

Sustainable Urban Transport Planning in Yerevan

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30 October 2008

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The situation of transportation in Yerevan

The public transportation in Yerevan is provided by:

- Buses
- Trolleybuses
- Microbuses and
- Metro

48 bus, 9 trolleybus and 119 microbus routes are included in the ground transportation system.

Nowadays the main part of passenger transportation is carried out by microbuses (near 80%).

There are near 120 000 private cars in Yerevan.

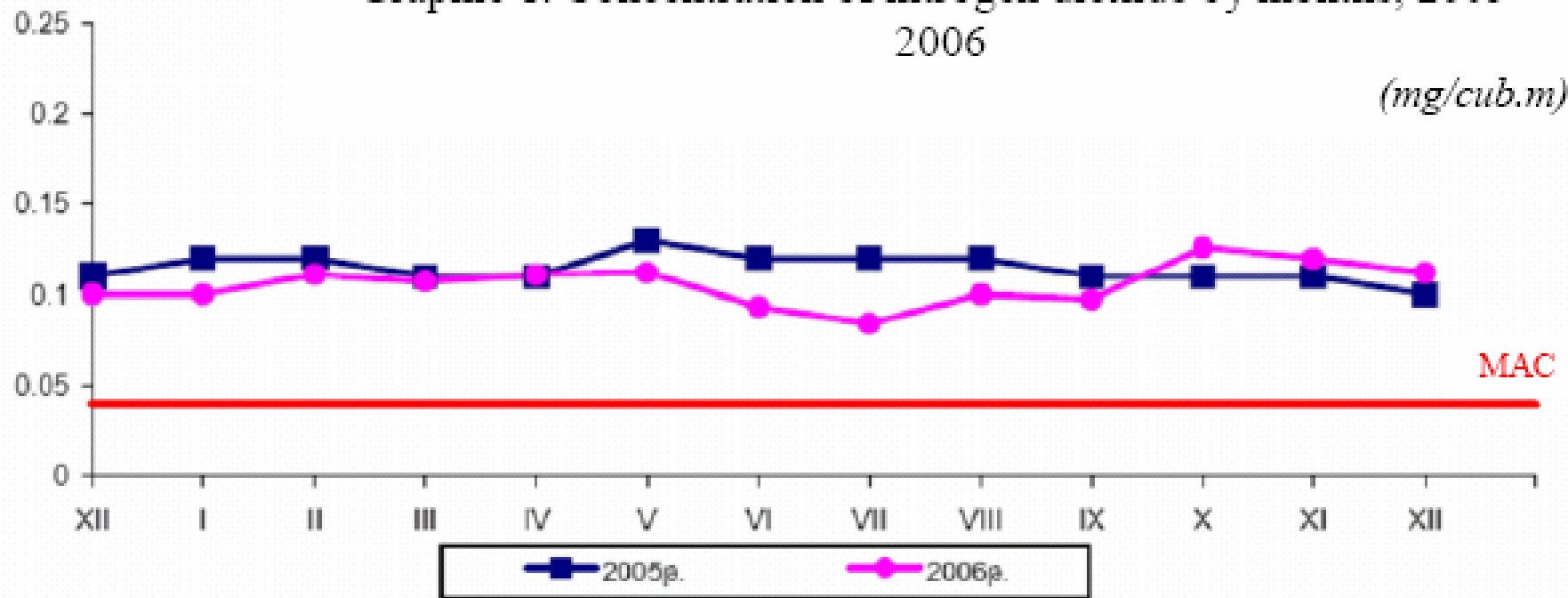
Number of automobiles increases by 9-10 thousands annually.

The situation of transportation in Yerevan



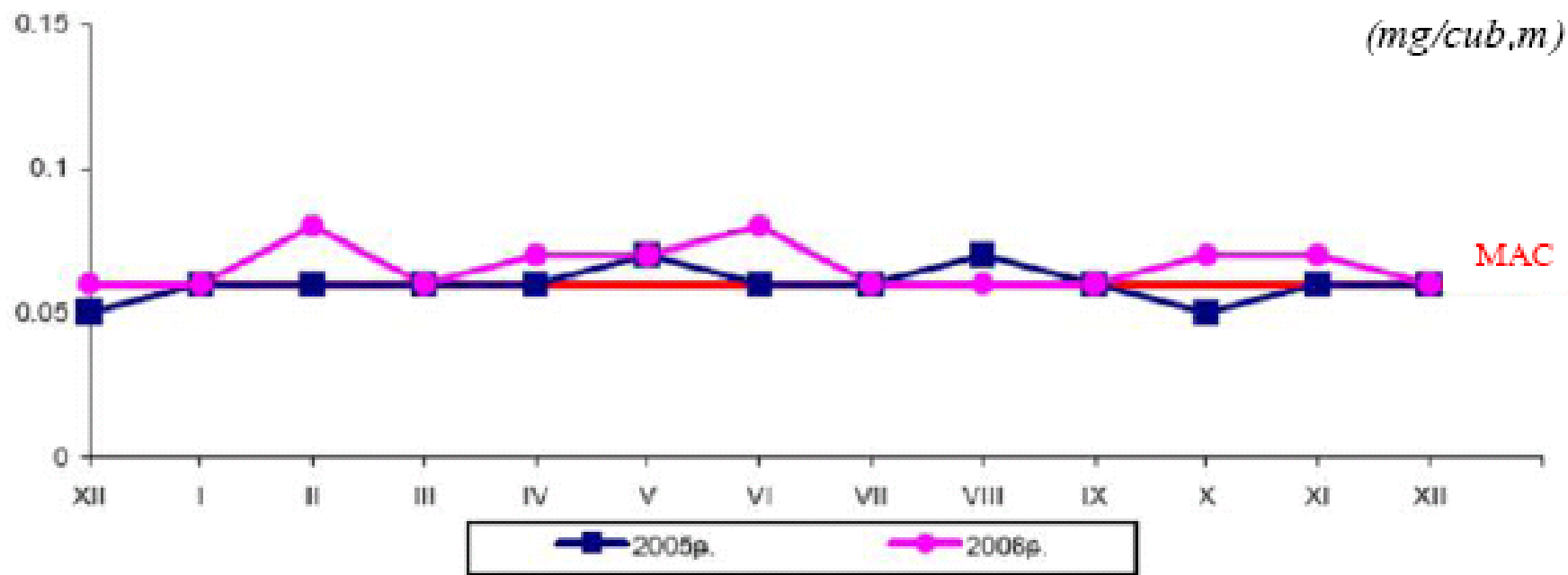
Air pollution

Graphic 1. Concentration of nitrogen dioxide by months, 2005-2006



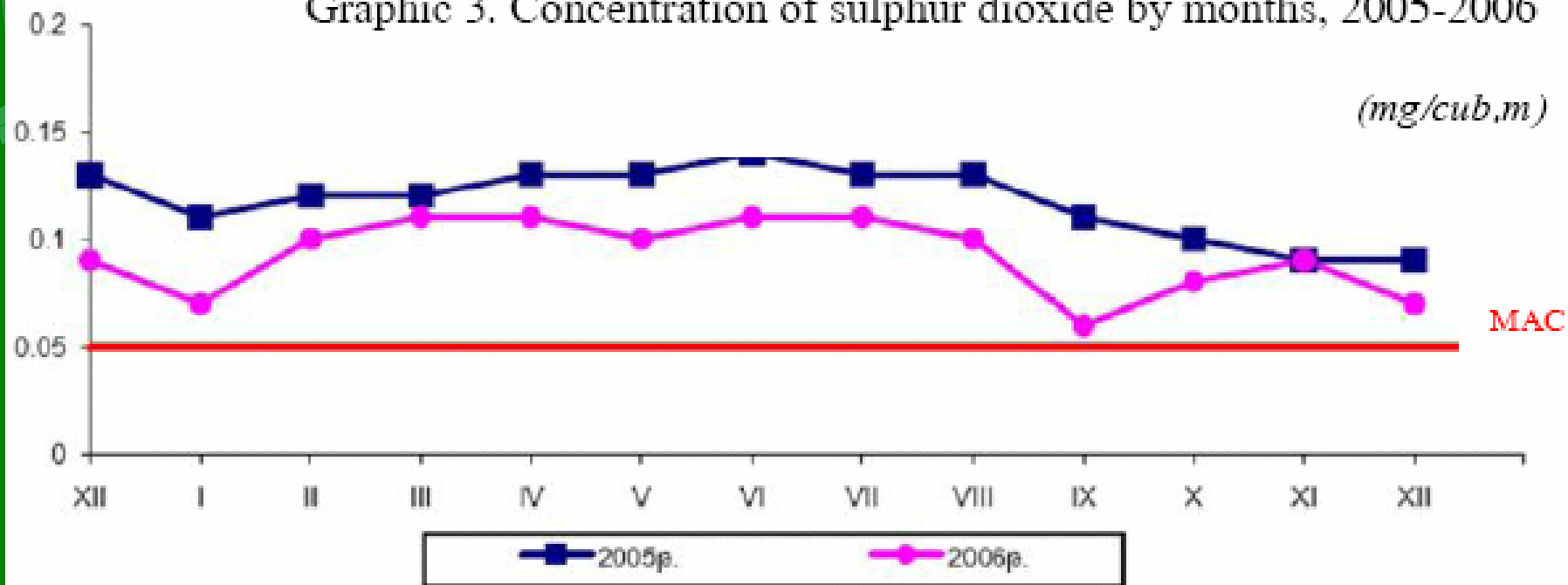
Air pollution

Graphic 2. Concentration of nitrogen oxide by months, 2005-2006



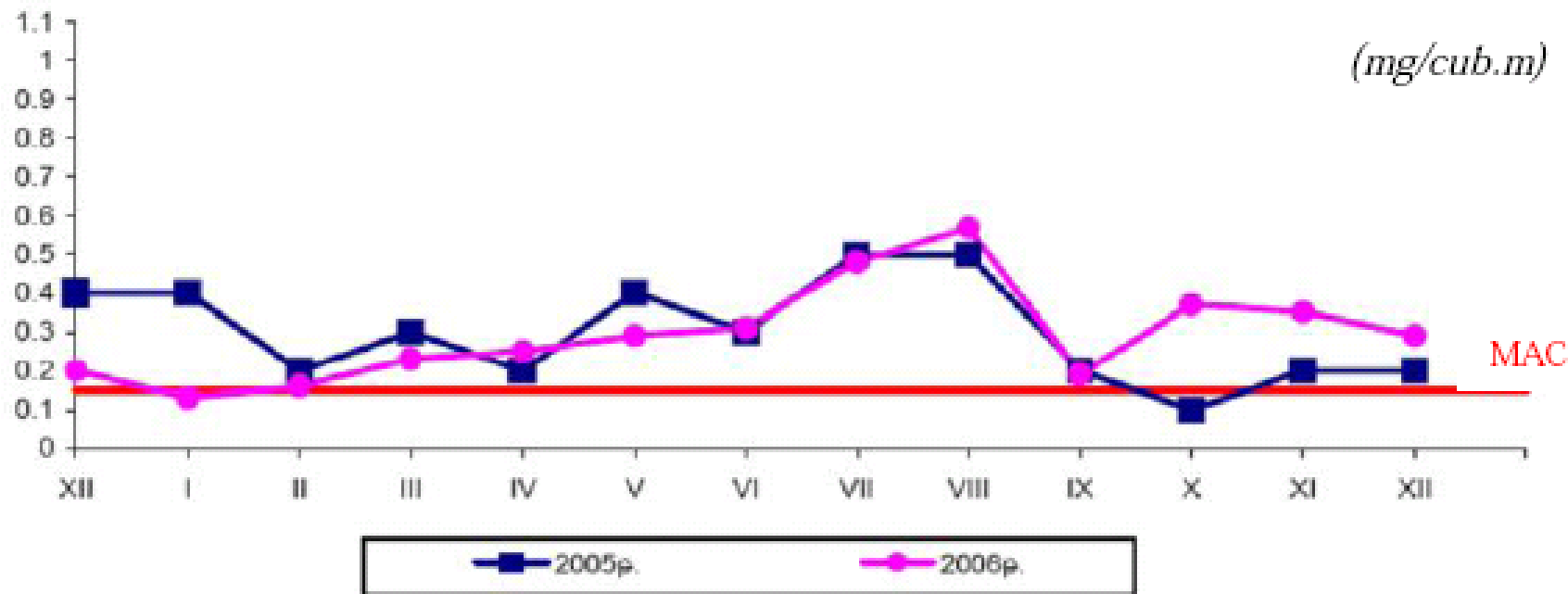
Air pollution

Graphic 3. Concentration of sulphur dioxide by months, 2005-2006



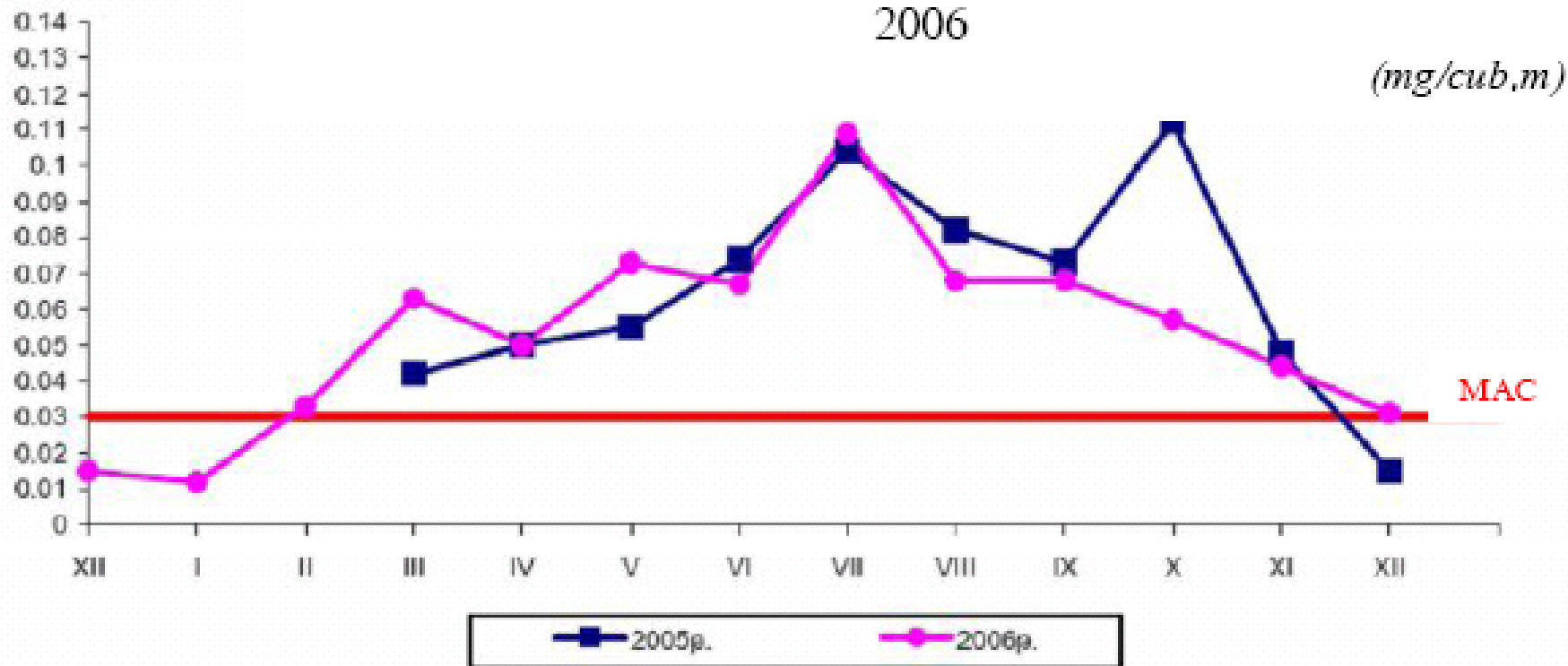
Air pollution

Graphic 4. Concentration of dust by months, 2005-2006



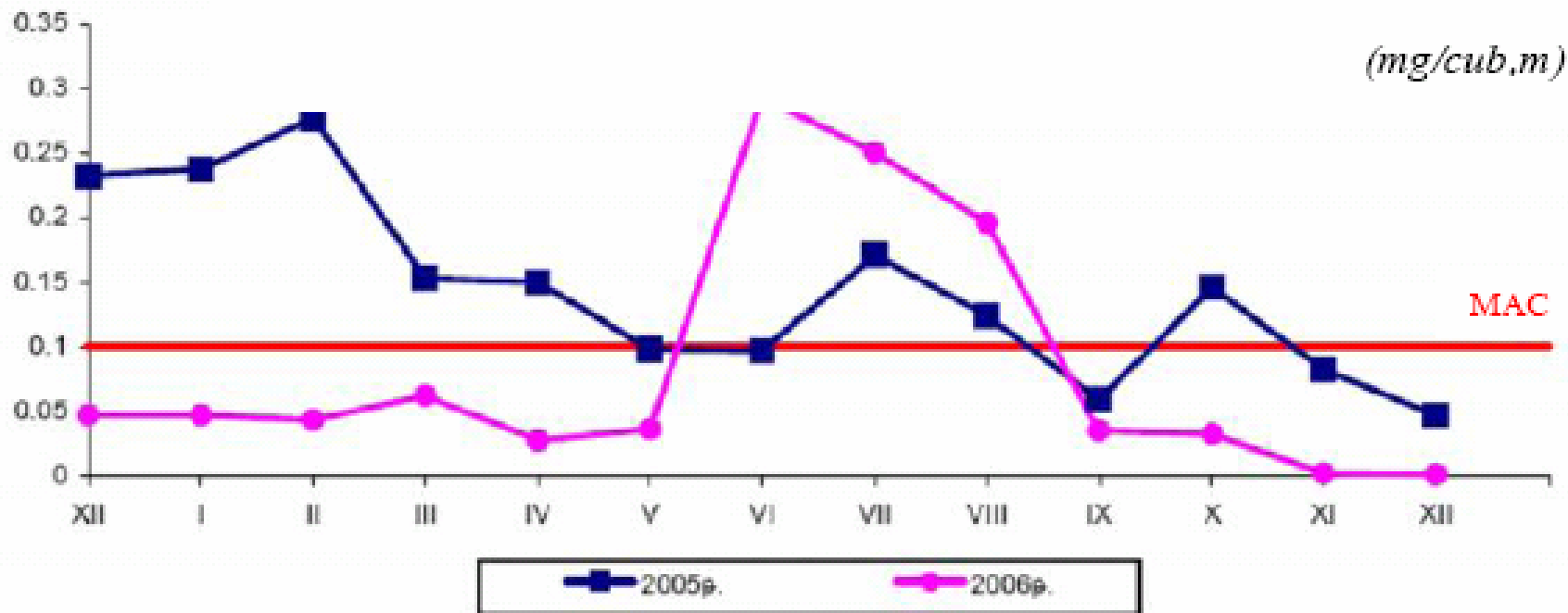
Air pollution

Graphic 5. Concentration of ground level ozone by months, 2005-2006



Air pollution

Graphic 6. Concentration of benzene by months, 2005-2006



Air pollution

Almost 1/3 part of private cars, “PAZ” buses and “Gazel” minibuses use compressed gas, which is environmentally cleaner and 2-3 times cheaper than petrol.

Almost 95% of air pollution in Yerevan comes from transportation.

Yerevan City Master Plan

Parameters	Units	Beginning year, 01.01.2005	Planned, up to 2020
Population	1000 person	1102.8	1200.0
Territory	ha	22670,3	22670,3
Length of the public transport, from which	Both sides, km	196.0	289.6
Metro	-- ^{oo} --	12.5	16.6
Trolleybus	-- ^{oo} --	53.5	76.0
Bus	-- ^{oo} --	130.0	197.0

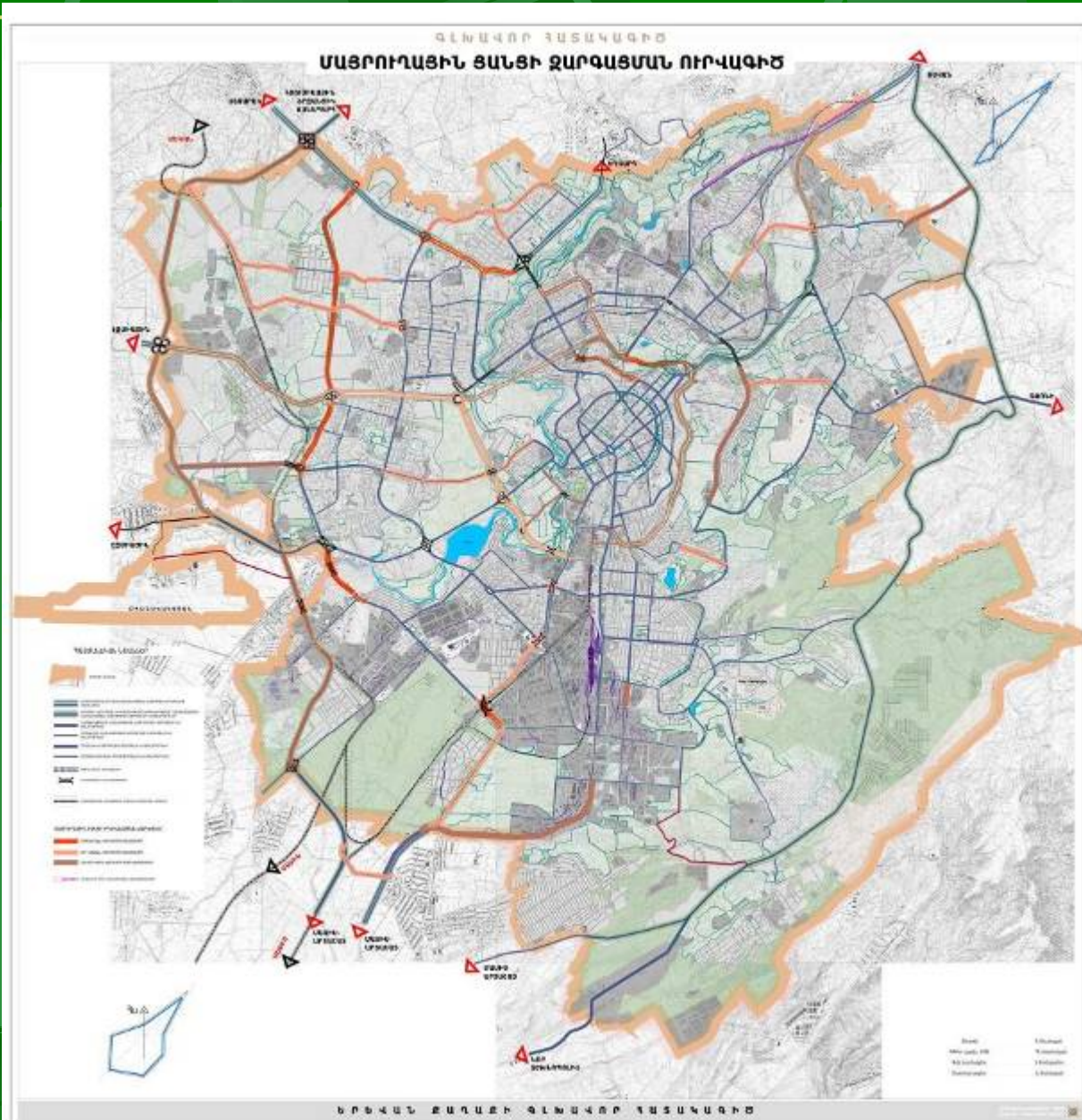
Yerevan City Master Plan

Parameters	Units	Beginning year, 01.01.2005	Planned, up to 2020
Total lengths of streets and road, from which	km	214.0	294.0
highways	--°°--	-	25.7
Density of the streets-roads network	km/ km ²	1.7	2.16
Bridges, tunnels, road junctions	Units	10	40
Level of air pollution	MAC's* multiplier	2.0-3.6	1.0-1.3
Level of noise influence	MAL's** multiplier	1.0-1.1	1.0-1.05

● MAC* - Maximum Allowable Concentration

● MAL ** - Maximum Allowable Level

Street-road network of Master Plan



Yerevan City Master Plan

Level of loading, %	Percentage from the total, %
More than 100%	15
80-100	18
70-80	17
50-70	15
Less than 50	35

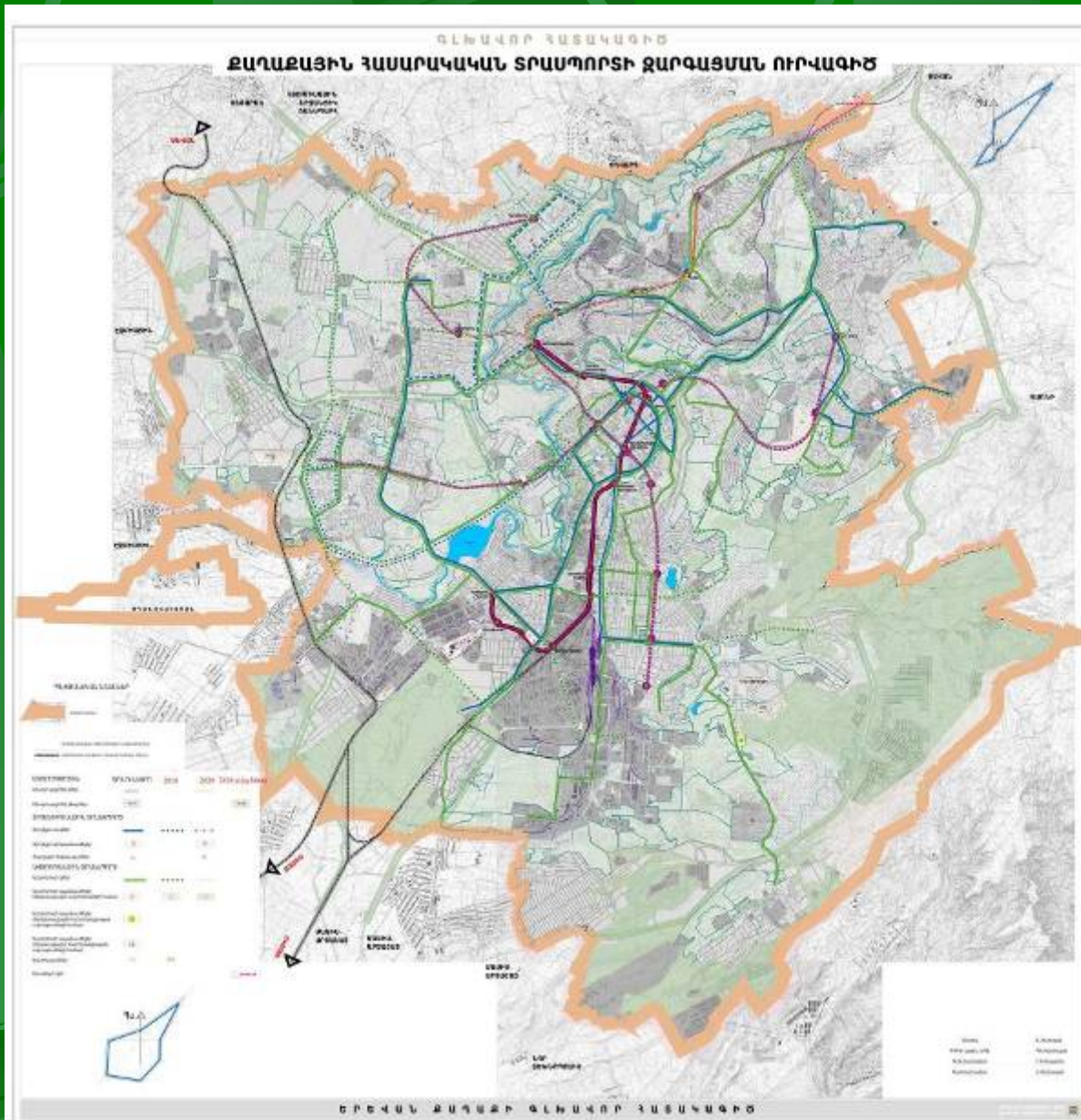
Yerevan City Master Plan

Transportation types	Years								
	2004			2010			2020		
	Mln. Pas. year	Thu. Pas. day	%	Mln. Pas. year	Thu. Pas. day	%	Mln. Pas. year	Thu. Pas. day	%
1	2	3	4	5	6	7	8	9	10
Total volume of passenger transportation, from which	411.0	1126.3	100	458.5	1256.2	100	516.0	1414.0	100
By metro	16.6	45.5	4.0	30.66	84.0	6.7	61.0	167.25	11.9
By trolleybuses	4.5	12.3	1.1	53.7	147.1	11.7	124.4	340.8	24.1
By buses	8.0	21.9	1.9	144.7	396.4	31.6	232.2	636.2	45.0
By minibuses	381.9	1046.3	93	229.44	628.6	50.0	98.4	296.6	19.0

Yerevan City Master Plan

Transportation type	Years			
	2010		2020	
	Running	Total	Running	Total
1	2	3	4	5
Subway coaches	30	38	48	60
Trolleybus	110	160	280	400
Medium sized buses	530	760	905	1290
Microbuses	1430	1790	675	845

Public Transportation Master Plan



Dalma Garden





*Thank you for
your attention*