

Urban design – can we measure the triple bottom line?

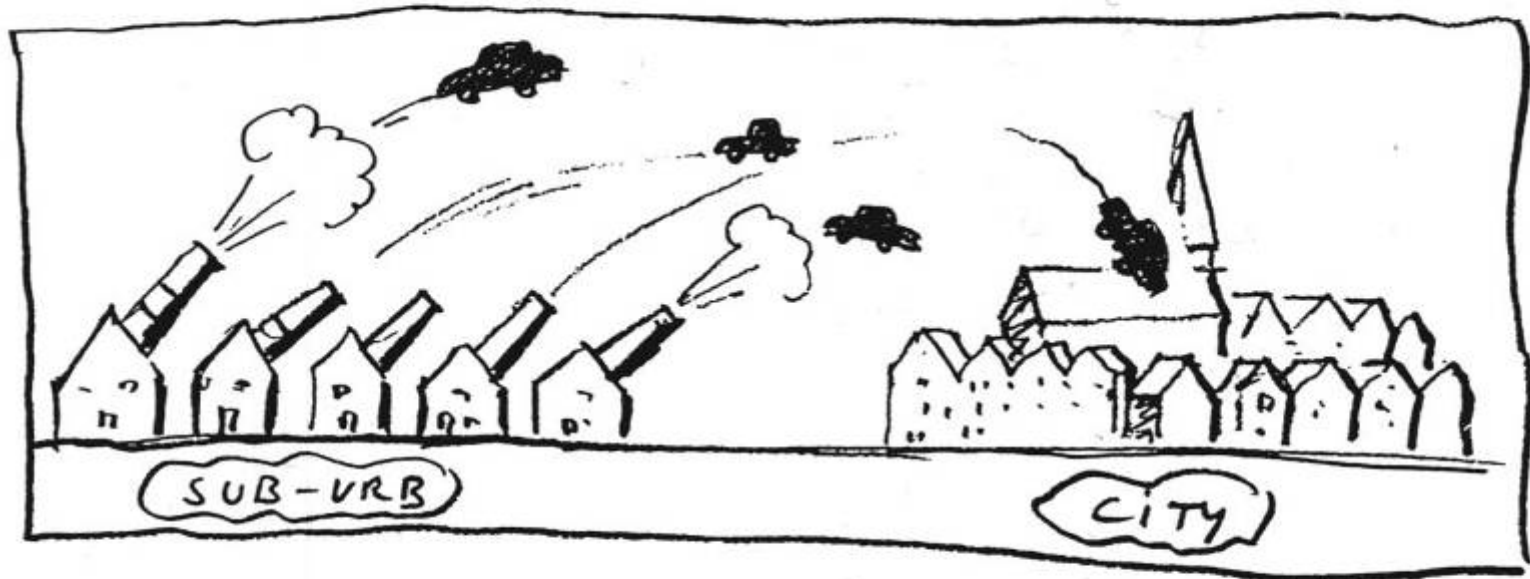


The Prince's Foundation

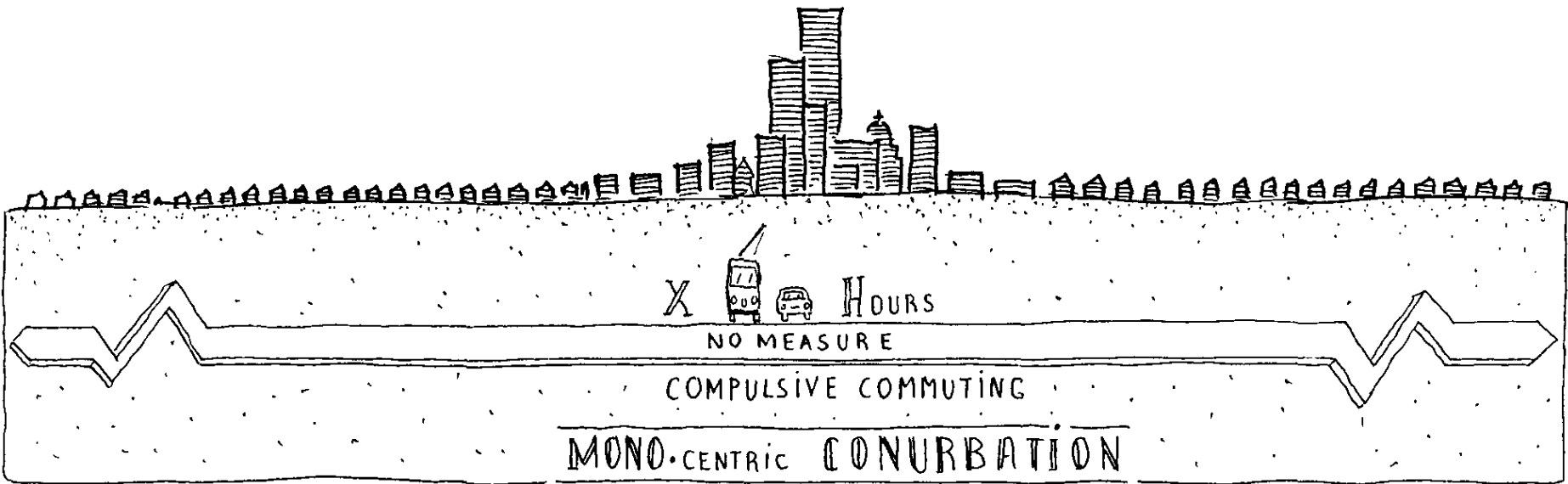
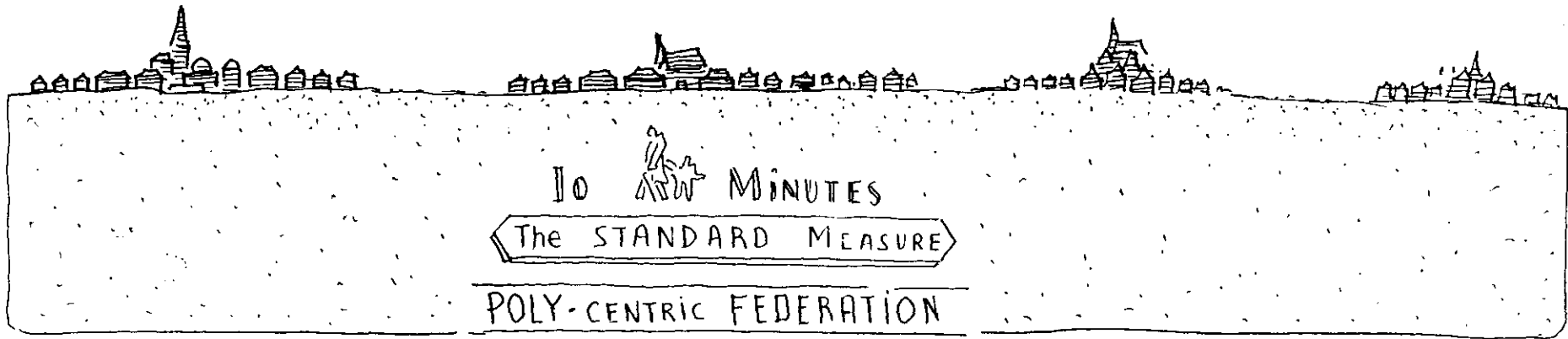


Leon Krier: Architecture, Choice or Fate?

NOT THE CAR BUT THE SUBURBAN HOME IS THE DEADLY WEAPON

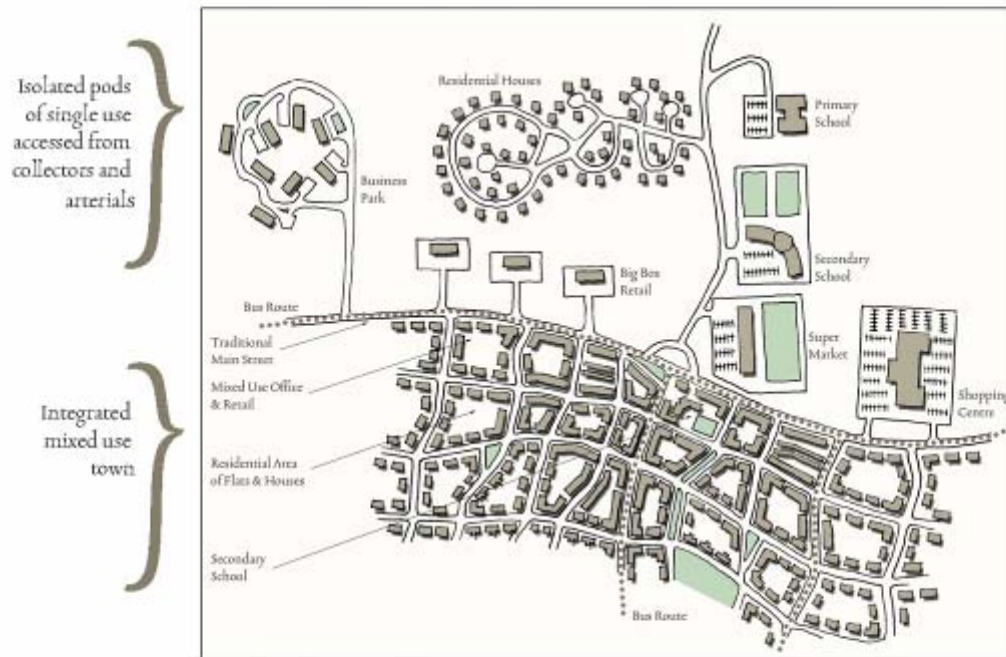


DAILY SUBURBAN MORTARFIRE AGAINST URBAN CENTERS



Our concept of urban design

CONTEMPORARY SUBURBAN MODEL



SUSTAINABLE URBANISM

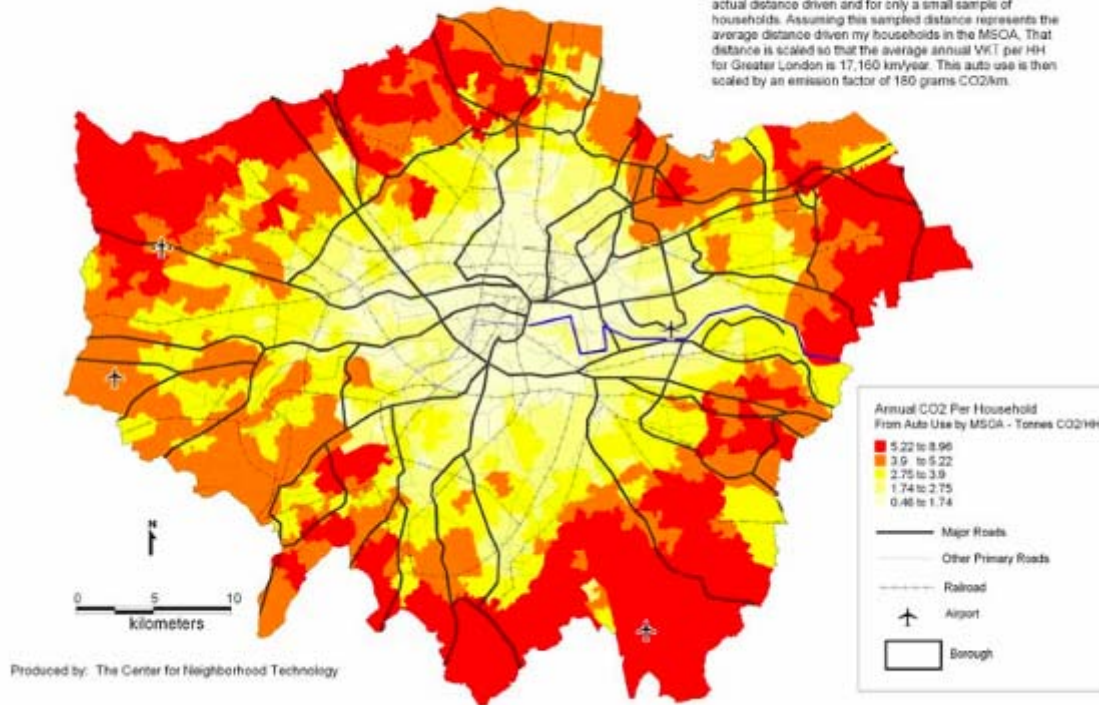
Density and Carbon: Walthamstow Town Centre



CO2 from Auto Use in London

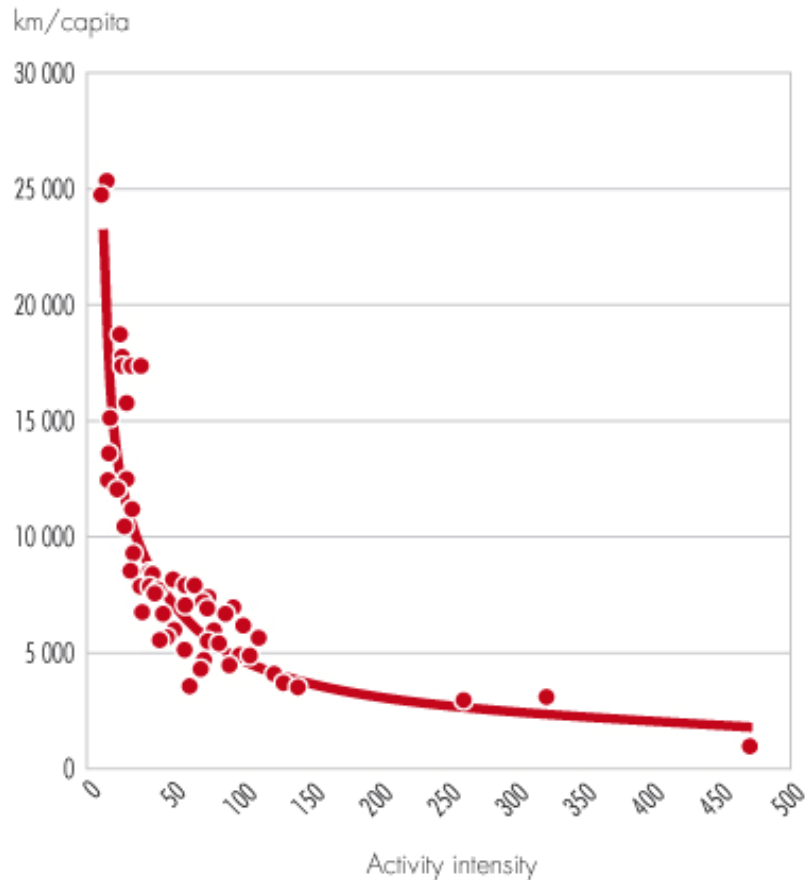
CO2 From Auto Use in Greater London: City Dwellers Produce Less GHGs per Household.

Based on the London Area Transportation Survey for 2001, which only measures the direct distance of any trip not the actual distance driven and for only a small sample of households. Assuming this sampled distance represents the average distance driven by households in the MSCA. That distance is scaled so that the average annual VKT per HH for Greater London is 17,160 km/year. This auto use is then scaled by an emission factor of 180 grams CO2/km.



Energy Use Reduces in Denser, Mixed Use Places

Figure 2.5 Activity intensity versus per capita personal car use in 58 higher income metropolitan areas around the world



Note: Activity intensity is defined as the number of jobs plus the number of people per urban hectare.

Source: Newman and Kenworthy 2006

Current residential pattern – low density



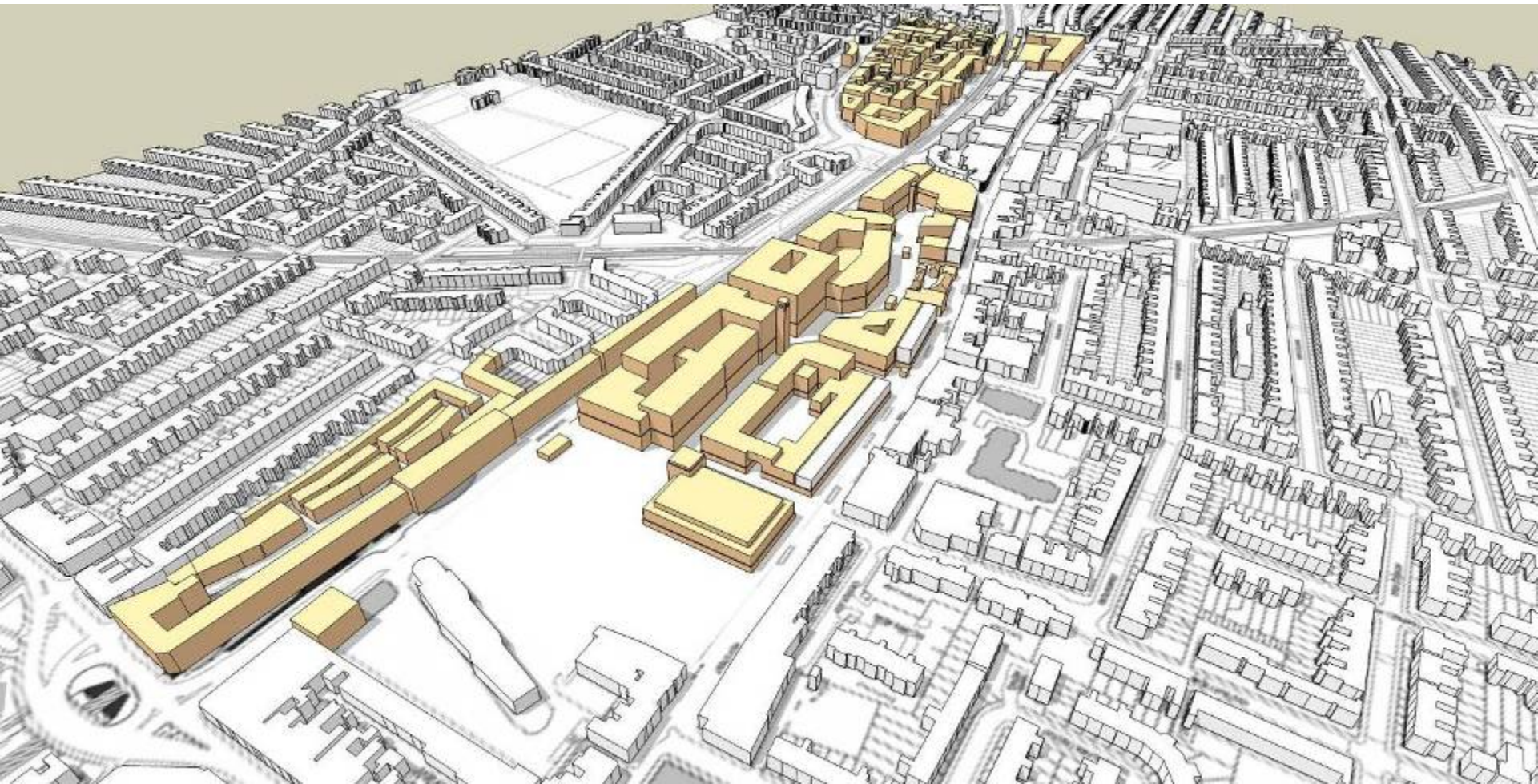
Possible precedents – Kensington & Chelsea



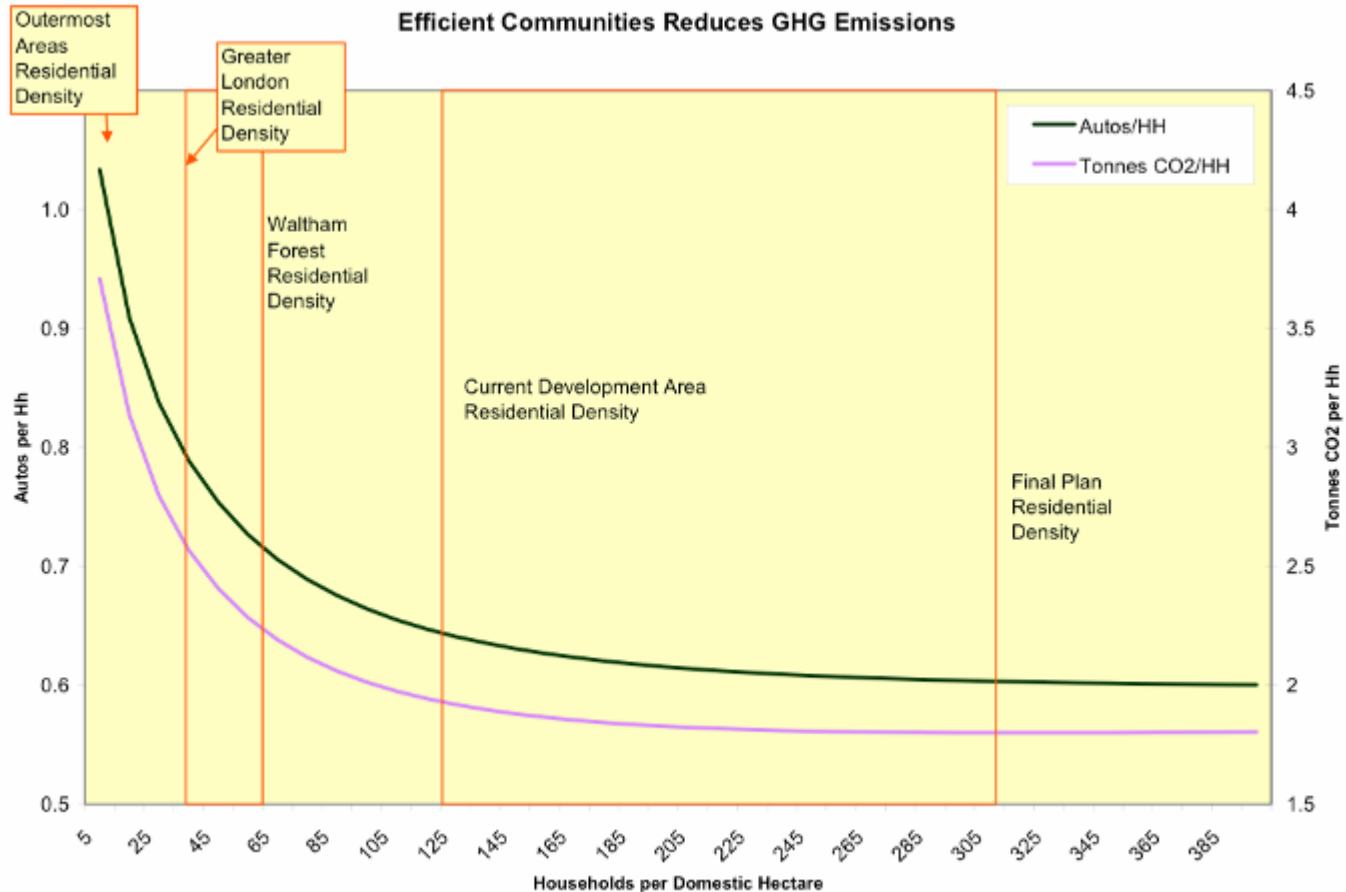
Master Plan



Massing



Climate Impacts of Master Plan for Walthamstow



2438 new households resulting in up to a total CO2 emission reduction of 4,654 tonnes

Sherford Sustainability Review by BRE

Performance summary

Development: Sherford, South Hams

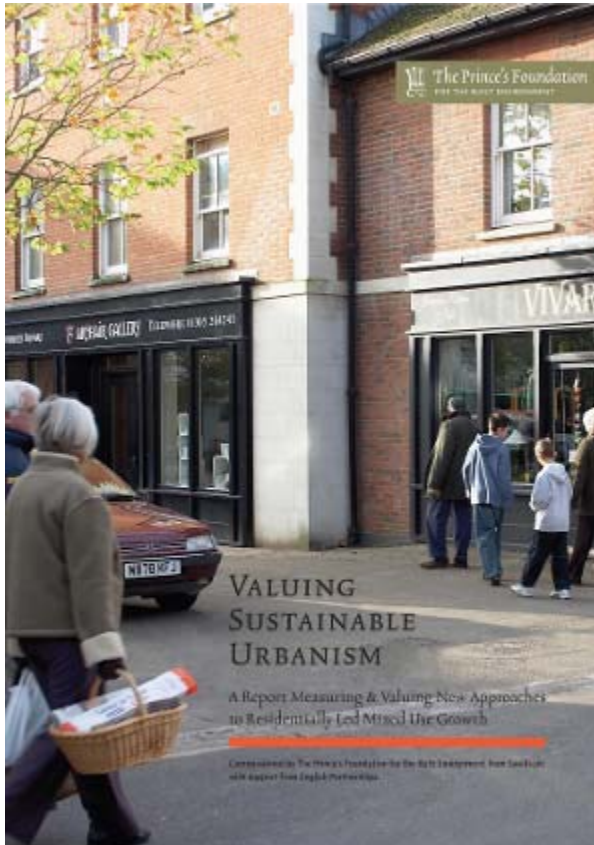
Date: 23rd November 2006

Sections		Number of Credits Achieved				Maximum possible score	Actual score achieved	%
		Best	Good	Minimum	Not Met			
1	CLIMATE CHANGE AND ENERGY	10	4	1	1	14.05	11.53	82%
2	SUSTAINABLE CONSTRUCTION	5	5	4	0	11.3	7.93	70%
3	COMMUNITY & SUSTAINABLE LIFESTYLES	5	1	0	1	6.4	5.10	80%
4	PLACEMAKING	6	7	2	0	13.2	10.12	77%
5	TRANSPORT	10	2	1	0	11.35	10.29	91%
6	ECOLOGY	6	1	0	0	5.65	5.44	96%
7	BUSINESS	1	1	2	0	3.85	2.26	59%
TOTAL SCORE		43	21	10	2	65.80	52.66	80%

Overall Performance Rating: **Excellent**

Table 1: Sherford Performance summary Table

Comparing Market Value



3 Case Studies



18%!

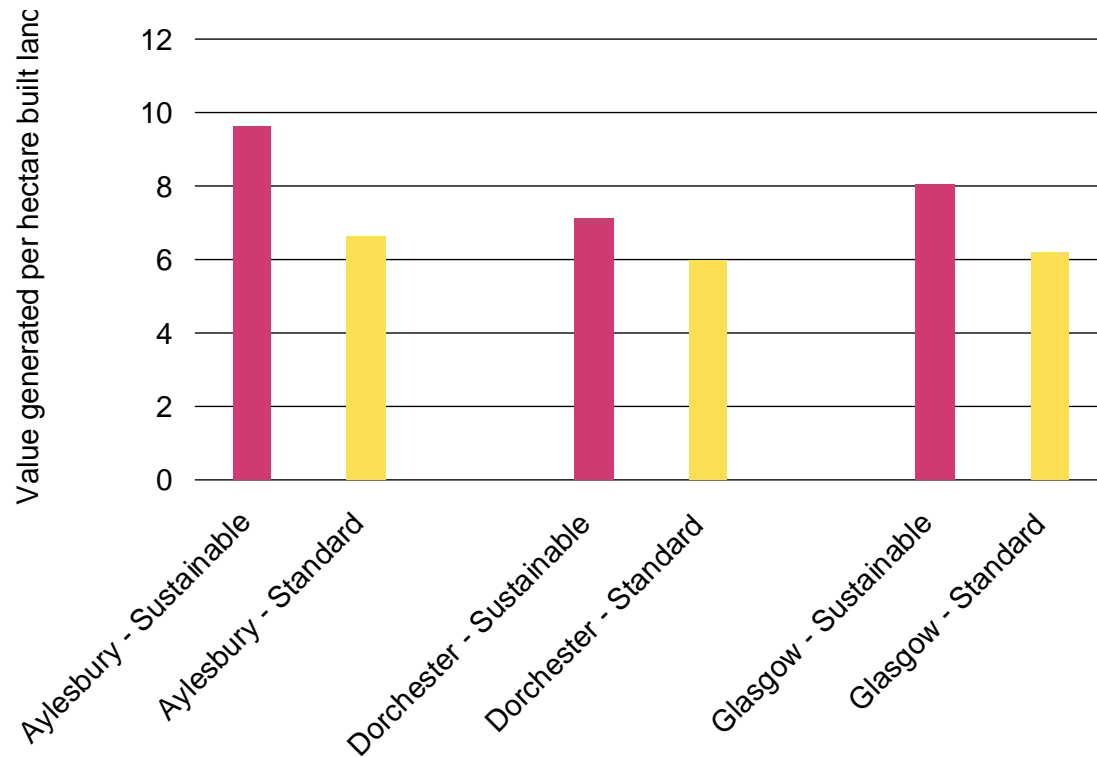


30%!



46%!

Sustainable Urbanism Pays



Source: Savills Research

Sustainable Urbanism may help with rising build costs

	Aylesbury	Dorchester	Glasgow
	Fairford Leys	Poundbury	Crown Street
Theoretical additional residual value with which to fund additional development costs	120%	46%	75%

Health and Obesity

The sustainable urbanism model encourages active, healthy and safe behaviour, through opportunity for incidental physical activity and provision of high quality public realm that promotes mental well being.

Land use mix identified as the most important factor in promoting daily physical activity - *“the inhabitant of a cul-de-sac on a suburban subdivision is statistically likely to weigh 8lbs more than his centrally-dwelling equivalent.”*

Dr. Richard Jackson



Safety and Perception of Safety



By building in opportunities for natural surveillance, street activity and interaction, sustainable urbanism, when associated with integration of transport options, creates connected and permeable communities that can reduce the incidence of criminal behaviour and the fear of crime in urban areas.

“An integrated location appears to reduce the risk of crime by as much as 40%.”

Mixed income, social inclusion and cohesion



Developments designed according to the principles of sustainable urbanism, with a high quality physical environment and the provision of a range of local services:

- Promote social integration through a choice of tenures and sizes
- Reduce social exclusion by creating integrated communities, with access to community facilities
- Encourage community cohesion and stability by enabling households to remain within a given neighbourhood through different life stages

Conclusion

