

INCREASE THE NUMBER OF JOURNEYS MADE BY BICYCLES IN WINCHESTER



CINDY

MIA

HAOYU

NEMO

MENG

KATHY

BRIEF

This project is aiming at the promotion of cycling in Winchester. It includes interview with citizens, and researches on facilities and roads. The team displays the results in charts, map and pictures. Three user modelling techniques are used to clarify and organise our research. Some ideas of solutions are provided after the research and discussion.

Team A3

COLLECT

Questionnaires & Interviewee

Questionnaire for Cycling Users in Winchester

1. Gender: Male Female

2. Age: 41

3. Status: student
staff (including part-time job)
retiree or unemployed

4. Month's disposable income (including those provided by parents)
(as used by you): £1,000

5. Name: EMMETT (Emily English)

6. Are you experienced in cycling?
YES NO

7. Your cycling frequency:
ALWAYS NOT OFTEN NEVER

8. General commuting or going out distance: 6km

9. What is your main purpose of your cycling trip? (no more than 2)
Work School Hire Leisure Shopping
Exercise Other: _____

10. Which mode of cycling would you prefer?
E-road bicycle Road bicycle Hybrid bicycle

11. What are your most common mode of travel? (no more than 2)
Walking Bus Scooter Moped
Car Taxi Train

12. Are you in the habit of exercising?
YES NO

13. Are you interested in cycling?
YES NO

14. Make your assessment of cycling in Winchester's cycling infrastructure (quality, quantity and coverage of cycle paths and parking spaces)
1 2 3 4

15. Advantages of cycling in Winchester (pick no more than 2):
Flexible travel time Fast speed without traffic jams
Low cost of travel Exercise Environmentally friendly
Others: _____

16. Disadvantages of cycling in Winchester (pick no more than 2):
Traffic accidents Poorly maintained Electric delivery
Weather conditions Lack of staff
High purchase cost Others: _____

17. If Winchester council wants to increase cycling numbers, what do you suggest?
Cycle lanes, lanes on main roads
Kiosk routes
Secure lockable storage
Bike loan scheme
Against the flow cycling lanes

NEAT PACE →

Cyclist over 50 years old



Volunteer for cycling



Bicycle repair man

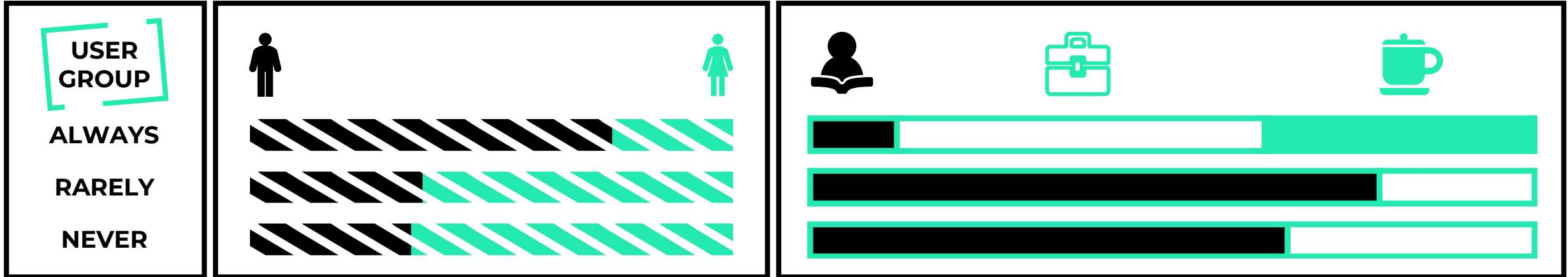


Delivery rider



COLLECT

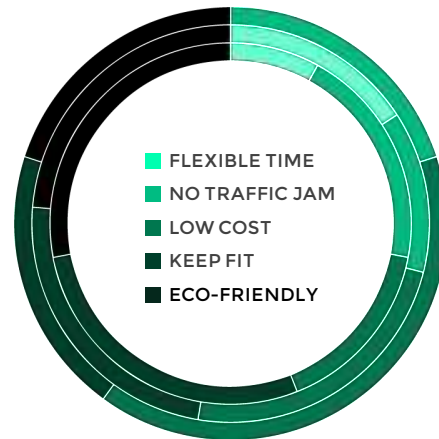
QUESTIONNAIRE RESULTS



MAIN PURPOSE OF CYCLING



ADVANTAGES OF CYCLING



DISADVANTAGES OF CYCLING



COLLECT

QUOTE



"more people have taken up cycling. But it will falter unless the roads become safer."



"I hope I can ride into town one day."



"It will be a great social ride to build a cycle lane on Badger Farm Road."



"I want a new bike, but I can lose it again."





Steve

AGE 64
GENDER Male
OCCUPATION Retired

Motivations



"More people have taken up cycling, but it will falter unless the roads become safer."

Pain points

- I've owned three great bikes, all of which ended up being stolen.
- North Walls is a nightmare for people on bikes, especially when cars pull out of the side streets straight in front of you. I've had plenty of close shaves on my bike.

Goals

- Cycling should be part of the driving test. It gives people insight into how vulnerable cyclists are and encourage them to be safer and more considerate drivers.
- Routes that are more logical for cyclists should be created.
- Traffic-lights at large junctions allow cyclists to move first then cars.
- The security for bike parking should be improved.

Scenario

These days Steve is retired. He uses his bike for shopping and visiting friends almost everyday. It's flexible for Steve to ride as he doesn't need to wait for a bus. But some journeys are difficult because of those steep hills and road layouts. And he doesn't cycle on main roads as he feels unsafe.



Emma

AGE 45
GENDER Female
OCCUPATION Nurse

Motivations



"I've been cycling for 10 years and it's become a part of my life. I love the fresh air and the exercise. It's a great way to clear my mind and stay fit."

Pain points

The weather is a real pain. It can be so hot in the summer and so cold in the winter. I also hate the rain. It's so annoying when you're out on a bike and it starts to rain. You have to stop and wait for it to stop. It's a real pain.

Goals

Having a better weather forecast would be really helpful. It would help me plan my rides better. I also like to have more routes that are safer and more scenic. It would be a great way to make cycling more enjoyable.

Scenario

Emma is a nurse and she works long hours. She uses her bike to get to work and to go to the gym. She likes to cycle on quiet roads and to avoid traffic. She also likes to cycle on scenic routes and to avoid busy roads. She would like to have more routes that are safer and more scenic.



Kelly

AGE 35
GENDER Female
OCCUPATION Teacher

Motivations



"I love cycling because it's a great way to stay fit and healthy. It's also a great way to clear my mind and reduce stress. I like to cycle on quiet roads and to avoid traffic. It's a great way to enjoy the outdoors and to get some exercise."

Pain points

The only problem I have is the weather. It can be so hot in the summer and so cold in the winter. I also hate the rain. It's so annoying when you're out on a bike and it starts to rain. You have to stop and wait for it to stop. It's a real pain.

Goals

Having a better weather forecast would be really helpful. It would help me plan my rides better. I also like to have more routes that are safer and more scenic. It would be a great way to make cycling more enjoyable.

Scenario

Kelly is a teacher and she works long hours. She uses her bike to get to work and to go to the gym. She likes to cycle on quiet roads and to avoid traffic. She also likes to cycle on scenic routes and to avoid busy roads. She would like to have more routes that are safer and more scenic.



Sarah

AGE 18
GENDER Female
OCCUPATION Student

Motivations



"I love cycling because it's a great way to stay fit and healthy. It's also a great way to clear my mind and reduce stress. I like to cycle on quiet roads and to avoid traffic. It's a great way to enjoy the outdoors and to get some exercise."

Pain points

The only problem I have is the weather. It can be so hot in the summer and so cold in the winter. I also hate the rain. It's so annoying when you're out on a bike and it starts to rain. You have to stop and wait for it to stop. It's a real pain.

Goals

Having a better weather forecast would be really helpful. It would help me plan my rides better. I also like to have more routes that are safer and more scenic. It would be a great way to make cycling more enjoyable.

Scenario

Sarah is a student and she works long hours. She uses her bike to get to work and to go to the gym. She likes to cycle on quiet roads and to avoid traffic. She also likes to cycle on scenic routes and to avoid busy roads. She would like to have more routes that are safer and more scenic.



Rob

AGE 55
GENDER Male
OCCUPATION Teacher

Motivations



"I love cycling because it's a great way to stay fit and healthy. It's also a great way to clear my mind and reduce stress. I like to cycle on quiet roads and to avoid traffic. It's a great way to enjoy the outdoors and to get some exercise."

Pain points

The only problem I have is the weather. It can be so hot in the summer and so cold in the winter. I also hate the rain. It's so annoying when you're out on a bike and it starts to rain. You have to stop and wait for it to stop. It's a real pain.

Goals

Having a better weather forecast would be really helpful. It would help me plan my rides better. I also like to have more routes that are safer and more scenic. It would be a great way to make cycling more enjoyable.

Scenario

Rob is a teacher and he works long hours. He uses his bike to get to work and to go to the gym. He likes to cycle on quiet roads and to avoid traffic. He also likes to cycle on scenic routes and to avoid busy roads. He would like to have more routes that are safer and more scenic.



Oliver

AGE 11
GENDER Male
OCCUPATION Student

Motivations



"I love cycling because it's a great way to stay fit and healthy. It's also a great way to clear my mind and reduce stress. I like to cycle on quiet roads and to avoid traffic. It's a great way to enjoy the outdoors and to get some exercise."

Pain points

The only problem I have is the weather. It can be so hot in the summer and so cold in the winter. I also hate the rain. It's so annoying when you're out on a bike and it starts to rain. You have to stop and wait for it to stop. It's a real pain.

Goals




Having a better weather forecast would be really helpful. It would help me plan my rides better. I also like to have more routes that are safer and more scenic. It would be a great way to make cycling more enjoyable.

Scenario

Oliver is a student and he works long hours. He uses his bike to get to work and to go to the gym. He likes to cycle on quiet roads and to avoid traffic. He also likes to cycle on scenic routes and to avoid busy roads. He would like to have more routes that are safer and more scenic.

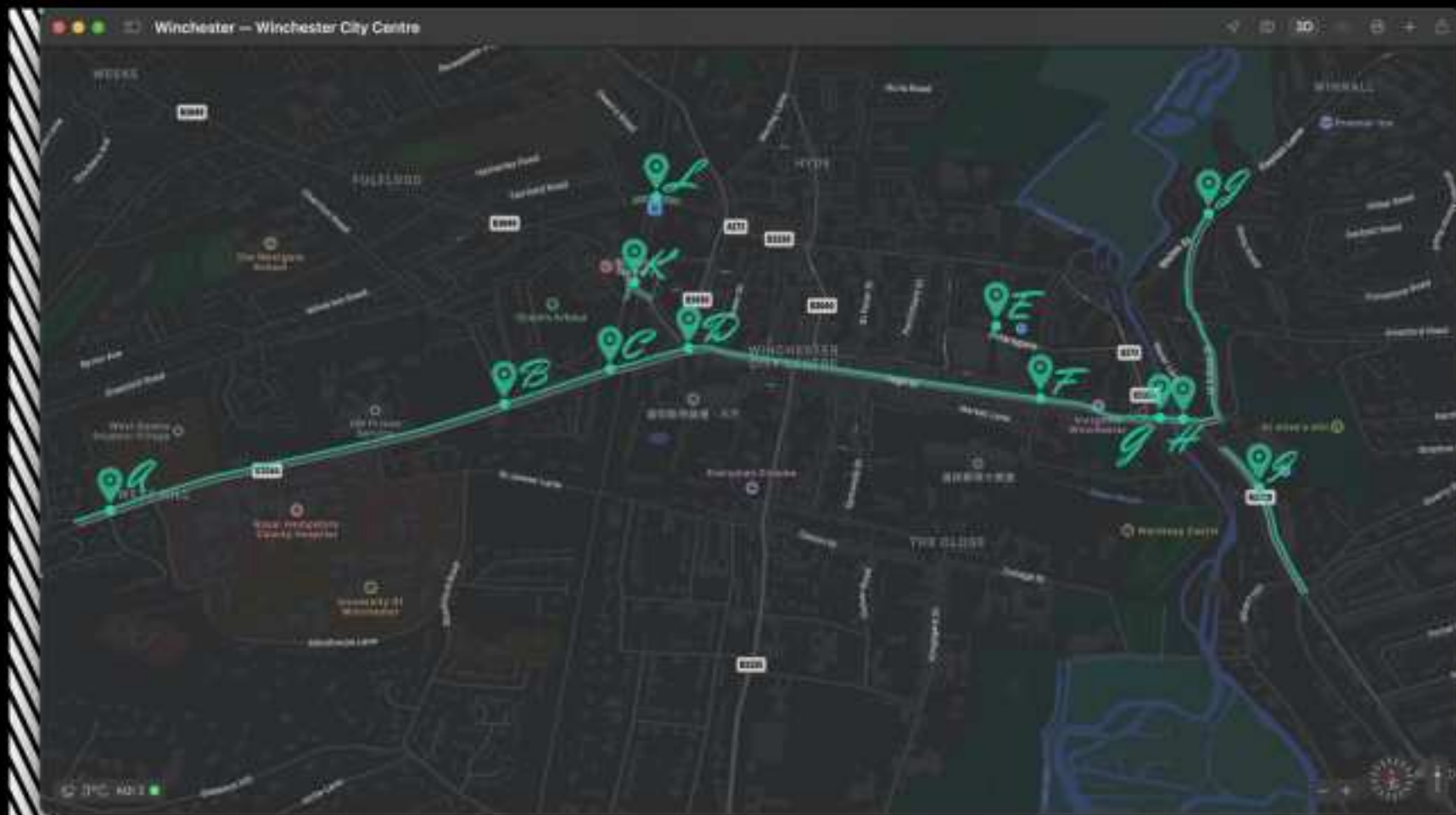
COLLECT

OBSERVATION

		CCTV	SHED	TOOLS	CAPACITY	UTILIZATION	QUANTITY
	<p>Cycle Hub</p> 	✓	✓	✓	High	20%	Only 1
	<p>Bike Stand</p> 	✗	✗	✗	Low	80%	A lot

AFTER CYCLING

Collect



1.6 miles

observation: cycle routes

- A. No viable alternative route for travel between west and city centre.
- B. Hazardous junction West End/ Romsey Rd.
- C. Difficult crossing Romsey Rd/ St James Terrace/ Clifton Terrace.
- D. Occasional accidents here due to camber and road surface. Motorists often ignore priority at roundabout.
- E. The short segregated cycle lane on Middle Brook St is often blocked by parked vehicles at its northern end.
- G. difficult turn from Bridge St onto cycle path.
- H. Cycle path often blocked by lorries unloading and part-blocked by tables from bar.
- I. Chesil St busy, narrow.
- J. NCN23 takes cyclists out of town on Wales St then turns right across heavy traffic into Eden Rd. Needs a safer way of doing this.
- K. difficult crossing Romsey Rd/ St James Terrace/ Clifton Terrace.
- L. low visibility in the underpass.





Narrow bike lanes and dangers distance from motor vehicles.

No viable alternative route.

Low visibility in the underpass.

Roundabouts sometimes cause traffic accidents.

The bike lane is blocked by parked cars, stalls and tables from the bar.

The junctions are dangerous with busy traffic and make them difficult to cross or change lanes.

Summary



COLLECT

SECONDARY RESEARCH



1. How many people own or have access to a bicycle ?

22,000,000

2. Who cycle most—woman or man?

Average number of cycle trips

3 : 1 (male : female)

3. Which age group cycles most?

16-24 For travel

45-54 For leisure

4. How safe is cycling?

Reported casualties in 2019

100 killed

4333 Seriously injured

12451 Slightly injured

5. How many cycles are stolen in the UK?

Incidents of bicycle theft from 2019 to 2021

271,000

COLLECT

Summary

Facilities

Lack of rack

Lack of CCTV parking spots

Lack of shelters

Lack of public repair tools

Cycle lanes

Lack of lanes

Narrow cycle lanes

Uneven surface

Blocked cycle lane sections

Discontinuous cycle lanes

Cut-off lanes

COLLECT

OBSERVATION

Bike Hub



EXPENSIVE

Good bicycles are expensive.



EQUIPMENT

Many other equipment to purchase.

Cycle Lanes



BLOCKED

Occupied cycle lanes are inconvenient.



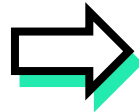
NARROW

The road is too narrow and easy to scratch.



DISCONTINUOUS

The lack of cycle lanes is confusing.



BEFORE CYCLING

CYCLING

COMPREHEND



Steve's Journey Map

Male # Retired # 64-year-old # Always ride

"More people have taken up cycling. However, this trend will falter if there is nothing done to make the roads safer."

ACTIONS

- Research on brands, price, features etc.
- Purchase bicycle and other related equipments.
- Wait for delivery or pick up in stores.

- Wear the equipments on.
- Learn and practice cycling.
- Choose a destination and route, get ready to go riding.

- Ride on cycle lanes.
- Observe traffic signs.
- Ride across intersections.
- Avoid pedestrians and motor vehicles.

- Find a bicycle rack to park.
- Maintain and repair.

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EMOTIONS & THOUGHTS



STAGE

PURCHASE

PRE-CYCLE

CYCLING

POST-CYCLE

CONCEPTUALIZE

IDEA

IDEA - 01



BETTER CYCLE LANES

Add more cycle lanes and traffic signals.

Add foot board to rest cyclists' feet.

Add rain probes to double the green light lasting time for cyclists when it is rainy.

Let's go cycling

MAKE RIDING SAFE AND COMFORTABLE

CONCEPTUALIZE

IDEA

BETTER PARKING

Add CCTVs for safety.

Add shelters to prevent from getting wet when it is raining.

Let's go cycling

MAKE PARKING SAFE AND COMFORTABLE



IDEA - 02