

Serving the underserved

The story of mapping Cairo's integrated Metro, Bus and Informal transit network.

Egyptian citizens waiting for a bus at an Informal Bus Station at Gamee't El-Dowal boulevard

Transport for Cairo (TfC)

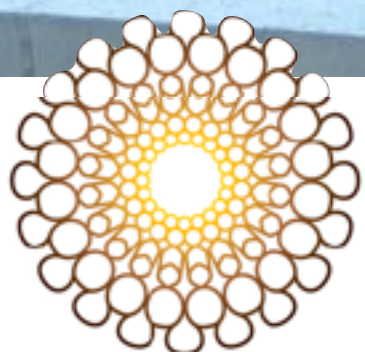
Humble start in Cairo (2015)



Digital Cairo Project Phase 1 - (August 2017)



October 3, 2017



إكسبو 2020
دبي، الإمارات العربية المتحدة
DUBAI, UNITED ARAB EMIRATES

Transport
for Cairo



مواصلات
للغاهرة

تكمين

تكون لتنمية المجتمعات المتكاملة
Takween Integrated
Community Development

digitalmatatus

Integrated Metro, Bus and Paratransit network



Beyond Mapping Workshop (August 2018)



Visual Cues

Position
Where in space the data is



Length
How long the shapes are



Angle
Rotation between vectors



Direction
Slope of a vector in space



Shapes
Symbols as categories



Area
How much 2-D space



Volume
How much 3-D space

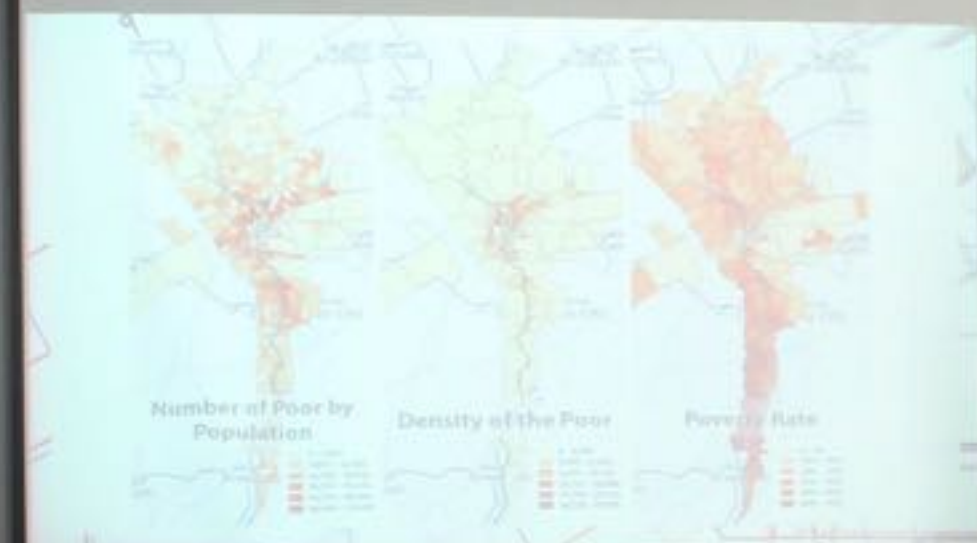


Color saturation
Intensity of a color hue

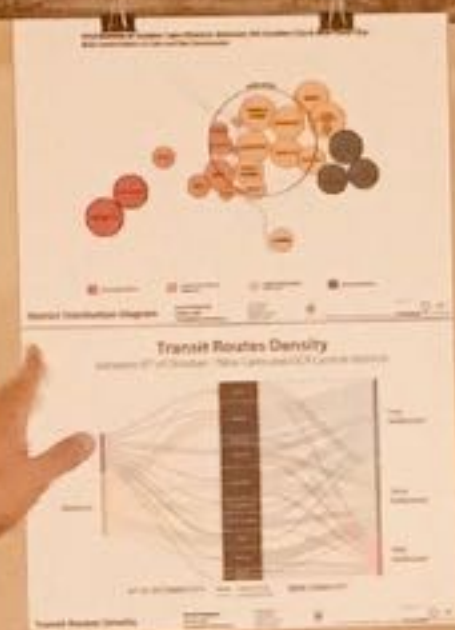


Color hue
Usually referred to as color



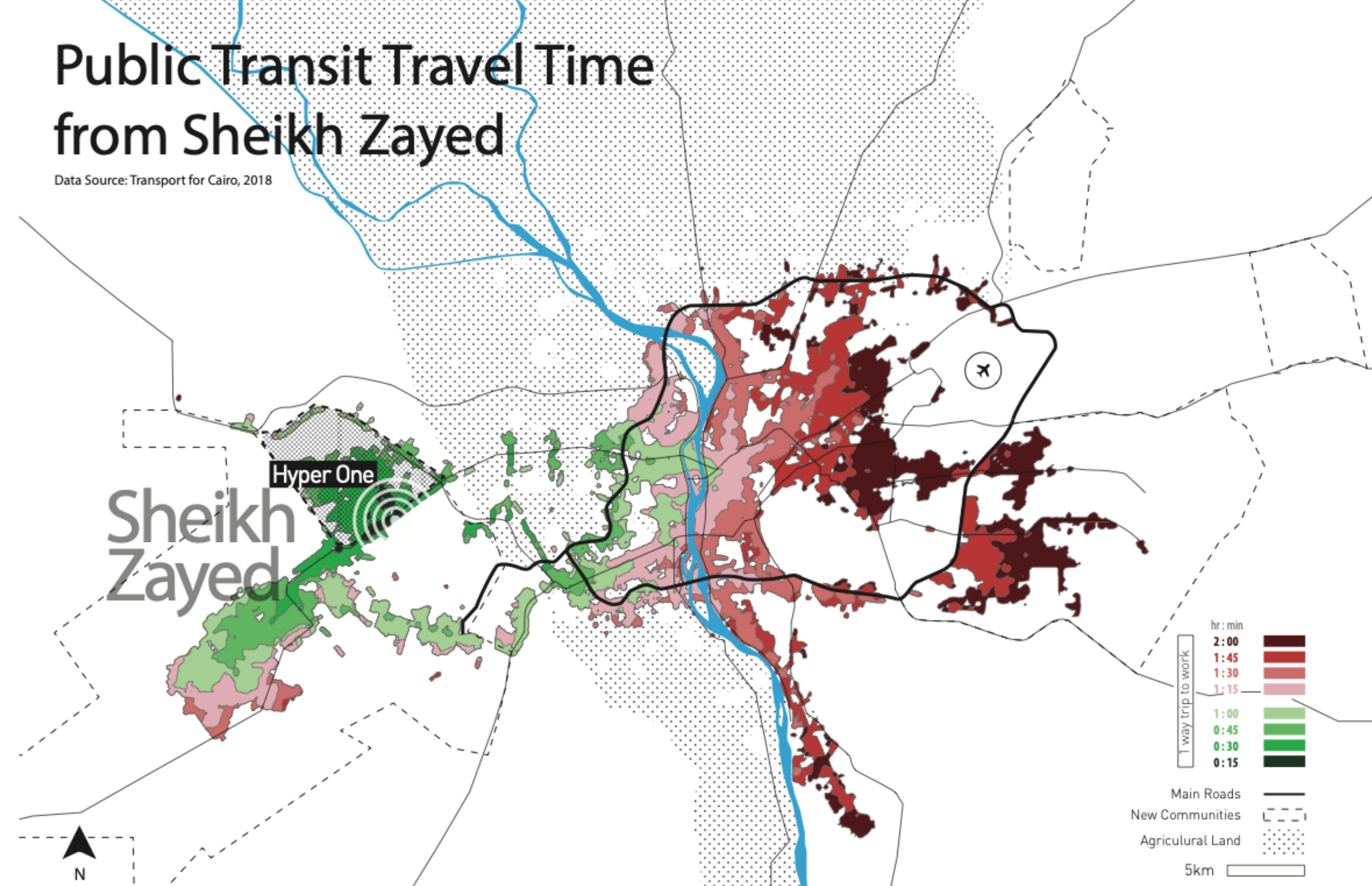




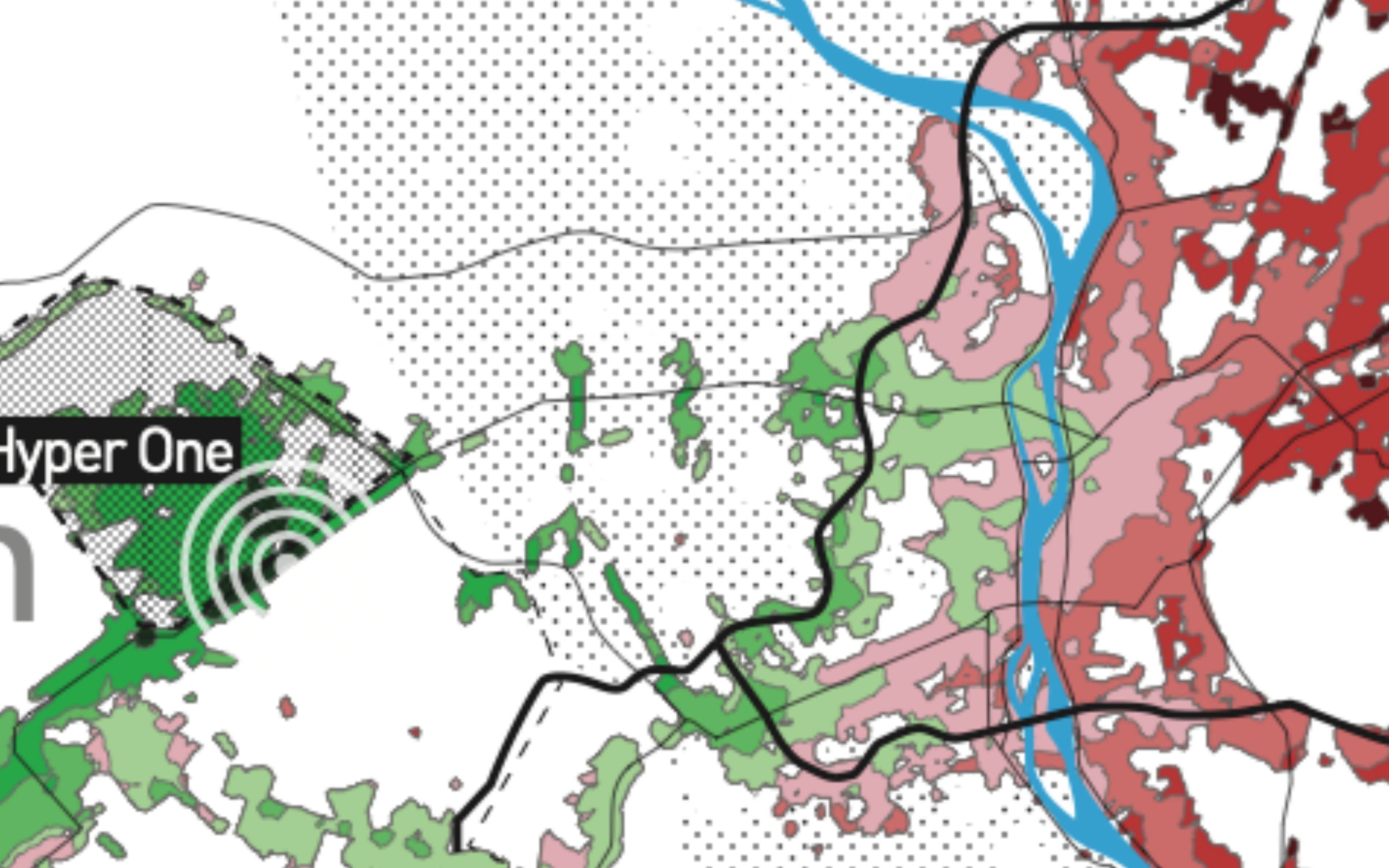


Public Transit Travel Time from Sheikh Zayed

Data Source: Transport for Cairo, 2018



Hyper One



Highway Stop



Me7war highway connecting Cairo the City with the Sheikh Zayed and 6th of October suburbs

2012



Image Courtesy: NASA Goddard Space Flight Center Image by Reto Stöckli (land surface, shallow water, clouds). Enhancements by Robert Simmon (ocean color, compositing, 3D globes, animation). Data and technical support: MODIS Land Group; MODIS Science Data Support Team; MODIS Atmosphere Group; MODIS Ocean Group Additional data: USGS EROS Data Center (topography); USGS Terrestrial Remote Sensing Flagstaff Field Center (Antarctica); Defense Meteorological Satellite Program (city lights).

1968

Image Courtesy Nasa



Policy Gap #1

Image Courtesy Nasa

Public Transport is invisible



Greater Cairo Region

Sheikh Zayed
City (1990's)

6th of October City
(1980's)

Inner-City
Cairo

Obour
(1990's)

10th Ramadan
(1980's)

Shorouk
(1990's)

Badr
(1990's)

New Cairo
(2000's)

New Administrative
Capital (2010's)

15th of May
(1980's)

Let's talk about accessibility

Housing policy

New Desert Communities 'NDC'





Walkable



non-motorized transport NMT
infrastructure

Friday Prayers - by car



Policy Gap - New urban developments have an accessibility problem

Can you spot people? (or the Suzuki?)





Paratransit 8 Seater Suzuki Chevrolet or DMF (Blue Licenseplates)

Short Name	Long Name	Vehicle Type	IDs	Trips By Direction
6O03	District 6-Motamayez	Bus	P_B_8_6O03	<ul style="list-style-type: none"> Last Stop: Al Motamayez Last Stop: Yellow Kiosk - 6th of October
6O04	Dolce-Motamayez	Bus	P_B_8_6O04	<ul style="list-style-type: none"> Last Stop: Al Motamayez Last Stop: Dolce
6O06	Laylat Al Qadr-Industrial Zone 3	Bus	P_B_8_6O06	<ul style="list-style-type: none"> Last Stop: Al Rashidi Al Mizan - Industrial Zone 3 Last Stop: Laylat Al Qadr
6O07	Al Souk Al Qadeem-El Hossary	Bus	P_B_8_6O07	<ul style="list-style-type: none"> Last Stop: Al Hossary Square Last Stop: Al Souq Al Qadeem
6O10	Laylat Al Qadr-Dolce	Bus	P_B_8_6O10	<ul style="list-style-type: none"> Last Stop: Dolce Last Stop: Laylat Al Qadr
6O12	El Hossary-Dolce	Bus	P_B_8_6O12	<ul style="list-style-type: none"> Last Stop: Dolce Last Stop: Al Hossary Square
6O14	District 7-Mostaqbal Entrance	Bus	P_B_8_6O14	<ul style="list-style-type: none"> Last Stop: Al Mostaqbal Entrance - Dolce Last Stop: 7th District (Hay Al Sabea) - 6th of October
6O15	Laylat Al Qadr-District 7	Bus	P_B_8_6O15	<ul style="list-style-type: none"> Last Stop: 7th District (Hay Al Sabea) - 6th of October Last Stop: Laylat Al Qadr
6O16	El Hossary-District 8	Bus	P_B_8_6O16	<ul style="list-style-type: none"> Last Stop: 8th District (Hay Al Thamen) - 6th of October Last Stop: Al Hossary

Estimated Travel Time

Stop Name
Shubra Al Kheima City Council
Shubra Al Kheima Metro Station
Ard Khedr Pedestrian Bridge - Shubra Al Kheima
Ring Road Entrance - Cairo Alexandria Agriculture Road
Madbah Steps - Ring Road
Ezbet Anwar Steps - Ring Road
Bahteem
Othman Steps - Ring Road
Al Amir Steps - Ring Road
New Marg Exit - Ring Road
New Marg Steps - Ring Road
Al Othman Motors - Ring Road
Al Moassasa Steps - Ring Road
Nadi Al Baraka Steps - Ring Road
Al Salam
10th of Ramadan (Asher Men Ramadan) Station
10th of Ramadan Station - Ismailiya Desert Road
Ahmed Galal Military Passage
Huckstep
Obour Square

Start	End	Frequency	Details
6:30	8:00	Every 5 mins.	Details
8:00	9:00	Every 5 mins.	Details
9:00	11:00	Every 5 mins.	Details
11:00	13:00	Every 5 mins.	Details
13:00	15:00	Every 5 mins.	Details
15:00	17:00	Every 5 mins.	Details

Time	Stop Name	Stop Sequence
9:00 - 9:00	Shubra Al Kheima City Council	1
9:03 - 9:04	Shubra Al Kheima Metro Station	2
9:05 - 9:05	Ard Khedr Pedestrian Bridge - Shubra Al Kheima	3
9:10 - 9:10	Ring Road Entrance - Cairo Alexandria Agriculture Road	4
9:11 - 9:11	Madbah Steps - Ring Road	5
9:13 - 9:14	Ezbet Anwar Steps - Ring Road	6
9:15 - 9:15	Bahteem	7
9:19 - 9:19	Othman Steps - Ring Road	8
9:20 - 9:21	Al Amir Steps - Ring Road	9
9:23 - 9:23	New Marg Exit - Ring Road	10
9:24 - 9:24	New Marg Steps - Ring Road	11
9:26 - 9:26	Al Othman Motors - Ring Road	12
9:27 - 9:28	Al Moassasa Steps - Ring Road	13
9:29 - 9:29	Nadi Al Baraka Steps - Ring Road	14
9:34 - 9:34	Al Salam	15
9:35 - 9:35	10th of Ramadan (Asher Men Ramadan) Station	16
9:55 - 9:55	10th of Ramadan Station - Ismailiya Desert Road	17
10:19 - 10:19	Ahmed Galal Military Passage	18
10:26 - 10:26	Huckstep	19
10:34 - 10:34	Obour Square	20
10:35 - 10:36	Carrefour - Obour	21
10:38 - 10:39	Amoun Fountain - Obour	22

Transport for Cairo maps formal and informal transport transit networks, providing raw data, enabling trip-planning and working on improving the system. The data is made available in GIS shapefiles or GTFS transit feeds. To learn more about the contents of the data, please download the Data factsheet.

[Learn More >](#) [Download Now >](#)

GTFS

[Learn More >](#) [Download Now >](#)

Build trip-planning apps, data visualizations and awesome models using the only GTFS feed for public transit in Cairo.

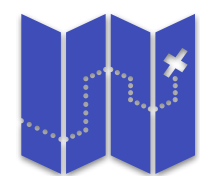
Table 3. Average Travel Times from El Sheikh-Zayed to Inner-City Cairo (in minutes)⁵

		Abbasseya	Abd El Moneim Riad	Attaba	El Moneeb - Metro	Giza Square - Metro	Midan Libnan	Ramses - Metro
Private Car	mean							
	min							
	median							
	max							
	sd							
	<div>Δ Travel Time</div> <div>Private Car as a reference point</div>	66%	71.3%	80.6%	39.7%	46.5%	72.1%	85.6%
Transit <div>Time in min, total trip duration including walking, waiting, interchanges</div>	mean							
	min							
	median							
	max							
	sd							
	Transit <div>Walking Distance in m</div>	mean						
min								
median								
max								
sd								
Transit <div>Number Transfers</div>		mean						





Transport for Cairo: An urban mobility lab



Geographic
mapping



Temporal
Modelling

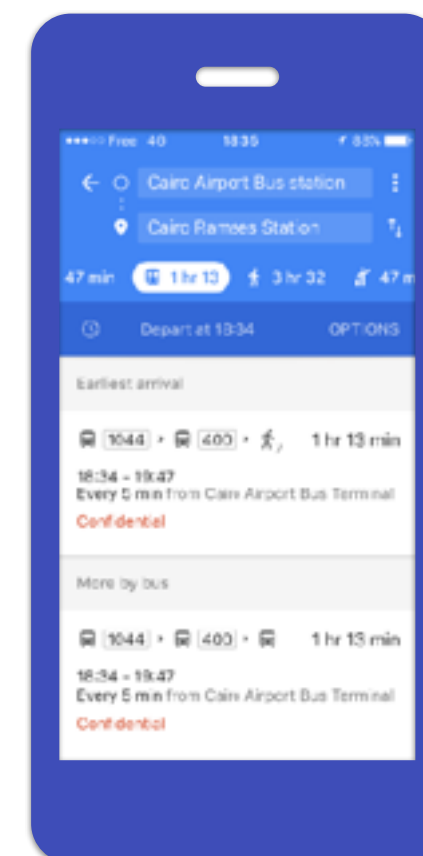


System
Adequacy

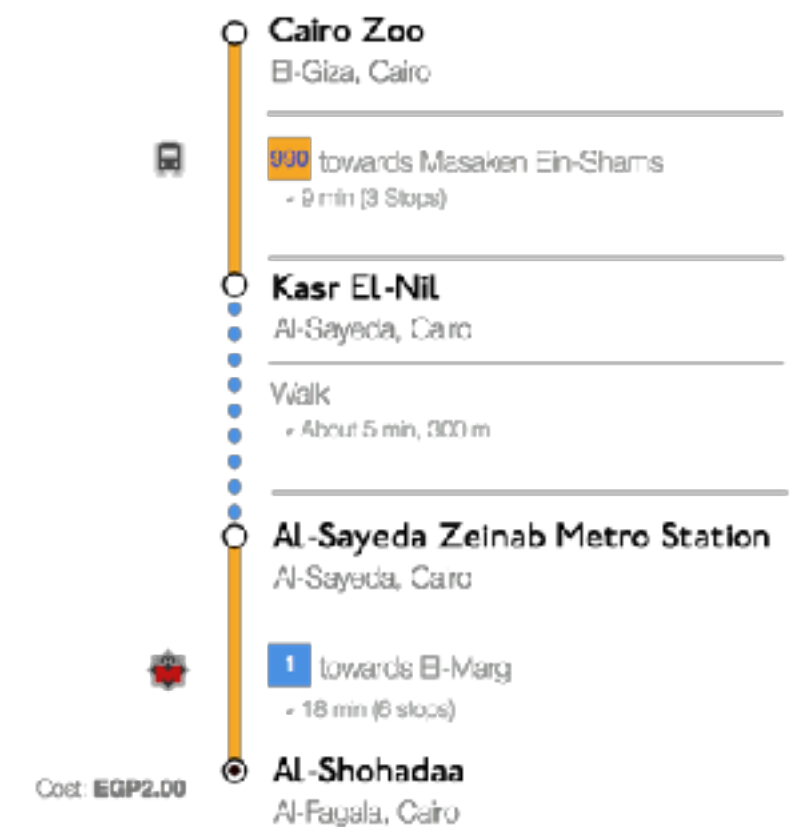


Qualitative
Research

Research



Product



We've benefited from this network





Policy paper



Cairo Urban Bus Study



Future Data Collection ?

Thank you

Address

4 Road 160 (Borg Reham),
Floor 8, Apt. 602
Maadi
Cairo
Egypt

Contacts

Mohamed Hegazy
m.hegazy@transportforcairo.com
EG: (+2) 0 1001422068
FR: (+33) 7 69 14 90 75
www.transportforcairo.com

Transport
for Cairo



مواصلات
للغاهرة



Have a break' and let others wrestle with traffic

Passengers sitting in crowded bus stop in Downtown, Cairo