

# TRAFFIC CONGESTION IN OBSERVATORY



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2019

Team Balcony:

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The UCT Knowledge Co-op facilitated this collaborative project with the Observatory Civic Organisation.

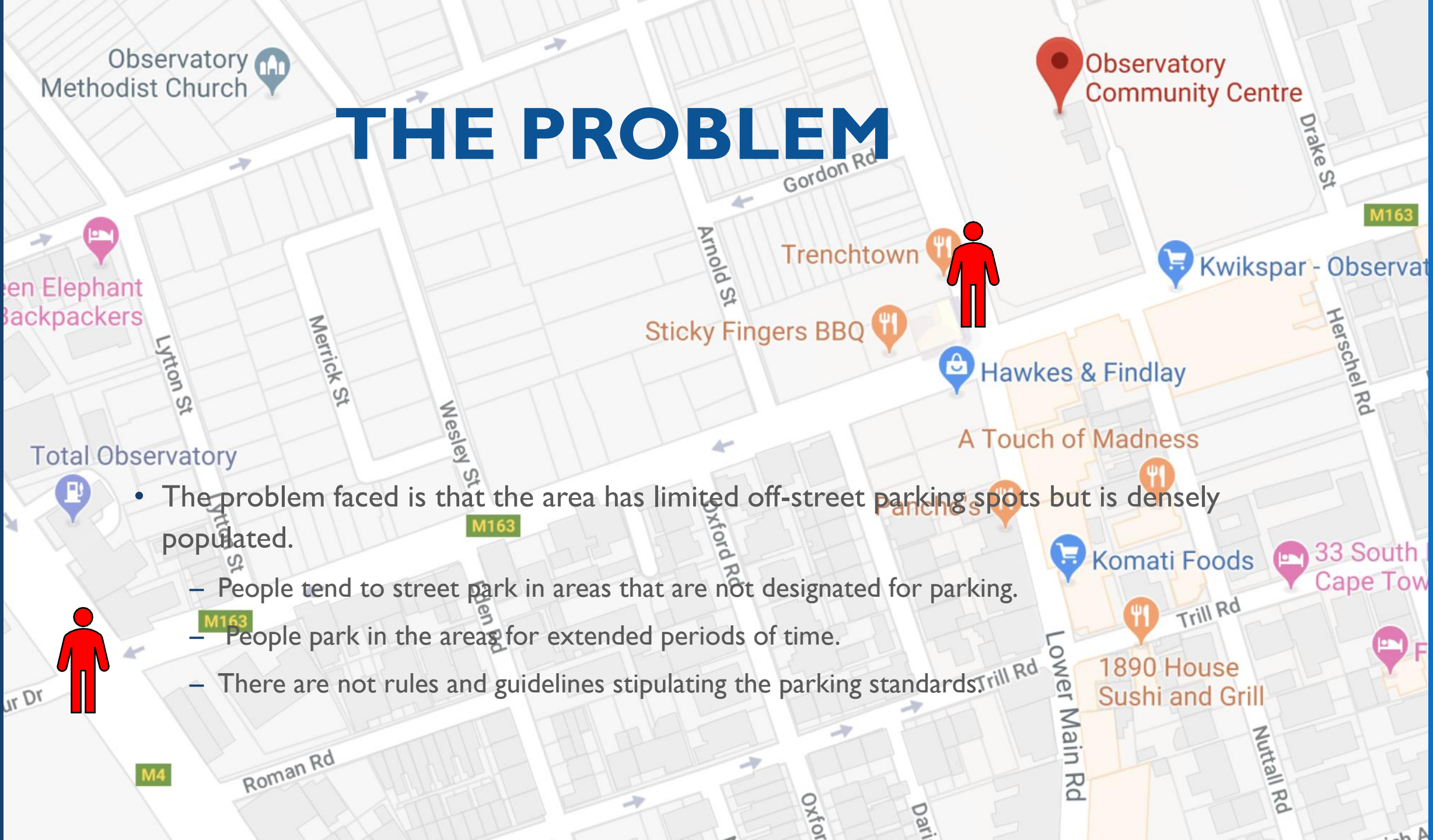
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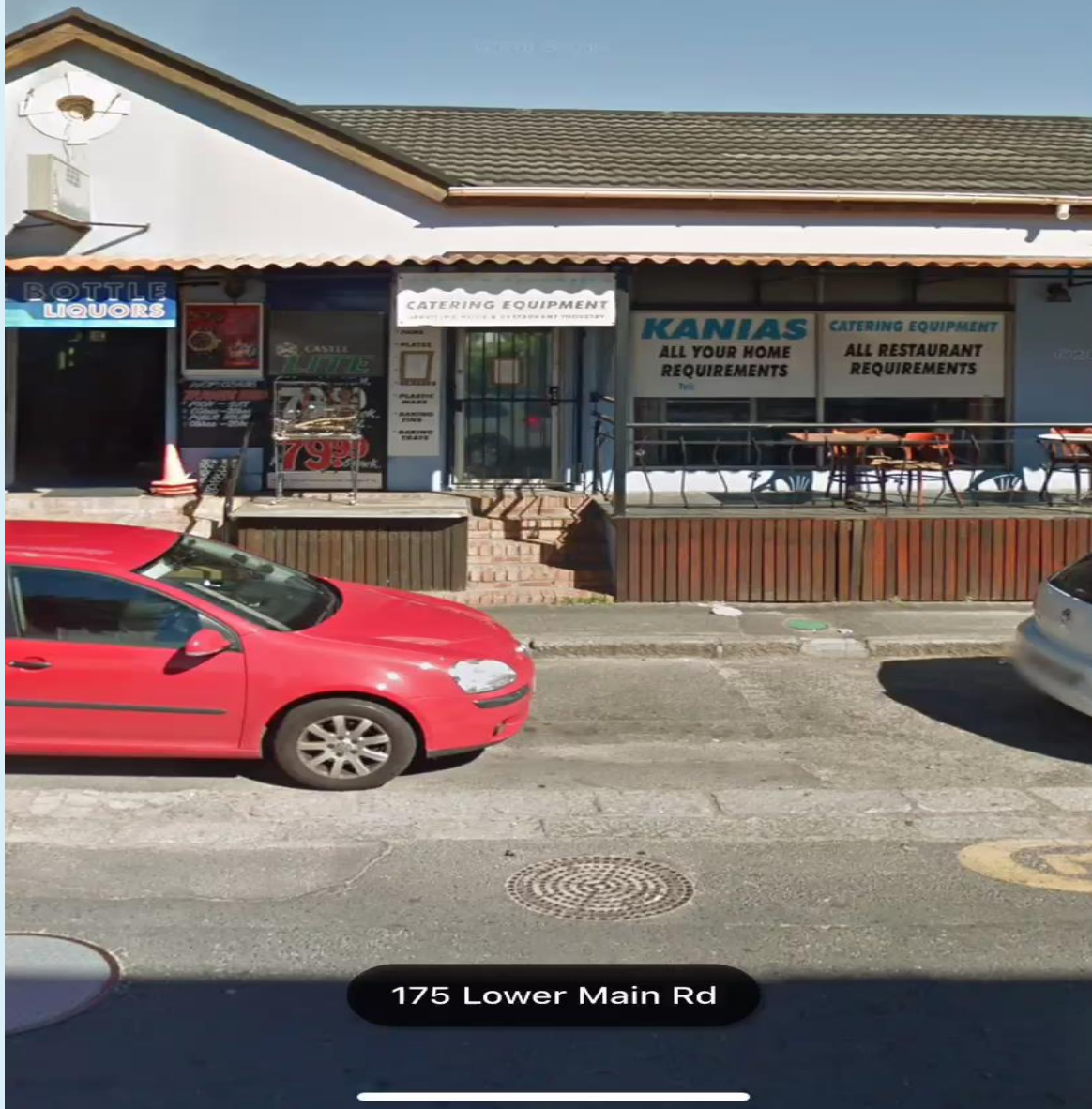
# BACKGROUND

- The Observatory Civic Organisation's Executive Board consists of members such as: Residents, Professionals and Business Owners located in Observatory who were elected by The Civic's members.
- The Observatory Civic recently created a traffic department which would oversee matters such as traffic congestion and parking in Observatory.
- The Observatory Civic operates within the bounds of Liesbeek Parkway and Main Road starting from Mowbray to Devils Peak.

# THE PROBLEM

- The problem faced is that the area has limited off-street parking spots but is densely populated.
  - People tend to street park in areas that are not designated for parking.
  - People park in the areas for extended periods of time.
  - There are not rules and guidelines stipulating the parking standards.





## AN EXAMPLE OF POOR PARKING GUIDELINES IN OBS

### NOTE:

Cars are parked in undesignated parking spots.

Cars need to wait for each other because the road has been made narrower.

There are no parking marshals or rules stating how long people can park in the areas for.

Restaurants and shops have limited designated parking bays but have high volumes of customers.

# PROBLEM- TRAFFIC CONGESTION

- Additional to the physical parking constraints, The Civic Centre lacks a database which can store all the information of its residents.
- The lack of a database means that:
  - Monitor the demographic of people that street park: Residents, Business Owners, Tourists or Commuters.
  - They cannot send out push notifications of any new rules they would like to implement.
  - They are not able to engage with residents to find out what their traffic concerns are and how they could alleviate them as a community.
  - The City of Cape Town, would require a consensus before approving any proposed solutions and a lack of a database and lack of Civic Members would jeopardise this.

# THE SURVEY

## QUESTIONS

*The most frequent answers will be shown*

**1. Do you have a car and if so where do you frequently park?**

YES, FREQUENTLY PARALLEL PARK  
PARK  
OUTSIDE RESTAURANTS AND SHOPPING CENTERS.

**2. Do you feel that as a resident your car is safe when parked outside?**

MOST OF THE TIME THERE IS SECURITY PATROLLING RESIDENTIAL AREAS.

**3. Do you work in Observatory particularly on Main or Lower Main Road?**

NO, BUT I COMMUTE FROM NEAR BY SUBURBS SUCH AS TOWN OR WYNBERG. MOST OF THE TIME I NEEDS TO LEAVE EARLY TO FIND PARKING NEAR BY BECAUSE MOST PARK IN OBS AND COMMUTE VIA THE TRAIN TAKING ALL THE PARKING

## QUESTIONS

*The most frequent answers will be shown*

**4. Do you think that parking disks will alleviate the traffic congestion?**

POSSIBLY TRAFFIC DISKS MAY ASSIST BUT THEY WOULD ALSO NEED TO INFORM THOSE THAT PARK AND COMMUTE ETC OF THE NEW GUIDELINES

**5. Have you hear about the Obs Civic?**

NO, THEY HAVE NEVER ADVERTISED OR HELD AGMS THAT I AM AWARE OF.

# THE SOLUTION

## Multiple other solutions considered

- We did extensive research and considered many different options to solve the traffic problem
- Some other solutions considered:
  - Parkade
  - Independent database
  - Carpooling/Car rental service
- None seemed viable

# PARKING DISK

- Simple solution to major issue.
- Long term effects.
- Reduces the number of cars parked on the road.
- Frees up an extra lane.



# HOW WILL IT WORK?

- Residents of Observatory will be required to join the Civic.
- Pay yearly membership fee.
- Members will get the disk and gain access to exclusive parking around Observatory.
- Pay for parking at a reduced rate.

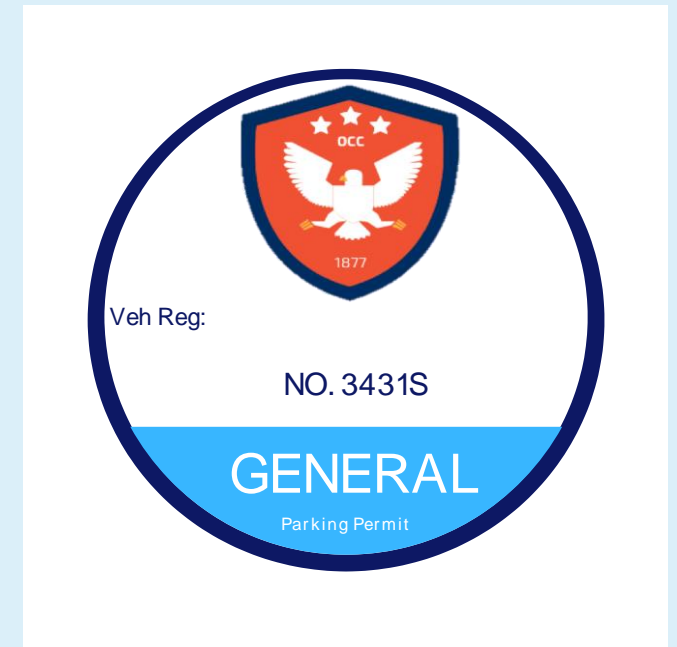
# SOLUTION INSPIRATION

- Solution inspiration stemmed from UCT.
- UCT have managed to avoid chaos on campus by having designated parking areas.
- We decided to use this concept and extend it to Observatory.

# FEEDBACK FROM SPONSORS

- Sponsors approved of the parking disk solution.
- Raised concerns which we cleared up.
- Database.

# PARKING DISK PROTOTYPE



- Three disks which are highly distinguishable.
- Includes vehicle registration number, disk number and parking classification.
- A special type of paper will be used to mitigate the risk of forged parking disks.

# WEBSITE PROTOTYPE

OBSERVATORY CIVIC

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Working Towards a Brighter Future



# WEBSITE PROTOTYPE

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### Sign Up

First Name:

*John etc.*

Surname:

*Wick etc.*

ID Number:

*D123454342 etc.*

Email:

*john@gmail.com*

Password

*Dontkillmydog etc*

Residential Address:

*129 Main Road, Observatory, Cap...*

# WEBSITE SIGN UP PROTOTYPE

## Parking Disk Information (Optional)

Vehicle Make:

*VW Golf etc.*

Registration:

*GP 123 123 etc.*

Parking Disk Type:

- BUSINESS**
- RESIDENT**
- GENERAL PUBLIC**

SUBMIT

012 3144 3214





**PARKING ON MAIN ROAD IS FULL  
NOW I NEED TO PARK A BLOCK  
AWAY AND WALK**



**Taboka Velempini  
Rahul Marajh  
Ashil Ramjee  
Gustavo Amicis**



# THE PROBLEM

THE OBSERVATORY CIVIC CENTER

A VOLUNTEER GROUP TRYING TO ALLEVIATE PARKING IN OBSERVATORY



LACK OF PARKING GUIDELINES



HEAVY CONGESTION ON NARROW ROADS LIKE LOWER MAIN AND MAIN ROAD



LIMITED REVENUE AND FINANCIAL SUPPORT FROM THE CITY OF CAPE TOWN



DON'T HAVE A DATABASE TO MONITOR AND UPDATE THEIR MEMBER'S DETAILS



NEW DEVELOPMENTS ARE NOT ALLOCATING ENOUGH PARKING BAYS FOR THE INFLUX OF NEW RESIDENTS



# THE SOLUTION

CREATE A RESIDENT DATABASE & EXPAND COMMUNITY RELATIONSHIPS



IMPLEMENT PARKING DISK PERMITS AND LOAD VEHICLES ONTO THE DATABASE

WORK IN CONJUNCTION WITH THE CITY OF CAPE TOWN TO CREATE NEW PARKING GUIDELINES



PARTNER WITH SHOPPING CENTERS AND RESTURANTS TO PROVIDE DISK MEMBERS WITH PARKING DISCOUNTS

