Urban sprawl in Europe

The ignored challenge
Urban Sprawl in Europe

- Joint report of European Environment Agency and Joint Research Centre of the European Commission
- Description of urban sprawl
- First European wide study on urban sprawl - published in 2006
- Drivers
- Impacts
- Way forward – EU Territorial Cohesion Policy?
Sprawl - Defined

- EEA has described sprawl as **the physical pattern of low-density expansion of large urban areas under market conditions mainly into the surrounding agricultural areas.**
  Sprawl is the leading edge of urban growth and implies little planning control of land subdivision.

- Development is patchy, scattered and strung out, with a tendency to discontinuity because it leap-frogs over some areas, leaving agricultural enclaves. **Sprawling cities are considered as the opposite of compact cities**, full of empty spaces that indicate the inefficiencies in development and highlights the consequences of uncontrolled growth.
Le nouveau visage de la France : la ville envahit la campagne
Sprawl - Defined

- **Classically it is a US phenomena** associated with the rapid low-density outward expansion of US cities from the early part of the 20th century.

- In **Europe the city has traditionally been much more compact** as European cities developed a dense historical core shaped well before the existence of modern transport systems.

- Furthermore, for much of the past century in most parts of Europe, **planning controls in the form of master plans, zoning etc have restrained urban sprawl and channeled growth in planned forms.**
Sprawl - Defined

- Compared to most American cities, their European counterparts still remain in many cases compact, but comparing European cities between the mid-1950’s and today clearly demonstrates that they have become less compact and more sprawled, a common phenomenon throughout Europe.
- Coasts are urbanized at an accelerating rate, and resident communities are being transformed to accommodate new economies increasingly intertwined with the hinterland and dependent on tourism and secondary homes (EEA, 2006).
- There is no apparent slowing in these trends; furthermore, the urban areas of the southern, eastern and central parts of Europe are particularly at risk, as the historically compact urban structures have started to grow rapidly outwards.
Sprawl – Why It Matters?

- Sprawl threatens the very culture of European urbanity, as it creates severe environmental, social and economic impacts for the cities and regions of Europe.
- Sprawl impacts affect not only the city and its region, but also the surrounding rural areas.
Flooding or building in the floodplain ... 

... natural

The river Rhine has already lost four-fifth of its natural floodplains. Similarly, at the river Elbe only 15% of the natural floodplains remain.

... and developed
Sprawl – Why It Matters?

- These impacts are evident in increased energy, land and soil consumption, biodiversity loss etc - a series of outcomes that threaten both natural and rural environments.

- As well as in rising greenhouse gas emissions, elevated air and noise pollution levels.

- Urban sprawl thus produces many adverse environmental health impacts that have direct effects on the quality of life in cities and seriously undermines efforts to meet the global challenge of climate change.
Sprawl – New Drivers

• Historical growth of cities driven by increasing urban population, but in Europe today, even where no population pressure, a variety of factors drive sprawl.

• Rooted in the desire to realise new lifestyles in suburban environments, outside the inner city, drive the sprawling expansion of the city.
POPULATION GROWTH & GROWTH OF BUILT UP AREAS

![Graph showing cities and their population growth and growth of built-up areas from 1950s to 1990s in percentage. The cities plotted include Belgrade, Bilbao, Bratislava, Brussels, Copenhagen, Dresden, Dublin, Grenoble, Iraklion, Helsinki, Iraklion, Marseille, Milan, Munich, Palermo, Pordenone, Porto, Prague, Sunderland, Tallinn, Trieste, Vienna, and Udine. The graph includes axes for population growth and growth of built-up areas, with values ranging from -50 to 250 in percentage. The cities are plotted according to their growth rates, with some cities showing higher population growth compared to growth of built-up areas, and others showing a more balanced increase.](image-url)
Sprawl – Interplay of Drivers

- Spatial development of cities - complex mix of centralising and decentralising forces, and sprawl depends upon the outcome of the interplay of these various forces.

- The **mix of forces include** both micro and macro-economic trends, the means of transportation, the price of land; individual housing preferences, cultural traditions and constraints; the attractiveness of existing urban areas and the quality of the environment, demographic trends

- And not least the application of land use planning policy at both local and regional scales.
Sprawl – Key Drivers

Drivers of urban sprawl

Macro-Economic Factors
- Economic growth
- Globalisation
- European integration

Micro-Economic Factors
- Rising living standards
- Price of land
- Availability of cheap agricultural land
- Competition between municipalities

Demographic Factors
- Population growth
- Increase in household formation
- Housing Preferences
- More space per person
Sprawl – Key Drivers

Drivers of urban sprawl

**Inner City Problems**
- Poor air quality
- Noise
- Small apartments
- Unsafe environments
- Social problems
- Lack of green open space
- Poor quality of schools

**Transportation**
- Private car ownership
- Availability of roads
- Low cost of fuel
- Poor public transport

**Regulatory Frameworks**
- Weak land use planning
- Poor enforcement of existing plans
- Lack of horizontal and vertical coordination and collaboration
Sprawl – Drivers at Work

- Global socio-economic forces form the fundamental drivers of sprawl - interact with more localised environmental and spatial constraints to generate urban sprawl.

- Second half 20th Century, new economic generators of sprawl have become dominant, freeing urban growth from locational constraints of the former model of industrial economy.

- Modern means of mobility based on improved transportation links and enhanced personal mobility including cheap private transport, have profoundly modified cities spatial footprints.

- Hyper mobility makes it possible to live increasingly far from city centers while retaining all the advantages of a city location, or to support personal choices to live in one city - work in another.
Overall, evidence from the development of cities throughout Europe highlights the crucial importance of effective planning strategies in controlling the outcome of these various forces moulding cities, and whether a city sprawls or not.

Where unplanned, decentralized development dominates sprawl will occur - conversely, where growth around the periphery of the city is coordinated by strong urban policy, more compact forms of urban development can be secured.
Need for Planning

Dresden and Prague - Transport Corridor

Problems and processes:

- Metropolitan and regional development
- EU Cohesion fund investments
- New development axis – motorway Dresden-Prague
- Elbe River basin – flood risk and growing exposure
Who decides?

- Market forces?
- Developers?
- Residents/stakeholders?
- Local authorities?
- Regional authorities?
- National bodies?
- EU impacts?
Sprawl – EU Integration

- European ‘internal market’, Europe’s new prosperity and economic development has put pressure on cities. Role and contribution of cities to Europe’s economic growth, jobs and competitiveness is clear.

- But also delivering social and environmental goals? EU says “Europe as a whole must benefit from the economic efficiency and social stability of cities” (European Commission, 1990; 2006).

- A specific element is the EU’s traditional commitment to Cohesion policy, including territorial cohesion, a commitment renewed for 2007-13.

- To this end huge EU Cohesion and Structural Fund budget transfers provide powerful drivers of macro-economic change to support EU integration.
Sprawl – EU Responsibilities

- Analysis shows budget transfers also create inadvertent socio-economic effects that have promoted the development of sprawl.
- Co-ordination of land use policies and Structural and Cohesion Fund investments remains key to support the containment of urban sprawl - complicated as impacts on urban development arise from EU intervention in many other policy domains.
- EU obligations in relation to the wide range of environmental, social and economic impacts of urban sprawl define a clear and substantial responsibility and mandate for the EU to take an active lead in the development of new initiatives to counter the impacts of sprawl.
- Demands new policy visions and solutions at the EU level to manage the effects of sprawl.
Sprawl – EU Roles

- Managing urban systems - complex and interrelated whole - highlights the potential dangers of ad-hoc decision making: solution to one problem, at one scale, causes another at a different scale.

- Prime importance to recognise that while the city is the main focus of socio-economic activity and the associated pressures and impacts on the environment, it cannot be managed in isolation from forces and decisions that originate well beyond the city borders.

- EU can (and should) take a lead role in developing the best frameworks for intervention at all levels and to pave the way for local leaders to do more (European Commission, 2005; 2006).
Sprawl – EU Vertical Integration

- Key dimension of this action framework - division of responsibilities between the different levels of city regional governance.

- Urban and regional managers at the local level clearly have prime responsibility for the management of the city and its region.

- But the strategies and instruments to control urban sprawl strongly depend on the interconnectedness between local, regional and national conditions

- EU role is complementary to, and does not reproduce local management of the urban environment. New planning responses to combat urban sprawl therefore must be built on principles that recognise what is locally driven and what should be EU driven.
Sprawl – Sustainable Visions

- Dimensions of the action framework – **local level policy revision** - replacement of the dominant trends of urbanisation - ‘laissez-faire’ - with a new urbanism - ‘creative control’

- Planning policy solutions at all levels of governance - typically reflect the logic of economic development rather than a sustainable vision of urban Europe.

- New policy interventions to counter sprawl – focus on need to **supplement the logic of the market** and be based on demand-driven management rather than a supply-driven one.

- Identifying spatial trade offs between economic, social and environmental objectives **requires** improved regional contextualisation of the assets to be maintained, restored or enhanced.
Sprawl – EU Policy Coherence

- EU can support the envisioning of the spatial planning of Europe’s cities and regions to effectively address urban sprawl.

- Articulated vision of sustainable urban and regional development - provides the context for integrated mutually reinforcing policy responses = new policy coherence implemented at all levels.

- Particular focus - the key EU policy frameworks which can make major contributions to policies to combat urban sprawl including transport and cohesion policy.

- EU Urban Environment Thematic Strategy support for actions and solutions developed at the local level to address urban management problems including urban sprawl - dissemination of policy solutions urban growth boundaries (green belts) and poly-nucleated regional cities and urban corridors.
Urban sprawl in Europe
The ignored challenge