Envisioning future travel in the GCR
Evolution of personal trips

School

3km
Evolution of personal trips

University

37 km

Evolution of personal trips

Parents

72 km
Friday Prayers ... by car
Multimodal Transport Strategy for the Greater Cairo Region

Location: Greater Cairo Region, Egypt
Date: Oct 18’ - June 19’
Client: The World Bank

Scope: Multimodal transport planning, Accessibility Analysis
Status: Completed

Visualization of the three chosen corridors. (TfC)
What TfC does

**Data Collection**
We create original actionable and high quality data. This includes public transport networks (formal / informal), distribution of populations, of jobs, and whatever else any given project requires.

**TfC Urban Mobility Lab**
The Urban Mobility Lab produces original research and actionable policy papers. It actively informs and enhances data collection and analysis methodologies, and the consultancy arm.

**Data Science and Analysis**
We work together with clients to transform the way projects use data to solve problems.

**TfC Training**
TfC works together with clients, universities and government to design high-impact events and provide capacity-building modules.

**Consultancy**
TfC consultants have served multiple projects around Africa. Seven partners and several team members with a broad spectrum of experience and expertise allow us to help our clients achieve their objectives.

**TfC Maps**
TfC Maps covers the production of transit maps for commuters, geographic data visualizations for data-driven insights and beautiful maps.
Cairo is a dense city

Cairo

Peak density within admin area (people/km²): 153,606
On est combien? - On vivent ou?

C'est quoi, le caire

New York
Peak density within admin. area (people/km²): 38,242

London
Peak density within admin. area (people/km²): 18,769

Cairo
Peak density within admin. area (people/km²): 153,606

Dar El Salam
Peak density within admin. area (people/km²): 42,241

Delhi
Peak density within admin. area (people/km²): 66,151
Where do we work?
Accessibility

(1) 60 minutes travel time using public transport
(2) From where I live to where I could work?

How many jobs can I access?

“50% accessibility score means I can access 50% of the jobs of the GCR, in 60 minutes”
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).
Policy Gap #1

Public Transport is invisible
Integrated Metro, Bus and Paratransit network
This data is created by Transport for Cairo 'TfC' with DigitalMatatus and Takween for Integrated Community Development, under the Digital Cairo Project supported by ExpoLive 2020.

1. This Map is not to scale thus the distances in the map differ from reality
2. The Interchange stops are shown for reference, however you can board, alight or change the transit mode from any point along the ride based on your request to the driver
3. It is always better to take the trip from its origin terminal to assure a comfortable free seating place
4. The lines shown in the map represent several routes that are combined as one direction route. Therefore before alighting, please ask at the station which vehicle/route goes to your desired destination (use the route names in the legend)
5. Some Routes have different return trip path, so be aware of the direction of these trips
User Experience - Breaking down the 60 min
Accessibility Analysis

Population + Work + Public Transport = Accessibility Score

17.59%
Where the network fails (Identifying gaps)
Active Travel

Image Courtesy ITDP, 2017
Electric Future users of Bike Lanes
<table>
<thead>
<tr>
<th>Mode</th>
<th>To Data Item</th>
<th>Abbasiya</th>
<th>Abdel Moneim Riyadh</th>
<th>Attaba</th>
<th>El-Moneeb - Metro</th>
<th>Giza Square - Metro</th>
<th>Lebanon Square</th>
<th>Ramses - Metro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Car</td>
<td>mean</td>
<td>73.8</td>
<td>59.9</td>
<td>70.4</td>
<td>42.6</td>
<td>45.6</td>
<td>45.2</td>
<td>75.8</td>
</tr>
<tr>
<td></td>
<td>min</td>
<td>51.4</td>
<td>40.7</td>
<td>50.5</td>
<td>21.8</td>
<td>25.4</td>
<td>26.3</td>
<td>56.1</td>
</tr>
<tr>
<td></td>
<td>median</td>
<td>74.5</td>
<td>61.2</td>
<td>71.7</td>
<td>43.5</td>
<td>46.5</td>
<td>46</td>
<td>76.9</td>
</tr>
<tr>
<td></td>
<td>max</td>
<td>87.3</td>
<td>71.2</td>
<td>82.2</td>
<td>57</td>
<td>60</td>
<td>56.7</td>
<td>89.3</td>
</tr>
<tr>
<td></td>
<td>sd</td>
<td>8.8</td>
<td>8.1</td>
<td>8.2</td>
<td>8.9</td>
<td>8.7</td>
<td>8</td>
<td>8.3</td>
</tr>
<tr>
<td>Journey Gap Travel Time of Transit to Private Car</td>
<td>mean</td>
<td>112.7</td>
<td>85.9</td>
<td>90.6</td>
<td>99.3</td>
<td>92.8</td>
<td>66.7</td>
<td>92.7</td>
</tr>
<tr>
<td></td>
<td>min</td>
<td>73.3</td>
<td>45.6</td>
<td>49.5</td>
<td>57.9</td>
<td>51.8</td>
<td>26.5</td>
<td>50.9</td>
</tr>
<tr>
<td></td>
<td>median</td>
<td>112.9</td>
<td>85.8</td>
<td>89.2</td>
<td>99.8</td>
<td>92.9</td>
<td>66.4</td>
<td>94.2</td>
</tr>
<tr>
<td></td>
<td>max</td>
<td>137.1</td>
<td>116.3</td>
<td>114.2</td>
<td>121.6</td>
<td>116.4</td>
<td>99.8</td>
<td>115.6</td>
</tr>
<tr>
<td></td>
<td>sd</td>
<td>14.5</td>
<td>15.8</td>
<td>13.3</td>
<td>15.5</td>
<td>14.8</td>
<td>15.6</td>
<td>13.5</td>
</tr>
<tr>
<td>Transit Walking Distance in min</td>
<td>mean</td>
<td>1268</td>
<td>1244</td>
<td>1348</td>
<td>2129</td>
<td>1951</td>
<td>1225</td>
<td>1450</td>
</tr>
<tr>
<td></td>
<td>min</td>
<td>357</td>
<td>193</td>
<td>397</td>
<td>905</td>
<td>890</td>
<td>193</td>
<td>639</td>
</tr>
<tr>
<td></td>
<td>median</td>
<td>1194</td>
<td>1138</td>
<td>1322</td>
<td>2042</td>
<td>1888</td>
<td>1120</td>
<td>1400</td>
</tr>
<tr>
<td></td>
<td>max</td>
<td>2108</td>
<td>2435</td>
<td>3011</td>
<td>3199</td>
<td>3504</td>
<td>3146</td>
<td>2962</td>
</tr>
<tr>
<td></td>
<td>sd</td>
<td>523</td>
<td>594</td>
<td>567</td>
<td>643</td>
<td>713</td>
<td>666</td>
<td>528</td>
</tr>
</tbody>
</table>

| Transit Number Transfers     | mean         | 1.61     | 0.68                | 1.82   | 1.57             | 0.96                | 0.79          | 1.64          |

**TABLE 1** Travel Times from Sixth of October to Inner-City Cairo (in minutes)\(^1\)
Cairo is perfect for micromobility.
Conclusions

1. Cairo as a labor market is below potential → Ability to travel is the ability to work

2. Successful Public transport depends on Active Travel; it gets us to work

3. It’s time to build infrastructure for Accessibility
   Pedestrian walk-ways & Cycle Lanes
Friday Prayers ... should not be by car
Thank you