

## Demographic Development of Madrid



Falko Mathews

Berlin, 16.03.2006

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- **Urban Region Madrid**
- **Change of Demographics and Infrastructure**
- **Regional Stakeholders and Policies**
- **Example “Programa de Actuación Urbanizadora”**

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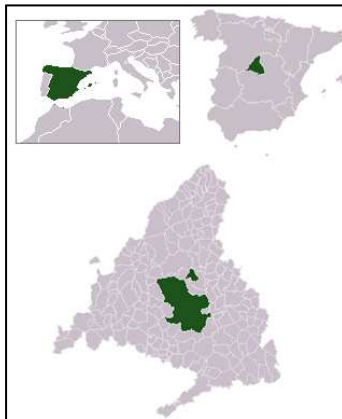
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## Urban Region Madrid

### Administration and Limits

*Autonomous Community of Madrid = City of Madrid and more than 90 other municipalities*



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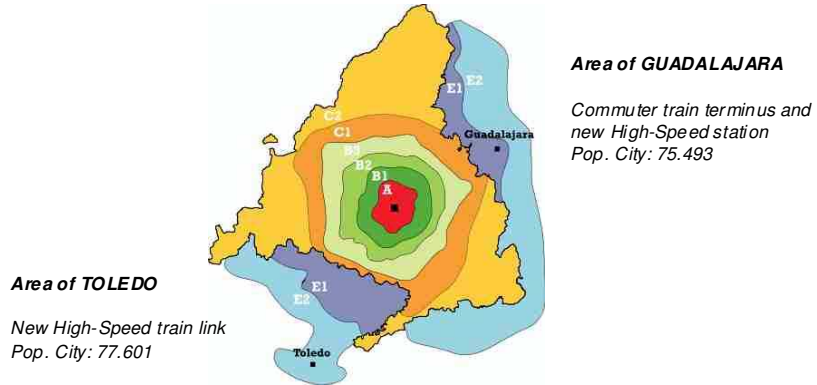
## Urban Region Madrid

### **Definition of Metropolitan Madrid**

*The metropolitan area is not clearly defined, but generally focus on the Autonomous Community.*

*Note: The zoning of the Regional Transport Authority reaches beyond the Community, serving more than 6.2 million people and taking into account the ongoing expansion of Madrid.*

*Good transport links result in wider commuting distances to adjacent provinces of Castile.*



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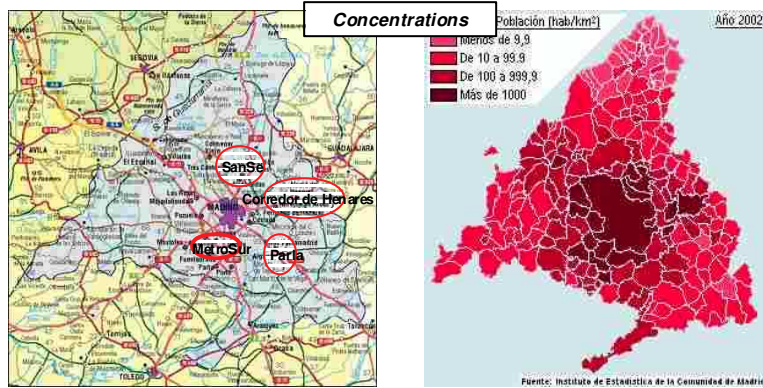
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## Change of Demographics and Infrastructure

### Population/ Area/ Evolution

Community: 6 Mio inhabitants (8,030.1 km<sup>2</sup>). City: 3.1 Mio inhabitants (607 km<sup>2</sup>)

1900	1950	1996	2001	2006
775.034	1.926.311	5.022.289	5.372.433	6.008.000



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## Change of Demographics and Infrastructure

### Demographic Trends

Growth concentrated in suburban towns. Population of City remains the same as 1970

Percentage of City's Population in Community			
Year	City	Community	Percentage
1950	1.553.338	1.823.418	85,19
1975	3.228.057	4.319.904	74,73
2005	3.155.359	5.964.143	52,9

Cities with more than 100.000 inhabitants		
	1990	2005
Madrid	3.010.492	3.155.359
Móstoles	189.707	216.463
Alcalá de Henares	155.548	201.380
Fuenlabrada	141.496	195.131
Leganés	172.729	181.248
Alcorcón	141.080	162.524
Getafe	139.068	156.320
Torreón de Ardoz	86.678	109.483
Alcobendas	78.295	103.149

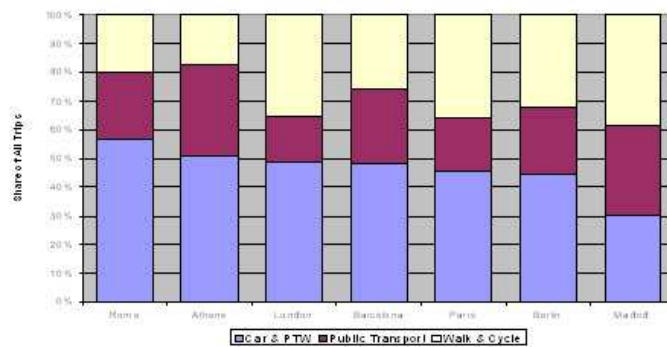


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## Change of Demographics and Infrastructure

### Transport Modes in the Urban Area of Madrid

- Walking important, as urban structure very dense, no "detached housing" sprawl
- High usage of urban transport. Dense metro and bus network with high frequencies
- Cycling less important, as hardly cycle lanes available
- Mode Split Madrid: 30% car, 32% PT, 38% walking



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## Change of Demographics and Infrastructure

### Massive Investments in Road Infrastructure

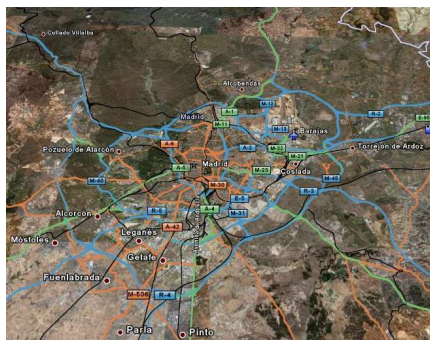
#### NETWORK 1990

Ring road M30 plus six national arteries  
Start of dualing programme



#### NETWORK 2007

National dual carriageways plus radial relieve motorways  
Ring motorways M30, M40, M45 and M50

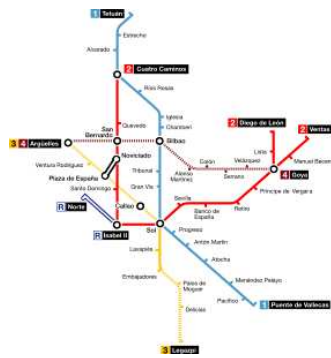


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## Change of Demographics and Infrastructure

*Prioritise Segregated Rapid Public Rail Transport to increase accessibility of new centres*

**Metro Network 1954**



**Metro Network 2007**



Change in PT modes (million passengers)						
Year	Metro	%variation	RENFE	%variation	Total	%variation
2001	5.43	3.70%	17.65	9.50%	15.00	3.50%
2002	55.56	4.10%	19.88	125.0%	15.15	1.00%
2003	6.04	6.80%	19.24	-3.10%	15.43	1.90%
2004	61.84	2.40%	19.59	1.80%	15.64	1.30%
2005	6.07	4.60%	1.99	1.30%	15.91	1.80%

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### Management of Land-use

Each Municipality defines its land-use and transport policies in one development plan, and realises them accordingly, e.g. for the City of Madrid → “Plan General de Ordenación Urbana de 1997”. There are all land-uses illustrated, including new developments, called PAU (Programa de Actuación Urbanizadora)



Largest PAU: **Vallecas**  
 New Housing Units: 26,000  
 New Employment: 75,000



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### Management of Transport

**Road Transport:** Municipalities, Community and National Transport Ministry, depending on road type

The **Transport Authority of Madrid** (Consortio) is responsible for the operation of public transport, its integration and joint projects between suburban and city transport, like improvement of interchanges at the airport or the new underground suburban city link.

**Metro Construction:** The Community of Madrid and the “Consortio” manage the construction of the Metro, built by its company MINTRA. MINTRA realises currently the underground extensions for the approved Extensions Plan 2003 - 2007.

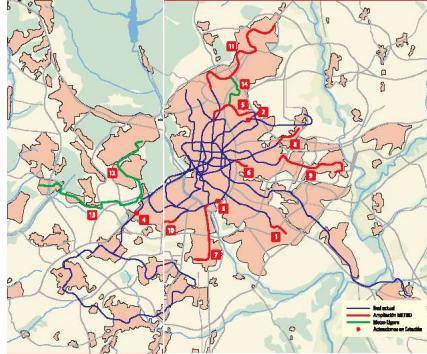
**Suburban Rail:** New projects are realised by the National Transport Ministry and its development entity ADIF. The suburban railway is run by RENFE, Spain’s national railway operator.

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## Regional Stakeholders and Policies

### Transport Programmes Public Transport

#### Metro Extension Programme 2003-2007



Extension of Metro Network			
	Stations	Length (km)	Increase (km)
Network 1995	164	120	
Investment Plan 95-99	202	176	56
Investment Plan 99-03	238	235	59
Investment Plan 03-07	317	316	81

#### Suburban Rail Programmes



New 5-km-long underground rail link (259 M €)



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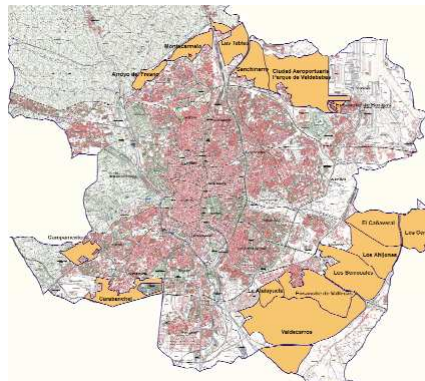
## Regional Stakeholders and Policies

### Transport Programmes Private Transport

#### Urban Motorway "Calle 30"



#### Road Infrastructure in "Grand developments"



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**Programa de Actuación Urbanizadora****PAU Sanchinarro - Housing**

Assigned for green belt 1.221.066 m<sup>2</sup>, profit-seeking use 700.010 m<sup>2</sup> and for community use 553.632 m<sup>2</sup>

Housing construction in apartment block style with around 7 storeys  
Built by various developers and co-operatives

- **Protected housing units: 7.596**
- **Unprotected housing units : 5.122**



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PAU Sanchinarro - Infrastructure

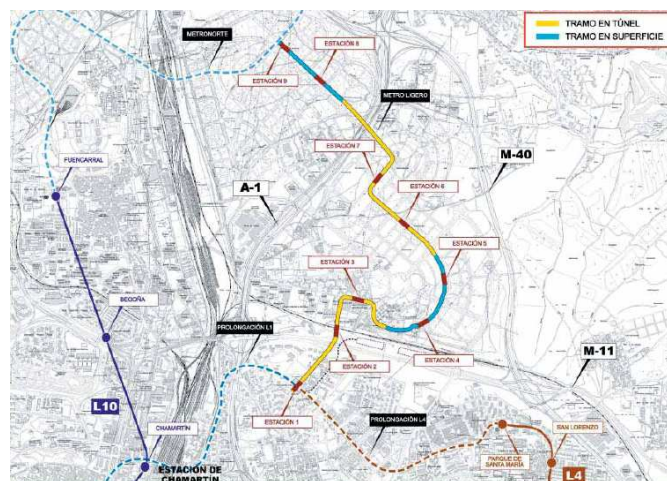
Transport and social infrastructure under development of the City of Madrid

- Education facilities: 227.710 m<sup>2</sup>
- Sport facilities: 112.837 m<sup>2</sup>
- Other Social facilities: 141.347 m<sup>2</sup>, etc.



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Metro and Light Metro for PAU Sanchinarro



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## Conclusions and Outlook

**Economic strength results in unprecedented growth of Madrid compared to other EU capital regions with grand development projects**

**Every year an average of 70,000 new housing units is constructed.**

**The Urban Region of Madrid will maintain its growth.**

**The Environmental Department predicts 10 million inhabitants for Greater Madrid in 2026.**

**Problems are**

- Slow adoption of infrastructure due to rapid growth
- A weak strategic planning
- Lack of public consultation
- Lack of resources, like water, parks and other recreational areas