



# **Go Green Week: Developing Community Through Sustainability Initiatives**

**Katherine Baker, Sam Lindberg, Kate Romero, & Sarah Sanchez**



Katherine Baker  
WPI Class of 2019  
Civil Engineering (B.S.)  
Fire Protection  
Engineering (M.S.)



Kate Romero  
WPI Class of 2019  
Biochemistry (B.S.)  
Global Public Health Minor



## Meet the Team



Samantha Lindberg  
WPI Class of 2019  
Biochemistry (B.S.)  
Business Minor

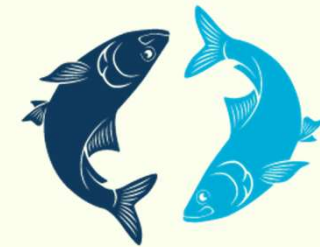


Sarah Sanchez  
WPI Class of 2019  
Civil Engineering (B.S.)  
Business (M.S.)



## Project Goals

- Plan, host, and evaluate a Go Green Week program in Worcester, UK
- Engage the community to attend GGW and learn about sustainability
- Promote the Unlocking the Severn Project and World Fish Migration Day
- Strengthen the relationship between the University of Worcester, the Worcester City Council, and the Worcester community



UNLOCKING THE  
**SEVERN**



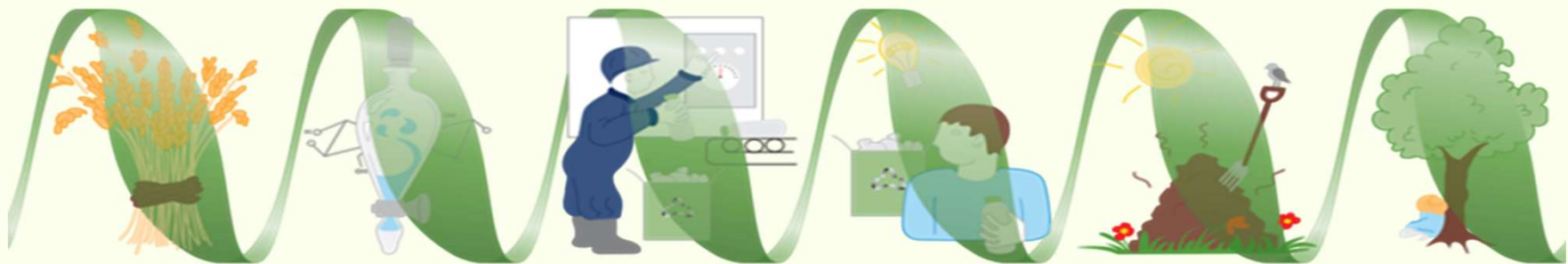
**University  
of Worcester**



**Worcester**  
CITY COUNCIL

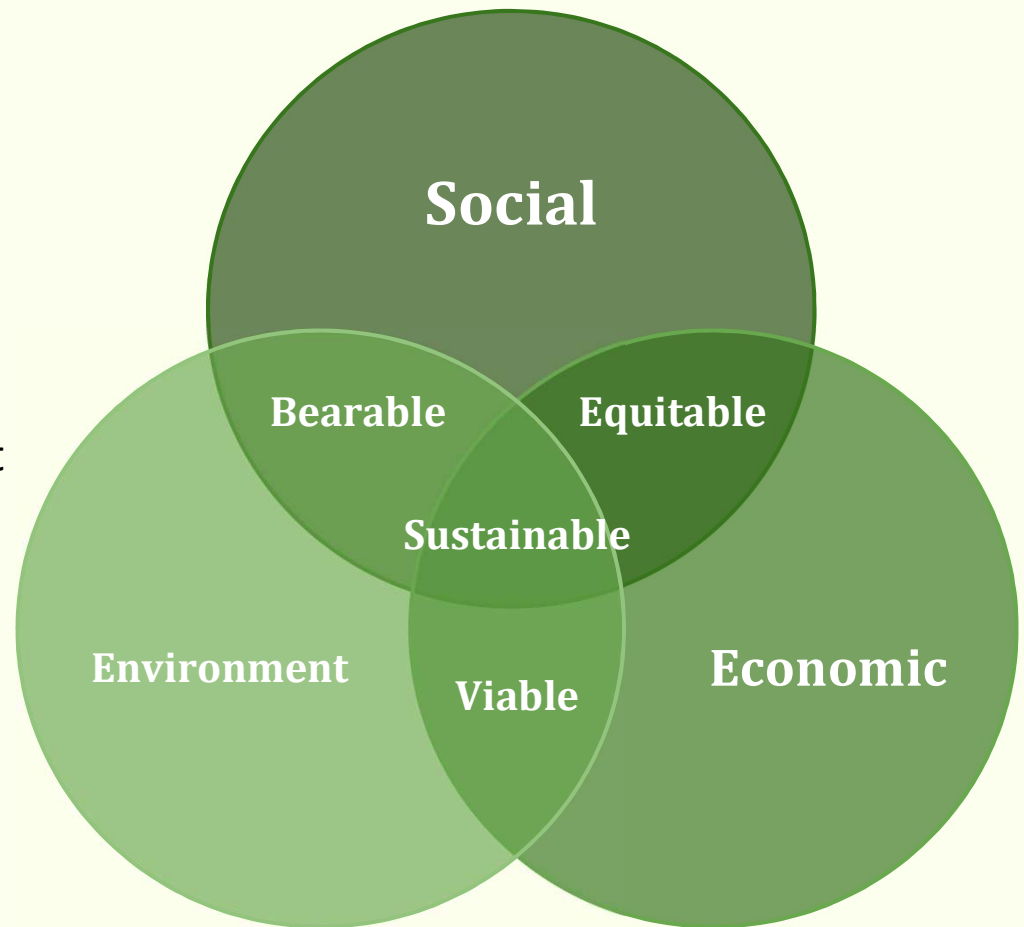
# Introduction

- Climate change and environmental issues have pushed organizations to take action
- “Green” behavior and practices of individuals
- Attitude-behavior gap: Discord between knowledge and action
- University’s goals towards sustainability
- Go Green Week 2018



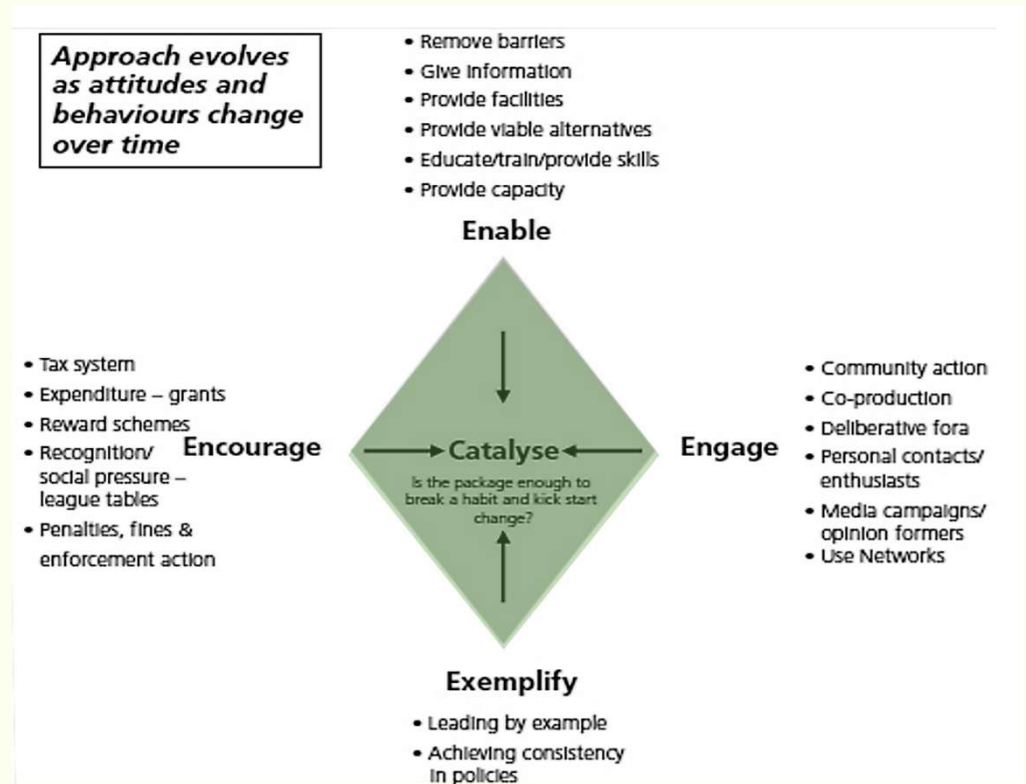
# Sustainability

- Three pillars of sustainability
  - Social
  - Environmental
  - Economic
- Experts disagree on whether or not countries have achieved all three
  - Social + Economic = Equitable is the most common
- Need to know: what to focus on in Worcester?



# Environmentalism in the United Kingdom

- Climate Change Act (2008)
  - Reducing emissions
- “Future Brief: Green Behaviour”
  - Pamphlet promoting sustainability
- We targeted issues of sustainability through similarly designed promotional material
  - Go Green Week flyers distributed



## Worcester's Efforts

- Worcester City Council plans to adapt to climate change
  - Energy/water reduction advice for businesses
- Transition Worcester



**Seed SWAP!**

**Saturday 4th March 2017**  
from 11am until 3pm  
**at The Guildhall**  
(in the front courtyard)

✿ **Seed Swap:**  
Bring any spare vegetable, fruit and salad seeds and swap them for a new variety, or maybe for something **completely different?**

✿ **Veg growing advice:**  
pick our brains to help you get started growing your own, whether you've got an allotment or just a window box!

**THIS IS A FREE FAMILY EVENT - but donations to Transition Worcester always gratefully accepted!**

**Why not take part in our great Potato Bash?**  
**Can YOU grow the largest weight of potatoes?**  
More info (and seed potatoes!) available at the event...

 **Transition Worcester**  
A part of [TransitionNetwork.org](http://TransitionNetwork.org)

 **Worcester CITY COUNCIL**

For more details please visit our website or find us on Facebook  
[www.transitionworcester.org.uk](http://www.transitionworcester.org.uk)

## Worcester's Efforts

- Unlocking the River Sever
  - Severn Rivers Trust, Canal & River Trust, Environment Agency, and Natural England
- University of Worcester
  - Involvement with Go Green Week





# 10 Golden Rules for Living Sustainably

- Created by the University, adapted for the community
  - Intended to promote living sustainably
- Examples: Drink tap water, minimize use of personal vehicles, turn off lights when not in use
- 10 Golden Rules influenced Go Green Week activities

## 10 Golden Rules



Living Sustainably at the University of Worcester

- 1) Drink tap water
- 2) Use active transport: walk, cycle and use the stairs rather than lifts
- 3) Reduce paper use: double sided photocopying, re-use scrap paper, don't re-print emails and other documents unless absolutely necessary, hold paperless meetings
- 4) Eat more fruit and veg locally produced and minimally processed
- 5) Turn off lights, computers, chargers etc when not in use
- 6) Turn down the thermostat and wear an extra layer
- 7) Use your own mug, not disposable mugs
- 8) Hold video conferences rather than asking people to travel to meetings
- 9) Only fill the kettle with enough water for the number of cups you are making
- 10) Think before you buy: do you need it or can you share it?

# Go Green Week Topics

Limiting Food Waste  
(Feed the 1,000)



World Fish Migration Day



Litter Pick and  
Recycling



## Engaging the Community, University, and Local Gov

- Sponsors include local government and university
- Holistic relationship is beneficial to each party
  - “CommUniverCity” model
- Miscommunications & differences in project objectives are potential limitations



# Methods



## Preparing for Go Green Week

- Listed all resources, activities, and tasks needed for organization
- Researched community initiatives in place
- Obtained resources and donations
- Engaged local organizations to participate



### *Appendix B: Sample Letter to Businesses*

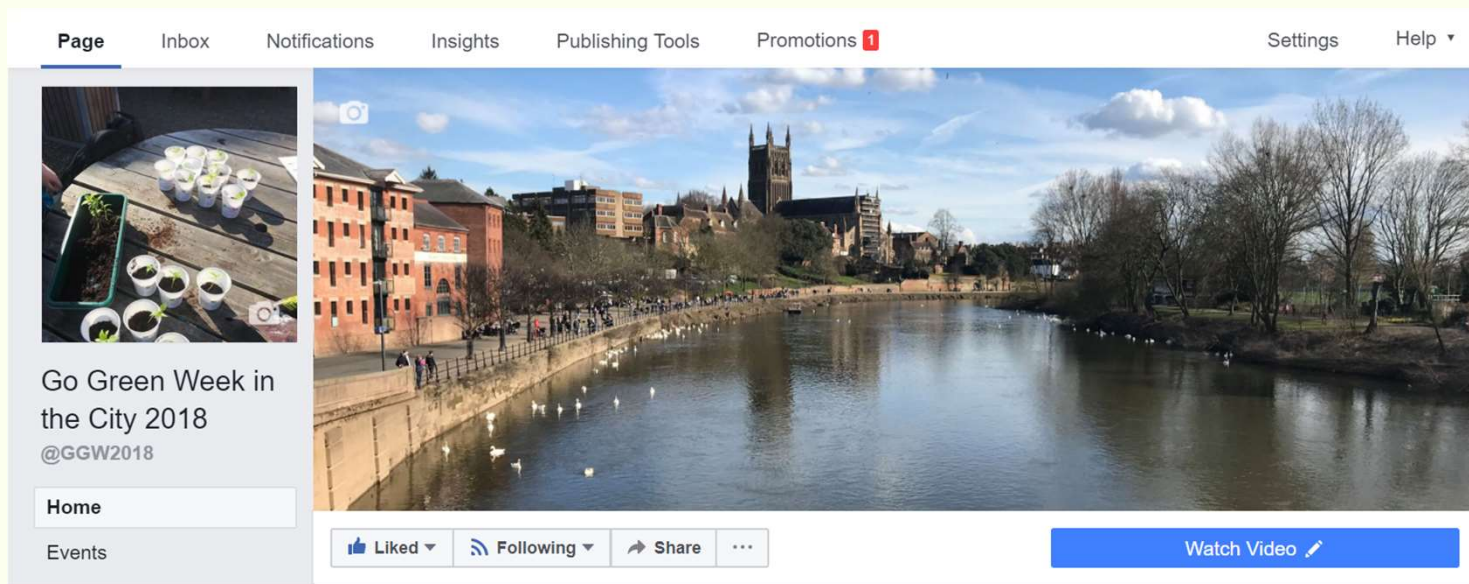
[Date]

To Whom It May Concern,

The University of Worcester, in conjunction with the Worcester City Council, Business Improvement District, and HOW College is hosting a community wide Go Green Week in the Worcester community this April. We are requesting for your business to sponsor the event on behalf of the aforementioned stakeholders.

# Preparing for Go Green Week

- Advertised via social media
  - Event Facebook page: [fb.me/GGW2018](https://fb.me/GGW2018)
- Permissions, licensing, venue booking, risk assessments



# Implementing Go Green Week

- Activity locations:
  - Guildhall (Feed the 1,000)
  - South Quay (Electric bike demos & litter pick)
  - Crowngate Shopping Centre (Shop for tables, artwork, informational discussions)
- Local organization involvement



**Go Green Week**  
**17-21 April 2018**

Have a FREE go on an E-bike at South Quay at 11:30-13:30 every day 17-20 April

Free hot food samples at Guildhall on Tuesday 17 April 12:00-14:00 for the Feed the 1000 event

Come join us for a litter pick at the South Quay 10:30-11:30 on Thursday 19 April

Come to Cathedral Square on Saturday 21 April at 11:00 to participate in a Fishy Parade

Come join us this week for family-friendly sustainability related activities!

All week we will be organizing fun crafting activities, including fish origami 17-20 April at the South Quay (11:30-13:30)

Giveaways include dehydrated fruit, flower seeds, and chilli plants

Submit a photo to the nature photo contest on our facebook page ([fb.me/GGW2018](https://fb.me/GGW2018)) to win a prize!

We are also located in Crowngate Friary Walk at 14:00-16:00 on 18-21 April.

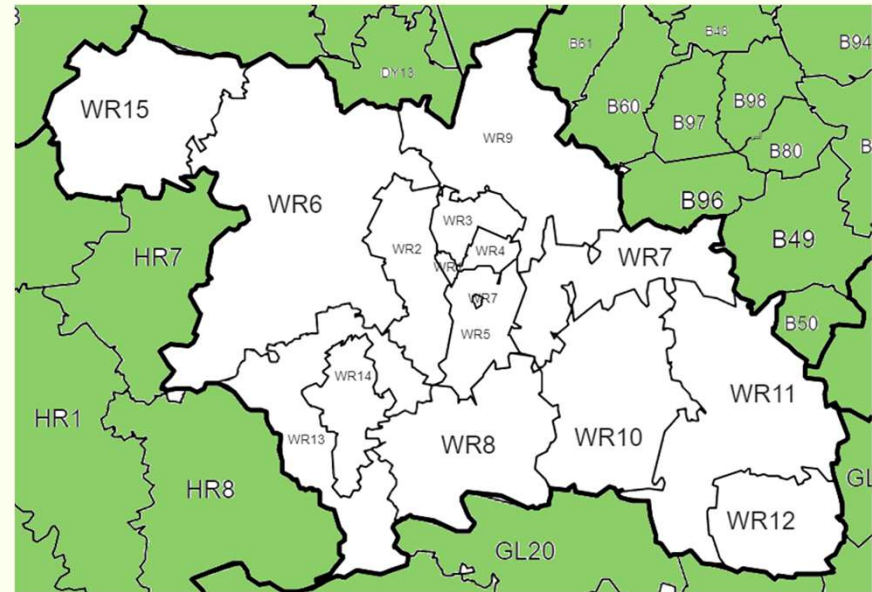
Take a survey to enter a raffle for prizes from local businesses

Visit us at [fb.me/GGW2018](https://fb.me/GGW2018) to learn more!

# Following Go Green Week

- Evaluate survey results
- Compare to previous university survey results
- Make future recommendations

Option	Your survey (119 responses)	
	Raw	%
Yes	56	47.06%
No	63	52.94%
Don't know	0	0.00%

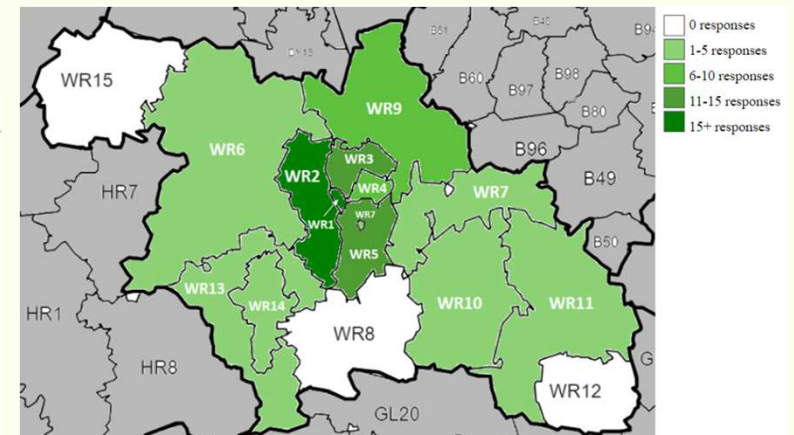
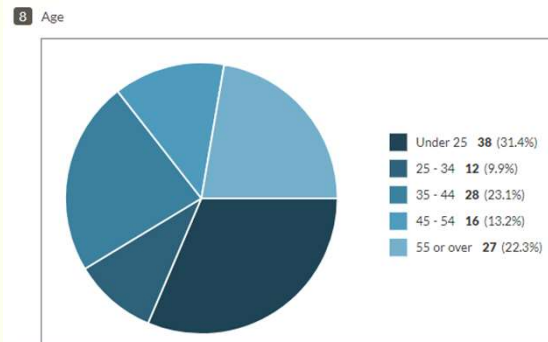
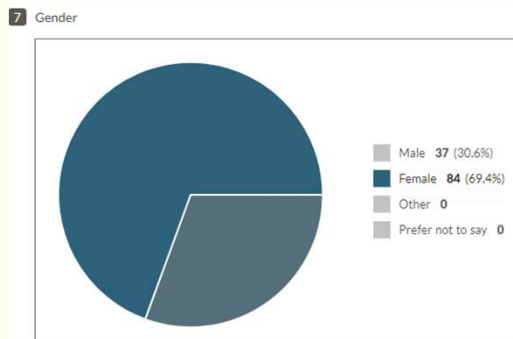




# Results

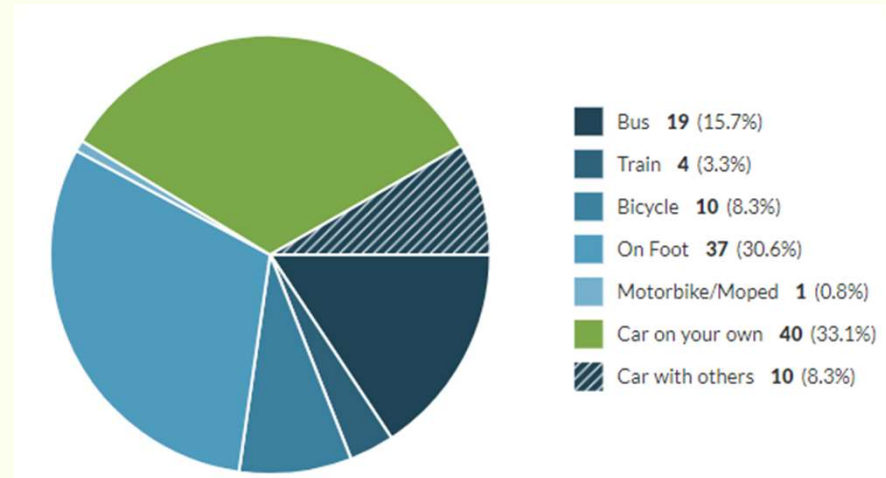
# Results of Go Green Week

- Evaluate the demographic responses of our data
  - **Gender:** Our sample was primarily women
  - **Age:** Over half of our sample was either under 25 or over 55
  - **Education:** Variety of education levels
  - **Location:** Respondents were concentrated around the city center (WR2 and WR1)

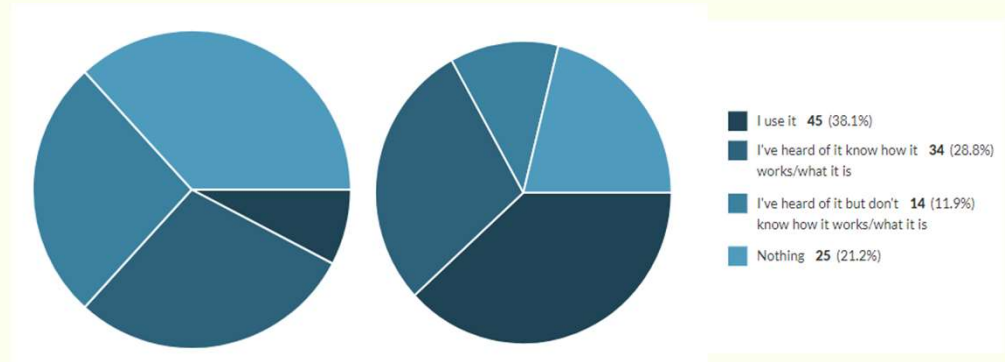


# Results of Go Green Week

- **Transportation Results**
  - 80/121 respondents opted for more sustainable work transport than driving alone
  - General trend: over half of participants knew of carpooling or bike sharing schemes, but less than 1/10 of the sample used either
  - Recommendation: increased education on schemes like uberPOOL



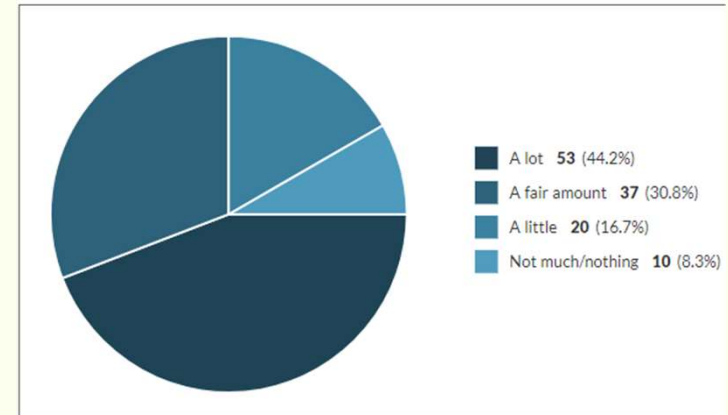
Participants' Knowledge of Car-Share Schemes and Bike-Share Schemes



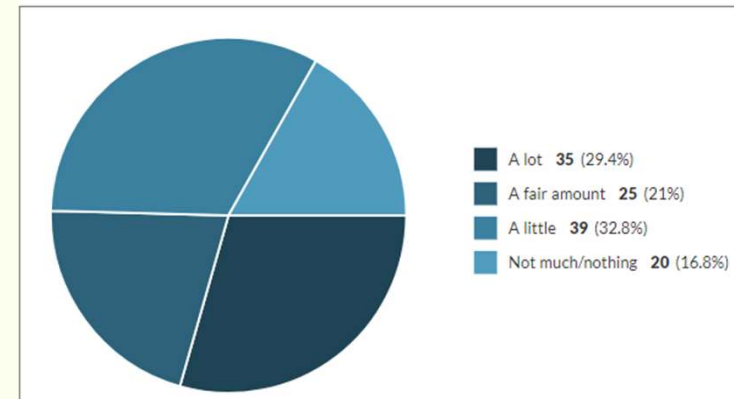
# Results of Go Green Week

- Understanding Green Behavior
  - $\frac{3}{4}$  of people surveyed knew either “a lot” or a “fair amount” of recycling glass, plastic, and paper
  - Only half of the sample knew a lot or a fair amount about disposing of food waste
  - Recommendation: For organizations like Worcester City Council and Transition Worcester to focus on education about composting and properly reducing, reusing, or disposing of food waste

Recycling of glass, plastic and paper



Disposing of food waste

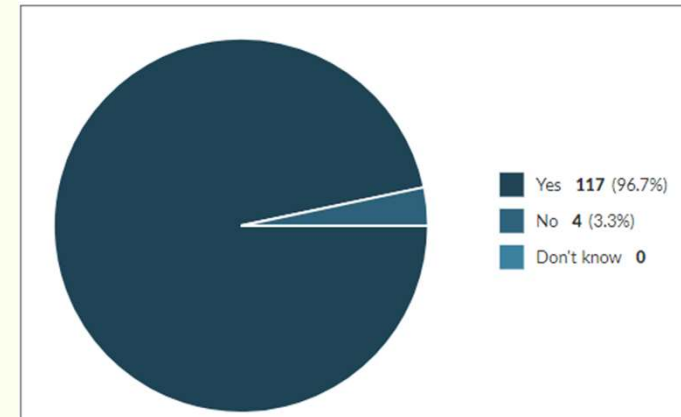




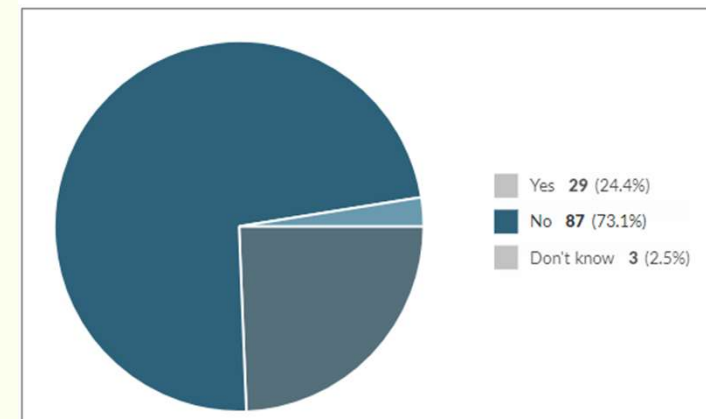
# Results of Go Green Week

- Sustainable Basis
  - Majority had recycling bins, programmable thermostats, and LED bulbs
  - Very few had light motion sensors or renewable energy systems
    - Concerns over cost of installation
  - Recommendation: Assure residents of the importance of using these items and promote campaigns which defray the cost of installing energy efficient systems

Recycling bins



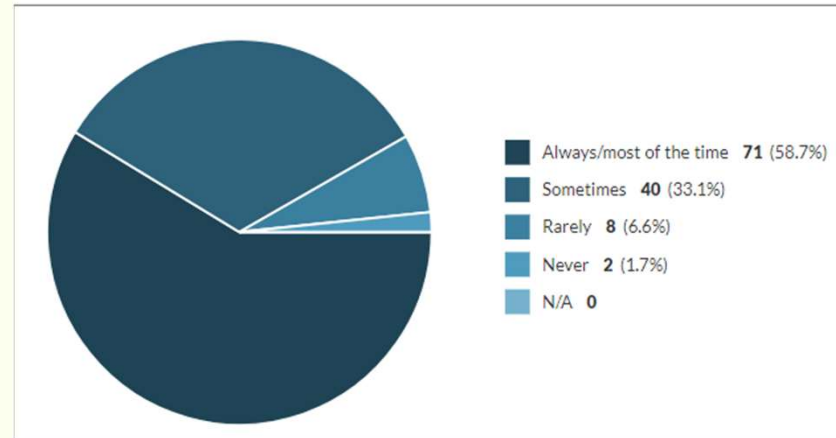
Light motion sensors



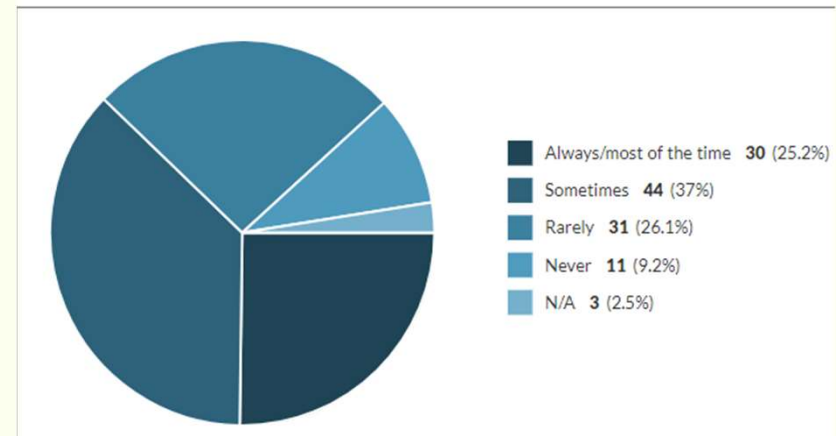
# Results of Go Green Week

- Demonstrating Green Behavior
  - General Trends: majority responded they always switch off lights or appliances, but fewer limit time in the shower or shop for items with minimal packaging
  - Recommendations: Promote businesses/products which use sustainable packaging and include more educational material about conserving water in the house

Switch off electrical appliances when not in use



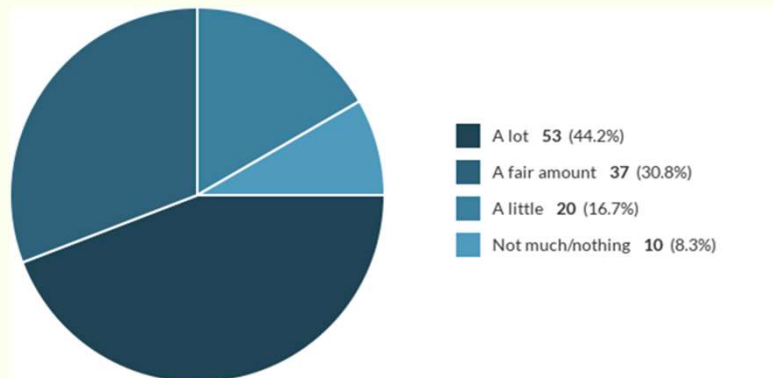
Shop for items with minimal packaging



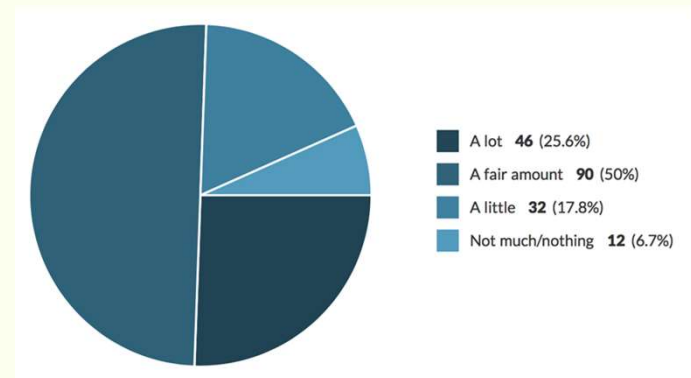
# Results of Go Green Week

- Comparing our data to the University of Worcester survey data
  - University sample was more informed about car and bike schemes
  - Both samples were fairly knowledgeable about recycling/donating
  - Consistent results regarding recycling bins and other sustainable necessities
  - University staff had a slightly higher response rate for “always” practicing green behaviors

GGW Participant Responses:  
Knowledge about Recycling Glass, Plastic & Paper



Staff & Student Responses:  
Knowledge about Recycling Glass, Plastic & Paper

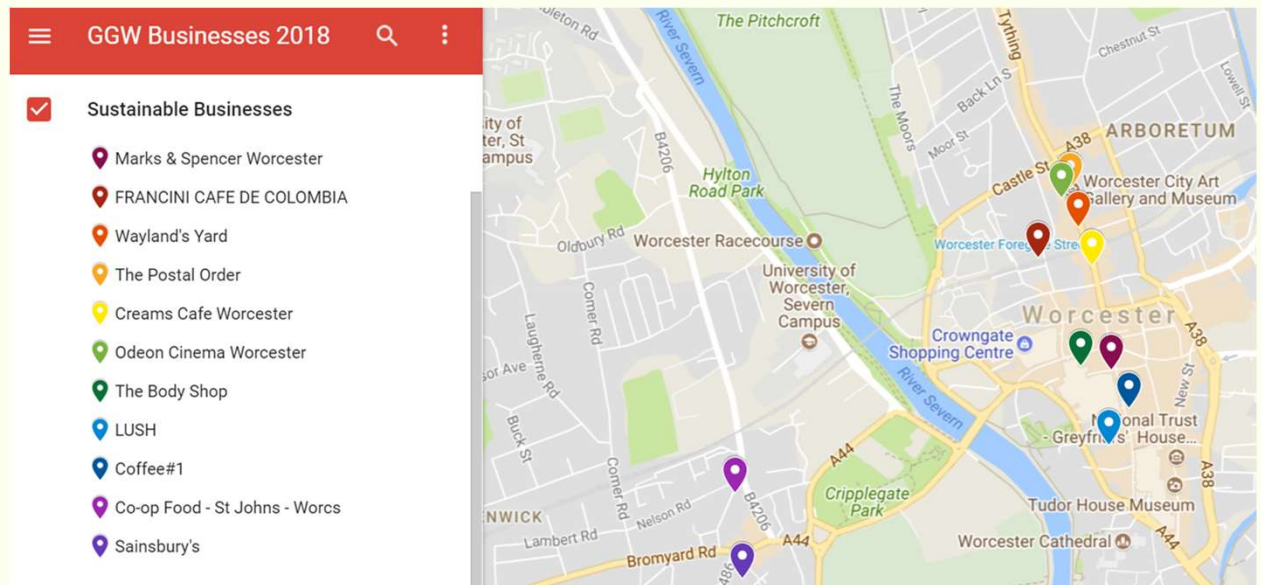


# Following Go Green Week

- Sustainable Business

## Trail

- 8 businesses that donated material items
- 4 businesses that donated food to Feed the 1,000
- To be provided to the tourism office



# Recommendations

- Limit GGW to two locations
- Speak to more businesses sooner
- Complete important logistical communications early
  - Easter break posed challenges - communication difficulties
- Do not have artwork/origami outside
- Recruit more organizations for tabling





# Conclusion

Our accomplishments:

- Educated Worcester's citizens on sustainability
- Encouraged cooperation between the community, the University, the City Council, and other organizations
- Raised awareness for the Unlocking the Severn project
- Evaluated survey results to give recommendations for the city of Worcester and future teams



# Acknowledgements

We would like to thank our sponsors, Professor Katy Boom from the University of Worcester, and the Worcester City Council for all of their support with Go Green Week, as well as Dr. Susan Jarvis for advising our project. We would also like to thank Heart of Worcestershire College, Fortis, and all the organizations that participated in Go Green Week.



Thank You to Those Who Participated



Thank You to Those Who Donated Items



**Questions?**

# Background References

- Unlocking the Severn project logo: Received from Severn Rivers Trust
- University of Worcester logo. <https://www.eventbrite.co.uk/e/pgce-teacher-training-taster-event-at-the-university-of-worcester-200318-tickets-41136829364?aff=erelexpmlt>
- Worcester City Council Logo. <https://www.worcester.gov.uk/council>
- Helix of Sustainability. [https://en.wikipedia.org/wiki/Helix\\_of\\_sustainability#/media/File:Helix\\_of\\_sustainability.png](https://en.wikipedia.org/wiki/Helix_of_sustainability#/media/File:Helix_of_sustainability.png)
- Sustainable Worcester. Adapted from Worcester City Council (n.d.). Retrieved from <https://www.worcester.gov.uk/sustainability>
- Green Behavior Pamphlet. <http://ec.europa.eu/environment/integration/research/newsalert/pdf>
- Cafe Bliss. (2017). Retrieved from <http://cafeblissworcester.co.uk/uncategorized/transition-worcester-seed-swap/>
- 10 Golden Rules for Living Sustainably. (n.d.). Retrieved from [https://www.worcester.ac.uk/documents/EcoRules\\_A5.pdf](https://www.worcester.ac.uk/documents/EcoRules_A5.pdf)
- Feed the 1,000 [https://twitter.com/how\\_college](https://twitter.com/how_college)
- World Fish Migration Day Logo: Received from Severn Rivers Trust
- Community Litter pick Photograph
- Nixon, H., & Salazar, D. (2015, December). Engaging students and community in urban environmental sustainability: CommUniverCity San José. *Current Opinion in Environmental Sustainability*, 17, 1 – 9. <https://doi.org/10.1016/j.cosust.2015.06.007>



## Methods References

- Worcester City Centre. <https://www.thecrazytourist.com/12-best-places-visit-worcestershire-england/>
- Colpritt, K., Hacker, A., Locke, A., McCarthy, A., & White, A. (2017). *Engaging the community: The green week initiative* (Undergraduate Interactive Qualifying Project No. E-project-050317-132817). Retrieved from Worcester Polytechnic Institute Electronic Projects Collection: [https://web.wpi.edu/Pubs/E-project/Available/E-project-050317-132817/unrestricted/Go\\_Green\\_Week\\_-\\_Final\\_Paper.pdf](https://web.wpi.edu/Pubs/E-project/Available/E-project-050317-132817/unrestricted/Go_Green_Week_-_Final_Paper.pdf)
- Photograph from Feed the 1,000
- Go Green Week Flyer, 2018
- Electric Bike Data Sorting Table by Gender
- Zip Code Map of Worcester, UK
- Unlocking the Severn. (n.d.). Retrieved from <http://severnriverstrust.com/projects/unlocking-the-severn/>

## Results References

- Demographic Data Sorting Table
- Postcode Map of GGW Survey Participants
- Transportation Data Sorting Table
- Bike-share scheme vs Bus Route Familiarity in Worcester
- Knowledge of Glass/Plastic/Paper Recycling
- Knowledge of Food Disposal
- Recycling Bins Data Sorting Table
- Light Motion Sensor Data Sorting Table
- Switching Off Electrical Appliances Data Sorting Table
- Shop for Items with Minimal Packaging Data Sorting Table
- GGW Participant Knowledge of Glass/Plastic/Paper Recycling
- University of Worcester Sample Awareness of Recycling
- Sustainable Business Trail
- Zero Plastic Worcestershire Display in Crowngate Shop
- Fish Migration Parade, 2018