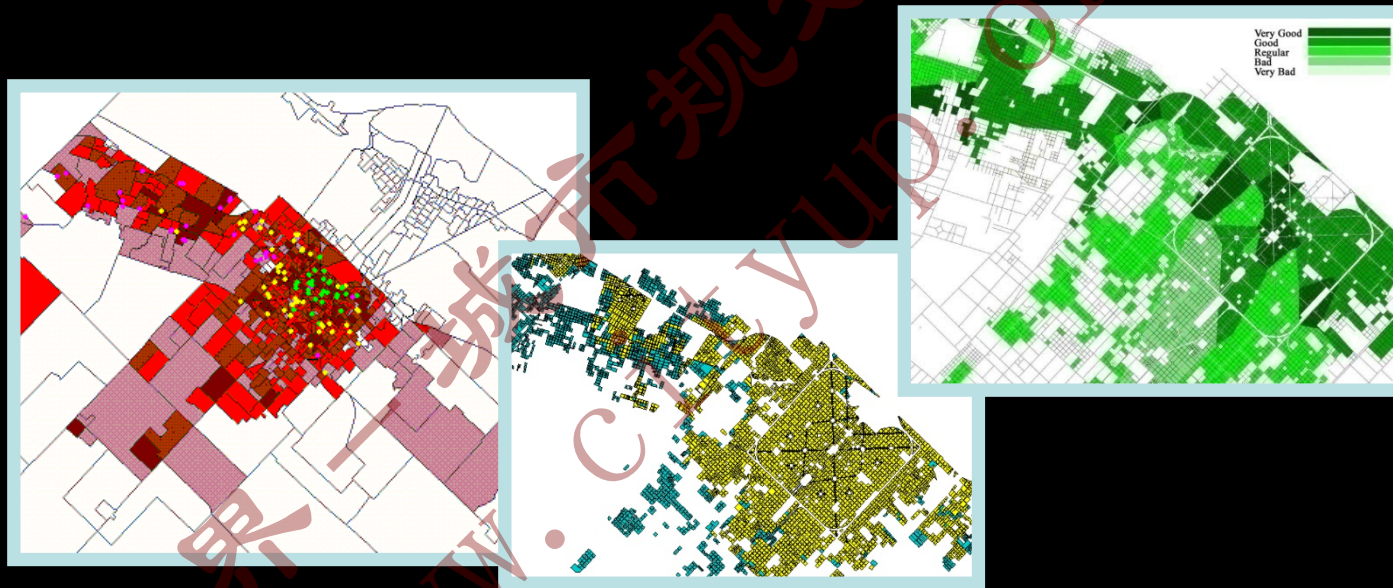


Compact city versus Diffuse city: Their implications in the urban life quality and the sustainability.



Rosenfeld, Discoli, San Juan, Martini, Dicroce, Ferreyro.
Compact city versus Diffuse city. 44th ISoCaRP Congress 2008

Unidad de Investigación N° 2 del Instituto de Estudios del Hábitat (IDEHAB),
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THE URBAN LIFE QUALITY MODEL ALLOWS :

- Analyzing the demands related with the basic services, urban infrastructure and the surroundings environmental condition;
- Studying the urban-environmental life quality in a local and regional scale;
- Integrating the knowledge of the urban systems and the environmental consequences of their dynamics, considering the energy infrastructure services network, sanitation services, their coverings and the users opinions;
- Elaborating indicators and indexes which enable to measure in a quality and social equity terms;
- Visualizing and analyzing the quality, and equity and sustainability implication in the compact and diffuse city contexts.

Compact city vs Diffuse city

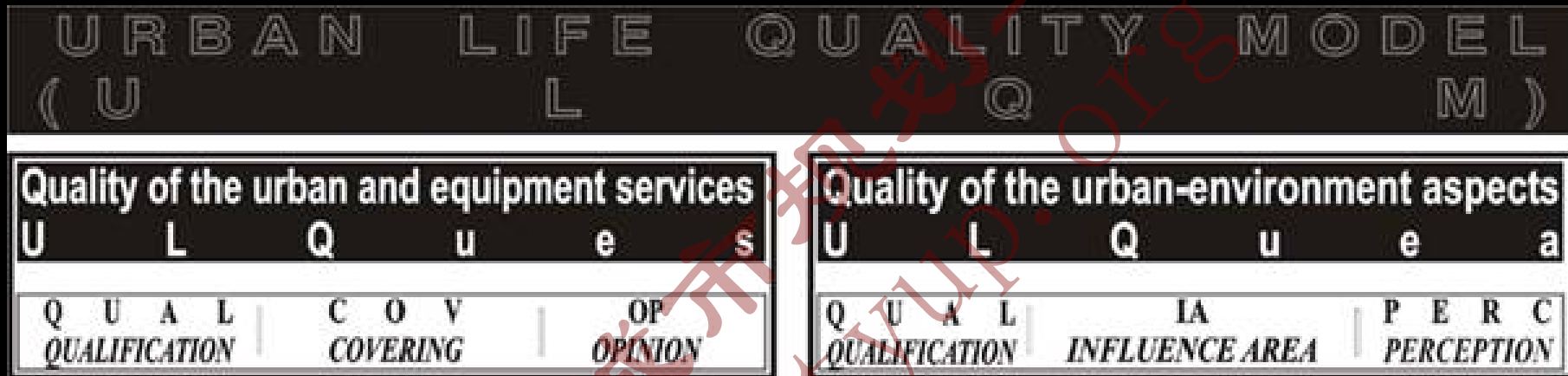
ANALYSIS UNIVERSE

**Compact city vs Diffuse city**

Rosenfeld, E.; Discoli, C.; San Juan, G.; Martini, I.; Dicroce, L.; Ferreyro, C.

September 2008

MODEL STRUCTURE

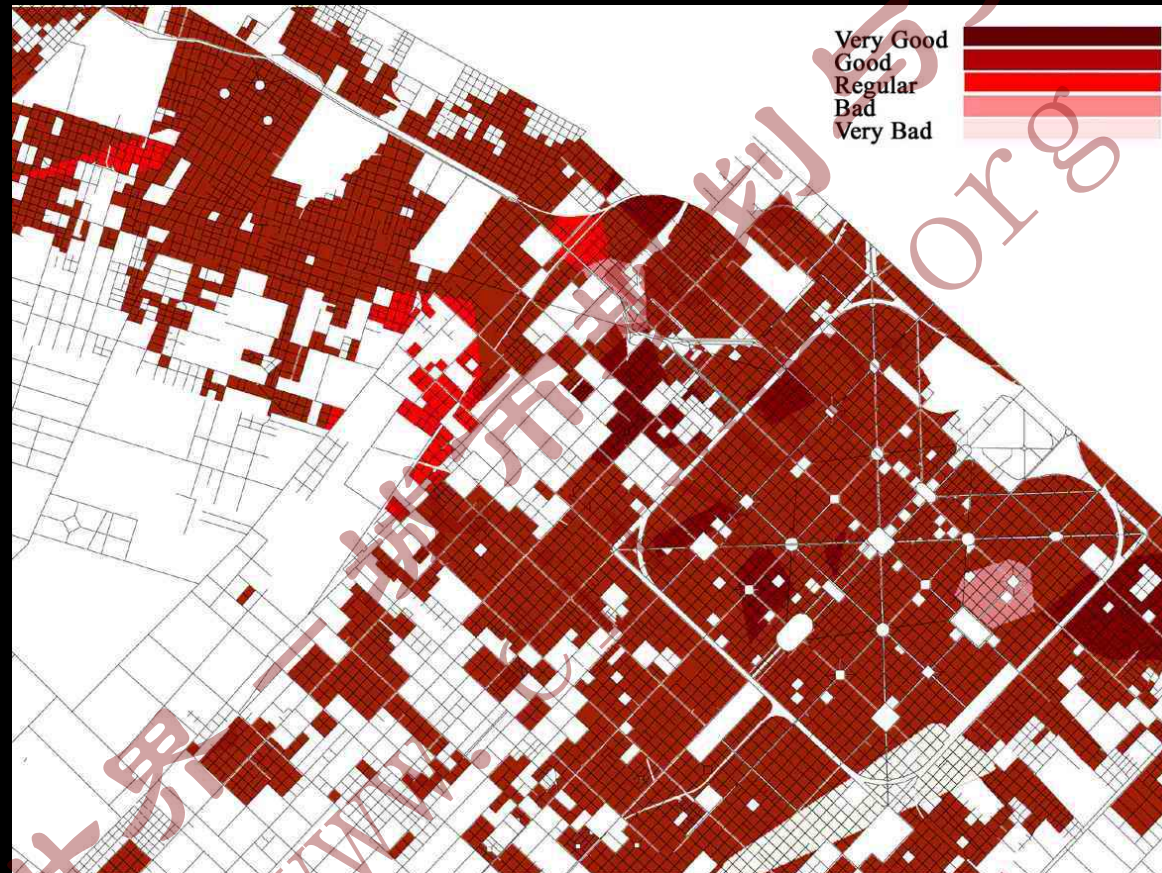


n1 = Infrastructure Services;
n2 = Sanitation Service;
n3 = Communication Services;
n4 = Social Services which integrate the Urban and Equipment Services,

n5 = urban aspects;
n6 = environmental aspects

Compact city vs Diffuse city

ELECTRIC POWER SERVICE



	ULQ Levels %	Diffuse City	ULQ Levels %
Very Good/Good	95	Very Good/Good	89
Bad/Very bad	5	Bad/Very bad	11

Compact city vs Diffuse city

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NATURAL GAS SERVICE



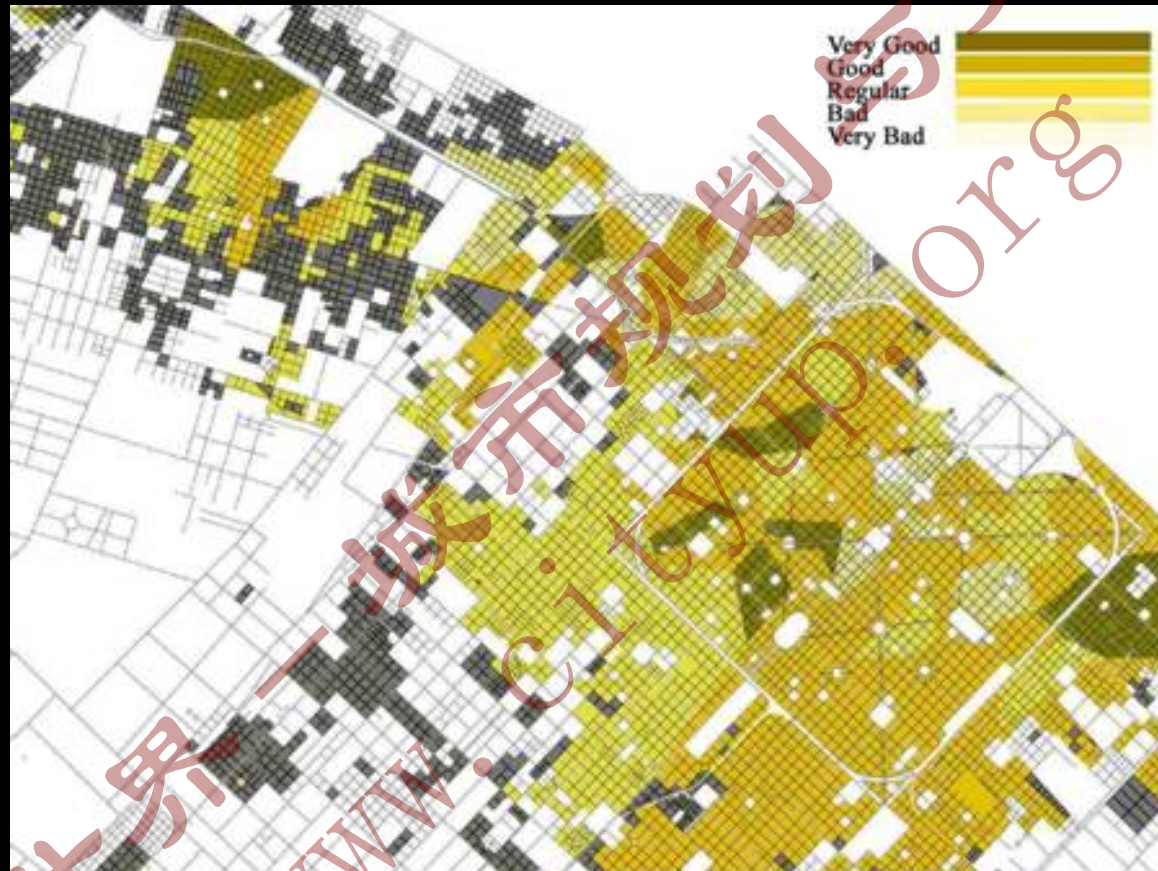
	ULQ Levels %	Diffuse City	ULQ Levels %
Very Good/Good	88	Very Good/Good	98
Bad/Very bad	12	Bad/Very bad	0.4
		Without Service	1.6

Compact city vs Diffuse city

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DRINKING WATER SERVICE



	ULQ Levels %	Diffuse City	ULQ Levels %
Very Good/Good	88	Very Good/Good	42
Bad/Very bad	18	Bad/Very bad	15
		Without Service	35

Compact city vs Diffuse city

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SEWER SERVICE



	ULQ Levels %	Diffuse City	ULQ Levels %
Very Good/Good	90	Very Good/Good	86
Bad/Very bad	10	Bad/Very bad	4.1
		Without Service	9.9

Compact city vs Diffuse city

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HEALTH SERVICE



	ULQ Levels %	Diffuse City	ULQ Levels %
Very Good/Good	85	Very Good/Good	11
Bad/Very bad	15	Bad/Very bad	35
		Without service	54

Compact city vs Diffuse city

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EDUCATION SERVICE



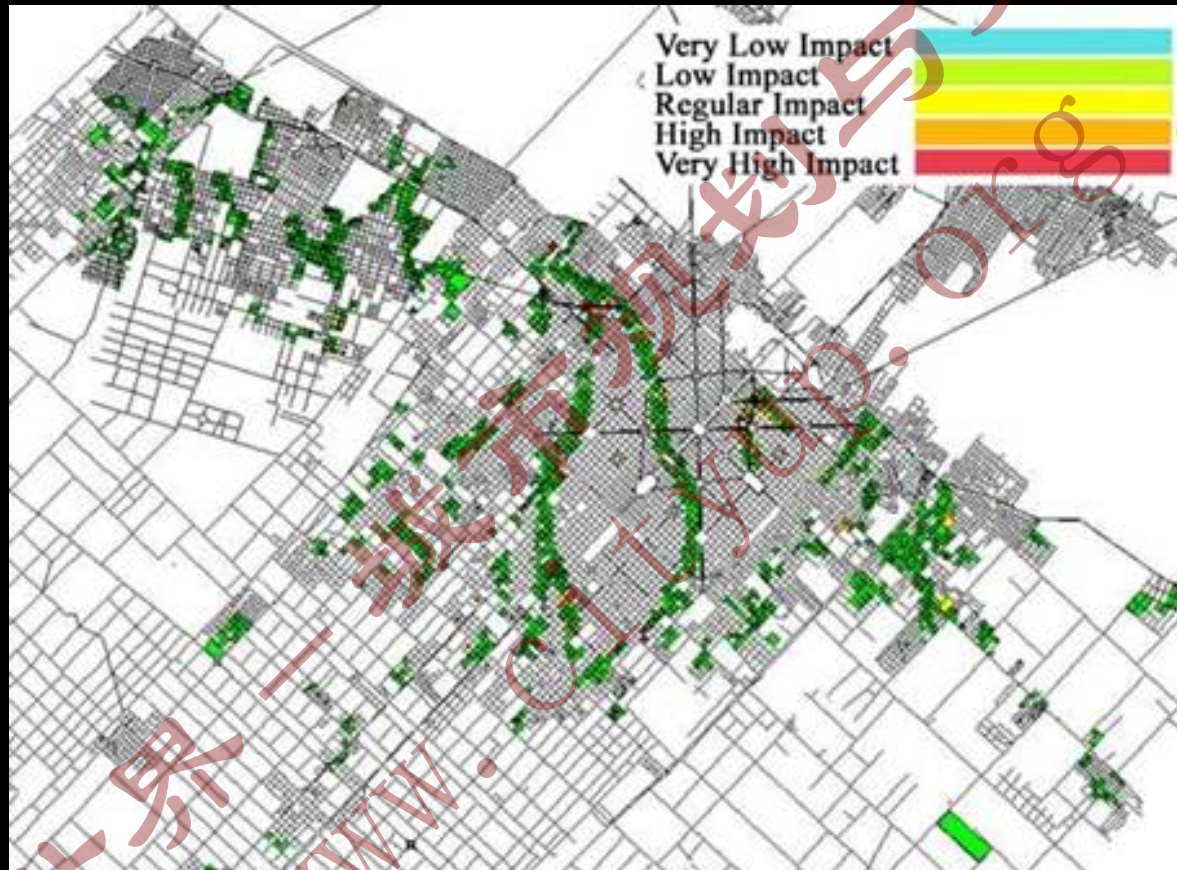
ULQ Levels %		Diffuse City	ULQ Levels %
Very Good/Good	68	Very Good/Good	44
Bad/Very bad	32	Bad/Very bad	56

Compact city vs Diffuse city

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FLOOD



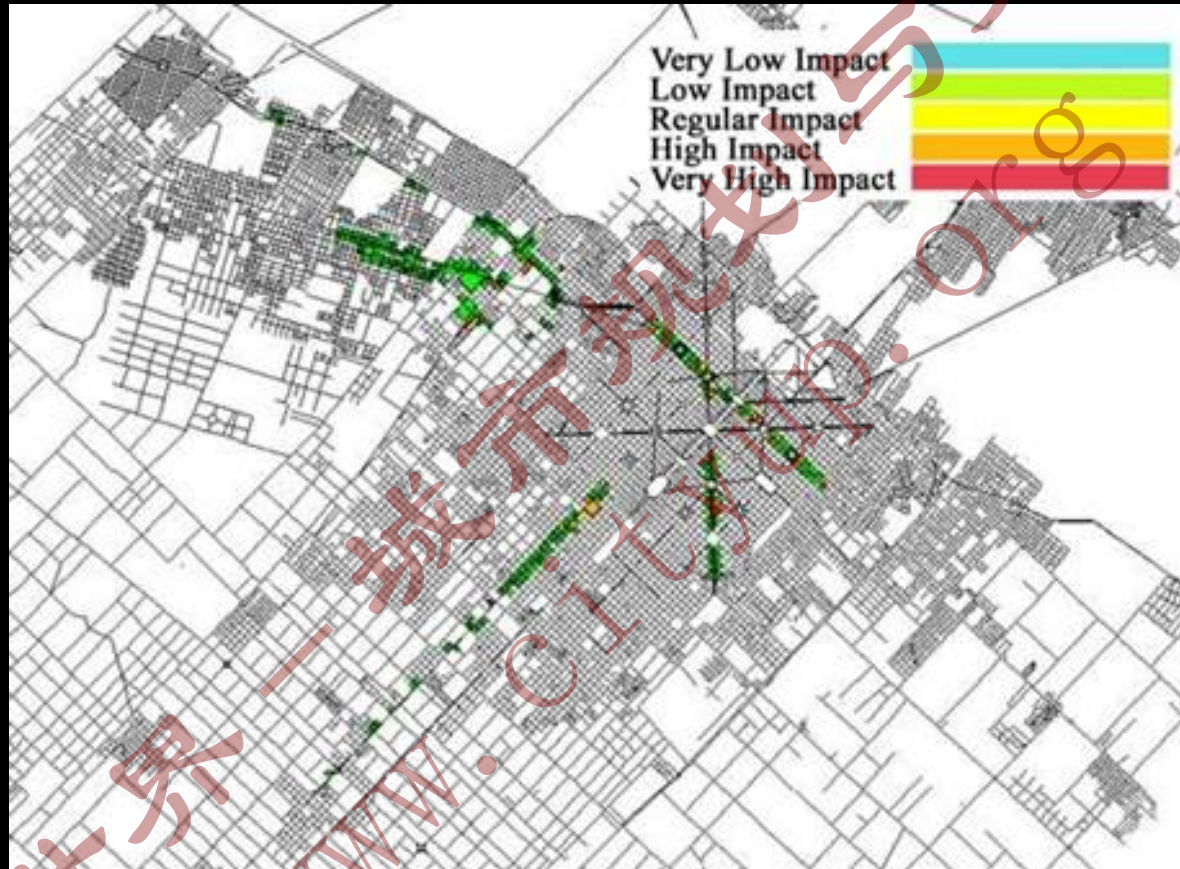
QUAL Levels %			Diffuse City	QUAL Levels %	
Low Impact	11.2	13.5	Low Impact	29	30.6
High Impact	2.3		High Impact	1.6	

Compact city vs Diffuse city

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AIR QUALITY



QUAL Levels %			Diffuse City	QUAL Levels %	
Low Impact	13	15.6	Low Impact	4.7	4.8
High Impact	2.6		High Impact	0.07	

Compact city vs Diffuse city

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CONCLUSIONS

- Urban services show that the Compact City have superior ULQ levels to the Diffuse City;
- Environmental aspects show an inverse situation;
- Energy services show high ULQ levels with particularities associated to:
 - the covering;
 - the localizations;
 - problems of obsolete technologies in the case of the gas network of the compact city.

Compact city vs Diffuse city

- Drinkable water: the compact city duplicates the ULQ levels, while in the diffuse city a vast area exists without covering and with very low ULQ levels;
- Sewers: a bigger balance exists based in the municipality strategy of minimizing the underground sheet of water pollution by cesspool;
- Health and education services: significant differences exist between the compact city and the diffuse city, marking a regression in the quality of these public services in consonance with the policies carried out in the last three decades;

Compact city vs Diffuse city

- The compact city gives to the infrastructure and complementary basic services a bigger life quality than the diffuse one, verifying in the territory the inattention degree of the services from the center to the periphery;
- Floods:
 - Compact city: in spite of not being very high, they are significant if we consider the population density that characterizes them.
 - Diffuse city: the affected areas are bigger, but in affected absolute population's terms they are smaller because of being areas with less density.
- Air quality: a similar situation to flood is observed.

Compact city vs Diffuse city



ISOCARP

Compact city vs Diffuse city

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THANK YOU

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