The evolution of cycling patterns in Tel Aviv- past experience and future trends

International Seminar on Cycling Policies

26.2.2015, Malaga

Dr. Benjamin Maor

Haggai Yaron

TEL AVIV - YAFO Municipality and CIVITAS 2MOVE2 Project
Tel Aviv

The Heart Of The Metropolitan Area
The Financial, Economic & Cultural Centre
An Attractive City for Living
### The Heart Of The Metropolitan Area

<table>
<thead>
<tr>
<th></th>
<th>Tel Aviv</th>
<th>Metropolitan area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>52 Km²</td>
<td>1,491Km²</td>
</tr>
<tr>
<td>Population</td>
<td>414,600</td>
<td>3,464,100</td>
</tr>
<tr>
<td>Employees</td>
<td>394,700</td>
<td>1,665,220</td>
</tr>
</tbody>
</table>

**Car Morning Peak**  
7:30 = 8:30
500,000 cars enter Tel Aviv every day

1,000,000 people enter the city every day

1 out of 8 Israelis work in Tel Aviv

62% of daily train trips in Israel are to and from Tel Aviv
An Attractive City for Living

High quality urban environment

A well balanced land-use mix

A well-developed public domain

A city well-connected with the sea

A multi-mode, efficient, sustainable transport system
### Modal Split

**Distribution of trips per transport mode in Tel Aviv**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On foot</td>
<td>16%</td>
</tr>
<tr>
<td>Private transportation</td>
<td>43%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>28%</td>
</tr>
<tr>
<td>Cycling</td>
<td>13%</td>
</tr>
</tbody>
</table>
Planning for pedestrians and cyclists is necessary for creating a sustainable and people-friendly city.
Tel Aviv a People-Friendly City

People-friendly cities require the right infrastructure

Infrastructure that promotes sustainable mobility such as cycling and walking
Walking or Cycling?

0.5 km - Walk
5 km - Cycle
The Infrastructure

130 km of bicycle routes have been implemented to promote non-motorised modes of transport.

(190 km by 2020)
Mode of travel to main place of occupation – in Tel Aviv

“How do you usually get to your main place of occupation?”

- Car - as the driver or passenger
- Bus one or more buslines
- Bicycle
- Walking
- Motorbike or other 2-wheeled motorised vehicle
- Taxi - private or sherut
- Train

*Presented is a percentage of respondents more than one answer could be given, hence the total answers per year exceeds 100%.*
People who cycle to their main place of occupation – over time

- 2007: 8.5%
- 2010: 56.0%
- 2012: 47.0%
- 2014: 25%

The Civitas Initiative is co-financed by the European Union.
Cycling is Continuously Growing

Growth percentage

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>20%</td>
</tr>
<tr>
<td>2009</td>
<td>21.9%</td>
</tr>
<tr>
<td>2011</td>
<td>23.6%</td>
</tr>
<tr>
<td>2012</td>
<td>25.9%</td>
</tr>
<tr>
<td>2014</td>
<td>130%</td>
</tr>
</tbody>
</table>
Tel-O-Fun – Tel Aviv Bicycle Rental Scheme was introduced in April 2012.

Today:

1,800 Bicycles
182 Docking Stations
Shared Bike Usage Spatial-Temporal Distribution

Bike Trips (Thousands)

12 AM 6 AM 12 PM 6 PM 12 AM

5 March 2015
All the Residents

% of Residents Who Cycle

Do you cycle? If yes – how often?

- 69% of those who cycle daily – cycle to work/school

- Don’t cycle, 63.0%
- Cycle - daily, 12.0%
- Cycle - 1-2 times a week, 6.5%
- Cycle - less frequently, 8.3%
- Cycle - 3-5 times a week, 6.0%
- Cycle once a week, 4.3%

Total cyclists – 37%
Bike Usage in Tel Aviv (Rental Bike Data)

Trip Duration

Cumulative Trips [Thousands]

Annual Subscribers Trips [Thousands]

Trip Distance Distribution (85% of the trips)

Trips [Thousands]

Min. Distance Between Stations [m]
Total Cyclists

Type of Bicycle (percent)

What type of bicycle do you use?

- Regular bicycle, 69%
- Tel-O-Fun, 20%
- E-bicycle, 11%
Parking Availability and Shared Bike Usage

![Bar graph showing parking usage and demand]

- **Parking Zone**
  - 1
  - 2
  - 4
  - 10
  - 30
  - 50

- **Bike Use [Thousands]**
  - 0
  - 1,000
  - 2,000
  - 3,000
  - 4,000
  - 5,000
  - 6,000
  - 7,000
  - 8,000

- **Legend**
  - Total Trips
  - Parking Demand/On-Street Supply

---

5 March 2015
All those working / studying

Mode of travel to main place of occupation – by area

<table>
<thead>
<tr>
<th>Area</th>
<th>Car - as driver or passenger</th>
<th>PT</th>
<th>Cycling</th>
<th>Walking</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>5</td>
<td>19</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Centre</td>
<td>12</td>
<td>19</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>East</td>
<td>9</td>
<td>25</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>South &amp; Yafo</td>
<td>10</td>
<td>15</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Bar chart and pie charts showing the percentage of each mode of travel by area.
Shared bike scheme ("Tel-O-Fun") Spatial Distribution

Weekday Bike Sharing Uses

- Max 640,000
- Max 280,000
- Max 140,000
- Max 40,000

Legend:
- Red: Max 640,000
- Yellow: Max 280,000
- Green: Max 140,000
- Light Green: Max 40,000
The Commuters – our challenge
Thank you!

Dr. Benjamin Maor
Haggai Yaron

Contact Details
Tel Aviv -Yafo municipality
maor_b@mail.tel-aviv.gov.il
haggai_y@mail.tel-aviv.gov.il
http://www.civitas.eu
http://civitas.eu/content/tel-aviv-yafo
Cyclists/Pedestrian Conflicts – over time

Pedestrians get in the way of Cyclists
- 2012: 19%
- 2014: 14%

Cyclists get in the way of Pedestrians
- 2012: 45%
- 2014: 13%

Don't Get in the Way
- 2012: 81%
- 2014: 86%

Get in the Way
- 2012: 55%
- 2014: 87%