



West Lothian
Council



Routing around in the undergrowth

The dark art of making route optimisation work

David Goodenough

Fleet, Recycling & Waste Services Manager



West Lothian
Council



The methods – back in the cave



© © NIKOLA SOLIC/Reuters/Corbis



West Lothian
Council





West Lothian
Council



The methods - self routing



The midden

The methods – early collections





West Lothian
Council



The methods – from A to Z





Oooh look a computer





West Lothian
Council



Audience participation time...



Q1: Health & Safety

Fatal Injuries within the waste and recycling sector 2017/18. How much higher than the UK average (across all industries) are we?

- a) 4 times
- b) 8 times
- c) 16 times
- d) 20 times

Q1: Health & Safety

Fatal Injuries within the waste and recycling sector 2017/18. How much higher than the UK average (across all industries) are we?

a) 4 times

b) 8 times

c) 16 times

d) 20 times

Q2: Occupational ill health in Scotland

What causes an estimated 1,200 deaths each year?

- a) Mesothelioma
- b) Breast Cancer
- c) Asthma
- d) Occupational Lung Disease

Q2: Occupational ill health in Scotland

What causes an estimated 1,200 deaths each year?

- a) Mesothelioma
- b) Breast Cancer
- c) Asthma

d) Occupational Lung Disease

Q3: Occupational ill health in Scotland

What is the most common cause of occupational ill health?

- a) COPD
- b) Musculoskeletal disorders
- c) Occupational Lung Disease
- d) Work Related Stress

Q3: Occupational ill health in Scotland

What is the most common cause of occupational ill health?

- a) COPD
- b) Musculoskeletal disorders
- c) Occupational Lung Disease
- d) Work Related Stress**

Q4: Occupational ill health in Scotland

Over a quarter of working days lost are due to?

- a) Occupational Lung Disease
- b) Work Related Stress
- c) Musculoskeletal disorders
- d) Asthma

Q4: Occupational ill health in Scotland

Over a quarter of working days lost are due to?

a) Occupational Lung Disease

b) Work Related Stress

c) Musculoskeletal disorders

d) Asthma

Q5: China - Markets

China has long been a reliable destination for recovered household waste materials from the UK and indeed worldwide.

In 2013 the global markets for recyclates were hit by what Chinese Government Policy:

- a) Green Wall
- b) Green Gate
- c) Green Sword
- d) Green Fence

Q5: China - Markets

China has long been a reliable destination for recovered household waste materials from the UK and indeed worldwide.

In 2013 the global markets for recyclates were hit by what Chinese Government Policy:

- a) Green Wall
- b) Green Gate
- c) Green Sword
- d) Green Fence**

Q6: China - Markets

In 2017 there was a further crackdown on the quality of materials received into the country, which put into place very stringent tolerances and quality checks. This was called:

- a) National Blockade
- b) National Sword
- c) National Control
- d) National Quality

Q6: China - Markets

In 2017 there was a further crackdown on the quality of materials received into the country, which put into place very stringent tolerances and quality checks. This was called:

- a) National Blockade
- b) National Sword**
- c) National Control
- d) National Quality

Q7: Random Recycling Stuff

Scottish Local Authorities had their recycling rate published for 2017. Given the Scottish Government's Zero Waste Plan Target for 2013 was 50% and for 2020 it is 60%, what do you think the national rate for 2017 was?

- a) 40.6%
- b) 45.6%
- c) 50.6%
- d) 55.6%

Q7: Random Recycling Stuff

Scottish Local Authorities had their recycling rate published for 2017. Given the Scottish Government's Zero Waste Plan Target for 2013 was 50% and for 2020 it is 60%, what do you think the national rate for 2017 was?

- a) 40.6%
- b) 45.6%**
- c) 50.6%
- d) 55.6%

Q8: Random Recycling Stuff

The highest performing council, East Renfrewshire was at 67.1%, whilst the lowest, Shetland, was 8%. How many councils beat the 50% target?

- a)15
- b)5
- c)2
- d)20

Q8: Random Recycling Stuff

The highest performing council, East Renfrewshire was at 67.1%, whilst the lowest, Shetland, was 8%. How many councils beat the 50% target?

a)15

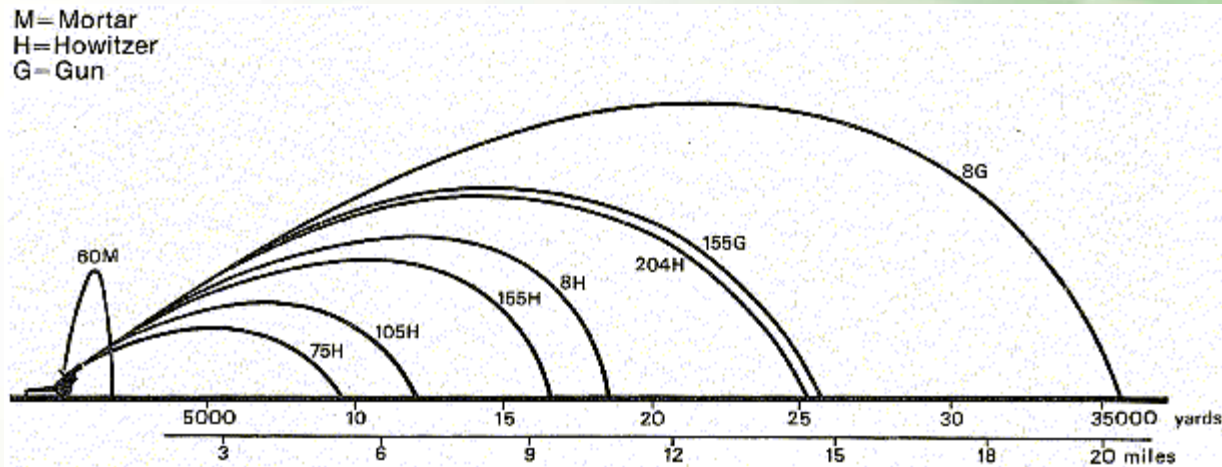
b)5

c)2

d)20

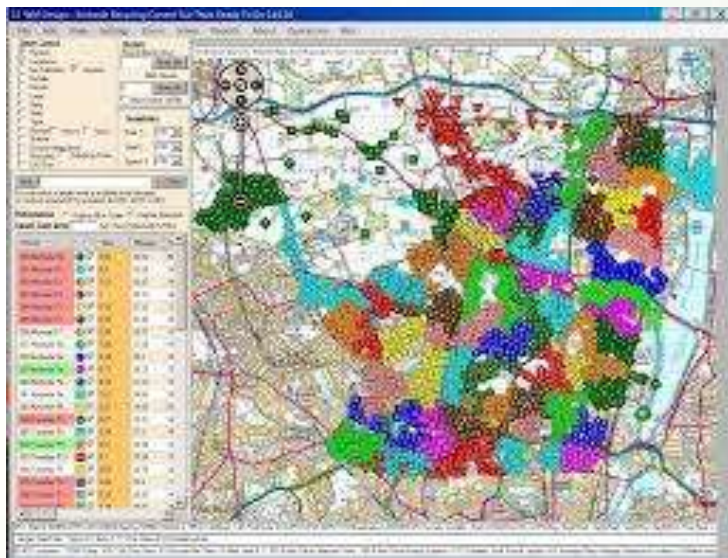
What was all that about...

- You were optimising





Escape Route





The making it work bit...

- What Kenny said yesterday...
- Planning
- Clean data = clean results
- Realism
- Involve the frontline crews
- Sense check with line managers
- Present and dry run for sceptics (if needed)
- Tweak as an when required (active routing)



West Lothian
Council



**Thank you for your time
and attention**