

Past and future of Dutch urbanization policies: growing towards a system in which spatial development and infrastructure contribute to sustainable urbanization

Summary

The Dutch national state, since WWII, strongly intervened in urbanization and infrastructure. In the 1990's the institutional setting for urbanization and infrastructure changed. The necessary connections between the transport system and urbanization were guaranteed partly through urbanization contracts that were agreed in the 1990's by state, regional and local level. And partly through decentralization of transport subsidies to provinces and urban regional governments. The main spatial planning concept was (and is) 'concentrated deconcentration' or clustering. Arguments underlying these concepts are *inter alia* to keep undeveloped (green/landscape) areas undeveloped and open, limiting car use and supporting amenities. The concept and accompanying policies has been successfully applied to housing. But – we argue - not so successfully to employment locations; as a result of which they dispersed all along the highways. We also argue that concentrated deconcentration has supported sustainable urbanization in three manners:

1. encouraging housing densities that are not too low
2. limiting travel distances
3. encouraging low energy transport modes such as walking and cycling as well as public transport

The current government – in place since 2007 - continues the policy of contracting for urbanization. Area development (*gebiedsontwikkeling*) as an additional concept has been pushed forward strongly by national government. Not only by the department of planning, but also by the department of infrastructure and transport. For the first time they share a concept, which gives rise to hope that the two fields will converge. This is enhanced by decision of the current government to create a policy mechanism in which spatial planning and infrastructure planning are joined at a national level (long range program for infrastructure, spatial development and transport, *MIRT*). Also more attention is paid to industrial locations: discouraging newly built industrial sites along highways and stimulating better design for the industrial locations. Thus, new energy is currently being released to working towards urbanization in a sustainable manner.

1. An institutional perspective

Urbanization policies take shape in specific institutional environments. The Dutch national state, the pinnacle of the 'decentralized unitary' that calls itself the Kingdom of the Netherlands developed in the post war years into an very active, interventionist state in all matters of spatial development. From housing, traffic, to water management and agricultural land redevelopment. This is not exceptional by itself, as many European countries had to redesign themselves after WWII, but The Netherlands suffered extensive industrial damage and loss of housing stock, combined with strong population growth. The national state took up a rigorous interventionist mode. Until the 1990's, almost 85% of housing construction was subsidized and delivered by semi-state owned housing corporations. The rental market was (and is) strongly regulated, urban

expansion plans had to be approved by the national state, and industrial areas were (and are) developed and managed by municipalities, not by private developers. As in the field of housing, infrastructure (roads and public transport, esp. railway) was also developed by the national state, department of traffic and transport.

Municipalities are the prime developers of urban land, whether it be for housing, industry, harbors, leisure or commerce. And where private developers gain a foothold – office and commercial complexes, homeowner market – they still have to co-operate closely with municipalities. Almost all municipalities have a land management department, and some cities, of which Amsterdam is the largest and most active, own most of urban land and put it on the market through long lease contracts. Local income is substantial, but 70% comes from the national state, so land development (as long as it generates profits) is an additional source of income and power. Infrastructure in new urban areas is provided for by the municipalities and recovered through sale of land. The State subsidizes larger regional roads, traffic safety measures and public transport, both infrastructure and exploitation. Toll roads are an exception, but plans have been agreed very recently to start a piecemeal introduction from 2012 onwards.

In this setting, urbanization policies have since WWII been part of *national* spatial planning, and can be said to be at their heart. National policies and concepts have found their way into regional and local development projects through conditions attached to housing subsidies, land development subsidies, traffic subsidies, and, since the 1990's, subsidies for soil sanitation and recreation. Although part of urbanization was not within the reach of state subsidies – in smaller towns mostly – and local preferences for less compact development could leave their imprint, urbanization patterns in the whole of the Netherlands are roughly the same. Throughout the Netherlands orderly extensions of existing towns and villages at not to low densities (> 15 houses/hectare) can be found.

In the 1990's, the institutional setting for urbanization changed drastically. The housing corporations became independent of the national state, national subsidies for housing and land development were reduced and the private sector, both housing corporations and private developers, grew in size and market power. Transport investments for regional and local networks were largely decentralized.

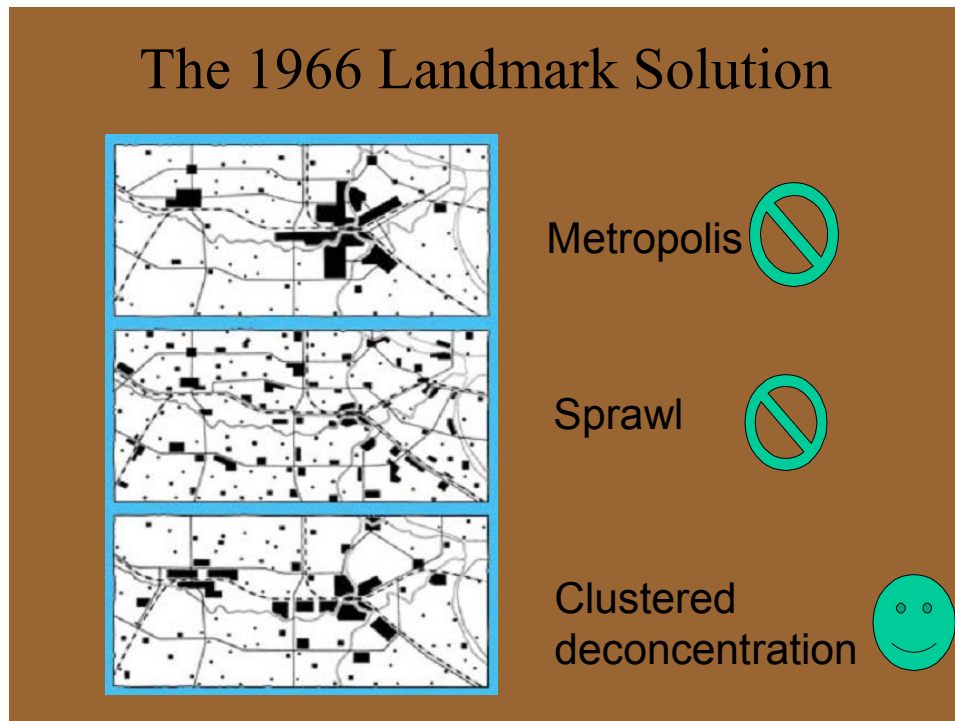
2. Past policies and their effectiveness: concentrated deconcentration as central concept

New Town program

The conceptual base was and is formed by the 1966 national landmark decision to concentrate urban development everywhere in the country primarily in urban regions (*stadsgewesten*) in a mixed pattern of moderately expanding and transforming large central cities (according to Christallers model) and smaller towns. In actual national spatial strategy we call this 'clustered urbanization'. This concept aimed at avoiding the dangers of the 'metropolis' (as described eloquently by Lewis Mumford and Charles Dickens) on the one hand, and totally dispersed, low-density development (sprawl or 'ribbon development') in the countryside. In order to give workers living in the new suburbs access to employment opportunities - that were supposed to remain in the larger urban centers - new towns were connected to those larger centers of the urban regions by road and public transport¹. By concentrating new urbanization close to existing urban centres the distances were to be such that people would choose to walk or cycle to work. Moreover, in an urban region public transport services are

¹ In contrast to British new town policies, the Dutch new towns were too close to major centers to develop into employment centers of their own.

better, so more people would travel – so it was thought - using public transport. Alongside housing and transport subsidies the new town program also included provisions for green area / landscape development and concentrated development of amenities and business development.



Outcomes (e.g. Van der Burg & Dieleman 2004) of this landmark choice took some time to surface. A serious New Town program only started in 1972. However housing shortage was long time national priority no. 1, so that in effect every building opportunity in any town or village was approved by the state (i.e. the housing department). Policies were mostly limited to housing and related amenities, and to road development. Only a few public transport lines were actually created after 1970. New Towns were for a long time “sleeping towns”, some of them badly situated in relation to their supposedly super-ordinate urban center. Employment remained in the central cities, and developed later, unforeseen by national policies, at the branches and crossroads of the highway network (probably because the Dutch highway network has so many branches and crossroads). The secondary roads system (provincial roads) is heavily under-developed. The effect on the national highway network is that most of its traffic is regional at best, and congestion is high and hampers long-distance traffic (esp. goods). This process of decentralization of employment is still going on, though not at a very high rate, and urban centers still are vivid and economically attractive (due to leisure, shopping and advanced producers services, and in some instances due to higher education). State subsidies for industrial areas and for roads stimulated the shifting of employment to the outskirts of cities.

VINEX-era²

In the 1990's a new nationwide program of housing expansion was needed, this time under the dual aegis of reducing housing shortage and limiting the growth of car use (environmental concern). This took the form of so-called VINEX urbanization contracts, between the state, major cities, urban regions and the provinces. Municipalities in their turn contracted private landowners, developers and transport companies. In practice in most of the urban areas land, amenities and infrastructure land was developed by the municipality, and developers filled in the housing and commercial plots. Like the new town program, it was meant to be a broad package.

According to the contracts, regulating all housing production for the period 1995-2005 (later extended to 2010), new urban areas should be situated according to an order of preference. First sites inside existing urban areas were to be given priority. Secondly, sites near already built-up land. Only when the first two opportunities were exhausted, sites further away from the central city center were possible. A same order of preference was put in place for the development of employment centers (*ABC beleid*). The policy distinguished businesses that would be best located in the city-centers (preferably around public transport hubs, like train stations ('A location'), to so-called 'C locations' that were meant for businesses that heavily depended on road transport / accessibility. This policy was a reaction to the growth of offices and large-scale amenities along highways in the 80's. It was also meant to reduce car-use.

VINEX agreements came in the form of package deals, comprising subsidies for land development, soil sanitation, regional recreational areas, and for urban and regional public transport and roads plus some extra stops in the national train system. The main prizes were the subsidies for soil sanitation (for some polluted sites up to € 100 mln.) and for transport. An example: In Alkmaar and surroundings (situated some 35 kilometers north of Amsterdam), subsidies per home amounted to € 2.726, of which € 561 for land development and € 1.697 for transport infrastructure. Provision of extra highway capacity didn't count as subsidy or special state contribution to VINEX, although in effect it was. All this money came in exchange for a specified list of larger (>5.000 homes) new locations and imperative numbers for certain categories of housing (inner city development, social housing etc.). The locations were - after consultation with regional and local government - designated by national government. The unforeseen result of which was that private parties bought the land, and municipalities suffered difficulties developing the areas. It did give rise to a larger and more professional private building and development sector.

After some troublesome years in which some larger locations were slow to start up, the projected development took its direction. On balance, smaller cities and locations developed quicker and produced much more housing than wished for – especially at more attractive rural locations – but in the long run all agreed locations will be urbanized. The aimed-for concentration of housing is achieved (58% housing stock is concentrated in urban regions, and 61% of new additions is concentrated there). Densities are differentiated, but on average net densities are 34,3 homes per hectare, and the average size of a building plot is 246 m². This cannot be called sprawl, but 'compact city' is also not the case. The average densities give room for 80% houses with a garden on new locations and 28% of the same in inner city locations. This average gives some support for public transport, but only in the larger cities with an already developed system of public transport, services are (modestly) adequate.

² Acronym for the Fourth Report on Spatial Planning Extra.

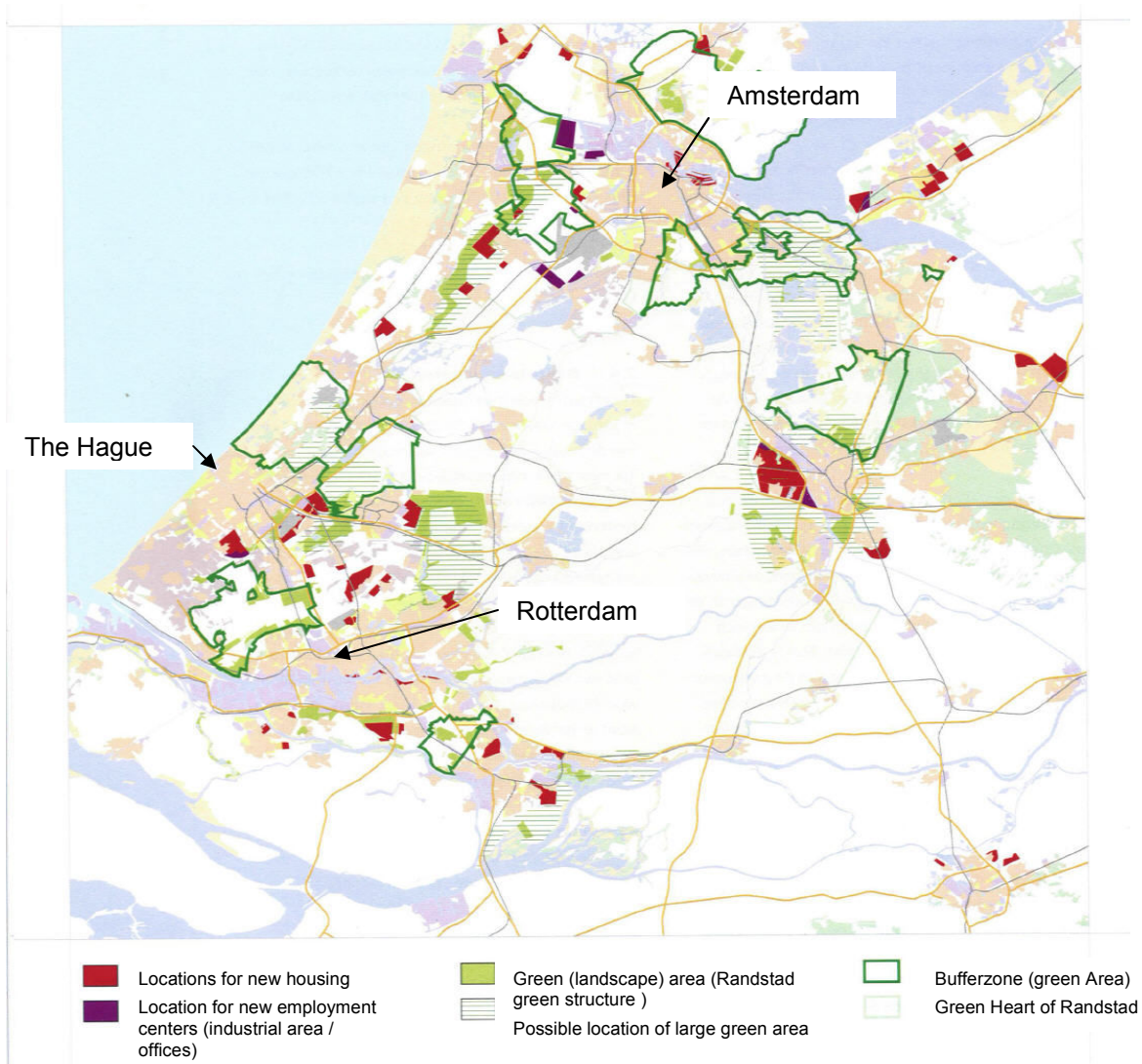


Illustration: Designated VINEX locations and regional green areas in West of the Netherlands (area called the *Randstad*)

Though transport arrangements for the newly developed housing locations outside existing urban areas were included in the contracts, the implementation of the housing program by municipalities and the infrastructure investments by the department of infrastructure and transport were not optimally attuned. Infrastructure and transport provisions at a few locations lagged behind, rendering a negative connotation to the locations (and for some to the Vinex program as a whole). In retrospect questions were also posed by the department of infrastructure and transport as to whether the locations – that fitted the spatial planning concepts – were effective from a mobility point of view.

Effects of VINEX on mobility

Evaluation studies of the VINEX program (VROM 2007) show that most residents are very satisfied with their homes, as the program made dominantly the preferred row

houses available. Also from a mobility point of view the VINEX program was not too bad. The goal of limiting the growth of car use has come closer, be it mainly on inner city locations (Snellen 2005). Shortage of parking space is a major problem, due to ideological theories about limiting car use by restricted parking space (1,6 per home in locations with adequate public transport). The development of new public transport on large locations was slow, mainly because of the rule that high quality public transport such a light rail would only be operational as soon as 2/3 of projected houses were delivered. In combination with the new housing plots excellently situated close to highway branches, the reduction in the use of cars in commuter traffic was much less than anticipated. The other reason is that the population that is attracted to new housing are usually middle class, working (two earners being the standard) and owning more than one car. As traffic intensity grows, and as new public transport does finally come into operation, this effect is expected to take a favorable turn. Though this is not certain, as studies show that once a habit is formed (car use) it is difficult to get people to take public transport. A recent model exercise has shown that ex-post the official concentration policy may have saved 5% to 10% on car kilometers, and concomitant pollution, compared to a more unrestricted land use policy (Geurs 2006).

The development of employment centers did not go according to VINEX policies. The VINEX provisions in this field were broken off by a new minister of spatial planning in 2001. In general, employment grew (and still does) at some prime public transport locations (e.g. Schiphol Airport, some railway stations) but the bulk of employment, also in the service industry, shifts to the outskirts of towns and along highways. This led to 'industrial sprawl'. It has led to a fierce debate in Dutch spatial planning about the consequences on landscape and congestion (Hilbers, Snellen, Hendriks, 2006 as well as VenWraad). A new project has been started by the government to protect open landscape-views from highways, to restrict the unlimited planning and growth of industrial areas and encouraging better design of these locations.



Illustration: Open views on national landscapes around highways

In conclusion, we see a kind of dual pattern:

A. Housing and supporting amenities developed more or less according to the concept of clustered deconcentration, a form of disciplined development guided jointly by national and local governments. With this come three big disadvantages:

1. Permanent housing shortage (higher than 1.5 % of total demand), both quantitative and qualitative (not enough low rise housing and not enough floor space per house);
2. No real big metropolis(es) comparable to London, Paris or Barcelona, although Amsterdam (region: 1,5 mln. inh.) scores satisfactorily on all international rankings; and
3. Many urban regions are too small to support an adequate system of public transport (subways only in Amsterdam and Rotterdam, cities under 150.000 inh. only served by local trains or buses).

B. Industry and offices (and increasingly shops and leisure destinations) developed more or less according to the expansion of the major road networks (and on a limited scale around major railway stations), a form of disciplined development guided only by municipalities. This has two major disadvantages:

1. More and more employment destinations can only be reached within reasonable time by car;
2. Industrial land is so abundant and cheap that older industrial sites are slow to redevelop, and inner city redevelopment hardly can do without major state subsidies.

We must take note of the strange combination of what is in The Netherlands commonly called '*the iron stock of industrial land*', kept by municipalities in order to serve any customer immediately, and on the other hand what is called '*the acceptable rate of housing shortage*', guarded by the state in order to keep the landscape free from over-development (or sprawl) and to give citizens adequate access to schools, shops, doctors and all other amenities that make daily life pleasant and efficient. One could deduct from the former that in Dutch society employment is rated higher than housing, or that free enterprise meets little limitations for employment and is too restricted for housing.

3. New policies for new circumstances

In 2003 a new national spatial strategy (*nota Ruimte*) was introduced under a liberal minister. New was that the four departments that play a role in the physical domain adopted the strategy (departments of spatial planning, infrastructure and transports, nature and natural landscape and lastly the department for economic affairs). Much emphasis was placed on the *system* of spatial development, more specifically the subsidiarity principle (increased decentralization). Less detailed regulation by central government and greater latitude for other levels of government, members of the public and market parties were put in place. In the field of urbanization, but concurrently in the field of infrastructure and transport. The changing institutional setting from the 1990's onwards was thus continued with growing local and regional public capacities as well as a growing importance of private parties.

With the new strategy an additional concept was introduced: that of integral area development (*integrale gebiedsontwikkeling*). The concept has been described as (Cammen, 2006):

- An integrated approach and development of an area

- On the basis of a shared vision of quality and ambition for the area
- By public and private partners and individuals, who in co-production complement and reinforce each other; and
- Explicitly heed the financial aspect

In the new policy report was also stated that infrastructure plays a structuring role for spatial development. More than before, infrastructural and mobility aspects were taken into account when developing a spatial policy or project. We can say that these are the lessons of the past, most notably VINEX. The policy report asserts that there are six national urban networks (*stedelijke netwerken*, overlap with the economic hotspots (*economische kernzones*)). These networks/hotspots are connected to each other by main transport axes (*hoofdverbindingssassen*). These axes include roads and public transports. The scaling up of concepts on urbanization (the networks spread over a wider area than urban regions) meant a shift in focus away from solely the public transport system to a focus that also included the main highways (Walbeek, 2006). The department of infrastructure began to focus on the largest urban agglomerations by analyzing the infrastructure and transport network (*netwerkanalyses*). At the same time the regions worked together with the department of spatial planning to draw up agendas for the development of their urban network (*samenwerkingsagenda's*). Very recently the decision has been made to join the two agendas. This further challenges the still two separate worlds of planners and infrastructure engineers with different disciplines, concepts and attitudes. Together with the shift in institutional setting (increased decentralization) and the rising popularity of regional area development (*gebiedsontwikkeling*) hope arises for more coherent planning and implementation.

The new government that was installed in 2007, decided to formalize the collaboration between spatial development and infrastructure development. Declared was that the system of deciding on infrastructural projects was to be complemented by considerations on spatial projects of national importance (*MIRT*). Again the four departments of national government active in the physical domain were joint together to increase their cooperation. A program of national projects set in a background of area development is drawn up in an integrated manner.

Most recently the national government declared its intention to follow up VINEX by concluding integral urbanization contracts with the main urban regions for the period 2010 – 2020. New chances arise for better cooperation. For instance by planning spatial developments along public transports hubs so that the lines are used efficiently. We have ample evidence of successful local developments of such kind (e.g. development around large train stations), but very few regionally. Maybe that is because area development is difficult as it is (De Zeeuw, 2007).

The challenge for the follow up of VINEX is to take the lessons of the past to heart:

1. planning of new housing locations in a deconcentrated concentration manner (also the VINEX order of preference for location selection) can support a more sustainable manner of urbanization by limiting distances, encouraging alternative transport modes – bike, walking – and encouraging public transport
2. cooperation between spatial planning and infrastructure/transport investments should be kept firmly in place, also in the phase of project realization. One wonders whether the agreement to keep financial regimes separate will facilitate this sufficiently. This was also done in VINEX: every department kept its own budget/procedure. Though currently we've seen an increasing decentralization,

but one wonders whether the financial arrangement of separate budgets is effective enough.

We need better programming of employment centres (industrial sites and offices) to counter sprawl, to keep the landscape open and to reduce congestion.

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