

List of sources that support my “IDEA”

I currently have two ideas which are to develop an App that can be used to find out areas where there is plastic waste that needs cleaning up and where to bring it for recycling and to get a payment for doing so. The second idea is to recycle plastic waste to produce smart roads and paths.

The Apps that I have found are as follows:

1. Waukesha County Recycles (<https://itunes.apple.com/us/app/waukesha-county-recycles/id1081045001?mt=8>)

This app educates residents about recycling by breaking down what to recycle, how to recycle, how to safely dispose of items and where to take them. The app also provides local recycling news and events to keep customers up to date with the latest industry happenings. **(1 & 2)**

2. [1800Recycling.com](https://www.1800recycling.com)

It makes it easy for users to find nearby recycling locations for their materials. This app allows users to search for multiple materials at once, and the most commonly recycled materials are grouped into nine quick-pick categories: Electronics, Plastic, Metal, Paper, Glass, Household, Hazardous, Automobile and Yard Waste. Users may also organize and save their lists for future use. **(1 & 2)**

3. iRecycle (<https://itunes.apple.com/us/app/irecycle/id312708176?mt=8>)

With iRecycle, residents of the U.S. can browse over 1,600,000 ways to recycle more than 350 materials and the latest articles covering current trends and ideas. This app also features easy-to-use search capabilities that use your current location, ZIP code, address or city to find nearby recycling locations and programs. **(1 & 2)**

4. My Waste (<https://play.google.com/store/apps/details?id=mobi.mywaste.worldster.pack>)

This app provides a calendar for collections, sets reminders and provides detail disposal instructions. **(1 & 2)**

5. Recyclebank <https://www.recyclebank.com>

This is a recycling App which provides education on recycling and to earn points which can then be used to get discounts at local participating businesses. **(1 & 2)**

The benefit to me of researching Apps that are currently available is to understand their limitations, which hopefully will help me to design a better App.

Smart Plastic Roads

6. <https://en.volkerwessels.com/en/projects/detail/plasticroad>.

Volkerwessels are a Dutch construction company who are exploring the feasibility of making prefabricated plastic roads. They have a short video and a Q & A on their site. They are also willing to work with others on this development, including Universities. This project is in its development stage. I think by contacting this company I can learn more about the commercial possibility of building plastic roads and the primary obstacles. **(1 & 2)**

7. <http://www.tce.edu/chemistry/process.html>

Roads have been made using recycled plastic in India. The plastic is one of the components and the end result looks like tarmac. This site describes the process for converting the recycled plastic and so should help me understand the commercial feasibility of making roads from recycled plastic. **(2)**

8. <http://www.kurzweilai.net/innowattech-harvests-mechanical-energy-from-roadways>

An Israeli company, Innowattech is trialing roads that can generate electricity. I am interested in learning if this could be applied to plastic roads. **(1 & 2)**

General Sites

9. The Guardian <https://www.theguardian.com/uk/environment>

The environment section of the Guardian is a free on-line resource providing searchable archives on issues related to the environment. This should help me understand more of the issues in plastic recycling **(1 & 2)**.

10. www.haveyogotthebottle.org.uk. A campaign for developing a deposit scheme for plastic bottles run by the Association for the Protection of Rural Scotland. This will help me in understanding how to make recycling work in practice. **(1)**