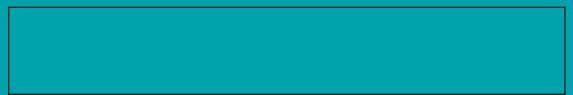


ZÜMRÜTEVLER
SQUARE
INTERIM
IMPLEMENTATION





**ZÜMRÜTEVLER**

**SQUARE**

**INTERIM**

**IMPLEMENTATION**



**Bernard  
van Leer**  
FOUNDATION









As Superpool, we realized the first intersection interim implementation for the improvement of Istanbul's streets and intersections in terms of pedestrian safety, at Maltepe Zümrütevler Square, in collaboration with Maltepe Municipality and with consultancy from NACTO's Global Designing Cities Initiative (NACTO GDCI).

The interim implementation that we realized in October 2019 was supported by the Bernard van Leer Foundation within the scope of their Urban95 program that focuses on the city and early childhood. With this program, the foundation poses, to city administrators, urban planners, architects, designers and entrepreneurs, the question "If you could see the city from an elevation of 95 centimetres – the average height of a healthy 3-year-old – what would you do differently?" So we, too, within the framework of this program, wanted to learn and implement together, as part of a broad network of partners, how streets could be improved in a manner that takes young children and their caregivers into consideration.

The booklet in your hand analyses our Zümrütevler Square Interim Implementation process as a case analysis; focuses on the design of streets and provides basic information about the interim implementation's process, pedestrian-priority design strategies and materials used.

Wishing that it will support methodical development for similar implementations...

**SUPERPOOL**  
2020

Founded in 2006 by Selva Gürdoğan and Gregers Tang Thomsen, SUPERPOOL is a research-focused multidisciplinary architectural office. Its diverse field of activities range from architecture to urban planning, and from interior design to mapping, bringing together local solution practices with basic design values and differentiating itself through its approach to understanding, remembering and research. At Superpool, sociologists, artists and writers work together with architects to create a "pool" of ideas open to different collaborations.



## As We Begin: Some Definitions and Principles

### WHAT IS A WALKABLE NEIGHBOURHOOD?

One definition of a neighbourhood is the 20-minute-neighbourhood, or 'a place where a community can access its needs within a 20-minute return walk from home'. Research shows that the majority of people do not prefer to walk more than 20 minutes. This duration is also significant for small children and their caregivers who want to remain as close as possible to home because of sleep and feeding schedules. On this basis, we can say that small children and their caregivers spend most of their time in their neighbourhoods. Being able to comfortably walk the distance to the nursery, playground, health centre or corner shop from home is an important quality of life aspect for every age group including small children and their caregivers. The improvement of streets to meet pedestrian-priority standards is the first requirement for walkable neighbourhoods. Neighbourhood streets with a lesser level of vehicle traffic should be considered as priority areas where pedestrian-priority street designs can be tested.



2

### WHAT ARE ITERATIVE PROJECT STRATEGY AND INTERIM IMPLEMENTATION?

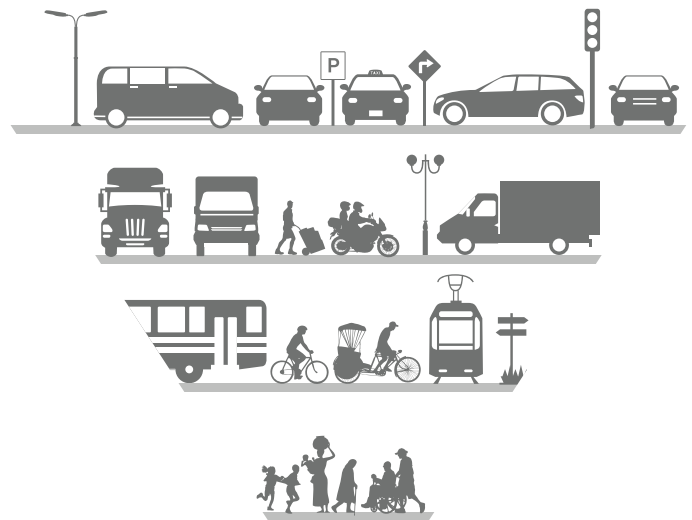
The iterative project strategy defines the project design process as a series of swiftly applicable steps aiming to streamline change. Every phase is designed so as to be constructed upon the experience of the previous step. In this way, it aims to manage, in a healthier manner, the budget challenges, complex permit- and approval- processes and the participation of neighbourhood residents.

Before a high-cost investment, a low-cost interim implementation with temporary and flexible-use material is carried out. Data is collected before and after the implementation and means are provided for neighbourhood residents to take part in the project. Following one or more interim implementation processes, the project and implementation is finalized. The process can be managed by public officials and decision-makers, but it can also progress under the leadership of neighbourhood residents, or civil society institutions.



## Goals of the Iterative Project Strategy

- Facilitating Change** → Inspiring by providing an alternative through the interim implementation, preparing neighbourhood residents, users and public administration.
- Broadening Participation** → Understanding needs on site and in depth by observing the use of space, in addition to preferences expressed by neighbourhood residents throughout the process.
- Thinking Together** → Enabling and encouraging public officials, decision-makers, civil society institutions and citizens to work together.
- Carrying Out Pre-Assessments** → Testing the impact of a program, project or change in regulations before carrying out greater political or financial investments.



→ For walkable streets, pedestrians, bicycles and public transport must be prioritized. ←



## Learning by Doing and Experimenting!

### WHY ZÜMRÜTEVLER?

With a population of 71.500 people, Zümrütevler is one of the two most intensely-populated and disadvantaged neighbourhoods of Maltepe district. More than 30% of its population is made up of children and young people in the 0-18 age group, while babies in the 0-4 age group make up 8%. There is a lack of open spaces and parks because of dense housing development. Therefore, the decision was taken to carry out the first interim implementation of pedestrian-priority street implementations planned for Maltepe in the Zümrütevler neighbourhood.

### DATA-DRIVEN DECISION-MAKING

Zümrütevler is a neighbourhood with a high percentage of disadvantaged children, and a lack of open spaces and parks. The interim implementation provides a solution to this specific need of the neighbourhood, which was also revealed in data collected and surveys carried out. For this reason, although neighbourhood residents complain of narrow roads and the cancellation of parking places when they look at it from a vehicle-owner-perspective, they do not want the square to be returned to its previous state. Some views from neighbourhood inhabitants:

“It’s a new place to spend some time here, we no longer have to stand around while we wait.”

“There used to be no place to sit here, now everyone is spending time here.”

“It’s turned out so beautiful. I can relax here. I come from home to relax here every day.”

“It’s a good idea for an earthquake emergency. And an alternative for summer days. This place is very important for grandmas.”

### PARTICIPATION: WORKING COLLECTIVELY AND IN COOPERATION

The sense of adopting a place, created as a result of close communication during pre-implementation data collection, painting and collective work during implementation week, plays an important role in the space being used by neighbourhood residents and shopkeepers without any major change - although some kerbstones were dislodged.



Iterative Street Design Can Be Divided into Three Phases:

PROJECT TYPE	POP-UP IMPLEMENTATION	INTERIM IMPLEMENTATION	PERMANENT IMPLEMENTATION
TIME INTERVAL/BUDGET	Days 1 - 3 / \$	3 months-1 year / \$\$	1 - 50 years / \$\$\$
PROJECT PARTNERS	Public institutions, civil society institutions or neighbourhood residents can be organized together or one by one.	Leadership of public institutions is required.	Leadership of public institutions is required.
PERMISSIONS	May not be necessary.	Necessary.	Necessary.
MATERIALS	Often, low-cost materials that are easy to bring to the site are used. These materials are not expected to be permanent.	Low-cost materials that can be fixed if required, and that do not require constant maintenance are used.	High-cost, permanently fixed materials are used.
PARTICIPATION	It enables broad participation and on-site feedback regarding the implementation.	The presence in the field of public institutions or civil society institutions enables the reception of feedback throughout the interim implementation.	The presence of public institutions and civil society institutions in the field enables the reception of feedback from users.
DESIGN FLEXIBILITY	Partners demand that the project changes in implementation and remain short-term.	Partners foresee changes to the project, but the aim is to retain the project in its general outlines.	This is the permanent project formed on the basis of what is learned from interim implementations and it is not expected to change in the near future.
BEFORE AND AFTER DATA COLLECTION AND ASSESSMENT	Should be carried out.	Must be carried out.	Must be carried out.



CASE

ANALYSIS



2 Months  
August–September 2019

## Pre- Implementation

Data collection  
Participation  
Design  
Coordination

1 week  
October 2019

## Implementation Week

Geometry test  
Implementation procedure

3 Months  
October–December 2019

## Post- Implementation

Maintenance  
Programming  
Data collection  
Data assessment

ZÖMRÜTEVLER  
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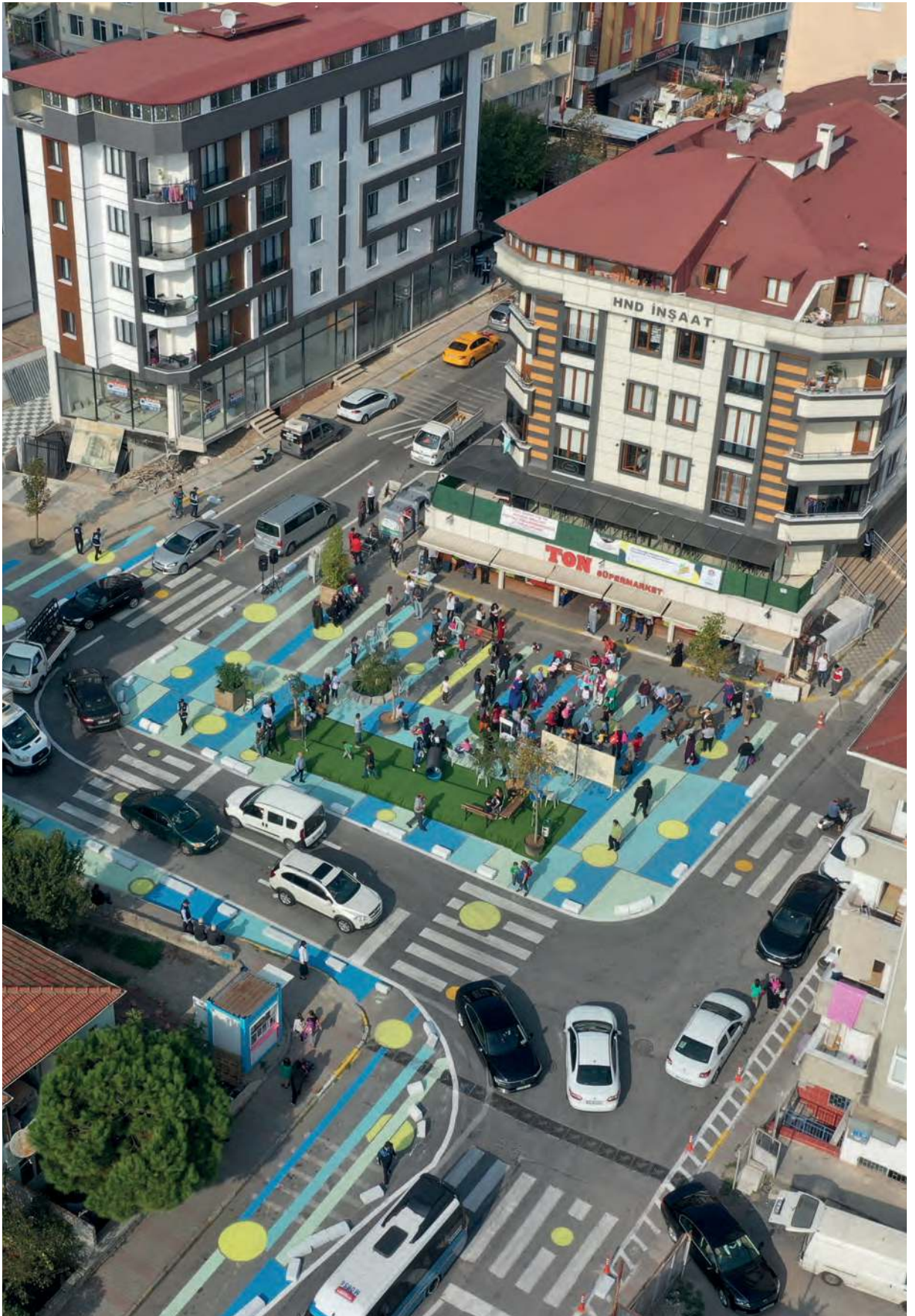
PRE-  
IMPLEMENTATION





ZÖMRÜTEVLER  
SQUARE  
INTERIM  
IMPLEMENTATION

POST-  
IMPLEMENTATION



Pre-

Implementation



ZÜMRÜTEVLER  
SQUARE  
INTERIM  
IMPLEMENTATION

PRE-  
IMPLEMENTATION

AUGUST  
2019

## Site Selection

The intersection selected for the interim implementation is at the junction of roads that lead to the three schools in the area. Every day, at school start and end times, hundreds of children, along with their parents pass by the intersection selected for the interim implementation as they go to or come back from school. Although walking to school is encouraged, it has to be done by taking risks along roads where necessary measures have not been taken for pedestrian safety, pedestrians having to pass between vehicles in a dangerous manner. Having observed that this area is frequently used by children, we decided that a safety-first project was necessary.

When we began work regarding this intersection on the public bus and minibus shuttle routes, which also had a widespread problem of illegal parking, we aimed to create safe and permanent pedestrian footpaths, facilitate street crossings and transform the area where cars were parked into a neighbourhood square, thus forming the list of priorities below:

- Increase pedestrian safety
- Make up for the lack of high-quality open space in the neighbourhood
- Create space for street games that are already being played in the neighbourhood
- Test the project design and receive feedback with a low-cost interim implementation before the final invest

AUGUST - OCTOBER  
2019

## Data Collection

For the Zümrütevler Square Interim Implementation, we formed a 6-person data collection team, formed of us, the Superpool team and volunteers. We invited the Global Designing Cities Initiative (NACTO GDCI) to Istanbul and organized a training session where data collection methods were shared by the NACTO team. Following the training, data collection work began at the intersection where the implementation was to be carried out. In line with the interim implementation's goals:

- We counted how many pedestrians and vehicles passed through the intersection.
- We observed the routes pedestrians preferred when crossing the street.
- We measured the speed of vehicles passing through the intersection.
- We also observed and mapped types of use other than pedestrian use at and around the intersection.

.....

In iterative project implementations, collecting data is very important before transition to further stages, so a pre-and post-implementation comparison can be carried out.

.....

SEPTEMBER - OCTOBER  
2019

We decided to carry out the count and measurements on Thursday, Friday and Saturday. Since the interim implementation prioritizes the safety of children, we created a 6-person-team for the measurement plan for school start, lunch break and end times. In order to assess the targets below, the team carried out measurements and collected data on and at pre-determined streets, directions, days and hours:

- The slowing down of vehicles as they enter the square

- The stopping of vehicles to allow pedestrians to pass at pedestrian crossings
- Increase in pedestrian use
- Decrease of illegal use on the square
- A sense of safety for and more frequent use of the square and pedestrian pathways

.....

Data collection must be carried out regularly for a few weeks, and on the same days and at the same hours.

Two week days and a day on the weekend, a total of three days, are recommended at least for the repetition of measurements. One of the week days can be Monday or Friday, days when commuter traffic is dense, or a day when the neighbourhood street market is held, and the other day can then be any week day. It is important to set clear targets for post-implementation before data collection. For data collection, in addition to on-field observation, drone footage and time-lapse photos can also be used.

Time-lapse photography is especially beneficial in determining vehicle parking durations.

.....



7



8

## Pedestrian Counts : Sidewalk

NAME <u>BE42A</u> DATE <u>13/09/19</u> DAY <u>CUMA/FRİ</u> TIME <u>08:30</u> to <u>08:45</u> WEATHER  TEMPERATURE <u>22</u> C/F PROJECT _____ LOCATION _____ NOTES <u>SUPERMARKET IS CLOSED.</u>	<b>Location Map:</b> (mark the location of the counting) 
--	--

**Pedestrian Type:** Identify the pedestrian type relevant to the site context, and use the space provided below to conduct the counts. Use the legends provided to mark each type or use a legend of your own with an appropriate notation. Mark groups with a large circle around the counts.

Category	 Baby and Young Child 0-5	 Child 5-12	 Young Adult 12-20	 Adult 20-64	 Old 65+	 Person on Wheelchair	Total
Sidewalk							157
	T 3	T <del>10</del> 7	T 15	T 67	T	T	
Roadbed							164
	T	T 4	T 2	T 4	T	T	
	T 3	T 76	T 17	T 71			324



# Activity Map

NAME KAAN

DATE 12.09.19 DAY Thursday

TIME 15:45 to 16:00

WEATHER TEMPERATURE 26 C/F

PROJECT \_\_\_\_\_

LOCATION Zümrütevler

NOTES \_\_\_\_\_

Location Map: (Draw the study area, mark the location of the counting and provide street names.)



PERSON	GENDER		AGE		GROUP	POSTURE			ACTIVITIES				PLAY	SPECIAL NEEDS	NOTES														
	MALE	FEMALE	INFANT AND YOUNG CHILD	CHILD 5-12		YOUNG ADULT 12-20	ADULT 20-64	OLD 65+	COUPLE	STANDING	SITTING	SITTING (IMPROVISED)				LYING	WALKING	TALKING	READING	PHYSICAL EXERCISE	EATING/DRINKING	ON MOBILE DEVICE	SELLING THINGS	RESTING/SLEEPING	PEOPLE WATCHING	CITY AGENT	SELF PLAY	GROUP PLAY	PLAY WITH CAREGIVER
1	/				/	/		/																					
2	/				/	/		/																					
3	/				/	/		/																					
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28	/	/			/	/		/																					
29	/	/			/	/		/																					
30	/	/			/	/		/																					



### Vehicle Counts

NAME Ege  
 DATE 19/09/19 DAY Thu  
of the week  
 TIME 8.50 to 9.05  
min. by  
 WEATHER  ☁  ☀  ☔ TEMPERATURE 21 C/F  
 PROJECT \_\_\_\_\_  
 LOCATION Çigdem sok.  
 NOTES \_\_\_\_\_

Location Map: (mark travel lanes and location of the counting)



**Vehicle Type:** Identify the vehicle type relevant to the site context, and use the space provided below to conduct the counts. Count Vehicles per signal and travel lane. Use the legends provided to mark each type or use a legend of your own with an appropriate notation.

						<i>minibüs</i>	<i>Ticari</i>	<i>Servis</i>	<i>Taksi</i>
Car	Bus	Truck	Cyclists	Two-Wheeler	Vehicles Turning				
/	X	T	⊥	⊥	⊙	M	△△	S'	T

Travel Lane 1 A	Travel Lane 2 B	Travel Lane 3 C	Travel Lane 4 D	Queue Length (# of Vehicles)	Excess Green Time (Secs)
/// / △	/// △ △	△ /	⊥ / △ (Parked)		
/ T ///	△ △ / / △		/		
△	/ △ △ / /				
	T △ △ S' /				
	△ S / / /				
	/// / △				
	△ / △ / /				
-11-	-35-	-2-	-4-		

### Data Collection Plan

NAME \_\_\_\_\_

DATE   /  /   DAY    of the week

TIME \_\_\_\_\_ to \_\_\_\_\_

WEATHER TEMPERATURE \_\_\_\_\_ C / F

PROJECT \_\_\_\_\_

LOCATION \_\_\_\_\_

NOTES \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- LEGEND**
- Perimeter of the site
  - pc-s** Pedestrian counts - Sidewalk
  - pc-c** Pedestrian counts - Crosswalk
  - vc** Vehicle Counts - Direction (d) + Signal (s)
  - sp.** Vehicle Speeds - Midblock (m) + Turning (t)



ZÜMRÜTEVLER  
SQUARE  
INTERIM  
IMPLEMENTATIONPRE-  
IMPLEMENTATION

	SURVEYOR 1	SURVEYOR 2	SURVEYOR 3	SURVEYOR 4	SURVEYOR 5	SURVEYOR 6
<b>8.30</b> (15 min)	Pedestrian counts sidewalk 1	Pedestrian counts sidewalk 2	Pedestrian counts sidewalk 3	Pedestrian counts sidewalk 4	Pedestrian counts sidewalk 5	Pedestrian counts sidewalk 6
<b>8.45</b> (15 min)	Vehicle counts street 1	Vehicle counts street 2	Vehicle counts street 3	Vehicle counts street 4	Vehicle counts street 4	Vehicle speeds
<b>9.00</b> (15 min)	Pedestrian counts crosswalk 1	Pedestrian counts crosswalk 2	Pedestrian counts crosswalk 3	Pedestrian counts crosswalk 4	Pedestrian counts crosswalk 5	Desire Lines
<b>9.15</b> (15 min)	Activity map	Activity map	Vehicle speeds	Data and information	Data and information	Data and information
<b>11.30</b> (15 min)	Pedestrian counts sidewalk 1	Pedestrian counts sidewalk 2	Pedestrian counts sidewalk 3	Pedestrian counts sidewalk 4	Pedestrian counts sidewalk 5	Pedestrian counts sidewalk 6
<b>11.45</b> (15 min)	Vehicle counts street 1	Vehicle counts street 2	Vehicle counts street 3	Vehicle counts street 4	Vehicle counts street 4	Vehicle speeds
<b>12.00</b> (15 min)	Pedestrian counts crosswalk 1	Pedestrian counts crosswalk 2	Pedestrian counts crosswalk 3	Pedestrian counts crosswalk 4	Pedestrian counts crosswalk 5	Desire Lines
<b>12.15</b> (15 min)	Activity map	Activity map	Vehicle speeds	Data and information	Data and information	Data and information
<b>15.50</b> (15 min)	Pedestrian counts sidewalk 1	Pedestrian counts sidewalk 2	Pedestrian counts sidewalk 3	Pedestrian counts sidewalk 4	Pedestrian counts sidewalk 5	Pedestrian counts sidewalk 6
<b>16.05</b> (15 min)	Vehicle counts street 1	Vehicle counts street 2	Vehicle counts street 3	Vehicle counts street 4	Vehicle counts street 4	Vehicle speeds
<b>16.20</b> (15 min)	Pedestrian counts crosswalk 1	Pedestrian counts crosswalk 2	Pedestrian counts crosswalk 3	Pedestrian counts crosswalk 4	Pedestrian counts crosswalk 5	Desire Lines
<b>16.35</b> (15 min)	Activity map	Activity map	Vehicle speeds	Data and information	Data and information	Data and information

SEPTEMBER - OCTOBER

2019

## Participation

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In addition to surveys carried out during data collection, meetings can also be organized with neighbourhood residents and shopkeepers. The aim of these meetings is both information exchange and the determination of project design priorities.

.....

A meeting at the neighbourhood was planned for 16 September, however, taking into consideration in fact that an interim implementation was to be carried out for the first time in Turkey, we decided that it would be best that communication with neighbourhood inhabitants should be established with the participation of the District Mayor; and also, feedback could be collected in the field during implementation.

.....

Participation of neighbourhood residents in urban policy processes enables transparency, democracy and accountability. It renders public institutions accessible.

It activates different stakeholders and enables the emergence of collaboration-based, innovative methods aimed at meeting real needs. And most importantly, it builds trust between urban stakeholders.

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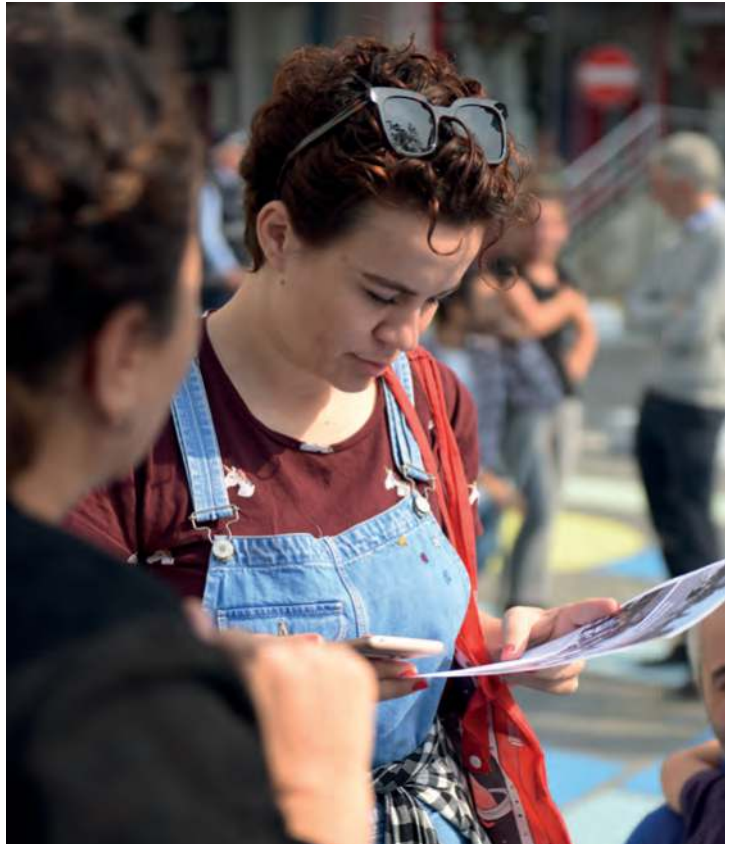
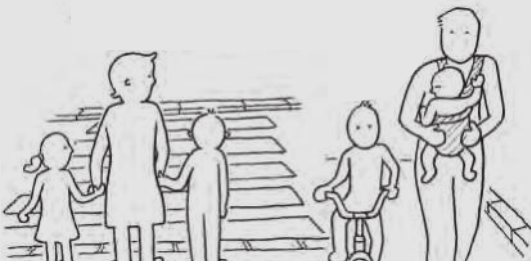
### LET'S THINK ABOUT OUR NEIGHBOURHOOD TOGETHER

Everyone in Maltepe, kids, the elderly and toddlers, we look forward to seeing you at the Neighbourhood Chat! Let us think together as a neighbourhood about the reorganization of Zümrütevler Square...

Let us discuss together both the current condition and needs of our square, which makes all our lives difficult with its chaotic traffic and parking problem, bothering small children and their families most.

**Where: Maltepe Zümrütevler Park**  
**When: 16 September Monday**

ISTANBUL99





## Project Design

We designed the Zümrütevler intersection, occupied by vehicles and a place where drivers used their vehicles at high speed without taking pedestrians or children into consideration, with consultancy from Maltepe Municipality and NACTO GDCl. The entire Superpool team took part in the design featuring a safe square and safe pedestrian pathways formed on the basis of measurements, observations regarding the use of the area and information received from neighbourhood residents. The square interim implementation was designed with reference to the street design guide published by NACTO GDCl, and pedestrian-priority traffic slowdown strategies were trialled.



Road diet aims to reduce the amount of public space allocated to vehicles, and to slow down traffic. Also known as lane reduction or road rechannelization, road diet is a technique used in transport planning and street design. In recent years, many cities have displayed the tendency to solve matters of pedestrian access and safety by implementing road diet to prioritize pedestrians. In the light of assembled data, in city centres, road and parking space used by motor vehicles is reduced to a minimum, and the gained area is used in a manner that increases pedestrian safety, or facilitates public transport services.

### ORGANIZATIONS IN ZÜMRÜTEVLER WITHIN THE ROAD DIET FRAMEWORK

#### Pedestrianization and the Organization of Parking Areas

Filiz Street, a street which was shown in collected data to have little vehicle traffic, was divided into two with a central refuge. It was transformed into a bidirectional street, taking up less space. The square, before the implementation, was used to park 7 vehicles. Roadside pockets for parking were formed for these vehicles and the square was organized for public use. The installation of kerbstones to prevent vehicles from entering the square was also planned.

#### Reducing Lane Width

We planned to reduce lane width to 3.20 metres.

.....

In contrast to motorways, lane width for motor vehicle use in neighbourhoods may be reduced to 3 – 3.20 metres. Narrowed roads within neighbourhoods force vehicles to slow down and thus prevent potential accidents. At the same time, vehicles cannot randomly park on narrowed roads in places other than those allocated specifically for parking. In this way, congestion due to randomly-parked cars is also prevented.

Road width gained from vehicle roads can be reorganized for the use of pedestrians and for vehicles to park in an organized manner. Wide sidewalks increase the liveliness of a street and enable pedestrians to walk in safety.

.....

### Reducing Width for Turn Lanes

By reducing width for vehicles turning at the square to 3 metres, we also reduced the width for public buses turning to 4,5 metres. With speed bumps and plastic lane dividers positioned in the approach to the intersection we aimed to direct drivers to keep in lane, reduce speed and if necessary, enter narrow turns at speeds that will enable them to give way to pedestrians.

.....

In contrast to motorways, in urban settings, within neighbourhoods, the necessary width for motor vehicles to turn is 3 metres. Drivers do not need to slow down to reverse, narrow radius corners also force vehicles to slow down. Pedestrian priority at crossings can only be secured if traffic is slowed down.

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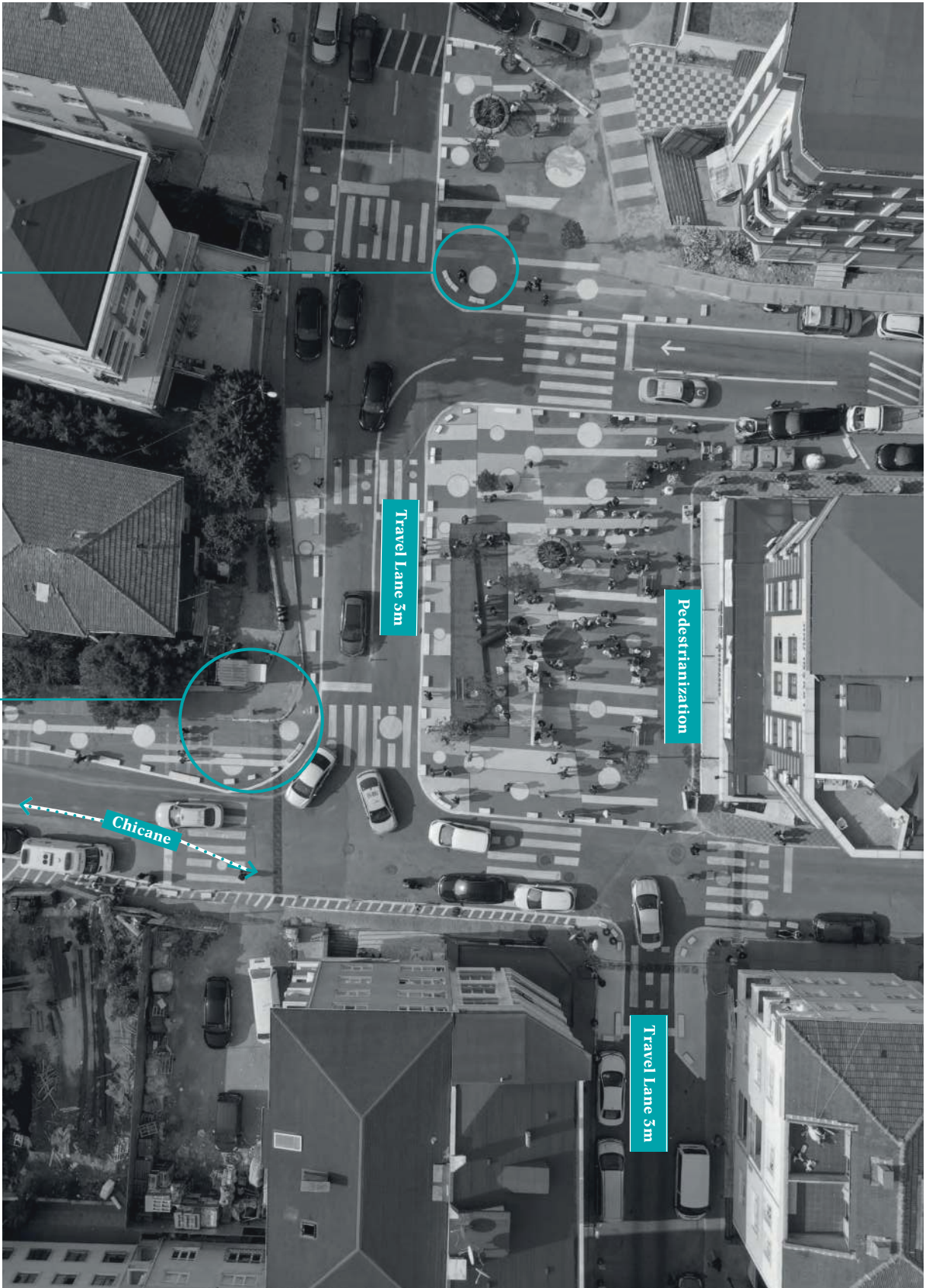


Walking is the most essential means of transport for human beings and thus must be prioritized. It is of utmost importance that pedestrian routes in the city are uninterrupted, wide and accessible, and that in places where pedestrian routes intersect with motor vehicle traffic, pedestrian safety is provided. The right of way of pedestrians was secured in Turkey with a law passed in the year 2019. According to Article 74 titled 'First right of way for pedestrians'; at intersection entry or exits and pedestrian and school crossings, where there is no officer or traffic lights, but has been posted with traffic signs and posts, drivers are obliged to slow down as they approach, and provide first right of way by stopping to pedestrians who are passing or are about to pass. Walking is as important for a healthy life as it is for transport. Well-designed pedestrian footpaths and public spaces enable better socialization.

ZÖMRÜTEVLER  
SQUARE  
INTERIM  
IMPLEMENTATION

Turning  
radii  
5 m

Turning  
radii  
4,5 m



## IMPLEMENTATIONS PLANNED IN ZÜMRÜTEVLER TO INCREASE WALKABILITY

### Sidewalk Extensions

In order to provide the minimum sidewalk width along roads leading to the square, we proposed the addition of a part of vehicle roads to the sidewalk by installing barrier elements and painting the surface.

.....

Sidewalks are the most important public spaces of a city, because they enable the access of pedestrians to public transport systems, form uninterrupted networks of contact and also, because they are living common spaces. Minimum sidewalk width should be 1,33 metres, in pedestrian pathways where there is low pedestrian flow this rises to 1,80 metres, in mid-density pathways to 2,40 metres and high-density pathways to 3,50 metres. There should be no exception to prevent the minimum width; and utility poles, guide signs and trees are not included in the measuring of the width.

.....

### Pedestrian Crossings

There were no pedestrian crossings in Zümrütevler before the implementation, and the right of passage of pedestrians was not observed. During surveys and counts we determined the most-frequently used trajectories by pedestrians, and planned pedestrian crossings at those points in a manner that enabled the continuity of pedestrian pathways.

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Pedestrian crossings also provide the information regarding right of passage at points where pedestrian pathways intersect with vehicle traffic.

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### Preventing Vehicle Parking at Curbs and Pedestrian Crossings

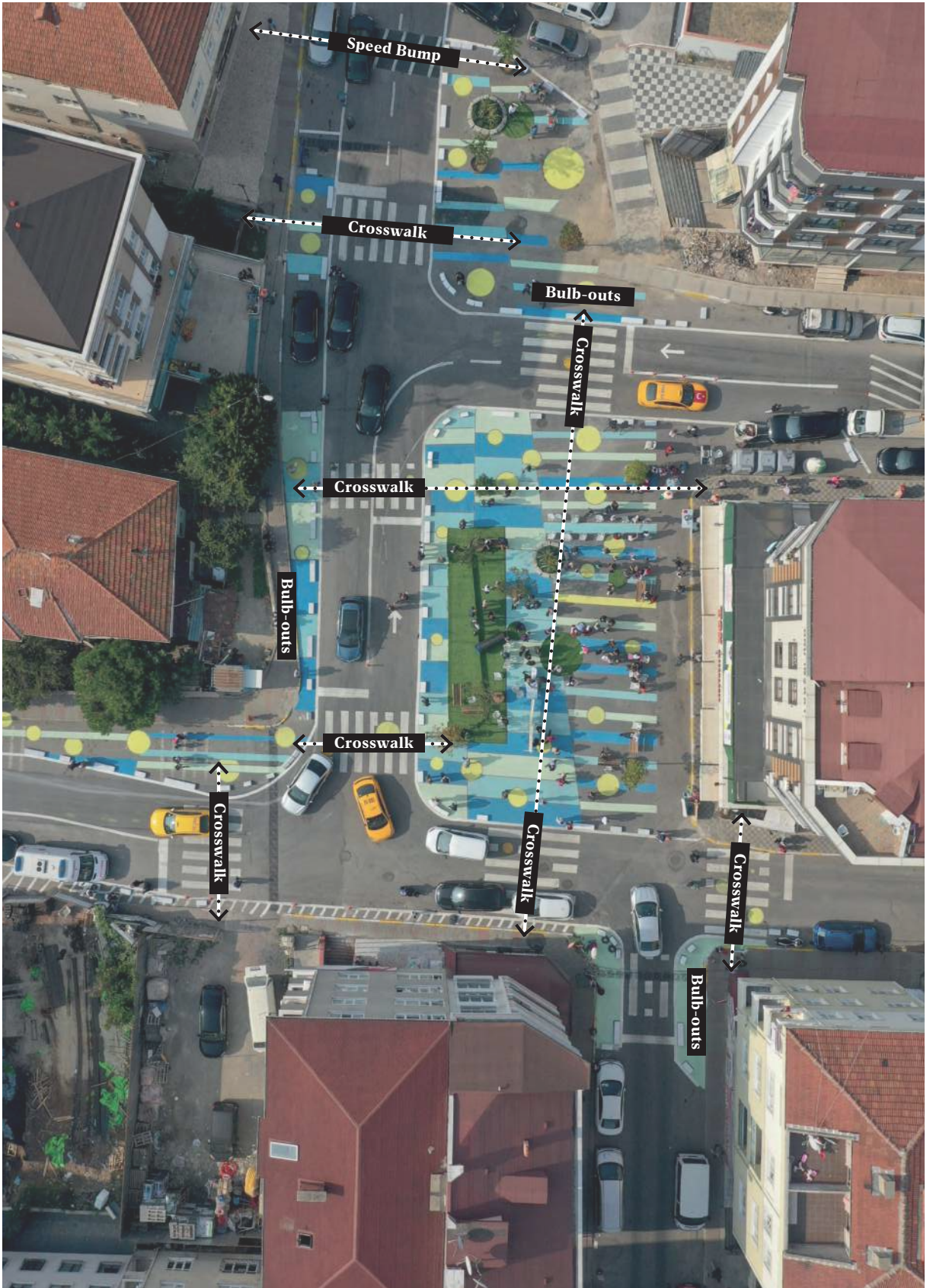
We decided to install kerbstones to prevent vehicles from parking at curbs and pedestrian crossings.

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It is of utmost importance for their security that pedestrians can clearly see oncoming vehicles as they cross a vehicle traffic. Vehicles parking at curbs pose a risk for pedestrians since they block the vision of pedestrians.

.....







OCTOBER 8

2019

## Coordination

Any project that brings together multiple institutions requires a great coordination effort. During the preparation process for the interim implementation, we carried out many field visits, training sessions and meetings. In addition to the communication of institutions during the process, we also worked in tandem with a total of 14 directorates of the municipality during implementation week.

A coordination meeting was held a week before the implementation: Directed by the Maltepe Municipality Directorate of Strategy, the Mayor, 14 directorates from within the municipality and we, Superpool, took part in the meeting. The directorates were informed about the project, and the distribution of tasks during implementation week was agreed upon. The week's program was shared with the directorates in as much detail possible.

### DISTRIBUTION OF TASKS AMONG MUNICIPALITY DIRECTORATES

#### Directorate for Strategy Development

Zümrütevler Square Interim Implementation coordination inside and outside the municipality.

#### Directorate of Technical Works

Providing necessary personnel, materials and construction equipment for the implementation.

#### Directorate of Parks and Gardens

Providing necessary personnel, materials (benches, trees, plants) for the implementation.



All parents have the right to safely walk, with their children, in the main square of their own neighbourhood. A child walking to school must be protected from any risk caused by traffic. Pedestrians must be able to cross the street from a point where they can clearly see traffic from all directions.

We, the Maltepe Municipality, are now initiating a transformation that will increase pedestrian safety across Zümrütevler Square.

16-18 October 2019  
Zümrütevler Square Interim Implementation



**Directorate of Municipal Police**

Evacuating the implementation area, removal of vehicles and occupations and serving of notifications so that the necessary arrangements can be implemented.

**Directorate of Planning and Projects – Department of Cartography**

Measurement and marking of the implementation zone in accordance with the project.

**Directorate of Sanitation**

The cleaning of the implementation zone, changing the places of waste containers, marking of road lines in the implementation zone.

**Directorate of Environmental Protection and Control**

Removal of recycle bins in the implementation zone.

**Directorate of Support Services**

Providing necessary personnel and materials (plastic chairs, chalk for opening day) for the implementation.

**Directorate of Press and Information**

Reporting for the press on, social media promotion and brochure printing for the implementation.

**Directorate of Public Relations**

Providing the personnel to listen and record the complaints and proposals of citizens in the event area.

**Office of the Private Secretary of the Mayor**

Ensuring the participation of the mayor in the street event.

**Directorate of Neighbourhood Representatives [Muhtarlık]**

Contacting the neighbourhood representative.

**Directorate of Culture and Social Affairs**

Organizing the street event.

**Directorate of Transportation Services**

Providing transportation for personnel, citizens and students taking part in the event.













# Implementation Week

ZÜMRÜTEVLER  
SQUARE  
INTERIM  
IMPLEMENTATION

IMPLEMENTATION  
WEEK

	7 OCTOBER MONDAY	8 OCTOBER TUESDAY	9 OCTOBER WEDNESDAY	10 OCTOBER THURSDAY	11 OCTOBER FRIDAY	12 OCTOBER SATURDAY
08.00						
09.00						
10.00						
11.00						
12.00						Notification by municipal police MALTEPE MUNICIPALITY
13.00		Coordination meeting MALTEPE MUNICIPALITY		Distribution of publicity leaflets MALTEPE MUNICIPALITY		Installation of a timelapse camera on a balcony overseeing the square SUPERPOOL+NACTO
14.00						
15.00	Submission of UKOME- approved design SUPERPOOL+NACTO					
16.00						
17.00					Drone (UAV) filming SUPERPOOL+NACTO	
18.00						
19.00					NACTO team in Istanbul SUPERPOOL+NACTO	

	14 OCTOBER MONDAY	15 OCTOBER TUESDAY	16 OCTOBER WEDNESDAY	17 OCTOBER THURSDAY	18 OCTOBER FRIDAY	19 OCTOBER SATURDAY
08.00	Removal of vehicles from the site MALTEPE MUNICIPALITY	KHAS University City and Children Studies graduate program students MALTEPE MUNICIPALITY SUPERPOOL+NACTO		Drone (UAV) filming SUPERPOOL+NACTO		
09.00					Preparation for opening-Final checks MALTEPE MUNICIPALITY SUPERPOOL+NACTO	
10.00						
11.00	Geometry test MALTEPE MUNICIPALITY					
12.00		Marking of vehicle roads and pedestrian crossings within the scope of the phasing plan MALTEPE MUNICIPALITY SUPERPOOL+NACTO	Painting implementation MALTEPE MUNICIPALITY	Painting implementation MALTEPE MUNICIPALITY	Interviews MALTEPE BELEDIYESI	
13.00					Drone (UAV) filming SUPERPOOL+NACTO	
14.00	Marking with the mapping team MALTEPE MUNICIPALITY			Coordination SUPERPOOL+NACTO		HOP Pop-up Playground
15.00		Installation of barriers MALTEPE MUNICIPALITY			Opening with the participation of the Mayor and feedback work MALTEPE MUNICIPALITY SUPERPOOL+NACTO	
16.00		Trees brought to square MALTEPE MUNICIPALITY	Planting-covering the traffic island with artificial turf MALTEPE MUNICIPALITY SUPERPOOL+NACTO	Urban furniture brought to and fixed at the square MALTEPE MUNICIPALITY		
17.00						
18.00						
19.00						

**GEOMETRY TEST**

On 14 October, Monday, we began the field work that would continue for five days. In the morning, municipal police removed the vehicles parked in the area. Waste containers were taken to their new locations and the square was cleaned with pressurized water. The cartography team carried out the first markings in line with the project design and we carried out the geometry test.

.....

It is proposed that a geometry test is carried out before the design is implemented in the field and that the impact on vehicle traffic of road diet arrangements are observed. Depending on the scale of the field, the test may continue for one or two days, or be planned for the beginning of the implementation process.

During one- or two- day test implementations both the design is checked in the field, and the design is experienced with neighbourhood residents and public officials. This also allows for communication among the stakeholders.

.....

For the Zümrütevler Square Interim Implementation, we carried out the geometry test on the day the implementation began in the field. Using municipal police barriers, we tested the turning widths proposed for public bus passage and the design was given its final form.



## Day 2

ZÜMRÜTEVLER  
SQUARE  
INTERIM  
IMPLEMENTATION

15 OCTOBER  
2019

IMPLEMENTATION  
WEEK

### PHASING AND THE PAINTING OF VEHICLE ROADS

The painting of vehicle roads began on the second day of the implementation and phasing was carried out in order to carry out the work without hindering traffic flow. Outer lines, lane lines and pedestrian crossings along vehicle roads were first marked with chalk by using rope and then marked with a road marking machine using solvent-based road marking paint.

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During interim implementations, in order to facilitate road marking, vehicle traffic may be temporarily interrupted, or well-planned phasing may be carried out to allow for the use of a single lane at all times for uninterrupted traffic flow.

.....

### INSTALLING BARRIERS

Sidewalk kerbstones and granite cut stone to be used as barriers during the interim implementation was brought from the warehouse of the Directorate of Technical Works. Installation began to apply the geometrical plan. The introduction of narrower lanes was met with the objection of some drivers, however, we did succeed in beginning to slow down vehicle traffic.

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Materials used as barriers aim to protect pedestrians, orient vehicle traffic and prevent sidewalks from being used as vehicle parking places. Pedestrian flow must be taken into consideration while installing barriers.

.....

In order to symbolize the fact that the change implemented at the intersection would be introducing a new living space, trees were brought from the warehouse of the Directorate of Park and Gardens, and the first trees were placed in the square before the work ended.





**PAINTING**

On the third day of the implementation we procured water-based exterior paints. We preferred water-based paint because it dries faster. Using chalk, rope and paper tape, we marked the areas to be painted. With Directorate of Technical Works personnel, the painting work began using cleaning brushes. We also encouraged passers-by and especially children at the square to join in the painting.

.....

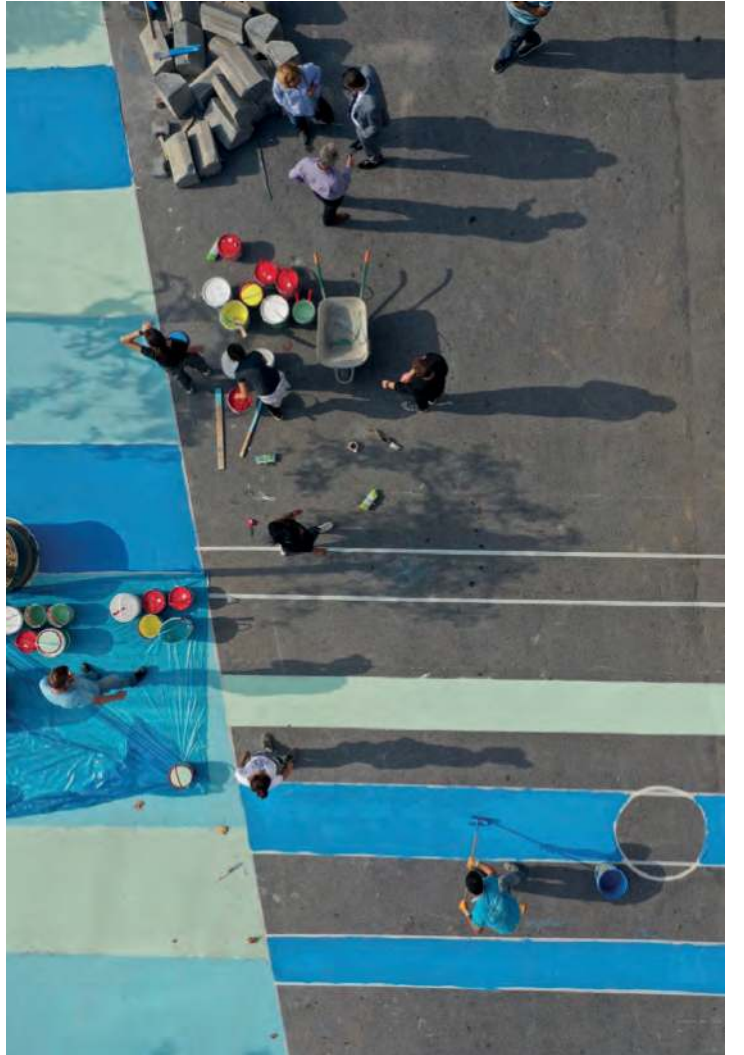
In interim implementations, the project is painted on the field to show the change taking place.

The painting of pedestrian-priority areas emphasizes both to motor vehicle drivers and pedestrians that there is a change taking place in this area and aims, especially, to facilitate a change of behaviour in drivers. The quality of the paint used is an important factor determining the duration of the interim implementation.

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18



**PLANTING**

We covered the already existing traffic island on Zümrütevler Square with artificial turf. The artificial turf and the plants installed at the end of the second day helped the square to be imagined as a green area. This attracted the attention of children and neighbourhood residents from the first moment on and we observed that it played a significant role in bringing together the inhabitants of the area.

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Plants and trees play a highly significant role in transforming a stagnant parking place for vehicles into a city square. A green area –and at times, even artificial turf helps people to relax and change their behaviour.

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**SEATING AND URBAN STREET FURNITURE**

On the fourth day, as the painting work continued, the Directorate of Parks and Gardens brought the small waste baskets, benches, remaining trees and other large plants to be installed in the square. The benches and waste baskets were fixed on location in the square.

.....

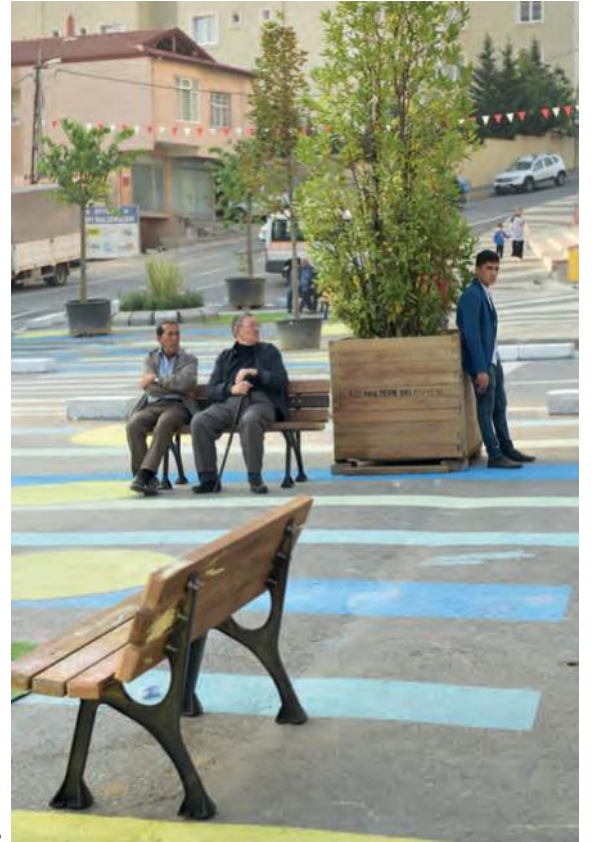
In any part of the city, there should be places where people of all ages can sit and spend time. To rest after a walk, to wait, to meet neighbours and chat, we need places like benches to sit on. Benches are often fixed on site. However, if we want to increase user comfort, then it is better to use mobile chairs and tables. This will allow people to drag chairs to the shade or the sun as they wish, or use more than one table to accommodate a larger group.

In addition to seating and tables; waste baskets, plant pots and urban play equipment are other important elements of public spaces. One must also ensure that fixed urban furniture does not obstruct pedestrian traffic.

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**OPENING EVENT PREPARATIONS**

Friday morning was reserved for final arrangements. Remaining sections were painted, plants were installed. A 2-metre-long piece of corrugated pipe was fixed in the area as a play equipment.

Chairs were brought in for the opening. The Directorate of Public Relations installed its own stand, information and survey panels, while the Directorate of Culture and Social Affairs installed the sound system for the event.

**OPENING AND RECEIVING FEEDBACK**

The five-day implementation was finalized with the event held at 2 pm on 18 October, Friday, with the participation of the Maltepe Mayor. In his speech, the mayor shared the goal of the interim implementation with neighbourhood residents. Directorate of Public Relations staff carried out surveys in the field to receive feedback about how residents came to the square, what they usually did at the square and what they would like to be able to do in the future. Detailed information about the interim implementation was shared with attending residents.

The opening event program was supported with play activities and a juggling performance – we made an effort to add a festive mood to the event. At different times throughout the event, around 300 people in total were present at the square.



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In interim implementations, the most important aim of the opening event is to create the most positive experience of change in physical space and receive feedback. Changes to improve pedestrian use often aim, first and foremost, to increase the life quality of women and children. Therefore, the opening event should be planned in a manner enabling the participation of women, children and other caregivers, and feedback must be received from these groups as much as from shopkeepers and vehicle owners in the area.


















.....



Maltepe, October 2019  
Zümrütevler Neighborhood, Interim Implementation

What did you do here?							
 Shopping	 Resting	 Eating/Drinking	 Working	 Meeting with friends	 Waiting	 Taking transportation	 Walking by
What would you like to do here?							
 Picnic	 Resting	 Eating/Drinking	 Reading	 Meeting with friends	 Social activities	 Physical activities	 Playing
Please mark		<input type="checkbox"/> I did / <input type="checkbox"/> I would like to do					

Maltepe, October 2019  
Zümrütevler Neighborhood, Interim Implementation

How did you get here?							
							
How would you like to get here?							
							
Please mark		<input type="checkbox"/> get here					

Maltepe, October 2019  
Zümrütevler Neighborhood, Interim Implementation

Which public space elements do you want to see more of?			
Add a dot next to the element(s) that you would like to see more of in this space.			
	Lighting		Plants and landscaping
	Seating		Wayfinding - signage
	Water fountains		Bike racks
	Weather protection		Waste receptacles
	Stroller parking area		Play elements
Draw your own	_____	Draw your own	_____
Draw your own	_____	Draw your own	_____
Comments:			
			

## Implementation Materials

### 1 BARRIER ELEMENTS

#### Light and flexible materials

Traffic cones → 10 items

Municipal police barriers → 25 items

#### Heavy and more fixed materials

Granite stone → 86 items

Kerbstones → 24 items

#### Fixed materials

Flexible bollards → 8 items

### 3 URBAN FURNITURE

#### Shade elements

Large plants in plastic pots → 6 items

Large plants in wooden pots → 2 items

#### Seating elements

Benches → 10 items

### 2 MATERIALS USED IN SURFACE APPLICATIONS

#### Paint

Solvent-based white road marking paint → 3 × 25 kg each

Water-based exterior paint → 6 × 15 litres each

#### Auxiliary materials

Rope

Street marking chalk

Paper tape

Roller brush

Cleaning brush

### 4 LANDSCAPE ELEMENTS

Artificial turf → 80 m<sup>2</sup>

Trees → 8 items

Large plants → 8 items

Small plants → 15 items

Sidewalk kerbstones → 24 items















→ Post-  
→ Implementation

## Maintenance

In calculating the implementation cost, we included post-implementation, maintenance labour and materials costs within the project budget. Regular maintenance can significantly extend the lifespan of our interim implementation. The adoption of a proactive prevention strategy will enable us to solve problems before they reach a state of neglect. What we learn from the maintenance experience during the interim implementation will also benefit our selection of materials and development of maintenance methods for the permanent investment.

.....

Prevention is the foundation of maintenance.

It is important to enable the participation of neighbourhood residents and their adoption of the space as a place of their own to stop vandalism.

All the field activities, surveys and the communication established in the field throughout implementation week supports both adoption and protection. Following implementation, regular field visits and observation allow for the timely identification of potential problems.

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### PREVENTION AND PROTECTION

Our data collection team was in the field for one day every week for a total duration of four months in both the pre- and post-implementation process in Zümrütevler, thus providing us with the means to inspect and observe. This experience, which enabled neighbourhood residents to reinforce their relationship with the new project in the pre-implementation period, also allowed for the timely detection of problems such as the removal of kerbstones or the entry of supermarket trucks into the square, and for municipal authorities to be contacted to report these problems.

## CLEANING AND SANITATION

Zümrütevler Square is cleaned and sanitized every day by a sanitation worker.

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Frequent cleaning keeps streets and public spaces in a safe and clean condition. The personnel in the field to carry out cleaning, can also observe on behalf of the municipality and identify potential problems early on.

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## PARTICIPATION OF LOCAL GOVERNANCE AND PARTNERS

Shopkeepers from around the square have remained in contact with us even after the implementation. They find the protection of the square important.

.....

In interim implementations, it is important to receive the support of neighbourhood residents and engage them in the process. Neighbourhood residents are the users of the square, and they can, for instance, help with the watering of plants, and also help in swiftly reporting any problems to the municipality.

In a similar manner, civil society institutions, hometown associations and schools can also be engaged in the process. Supporting the acquired public space with various events after the opening as well will enable both neighbourhood residents to adopt the space and to keep it clean.

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**EXTENDED OR LONG-TERM IMPROVEMENT AND MAINTENANCE**

At the end of the three-month interim implementation, we are now planning the permanent implementation of improvements and changes to Zümrütevler Square.



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Conditions and usage in the space may change over time. Adaptation to possible new uses is critical for long-term sustainability. This may also involve changes to the interim implementation, or making it more permanent.

.....

**Programming Public Space**

At Zümrütevler Square, we aimed for the active use of the square throughout the interim implementation, and organized weekly book-reading sessions and pop-up playground events for babies. In order to help the square to become a meeting point for the neighbourhood, we regularly visited the field as a team in the post-implementation period.

.....

The more frequently a street is used, the more pedestrian focused its life is, the higher its level of security. There is a direct relationship between the natural observance of streets by local residents, workers and children playing and low crime levels. The most important factor in people coming together is the presence of other people, just like kids playing in the children encouraging other kids to come out.

Therefore it is vital to regularly plan and realize events in public spaces.

(HEY! Imaginable Guidelines F:08

"Sokağı İzleyen Gözler")

.....



**HOP POP-UP PLAYGROUND**

Once a month, we install HOP at Zümrütevler Square. HOP is a pop-up playground that aims to develop the perception and trigger the creative and inventive instincts especially of babies and young children. HOP transforms the site where it is installed, whether it is a pitch, a street or the corner of a forest, into an undefined playground for experimental free play. Simple and lightweight materials like cardboard boxes, pieces of cloth, tape and rope are left in the activity zone to support children's play. In whichever way they wish, small children carry out adventurous experiments using these materials. They create, for instance, their own "play equipment" like tents, towers or tunnels.



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**READING BOOKS**

Once a week, we held reading sessions for babies at the square. The selection of books aimed at children in the 0-5 age group focused on urban, architectural and design concepts, and was formed specifically for the cognitive level of this age group. We also had brief chats about the book with the kids after the reading sessions. These reading sessions, which were held within the scope of the Urban95 program, where babies were especially invited, also attracted the interest of children living in the neighbourhood.



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## Data Collection

In accordance with the counting plan made before the implementation, on Thursdays, Fridays and Saturdays we carried out post-implementation counts on certain streets and directions with a 4-person team. We sought to carry out post-implementation counts at the same times as possible with pre-implementation counts. Collected data was digitally assembled, compared with pre-implementation data and formed the basis for goal-assessments.

## Assessment

### INCREASE IN PUBLIC SPACE

At Zümrütevler Square, 1075 squaremeters of vehicle carriageway was converted into pedestrian space and a square of 550 squaremeters was formed.

### SPENDING TIME

We observed a 72% post-implementation increase in the number of people spending time at the square. According to weekday afternoon observations, the number of babies and small children increased three-and-a-half fold, while the number of children in the 5-12 age group increased twofold. According to the same observations, 61% of children played with their friends, 21% played alone, and 18% played with their caregivers. The number of elderly people spending time in the square increased ten-fold.

### PEDESTRIAN USE

Counts carried out revealed a 21% increase in pedestrians passing through the square, while sidewalk use increased 30%. The number of adults accompanying children increased by 16%, while the number of children walking alone in the streets increased by 43%; of the children walking alone, 89% walked in the marked secure area.

### SENSE OF SAFETY

107 people took part in the pre-implementation face-to-face survey, and 49 people were interviewed on the event day and in the post-implementation process. Participants were asked to assess the pedestrian safety level of the square and streets leading to square on a scale of 0 to 5. (0: Not safe – 5: Very safe)

Pre-implementations, 75% of 107 people stated that they did not feel safe in the streets, while 17% remained neutral. Post-implementation, the percentage of those feeling unsafe on the streets was reduced to 24%. Also, 68% stated pre-implementation that they felt unsafe when crossing the street. This was reduced to 25% in post-implementation surveys.

In the light of all this data, and despite the fact that the number of post-implementation surveys was less than pre-implementation, we could say that the sense of safety on the streets has improved. The clear increase in the numbers of children walking alone or with caregivers and elderly people spending time at the square as observed in post-implementation counts support this assessment.

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## Project Partners

### BERNARD VAN LEER FOUNDATION

The Bernard Van Leer Foundation is a Netherlands-based civil society institution that acts with the aim of “improving the conditions of socially and economically disadvantaged children”. The Foundation has supported projects related to early childhood in more than 50 countries and currently, in addition to its global program, supports work in a diverse range of countries including Brazil, Ivory Coast, India, Netherlands and Turkey. The Bernard van Leer Foundation has been active in Turkey since 1994.

### NACTO GLOBAL DESIGNING CITIES INITIATIVE (NACTO GDCI)

Global Designing Cities Initiative (GDCI) is a program of NACTO, the National Association of City Transportation Officials, a New York-based, not-for-profit institution. GDCI is a team of designers, planners and urban strategists committed to working in support of city practitioners for safe, sustainable, accessible and fair transportation strategies. It focuses on empowering local officials and communities to become changemakers, equipping them with the knowledge, tools and tactics needed to improve urban mobility and fundamentally change the role of streets in cities.

### MALTEPE MUNICIPALITY DIRECTORATE OF STRATEGY DEVELOPMENT

The directorate has four departments. The Urban Strategies Research and Implementation Centre, also responsible of the coordination of the strategic urbanization work carried out in Zümrütevler, reports and publishes data on Maltepe, prepares research and implementation projects, creates resources from grant programs, provides coordination within the institution and forms working groups and commissions. The Mentoring Department provides in house training and career-advice for staff, while the Strategic Planning and Internal Control Department prepares the 5-year strategic plan, the annual operating report of the municipality, and also prepares the internal control action plan and reports on it.

### SUPERPOOL

Founded in 2006 by Selva Gürdoğan and Gregers Tang Thomsen, SUPERPOOL is a research-focused multidisciplinary architectural office. Its diverse field of activities range from architecture to urban planning, and from interior design to mapping, bringing together local solution practices with basic design values and differentiating itself through its approach to understanding, remembering and research. At Superpool, sociologists, artists and writers work together with architects to create a “pool” of ideas open to different collaborations.

### URBAN95 PROGRAM

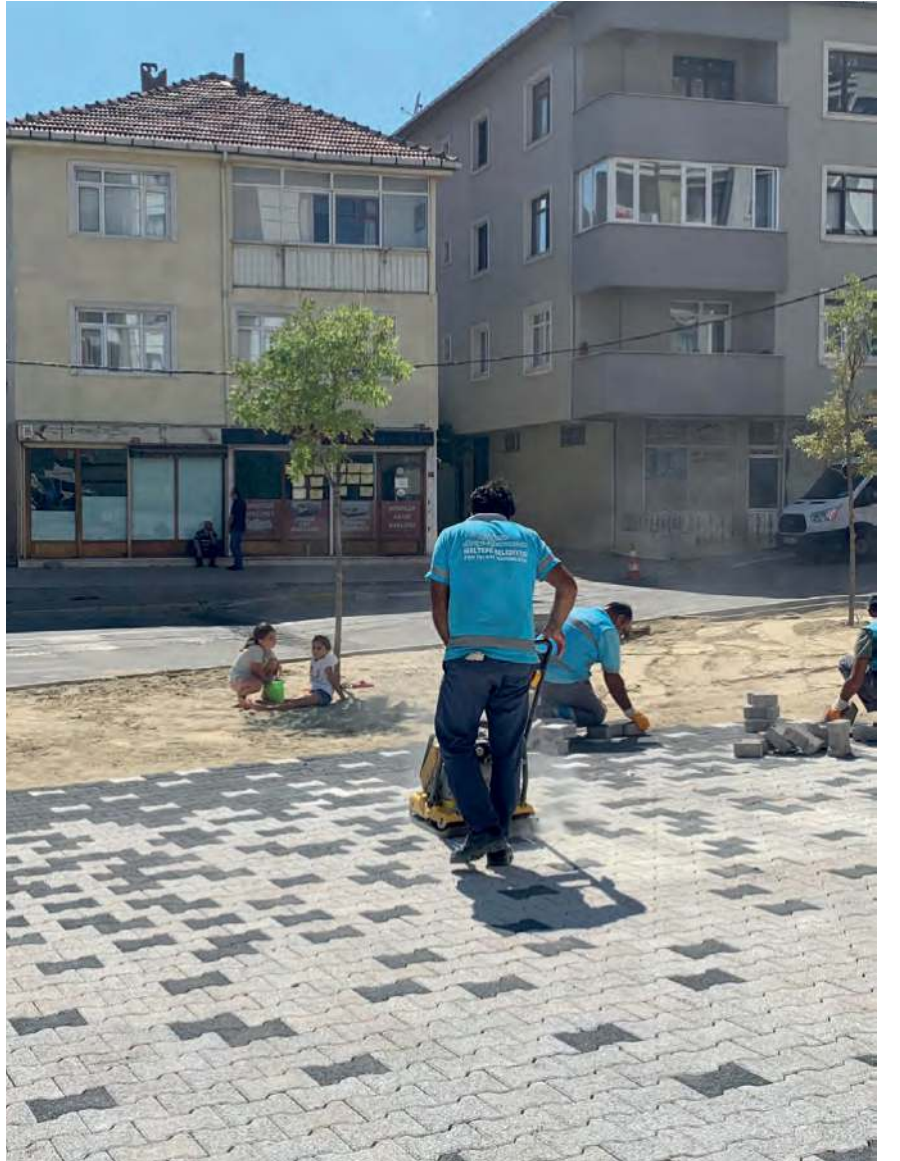
The Urban95 Program was prepared under the leadership of the Bernard van Leer Foundation, and with the participation of Boğaziçi University, Kadir Has University, TESEV and Superpool. The program asks “If you could see the city from an elevation of 95 centimetres –the average height of a healthy 3-year old- what would you do differently?” to find out the benefits, and the methods required to provide the benefits of this perspective, discussing this with local administrations. So far, pilot projects have been carried out with the Beyoğlu, Maltepe, Sarıyer and Sultanbeyli municipalities. Throughout the process, parks and services have been designed for children in the 0-3 age group and their families, and seminars, conferences and workshops organized within the scope of the program have drawn attention to the importance of early childhood. The aim of the program is to introduce the Urban95 perspective to the leading cities of Turkey.

## Afterword

In this booklet we have tried to share the details of the Zümrütevler Square Interim Implementation in order to show everyone imagining walkable cities including city administrators, urban planners, architects and entrepreneurs that this is not, in fact, a distant and difficult dream to achieve. The transformation we initiated in summer 2019 is being completed with the permanent implementation now, as we add the final touches to this publication.

It is our wish that public officials and administrators, educational institutions, designers and the inhabitants of this beautiful city begin to work together, and find excitement in producing together for more secure, pedestrian priority streets and lively public spaces!

To share similar experiences and for detailed information please write to us at → [kent95@superpool.org](mailto:kent95@superpool.org)







## ZÜMRÜTEVLER SQUARE INTERIM IMPLEMENTATION



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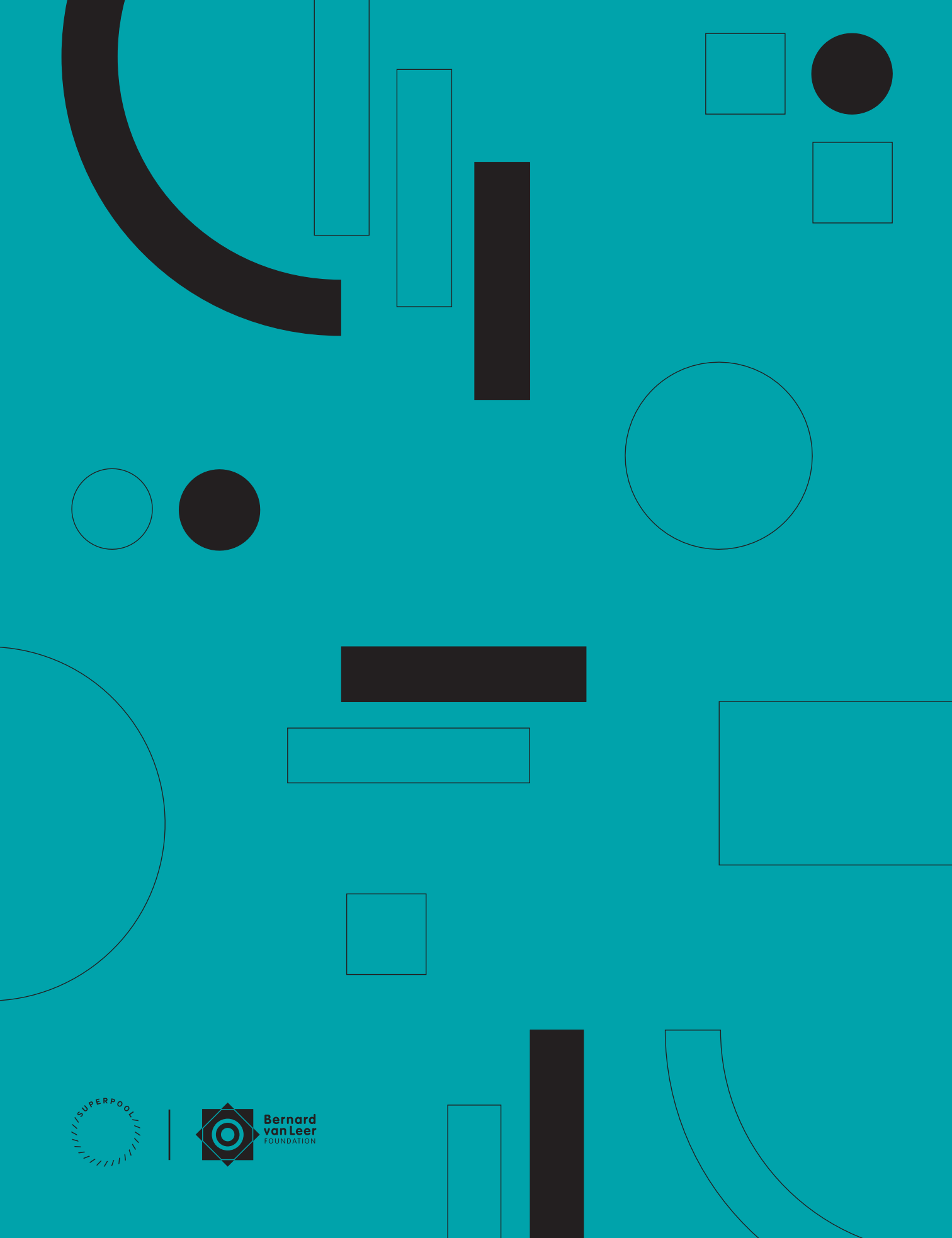












**Bernard  
van Leer**  
FOUNDATION