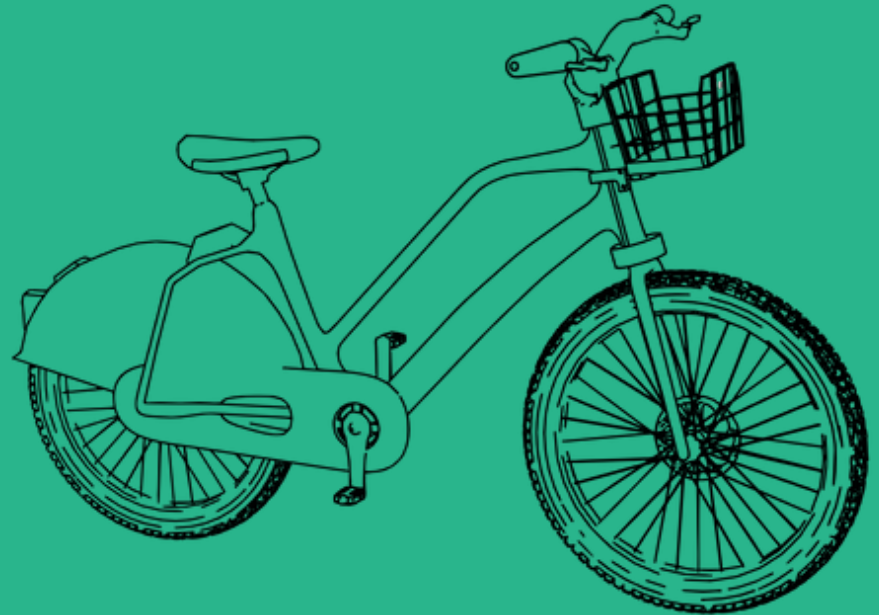


MEHUB: INTEGRATING A CONNECTED MICROMOBILITY INFRASTRUCTURE TO THE EXISTING PUBLIC TRANSPORT



AIM

The MeHUB initiative proposes to consolidate electric-powered shared micromobility vehicles (e-scooters and e-bikes) into hubs for effective management. Determining the locations of these e-hubs and the necessary charging infrastructure is critical for meeting the demands of commuters.



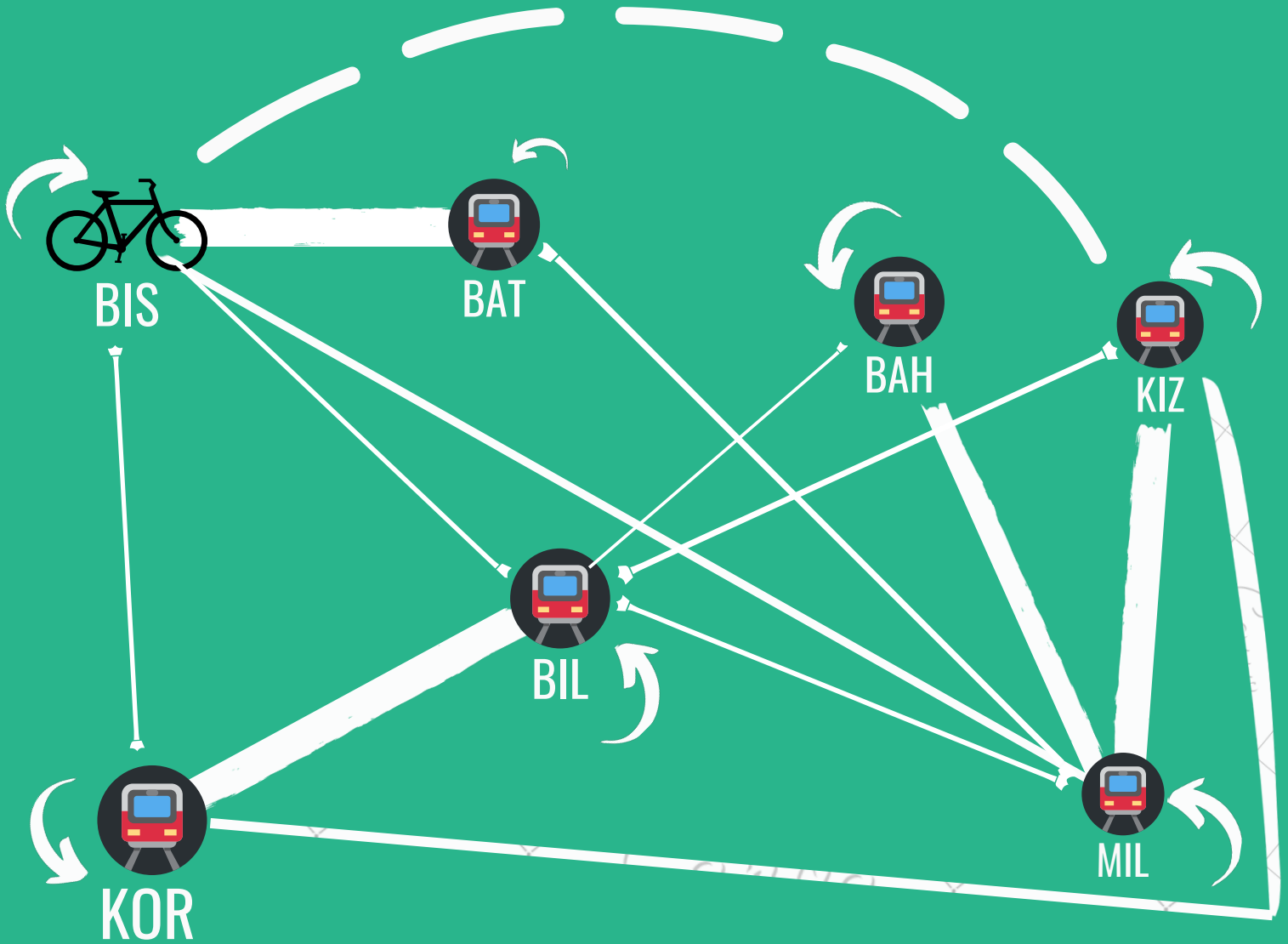
E-Hub Location Chart

| e-hub location | Abbr. | No. of Chargers |
|--------------------------------|-------|-----------------|
| Bahçelievler Metro Station | BAH | 12 |
| Batıkent Metro Station | BAT | 8 |
| Bilkent Metro Station | BIL | 14 |
| Bicycle Campus | BIS | 2 |
| Kızılay Metro Station | KIZ | 8 |
| Koru Metro Station | KOR | 8 |
| National Library Metro Station | MIL | 8 |

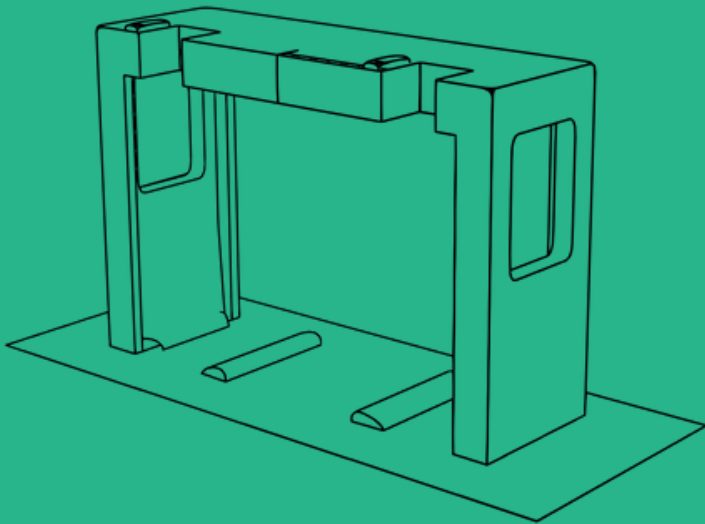
Number of Rides

Excluding trips <1 min

| From | BAH | BAT | BIL | BIS | KIZ | KOR | MIL | Total | Unidentified Attempts |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|-----------------------|
| BAH | 19 | | | 1 | 2 | | 10 | 32 | 61 |
| BAT | | 20 | | 4 | | | 1 | 25 | 8 |
| BIL | 2 | | 14 | 1 | 3 | 4 | 1 | 25 | 20 |
| BIS | | 5 | | 23 | 3 | 2 | 2 | 35 | - |
| KIZ | 3 | | 1 | 3 | 32 | 2 | 7 | 48 | 114 |
| KOR | | | 7 | 1 | 1 | 17 | | 26 | 24 |
| MIL | 8 | | 2 | 3 | 10 | | 16 | 39 | 44 |
| Total | 32 | 25 | 24 | 36 | 51 | 25 | 37 | 230 | 271 |



CONCLUSIONS



The location choices are supported by the data gathered. The implementation of e-hubs near metro stations and at Bicycle Campus gave users and residents visibility, and encouraged the use of e-bikes as a substitute for public transportation and the metro transport.

On the other side, the sizing choices, i.e. figuring out how many charging units are located at each location, may be altered to improve the utilization of the bike sharing system.

Designed by: Sarya Baran Kılıç