The role of public transport in the Strategic Sustainable Mobility Plan of the Madrid Region, Vision 2025

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1. Introduction to Madrid Region

MADRID REGION TERRITORY & MOBILITY

- Madrid is one of 17 autonomous regions of Spain, formed up by 179 municipalities,
- Madrid Region with almost 6.5 million inhabitants in an area of 8,028.5 km2.
- Madrid City 3.2 million inhabitants.

The total number of trips in the Madrid region during a weekday is 12.9 millions.

70% of this trips are made by mechanized modes and 30% by walking.

MODAL SPLIT OF TOTAL TRIPS IN MADRID REGION

- Private vehicle: 39%
- Public transport: 26%
- Walk: 30%
- Others: 3%
## REGIONAL PUBLIC TRANSPORT NETWORK

### PUBLIC TRANSPORT SYSTEMS OF MADRID REGION (2014)

<table>
<thead>
<tr>
<th>Transport Modes</th>
<th>No. Lines</th>
<th>Length of network (km)</th>
<th>Length of lines (km)</th>
<th>Stations/ Stops of network</th>
<th>Stations/Stops of lines</th>
<th>No. vehicles</th>
<th>Vehicles-km (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>12+1</td>
<td>267.9</td>
<td>267.9</td>
<td>235</td>
<td>285</td>
<td>2,326</td>
<td>164.1</td>
</tr>
<tr>
<td>Urban Bus Zone A (EMT)</td>
<td>204</td>
<td>1,531.7</td>
<td>3,621.0</td>
<td>4,630</td>
<td>10,653</td>
<td>1,907</td>
<td>88.9</td>
</tr>
<tr>
<td>Urban Bus other municipalities &amp; suburban</td>
<td>437</td>
<td>9,049.7</td>
<td>20,746.0</td>
<td>6,947</td>
<td>20,964</td>
<td>1,813</td>
<td>170.2</td>
</tr>
<tr>
<td>Light rail</td>
<td>4</td>
<td>35.8</td>
<td>35.8</td>
<td>56</td>
<td>57</td>
<td>220</td>
<td>12.7</td>
</tr>
<tr>
<td>Other rail concessions (TFM)</td>
<td>2</td>
<td>19.0</td>
<td>19</td>
<td>6</td>
<td>6</td>
<td>21</td>
<td>3.5</td>
</tr>
<tr>
<td>RENFE suburban train</td>
<td>9</td>
<td>391</td>
<td>778.3</td>
<td>92</td>
<td>166</td>
<td>1,127</td>
<td>146.5</td>
</tr>
</tbody>
</table>

### DEMAND BY MODE

1,371.1 million of journeys in Public Transport System in 2014
2. CRTM- Public transport Authority of Madrid Region

- CRTM was **created by law 5/1985, 16\(^{th}\) May**, of the Regional Government of Madrid.

- CRTM is an **autonomous agency** of Madrid Regional Government.

**CRTM FUNCTIONS**

- **Planning** of Public Transport Infrastructures.

- **Establishment of an integrated Fare System** for the whole Public Transport Network.

- **Planning of Transport Services** and Definition of **Co-ordinate Operating Programs** for all Transport Modes.

- **Audit** the integration of public transport with new urban planning.

- **Development of a management policy** and **finance framework** of the System.

- **Creation of an Overall Image** of the Public Transport System where CRTM holds the external relation with the users.
Active paper of CRTM in SUMPS

- 2005-2006 **CRTM** collaborates with **IDAE** for publishing Practical Guides of SUMPS and Work Transport Plans.

- 2005-2006 Editing SUMPS of Getafe, agreement between City Council, **IDAE** and **CRTM**

- 2006 Work Mobility Round Table

- From 2007, **CRTM** is the body delegated by Madrid Region to **manage SUMPS**.

- CRTM advises municipalities, follows the mobility studies, support municipalities, organize conferences, ...

### 2. CRTM - Public transport Authority of Madrid Region

**SUMPS IN MUNICIPALITIES OF THE REGION**

- 31 municipalities have SUMPs
- 86.8% of Madrid Region population under SUMPs

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**SUMP Madrid City >3 Millions inhabitants**

**SUMP Cities > 100,000 inhabitants**

**SUMP Cities > 30,000 inhabitants**

**SUMP Cities > 10,000 inhabitants**

**Cities without SUMPs >10,000 inhabitants**
3. The Strategic Sustainable Mobility Plan of the Madrid Region, Vision 2025

One step further...

**VISION 2025**: For an efficient, safe and sustainable integrated public transport system in Madrid Region

- 3 strategic objectives
- 9 general objectives
- +200 actions in 12 measures
3. The Strategic Sustainable Mobility Plan of the Madrid Region, Vision 2025

VISION 2025: For an efficient, safe and sustainable integrated public transport system in Madrid Region

3 STRATEGIC OBJECTIVES

**ECONOMIC AND FINANCE**
- 1. Support for the economic development of the Region
- 2. Stable socioeconomic mobility framework
- 3. Improvement of mobility

**SOCIAL**
- 4. Improvement of quality of life of Madrid’s residents
- 5. Improvement of safety
- 6. Improvement of transport accessibility

**ENVIRONMENTAL**
- 7. Improvement of air quality and noise
- 8. Reduction of GHGs emissions from transport
- 9. Reduction of energy dependency of transport

**BALANCED MODAL SPLIT**
- 31% 29%
- 40%
- 35% 35% 30%

**INCREASE TERRITORIAL COVERAGE OF PUBLIC TRANSPORT**
- 3% increase of territorial coverage of public transport

**DECREASE ACCESS TIME TO PUBLIC TRANSPORT**
- 15% decrease of Access time to public transport

**REDUCTION OF GHG EMISSIONS**
- 15% reduction of GHG emissions from transport

**USE OF RENEWAL ENERGIES**
- 10% renewal energy consumption in transport

**IMPROVED FINANCIAL COVERAGE OF PUBLIC TRANSPORT**
- Tariff revenues ≥50%

**EFFICIENT PUBLIC TRANSPORT**
- 8% of improvement pass/veh-km
3. The Strategic Sustainable Mobility Plan of the Madrid Region, Vision 2025

More than 200 actions in 12 measures

<table>
<thead>
<tr>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Traffic control and road regulation</td>
</tr>
<tr>
<td>2. Private vehicle management</td>
</tr>
<tr>
<td>3. Enhancement of public transport</td>
</tr>
<tr>
<td>4. Improvement of urban quality</td>
</tr>
<tr>
<td>5. Mobility management</td>
</tr>
<tr>
<td>6. Universal accessibility</td>
</tr>
<tr>
<td>7. Freight transport</td>
</tr>
<tr>
<td>8. Integration of mobility in urban planning</td>
</tr>
<tr>
<td>9. Energy saving and environment</td>
</tr>
<tr>
<td>10. Commuters transport plans</td>
</tr>
<tr>
<td>11. Road safety</td>
</tr>
<tr>
<td>12. Working group and evaluation</td>
</tr>
</tbody>
</table>

Diagram:

- **URBAN AREAS**
  - Quality Life
  - Energy and Environmental care
- **SUSTAINABLE**
  - Regional Thought
  - Integrated
  - Territory system
  - Free of Private vehicle
- **MOBILITY**
  - Safe
  - Efficient
  - Effective
  - Urban form
  - Accessible to all
- **PUBLIC TRANSPORT**
  - TRAIN
- **FREIGHT**
### 3. The Strategic Sustainable Mobility Plan of the Madrid Region, Vision 2025

**Actions related to public transport**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Total No. Actions</th>
<th>No. PT Actions</th>
<th>% PT Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Traffic control and road regulation</td>
<td>48</td>
<td>2</td>
<td>4.1%</td>
</tr>
<tr>
<td>2. Private vehicle management</td>
<td>4</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>3. Enhancement of public transport *</td>
<td>45</td>
<td>45</td>
<td>100.0%</td>
</tr>
<tr>
<td>4. Improvement of urban quality *</td>
<td>14</td>
<td>8</td>
<td>57.0%</td>
</tr>
<tr>
<td>5. Mobility management</td>
<td>8</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>6. Universal accessibility *</td>
<td>15</td>
<td>15</td>
<td>100.0%</td>
</tr>
<tr>
<td>7. Freight transport</td>
<td>3</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>8. Integration of mobility in urban planning</td>
<td>5</td>
<td>1</td>
<td>20.0%</td>
</tr>
<tr>
<td>9. Energy saving and environment</td>
<td>52</td>
<td>14</td>
<td>27.0%</td>
</tr>
<tr>
<td>10. Commuters transport plans *</td>
<td>21</td>
<td>10</td>
<td>48.0%</td>
</tr>
<tr>
<td>11. Road safety</td>
<td>37</td>
<td>12</td>
<td>32.0%</td>
</tr>
<tr>
<td>12. Working group evaluation *</td>
<td>13</td>
<td>10</td>
<td>76.9%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>265</strong></td>
<td><strong>120</strong></td>
<td><strong>45.3%</strong></td>
</tr>
</tbody>
</table>
4. The role of public transport in the integrated vision of sustainable mobility

Case study of Madrid Region

Public Transport Authority: CRTM

- Coordinates SUMP at municipal levels in the region
- Supervises urban planning policies at local level
- Develops and Coordinates **Strategic Sustainable Mobility Plan of Madrid Region**

*45% out of more than 250 actions exclusively for Public Transport*

- The important role of public transport in the integrated vision of sustainable mobility
- The experience role of public transport authority for integrating sustainable mobility measures
5. Conclusions

• Future urban mobility challenges will require an integrated vision of mobility solutions and combined mobility is a requisite.

• Public transport authorities are ideal experts to promote the sustainable mobility strategies due to their experience in managing mobility and their knowledge in public transport and how to complement with other means of transport.

• When developing a sustainable mobility strategy, public transport is presented as key actor in integrated mobility solutions and essential for the city or region development.
Thank you very much for your attention

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unimos Personas