

**The Jerusalem Institute for Israel Studies**  
The Center for Environmental Policy

**A Transportation and Environmentally-  
Sensitive Approach to The Classification of  
Urban Activities**

**Final Report**

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**2005**

The Center for Environmental Policy Studies Series no. 14

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**This research was initiated, guided and supported by the Division  
for Policy and Planning, Ministry of the Environment.**

This publication was made possible through funding by the Charles H. Revson  
Foundation. The statements made and the views expressed are solely the  
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## Abstract

Mixed land use has many potential advantages. Mixing land uses allows businesses to be more flexible in finding the most suitable locations, thereby promoting economic growth. Mixed land use can enable reduction in mileage traveled, since people can use services close to their home and place of work. It may also encourage shorter, non-motorized trips and resulting unstructured encounters, which is the greatest relative advantage cities have to offer, thereby contributing to urban revitalization. However, mixed land use can also expose urban populations to environmental degradation, which may deteriorate as densities increase. The current Israeli planning doctrine has favored urban crowding; however success of this strategy is largely contingent upon maintaining the residents' quality of life and the quality of the urban environment. Thus, the main dilemma presently facing urban planners is how to encourage a mixture of activities and offer businesses maximum flexibility in finding their optimum locations, while at the same time ensuring good access without jeopardizing environmental quality. The current method of classifying land use in local outline plans prevents mixed land use. This report presents a new method for classifying urban activities, based on transportation and environmental considerations, so as to allow mixed uses, ensuring good access to all activity types without generating unacceptable environmental degradation.. The principle underlying the proposed classification method is that each activity will be provided with as broad a range of locations as possible, within transportation and environmental limitations.

In order to identify these limitations, the environmental and transportation implications of a very broad range of activities and the sensitivity of each activity to environmental degradation were identified and characterized. On this basis, the city's built-up space was divided into four main categories: areas characterized by poor access and little environmental degradation (Area A), areas with good access and little environmental degradation (Area B), areas with poor access and substantial environmental degradation (Area C), and areas with good access but significant environmental degradation (Area D)., The degree to which each recognized activity is suited to each area was based on expert opinion. This report

also proposes a process to assess activities that were not discussed in this report, which would enable planners to cope with new activities.

In areas earmarked for preservation (primarily relating to prohibition of construction of buildings inappropriate in terms of size or shape), additional restrictions are proposed which may also be required in situations where certain conditions will be needed to enable a particular activity to be located in the area. Such conditions are likely to involve prohibiting mixed use in particular buildings, despite the fact that such uses may be permitted at the neighborhood level, and/or to require specific environmental checks to ensure that degradation and/or exposure to hazard are minimal.

The new classification method was examined in an area stretching from Baka to the Talpiot Industrial Zone in Jerusalem. The areas adjacent to main arteries were categorized as Area B or Area D, while interior areas lacking good access, were categorized as Area A or Area C, according to the character of each area. In addition, specific restrictions are proposed to prevent degradation resulting from the spill over of affected areas (C and D) into residential areas (A and B), as well as guidelines for the possible level of crowding that would not lead to unacceptable transportation hazards or significant loss of light to nearby residences. Draft regulations for this plan are presented in Appendix B. In this case study the relationship between densities and the proposed mixed use system are also outlined.

The proposed classification method allows for greater flexibility for the location of most economic activities, whilst preserving the character of the different areas. It also encourages better matching between classifying activities and transportation considerations than the current classification system. The proposed method does not impose exceptional demands on planning staff responsible for checking urban plans, but is likely to lead to a change in the discourse commonly heard in planning committees by focusing the discussion on transportation and environmental issues, which are the essential issues in discussion pertaining to permits for activities in various parts of the city. Thus the proposed method can also serve as a basis for a policy on non-conforming uses, before the completion of a local outline plan.

# **A Transportation and Environmentally-Sensitive Approach to The Classification of Urban Activities**

## ***1. Introduction***

During the 1990's, the emphasis in planning policy in Israel gradually shifted from the spreading out of building around existing cities and establishing new residential communities, to increasing densities within the existing urban fabric. This change intended to protect natural open space and was reflected in a series of national and regional plans, including the national master plan NOP 31; revisions to the district outline plans for the Central, Tel Aviv, Jerusalem, Haifa and Northern districts; the Tel Aviv Metropolitan Area master plan; the master plan for Israel in the 21<sup>st</sup> century — Israel 2020; and the national master plan NOP 35. Policies for increased density have been difficult to implement.

At the same time, there is greater recognition of the importance of cities, particularly large cities, as an engine for Israel's economy, and the problematic aspects of transportation systems that are vital to allow these cities to function. This recognition is the basis of the principal dilemma facing planners in Israel. On the one hand, they want to encourage and maintain urban revitalization, which is a basis for economic growth. But on the other hand there is also a desire to preserve the urban quality of life, which would make the city an attractive place to live.

Maintaining urban quality of life is essential for retaining strong populations in cities, especially in their internal core, and to reducing suburbanization and the resulting loss of open spaces, and to preventing the deterioration of older built-up urban fabrics. However, maintaining the urban quality of life requires imposing restrictions on the rate and nature of changes in activities that are the heart and soul of urban revitalization. In other words, while we need to maintain the relative advantages and vitality of the cities and promoting maximum flexibility in the process of changing the system of urban activities, we need to preserve the urban quality of life — essential for halting suburbanization and the deterioration of the urban fabric — which requires imposing restrictions on the nature of the changes to the system of activities in the city.

More attention has been paid in recent years in Israel and in the developed world, to the relationship between transportation and land use. The leading approach in recent decades, whereby transportation systems should respond to demand created by changes in the system of urban activities, has reached an impasse. A new approach is now being promoted, which favors a balance between land use and transportation. According to this new approach — which is reflected in the transportation sections of the “Israel 2020” plan, the Tel Aviv Metropolitan Area master plan, and the master plan for land transportation — we must permit land use to develop in correspondence with the availability of transportation, particularly the availability of public transportation systems. Another way to improve the coordination between transportation and land use is to permit mixed land use within the urban space. Mixed land use can ensure greater revitalization, increase the range of opportunities that can be realized using non-motorized means of transportation (walking and bike-riding), reduce commuting distances and enable maximum use of existing infrastructure at all hours of the day and night (by allowing for two-way commuting).

Land use is currently categorized according to activity. That is, each activity has an area in which only that activity is permitted. Thus, outline plans indicate uses according to activity, such as areas zoned for tourism, residential use, types of employment, academic institutions or transportation. This classification does not enable a mixture of activities, and hinders change to the fabric of activities since any change requires a change to the outline plan; this process undermines the city’s vitality. In practice, a growing number of activities operate as non-conforming uses, legally or illegally. At present, there is no connection between land use categorization and environmental parameters. Land use allocation does not guarantee the protection or revitalization of urban quality of life. The current standard classification of land uses in outline plans in fact makes it harder to achieve the planning and environmental goals of Israel’s new planning doctrine. As a result, many plans indicate “special” residential or employment areas, where mixed activity is permitted. In most cases, this mixture is allowed on an ad-hoc basis, without reference to criteria that would guarantee that the planners’ overriding objectives are met.

The purpose of this paper is to propose a new system for classifying activities that would enable a mixture of activities at the neighborhood level, while

maintaining environmental quality and adaptation to transportation systems. This system could be used when local outline plans are being introduced or updated, or as a guideline underlying a policy for non-conforming uses in places where there is, as yet, no interest in preparing a new local outline plan. This paper does not relate to the rural or outside planning open areas within or outside cities. All of these are indeed related issues, but are not central to this paper, which focuses only on intra-urban planning at the level of the local outline plan.

After surveying the problems inherent in the present system for categorizing land uses, we explain the methodology used to categorize the new system of classifications. Afterwards, in Chapter 4, we present and explain the new system being proposed. This system and its benefits are examined in Chapter 5, with regard to the Baka-Talpiot area of Jerusalem. Based on this case study, the proposed system is examined and discussed in Chapter 6.