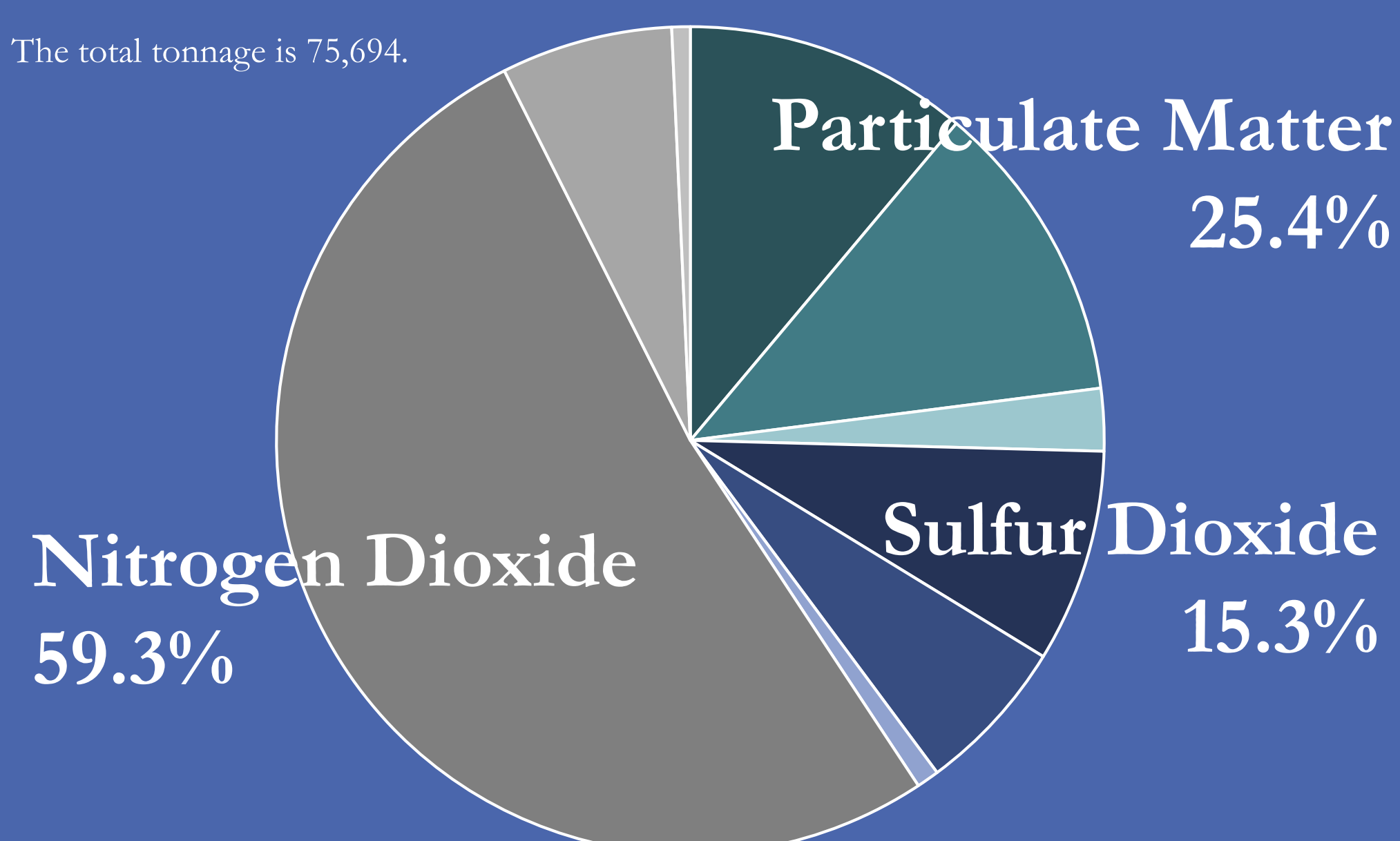
- Time constraints
- Harsh weather
- Zoning laws
- Limited resources

Future Goals

While we were unable to produce a tangible result, we would like to see community gardens become prevalent in Worcester as a result of our efforts.

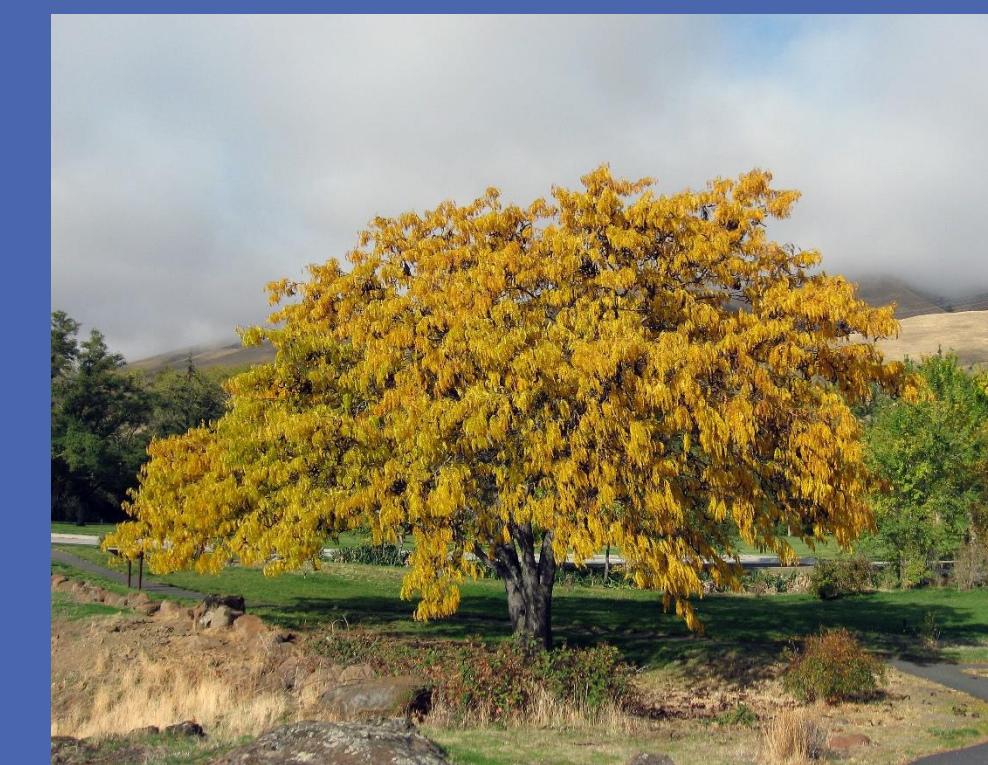
Types of Pollution (Tons/Year)

The total tonnage is 75,694.



As the intensity of the color diminishes, it represents a subcategory. The dark colors represent pollution from vehicles, the medium are from industry, and the light are from domestic uses.

Example Trees



Common Honey Locust



Littleleaf Linden

Vacant Lots



26 Park Hill,



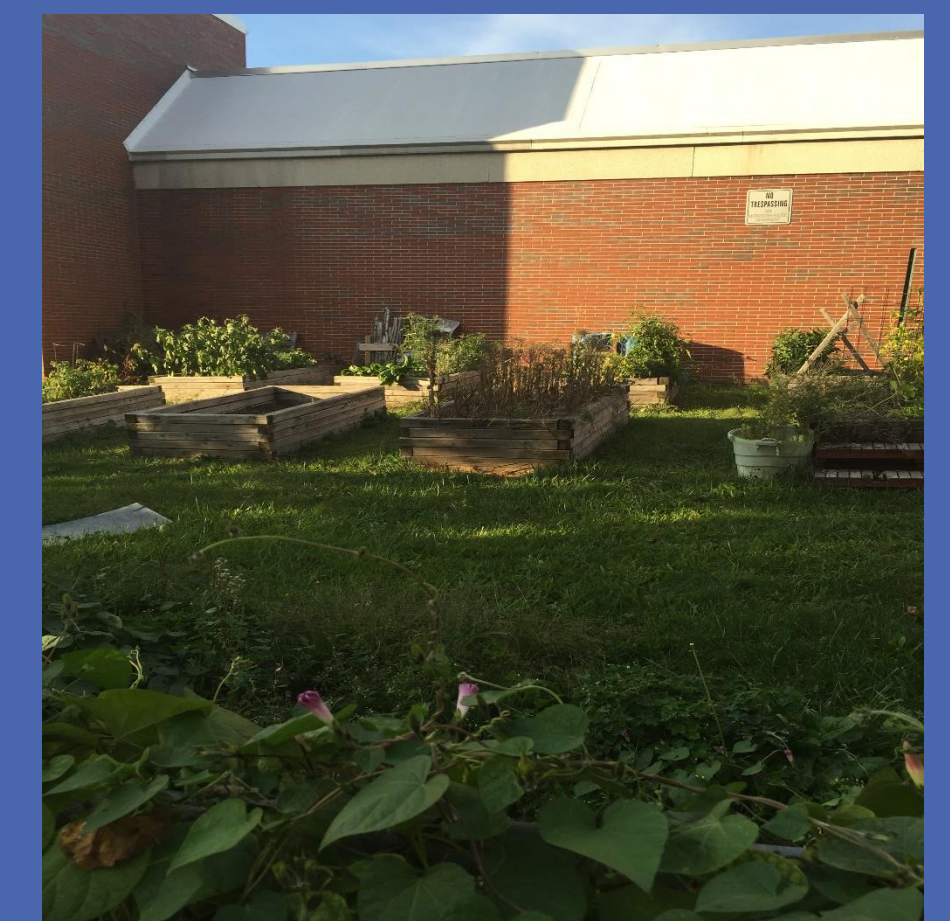
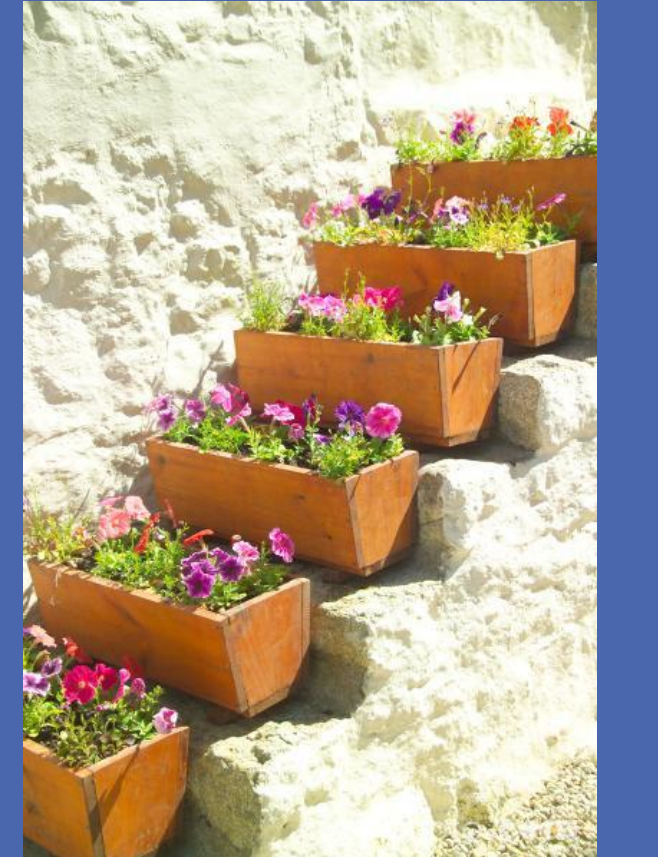
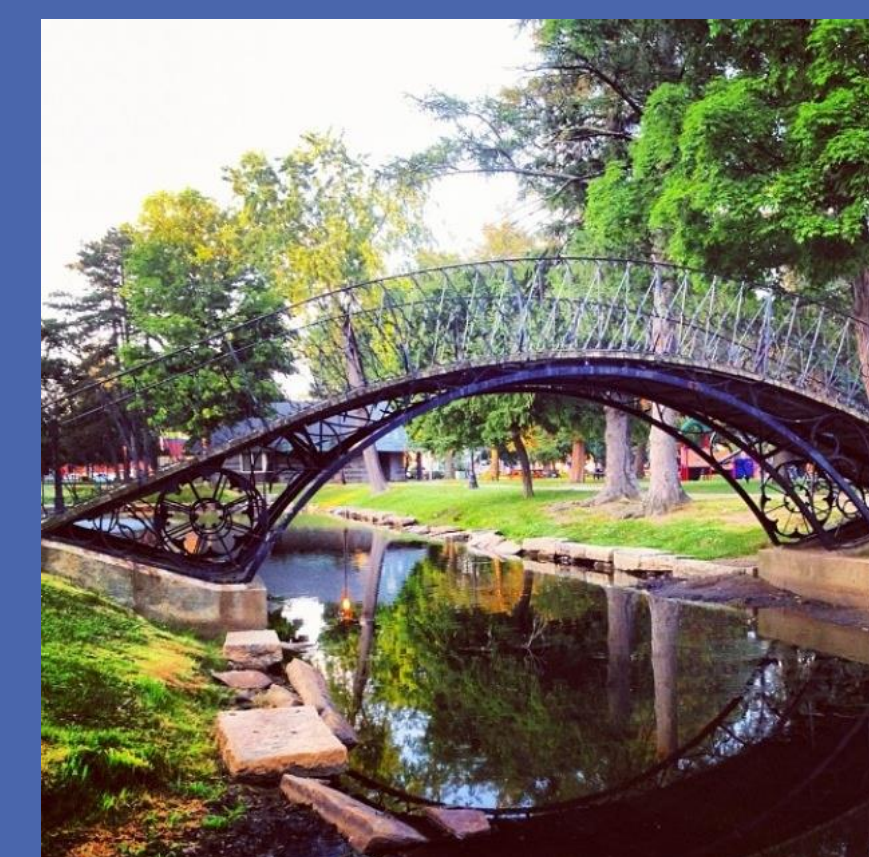
0 Millbury Street,



7 Jacques Avenue,

Community Outreach

Examples of Implementation



Acknowledgements

We want to thank our professors: Dr. Marja Bakermans and Dr. Beth Eddy, our PLA's Alex and Sarah, and WPI's Great Problems Seminars.

Dedicated to Worcester Tree Initiative

The Worcester Tree Initiative has been an invaluable asset, and without their assistance, this project could not have been possible. At their request, contact information is listed below:

Phone: (508)-852-6400

Office: 240 Barber Ave., Worcester, MA

Resources

1. http://gallery.yopriceville.com/Free-Clipart-Pictures/Trees-PNG-Clipart/Large_Green_Tree_PNG_Picture
2. <http://www.golocalworcester.com/news/regions-air-pollution>
3. http://www.wpi.edu/Pubs/E-project/Available/E-project-042813-132523/unrestricted/IQP_Local_Food_Production_Team.pdf
4. <http://www.who.int/mediacentre/factsheets/fs313/en/>
5. <http://www.crcnetbase.com/doi/pdf/10.1201/EBK1439809624-c3>
6. http://upload.wikimedia.org/wikipedia/commons/8/82/Gleditsia_triacanthos_Maryhill_Museum_01.jpg
7. https://c1.staticflickr.com/3/2651/3809478138_7f2aa1b1d3_z.jpg?z=1
8. http://s3.freefoto.com/images/12/60/12_60_62_web.jpg
9. http://upload.wikimedia.org/wikipedia/en/5/5a/Elm_Park_Iron_Bridge_Worcester_Massachusetts.jpg