# Report No. 4

# The Proposed Plan and the Main Planning Policies

# **Prepared for**

Jerusalem Municipality

Planning Administration
City Engineer
City Planning Department

This report is located in the internet site of the Jerusalem Municipality: <a href="https://www.jerusalem.muni.il">www.jerusalem.muni.il</a>

## **Team Personnel**

**Planning Team headed by:** Moshe Cohen

With the participation of:

Pascual BroidePhysical Plan CoordinatorBaruch YoskovitchMethodology ConsultantShlomo AharonsonLandscape and Open Spaces

**Yifat Gal** 

**Arthur Spector** Public Institutions and Hotels

Yonatan Lovel

Ami Shenar Central City and Employment

**Amir Man** 

**Doron Safrir** Residential Areas

**Uriel Babachik** 

David KroyankerPreservation of Building HeritageDan WeinerEngineering Infrastructure Coordinator

Shlomit Shaar

Ron Leshem Environmental Quality

**Liat Dofor-Dror** 

Michael NakmanRoads, Parking and Mass TransportationAmiram GonenSocio-Economic Team Coordinator

Sergio Della PergolaDemographyYishai SefarimEconomics

Shlomo Malik Religious Communities(until Nov.2003, since then member of

Municipal Council

Muhamed NakalMinoritiesHava MordokovitchGraphics

Amir Musek Mapping, Data collection and Analysis

Yaeli Daniel Secretary of Planning Team

Supplementary work:

Rafi Davra, Yairi Weisenthal-Efrati

Noga Lev-Tsion Nadan

**Public Participation** 

Nissim Solomon, Yeshai Sefarim Master Plan for Higher Education

Shahar Puni, John Zeligman Archaeology

Mike Turner, Joe Savitzky

John Zeligman, Liora Beeri-Eldan

The Old City

**Amos Solomon, Oded Katz** Earthquake Possibilities

On Khrubi

#### **Steering Committee:**

Mr. Uri Lupolyanski Mayor and Chairman of the Steering Committee

Mr.Eitan Meir Vice Mayor and Chairman of the Sub-Committee for Planning

and Building

Arch. Uri Shitreet City Engineer (Deputy Committee Chairman)

Mr. Yaakov Avishar Director of Traffic and Infrastructure Development

Department, Jerusalem Municipality

Mr.Ofer Aharon Director of Planning Policy Department, Jerusalem

Municipality. (Committee Coordinator)

Arch.Sophia Eldor Director of Urban Planning, Ministry of Housing

Mr.Eli Amitai Director of Nature Reserves and National Parks Authority

Mr. Raanan Borel Representative of Society for Protection of Nature.

Mr. Menashe Ben Ari General Consultant to the Mayor

Arch. Anda Bar Representative of the Architects Amuta in Jerusalem

Mr. Yitzhak Berman Representative of Industrialists Consortium in Jerusalem

M.Iris Bernstein Director of Central District Planning Department, Keren

Kayemet.

Mr.Ofer Greidinger Director of the Department of District Outline Plans and

Programs, Ministry of Interior.

Mr.Shuka Dirfman Director of Antiquities Authority, Jerusalem

M. Yaira Weisental Representative of the Community Minhalot in Jerusalem

Mr.Eli Zitok Municipal Bursar

Mr. Yossi Habilio Legal Advisor, Jerusalem Municipality

Mr.Eyal Haimovsky Advisor to the Mayor

Mr. Yishai Talor Supervisor of Traffic, Jerusalem and Southern Districts,

Ministry of Transport

Mr.Goldberger Shoni Director of Jerusalem District, Ministry of Environmental

Quality.

Mr. Aharon Cohen Chairman of the Contractors and Builders Association in

Jerusalem.

Mr. Moshe Cohen Representative of Local Council for Planning and

Building.(Until Nov.2003).

Mr. Yair Larry Representative of Local Council for Planning and Building.

Mr. Yehiel Lavi Director General, Moriah Co.

Mr.Moshe Merhavia Commisioner of Jerusalem District, Ministry of Building and

Housing.

Mr. Yossi Feldman Director General, Council for Preservation of Sites.

Mr. Moshe Rigel Deputy Director General, Ministry of Tourism.

Mr. Yitzhak Reif Representative of Industrialist Consortium in Jerusalem.

Ms.Bina Schwartz District Planner, Ministry of Interior, Jerusalem

Ms. Efrat Strauss Director of Jerusalem District, Israel Lands Authority.

# **Introduction- by Director General of the Municipality**

Jerusalem is a whole that is larger than its parts. An urban artifact created over generations. This statement is enough to give rise to fear and trepidation and to prevent any thoughts of planning. It presents us with a challenge with historical connotations.

We have accepted this challenge.

When I came to the Municipality and was appointed head of the Physical Administration, I felt the lack of a Master Plan for the city. I observed how localized planning decisions were made and accepted without any overall comprehensive perspective of the city as a whole entity. This lack of a comprehensive plan caused delays in procedures, disrupted large scale development steps and threatened to strangle the city into itself.

Part of the formative years of Jerusalem occurred during the second half of the past century. The unification of the city in 1967, annexation of areas and the building of new neighborhoods in these areas, transformed the character of the city. However this was done in a random and uncontrolled fashion. The demographic-economic-political realities created processes that could have caused almost irreparable damage, such as the deterioration and stagnation of the center of the city in spite of the fact that it was recently reunited.

I particularly felt the need for a Master Plan when I was placed at the head of the project for a light railway for Jerusalem. The lack of planning cried out to the skies. A light railway is above all a comprehensive urban instrument and as such it was necessary to identify development patterns of the city so as to give an adequate solution to the needs of the citizens, both for the present and the future to come.

The strategic plan that began to consolidate in the middle of the nineties was the forerunner of the coming outline plan. The plan was delayed and did not have legal standing. It however posed the large question- What kind of Jerusalem did we want in the 21<sup>st</sup> century? Although an outline plan is built on a time span until the year 2020, in reality the plan when it becomes operative it will project its light far into the first century of the third millennium.

The planners are faced with a very difficult task, to preserve the special character of the city as a world city, sacred to the three major monotheistic religions of the world, and at the same time to create a living and vibrant city providing its citizens with a high level and quality of living.

One cannot sum up these words without reminding ourselves of the contributions made by Mayors Ehud Olmert and Uri Lupolyanski, who conceived, initiated and directed the plan. Raanan Dinur as Director-General of the municipality also played an important part. The plan would not have been formulated in such a short time had it not been for the perseverance and leadership of the City Engineer, Architect Uri Shitreet and his team.

A special vote of thanks to the outline planning team headed by Mr.Moshe Cohen who toiled day and night in order to bring the plan to fruition.

Nevertheless, the steep slope of the mountain still lies ahead of us.

We are in need of the city notables and those who love the city to redouble their efforts to get the plan approved. We need especially, the tools for implementation that we can use in order to create a new urban reality, for the welfare of all of its citizens.

All the staff of the municipality under my direction are ready for the task.

Eitan Meir Director-General of the Municipality.

August 2004

#### 1. Executive Summary

Since 1948 two approved outline plans have been drawn out for Jerusalem. The first was a plan by Heinz Rau from the planning department in the Ministry of Interior. The plan was made for the entire city and its division by cease-fire lines was not taken into account. The city's borders have been considerably expanded especially westwards. A number of imperative planning rulings were set in this plan and its additions: Givat Ram to the west of the old built-on area, was designated to become the government building area, Har Hamenuhot in its western outskirts was designated to become a cemetery. The plan has applied the principle of valley designation to open spaces on the old areas as well. Moreover, the designation of Mount Herzel was set as a national monument and the Hebrew University was planned in the south-western extension of Givat Ram.

The second plan is Plan number 62 that was authorized in 1959. This plan is the last comprehensive and authorized legal document that regulates the city's development from its day of deposit and until today.

Consequent to the city's unification in 1967 a master plan was laid out which evoked a heated public debate. Not only the plan's content and shape caused that debate but also the severity of planning problems that followed its reunification and elevated public sensitivity regarding the results of the physical planning. Political and religious considerations have turned the debate over Jerusalem's planning into an international issue.

The main conclusion from this review was that there is a need to establish a fixed mechanism that will plan the city in a consecutive process and not a one time execution of a plan. Consequent to this conclusion, outline plan number 1978 was prepared under the supervision of Y.Shweid which was approved by the local committee on the 16<sup>th</sup> of April 1978 and was transferred to the district committee for discussion. The district committee convened and conducted a few discussions but the plan was never deposited.

In light of the absence of an up to date outline plan and the fact that the authorized outline plan relied on a plan dating to 1944, a statutory state emerged that committed the planning committees to work according to "the written law" and the "oral law" that included a system of rules and prohibitions that do not have a legal standing. In such state of matters, High Court of Justice and District Courts' rulings for administrative affairs are considered a "completion" of the outline plan no. 62 from 1959.

Expansion of the city's borders in a number of stages has necessitated the preparation of a partial outline plan to the city's new areas. It is important to emphasize that the regulations of plan number 62 were expressed in all the partial plans without there ever

being a new general thinking and in many cases the building and development principles set in the authorized plans from 1918 have been put into practice.

As a result of Jerusalem's planning history and its stages of development in the last 100 years, the buildings and areas in the city are different from one another in terms of quality and features. There are areas in the city where the quality of buildings is poor and the rate of land utilization is low. Thus, it is appropriate to execute procedures of evacuation and building in these areas while better utilizing the land. On the other hand, there are many buildings and whole neighborhoods that are worth perserving due to their historical, architectural or cultural value. The area serving public institutions is mostly dedicated to city-wide, national and international institutions while a small part of it is dedicated to institutions of the neighborhood.

The areas designated for industry in Givat Shaul, Talpiyot and Romema have altered their faces and in the process of setting irrevocable facts by entrepreneurs have turned into commercial areas, offices and even residencies. As a result of uncontrolled planning and development processes, an anachronistic, functional structure has evolved requiring a comprehensive thinking mode having in mind the entire functional structure of the city.

Today, the city's area is 126,000 dunams. The city's population numbers about 690,000 people. The projections of population growth and national development plans observe a considerable growth of the population, including annexation of expansive areas in the city's west. This expected population growth on the one side and an expansion of the city's area on the other necessitate the development of transportation systems distinct from the ones that were erected in the past. A railroad system of mass transportation and the development of a modern roads system (that contradicts the area's terrain in certain places) require an overall view of the whole city.

Therefore, the main objective of the outline plan is to offer a new and comprehensive thinking mode towards the creation of a statutory framework according to which the development of the city as the capital of Israel and a metropolitan center can take place while preserving its unique values and ensuring an urban quality of life to all the residents.

Report number 1 that was submitted to the steering committee on October 2001, summarized the first stage of preparing the outline plan. The report included the objectives and goals of the plan, work methodology and detailed work plan.

Report number 2 that was submitted to the steering committee on June 2002, summarized the second part and included the summary of the database, the current state analysis and the trends that have been taking shape in recent years in all the fields pertaining to the planning of the city.

Report no. 3 that was submitted to the steering committee on December 2002, summarized the third phase in the work plan and detailed the program in the different planning areas. Additionally, "framework" alternatives to the city's development have been defined until the destination year.

Remarks about reports 1-3 have soon been followed by additional governmental bodies and offices that make up the steering committee like: the Ministry of Environmental Protection, the Ministry of Transport, the Ministry of Tourism, the Society for the Protection of Nature in Israel, the Committee of the preservation of buildings and sites, the Planning Bureau in Judea and Samaria, the Authority for the development of Jerusalem, Transportation master plan team as well as remarks by residents of the city by community administrations. The planning team reviewed the remarks and they were expressed in report number 4.

Report number 4 that is currently being submitted, summarizes the fourth stage in the work plan and the main part of the fifth stage, namely the project's outline plan proposal designed for discussion in the steering committee and the planning committees' meetings.

The policy documents included in report number 4 express the main points of the "planning point of view" in the different planning fields and serve as the plan's commentaries. The policy documents are designed to guide urban development plans including their application and define, as much as possible, the means of achieving the plan's goals.

The approach of the planning team is that the outline plan should serve as the basis for a follow up on the degree of the realization of the goals of the plan, in the ongoing process of decision making, by the planning institutions, initiation of complementary plans and consecutive and timely update of the plan (dynamic planning).

The outline plan sets means of application required for the achievement of the plan's goals. Among other things, there are recommendations in the administrative, economic, organizational and planning domains. Therefore only part of the recommendations will be displayed in the plan's documents (drafts, appendixes and the plan's instructions) and get a statutory status. The other part includes recommendations that are being expressed in this document.

To ensure the implementation of the outline plan, there is a need to establish a municipal follow up body in direct subordination to the city's engineer that will continuously accompany the implementations of the plan's guidelines and instructions.

Three complementary works have been prepared as part of the outline plan: a detailed plan of the Old City, a master plan for higher education and a detailed review of selected archeological sites. Moreover, a detailed review of the neighborhood's open spaces is in the process of being laid out (in collaboration with the Ministry of the Environment). The goal is to enclose an appendix of neighborhood gardens out of recognition of the important role played by the areas in the neighborhood level. Corresponding to the preparation of the outline plan, several other plans are being prepared: detailed plans of the rehabilitation of the city's center, master plan for the orthodox main business center, master plan of educational institutions in eastern Jerusalem and a review of earthquake hazards. The findings of these plans constitute an additional level on which the proposed

outline plan is based and the outline instructions that stem from this were combined in the plan.

In fact, report number 4, submitted to the steering company for discussion, finishes the work on all the subjects that were set for handling by the outline plan. We are now approaching the stage of preparing the plan's book which contains the crux of the entire work from all 4 reports. It is intended to facilitate the understanding of the fundamental principles of the city's plan in the last decades as well as new principles that have been consolidated during the preparation of the outline plan combined with the findings that were extracted from the review phase.

In report number 4 that binds the policy documents there are a number of complementary chapters that include both the review phase and the policy documents. The chapters are: the Old City, the building code in the city, archaeology, higher education, and preservation of the building heritage.

#### Planning alternatives:

The total of objectives and goals at the basis of the outline plan reflect an overall conception for the long run that expresses the desirable picture of the future as viewed by the city's forefathers.

The array of open spaces and the residential program constitute the leading topics in terms of planning alternatives since the residential areas are the biggest land consumers on the one hand, and on the other hand, in light of the approach adopted by the planning team, the open spaces form a foundation around which the rest of the components (residencies, employment etc.) are arranged.

In light of this approach, right in the beginning, the planning team defined open spaces as "not-to-touch" areas that express the city's location in the geographic space in order to preserve the city's uniqueness.

Alternatives to the residential framework and open spaces:

Alternative a: reference alternative- business as usual- the planning procedures carry on as is. This alternative was disqualified since it fails to achieve the goals and objectives defined by the client as its meaning is the continuation of the city's development without an overall vision. Point planning harms the existing structure and complex planning procedures diminish the chances for materializing the plans.

Alternative b: moderate spreading- maximal densification of the built on area- This alternative is based on preventing the spillover of building to areas that are not built-up in the city, by thickening or densification of the built-up structures to the maximum. This alternative proposes to allocate about 6,500 dunams out of the reserve of lands that are not built on in the city.

Alternative c: broadening the layout distribution of the built on area – This alternative is based on the attempt not to crowd the built structures too much to avoid harming their unique character. Therefore a spillover is planned in a much larger scale into the areas that are not built on. According to this alternative, 10,000 squared kilometers should be allocated for residence out of the pool of non built on areas in the city.

**Alternative d: balanced spreading-** in this alternative the premise is that residential areas in western Jerusalem should be more dense than they are currently and that the existing structures in Jerusalem should be densified in such a way that the sensitive structures are not harmed. This alternative allocates about 6,000 dunams for residencies out of the pool of areas in the city that are built on.

The planning team defined alternatives in all the other planning areas including economics and employment, tourism, hotelry, quality of the environment, city's center and public institutions.

The preferred alternative was not selected from the framework alternatives and constitutes a combination of components out of all the options (except for the first one). Thus, the strengths of every alternative were conveyed and combined in order to realize the plan's goals and objectives while the premise defined by the client were met as much as possible. Getting the public to participate is another important element in selecting an alternative. This was done by a productive symposium with the community administrations. In an overall systems view, there are no major discrepancies between the residents' view of the selected alternative and that of the planning team. However there were situations in which the position of some of the residents did not coincide with the city's goals due to narrow sightedness.

The basic premises that were consolidated with the client were reviewed again at this stage of the work to examine the feasibility of their materialization in the future.

The selected alternative is one that combines different elements extracted from the planning alternatives and is therefore defined as an integrative alternative. In Chapter 16 in this report one can find the considerations and processes that led the planning team to choose the selected alternative.

All the aspects pertaining to the local outline plan were expressed in the report according to section 61 of the planning and building law. Subjects that were neglected in the statutory documents constitute policy lines that should be assimilated in the ongoing work process of the municipality departments dealing with planning and development of the city, but not exclusively by them.

In addition to this report the plan submitted for discussion in the planning committees includes the following documents: the plan's regulations, maps (a map of land use designations for the entire area of the city in a scale of 1:15,000 and a map of land use designations for the internal parts of the city in a scale of 1:500), open spaces and urban

nature appendix, the building code of the city appendix, the historic heritage and archeological sites appendix, transportation appendix, roads, mass transportation and areas of parking standard as well as infrastructure and quality of environment appendix.

# 2. Open Spaces:

Jerusalem is characterized by a unique geographic open space as well as a historical depth. In most outline plans, the open spaces array is a direct outcome of the main components of the city's plan. Ordinarily, the open spaces are offered in areas that have a low building potential. In the local outline plan of Jerusalem 2000, the approach is different as it places the open spaces as a central foundation. The rest of the elements (residence, employment etc) adjust themselves to that foundation.

In light of that approach, the planning team termed these spaces as "not-to-touch" areas, namely, open spaces that carry some importance to the urban structure and express the city's location in the geographic space in order to preserve the city's uniqueness.

In order to shape and preserve the array of open spaces, 6 planning components have been defined which together form the unique structure of the city and these are:

- 1. **The unique source** the old city and the historic and religious basin around it.
- 2. **The morphological aspect**: the preservation of the historic structures of the city and those of the view that express the location of the city in the geographic space.
- 3. **The radial and historic structure** that accentuates the main roads connecting the city to its close environment and carry historic and religious meaning.
- 4. **The mountain arena-** continuation of construction on the mountain arena as well as the strengthening of the valleys so they remain green.
- 5. **Hierarchy of open spaces -** the city view is affected by the penetration of open spaces into it and in turn, the functionality of the open spaces is affected as well. These areas become an integral part of the residents' recreational and leisure activity. The array of open spaces relates to two main levels of hierarchy:
  - Intensive open space that is mostly found in the urban areas of the city and includes the neighborhood and quarters' parks and part of the metropolitan park.
  - Extensive open space that surrounds the city and encompasses agricultural areas, nature, forestry and serves ass a background.
- 6. **Distributing the open spaces in the city** as part of planning there is an attempt to allow each neighborhood to have an open space close enough to the quarters' parks.

According to the planning components defined earlier, in the early stages of the work, the objective is to consolidate a planning policy for the supply of open spaces in Jerusalem. Additionally, there is a need to put together a guiding policy for a qualitative and quantitative program for these areas and for the different land use

designations while inserting the program into the planning guidelines for areas especially residential, employment, city center, public institutions etc.

The open spaces system was divided in a hierarchal manner into 3 main groups that received a detailed definition and were marked in the designated land use map as follows:

- A. Areas with historic meaning that single the city out as a capital city and a cosmopolitan city particularly the open spaces that define the Old City basin like Mount of Olives, Kidron Valley, Gehenna. In addition to this there is a list of theme parks and their characterization such as Sherover and Hess promenades, Jerusalem rose garden and Ammunition Hill. Part of these open spaces are located very close to intensive residential areas and serve as parks but are not included in the calculations of the quantity of open parks needed for the target population.
- B. Functional areas that include the city parks (like Neve Yaacov Park, Pisgat Zeev Park, Gan Haazmaoot (Independence), the metropolitan parks (the park in Emek Haarazim and the park in Emek Refaim). At this stage, the neighborhood parks that constitute an additional level in the open spaces array, were literally expressed in the plan's instructions. An additional appendix of the neighborhood gardens will be added as part of the plan's documents upon completion of the detailed survey.
- C. Landscape background areas that shape the urban morphology that is typical to Jerusalem and encompass open landscape areas and agricultural areas. These areas include the rivers' basins in the west (Brook of Sorek, and Brook of Refaim) and in the eastern part of the city (Kidron Brook, Dragot Brook etc) to clarify the city's structure of the "green foundation" an appendix about open spaces was enclosed. This attachment does not establish land use designations but evaluates the open spaces system while referring to a number of additional subjects:
  - The road system that connects between the city's open spaces and constitutes an inseparable part of the urban foundation. This system includes the radial, historic avenues that lead to the Old City such as Nablus way and Hebron way.
  - The reference points that carry historic and geographic weight that include the main gates and observation points on and within the city. This group includes gates like the Al-Qastal in the western part of the city that are known for their view, historic gates like Gate Mount Ha'zofim and urban gates like the area of the northern entrance to the city from Ramallah (the historic Nablus way). The observation posts include observation areas overlooking the old city and its surrounding basin, like the observation point on Har Hazofim, observation areas in the western part of the city such as Mount Herzel and Gilo and observation posts outside the city like Nabi Samuel in the north that are outside the border of the outline plan.

Setting open spaces as urban natural sites due to their exclusive natural features. Monitored research will be carried out in these sites towards the preservation of the fauna and flora.

The means of applying the principles in the plan are detailed in the chapter's summary:

- A. Administrative means such as the recommendation to establish an independent urban parks authority that will handle all the parks in the city, in coordination with bodies like the Jewish National Fund, Israel Nature and National Parks Protection Authority, the Society for the Protection of Nature in Israel and the Antiques Authority.
- B. Formation of economic leverages for developing the open spaces system. The recommendation in this regard is to attach open spaces to planned built on sites, to their development with that of the built on site and so avoid the difficulty in raising public development budgets.
- C. Professional recommendations for landscape development in certain areas that include locating open areas which can be cultivated as agricultural areas as was implemented along the Route 16 between The Gonenim neighborhood and Pat intersection.
- D. Possible solutions for the open spaces problem in the problematic and crowded neighborhoods especially by relating to the street's space as a green space and developing the common yards as a continuation of the public street space.

# 3. The Old City

The Old City and the religious historic basin embracing it constitute the space where Jerusalem has been dwelling for the past 3,000 years, and from it Jerusalem has emerged over the course of the last generations. The objective of the chapter that deals with the Old City is to define the principles of the planning policy that will receive statutory status in the detailed plan for the old city that is in progress.

The purpose of the plan and its goals relating to the old city are as follows:

- **▼** To ensure that the cultural heritage of the Old City is being constantly preserved.
- To sustain the institutional and civil life systems that are regulated within the borders of the old city as was done in the past.

- To improve the quality of life and the quality of the environment for the benefit of the city's dwellers and its visitors.
- To create appropriate conditions for the development of tourism and pilgrimage in the Old City.
- To outline guidelines and principles according to which detailed plans for the Old City are prepared.
- To erect an administrative mechanism that includes among others, ways of enforcement.

Similar to many other old cities, any sustainable development should take the following points into consideration: heritage, daily lives and tourism.

The borders of the Old City and buffer zones: the many changes undergone by the Old City have resulted in the situation whereby many archeological remnants that are intertwined can be found both within and outside the walls of the Old City. Understanding the old city with its planning, structure and archeological remnants can not be complete without taking the entire area of the ancient city and the Old City's basin into consideration.

**The skyline**: The Old City's traditional skyline is one of the most pronounced features of the city that has been preserved for hundreds of years. The existing skyline should be preserved by limiting the building height in the Old City especially near the walls, and preserve the unique building style in the different quarters in the city that affects the skyline.

**The reference points:** The reference points are an important component in the identity of the Old City as they indicate key structures in the city and serve as anchors for the physical and historic orientation in the city and for establishing the city's skyline.

Views from the Old City, on it and in it: The panoramic views from the mountain ranges that surround Jerusalem must be kept by being meticulous about the building height standard in the old city's basin (see building plan in the city below)

# The urban pattern

**Traffic main roads and public spaces:** there is a clear hierarchy in the Old City of streets and alleys: from main traffic roads, through secondary streets to inner alleys. This hierarchic structure of the streets and alleys must be kept to prevent the breakthrough of new roads on the one hand and blockage of existing roads on the other hand.

The urban structure of the city: one of the most outstanding features of the building in the Old City is the division into urban blocks, meaning a yard or an array of yards around which housing units are built. The unique character of every quarter can be preserved by

a scrutiny of the typical features and selection of local elements suitable for utilization in that specific quarter, neighborhood or even inn the street for rehabilitation.

The streets and the urban space: Alongside the practical need (shelter from the rain, sun etc) roofing the streets is one of the main elements in creating "the place's spirit" and atmosphere that characterize the Old City. The traditional roofings must be kept and new roofings that do not interfere with the view and fit to the street's character should be erected.

#### **Architectural guidelines**

**Principles of building classification and planning guidelines:** The structure's classification will be considered in every new building planning. Starting with first level structures, where reconstruction and preservation are facilitated and ending with fourth level structures that have no value that should be preserved but even harm the urban organization and structure where demolition is facilitated.

**New building and additions:** The existing structures should be preserved. A new building will be done in the suitable scale while the nature of the traditional building is kept and while building in the inner yards is being avoided. Before every new intervention in an existing building a survey and a documentation of the building and its environmental contexts should be conducted.

**The buildings' facades**: The authenticity of the urban pattern should be preserved by rehabilitating and preserving original elements that create the special atmosphere of the Old City's streets. The original openings of the shop windows, the gates, roofs, exterior stairs and terraces should be preserved. All these architectural elements were mentioned in the instructions of the detailed plan.

#### **Archeology and antique sites:**

In the Old City that is known as an "antiques site" the archeological sites are incorporated in the built on structure that was constructed at a later stage in a way that is inseparable. The sites constitute a testimony of Jerusalem's past and development and carry religious, cultural and artistic traditions. In each proposition to develop the Old City it is important to consider the need for archeological excavations, exposure of findings and their preservation after discovery. In the detailed plan there are detailed guidelines regarding the preservation of sites as well as guidelines pertaining to their close environment, the buffer zone and the area of influence.

#### The daily lives

**Population and housing:** It is recommended to strive to minimize the crowding in the Old City by an institutional intervention. The housing units should be unified and the restoration process of the existing housing units should be reinforced.

Land use designations: As a rule, the relation between the designated areas for residence within the borders of the Old City and the areas with a different designation will be preserved. Most areas intended for residence will keep their designation in the new plan. Public services: the different public services designed for the residents of the Old City will be supplied within the walls, with the exception of big public institutions such as junior high schools that also serve the population living outside the walls whose location is set outside the Old City. The usual acceptable standards in the other parts of the city in relation to planning, will be adjusted to the special conditions of the Old City out of consideration for its status and functions.

**Access and parking:** Pedestrian traffic should be given priority by diminishing traffic. The parking standard will not be applied to the Old City.

**Infrastructure:** There are many systems of infrastructure in the Old City which are neglected and old. These systems should be gradually upgraded. The old systems should be given way. It is important to act towards minimization of satellite dishes and T.V. antennae that are placed on the roofs and remove water tanks. Concealed infrastructure systems like underground systems, systems in side alleys and interior yards should be tended to first. Additionally, systems should be concentrated and incorporated in buildings in a way that does not harm their appearance or stability.

Illegal building: Illegal additions are not only deleterious to the quality of life and the spirit of the place but they also harm the unique skyline of the Old City. Often these additions physically damage the original buildings and endanger the lives of the dwellers. A strict enforcement of the laws of planning and building must be carried out to impede the phenomenon of illegal building. Additionally, a professional committee will be established that will offer consultation to architects about architectural specifications, building techniques and materials as well as monitor and frequent the construction sites. All this will be supervised by the Antiquity Authority and the Municipality of Jerusalem.

#### **Tourism and visiting:**

The Old City has an exceptional potential for attracting tourists as a city surrounded by a wall that preserves its historic and urban structure. Furthermore, there are numerous sites in the Old City and in the basin around it, which do not only carry archeological, historic, artistic/architectural value but also cultural, national and religious charge. A large number of the sites constitute landmarks of important historic and religious events. The archeological sites must be preserved and developed to interest the public and evoke curiosity; by using modern demonstration means among other ways (see the chapter about tourism below).

#### 4. Residence

In order to meet the goals of the plan relating to the residential areas, meaning ensuring an authorized planning supply in the required extent, the options and the best ways for addition of housing units have been explored and selected.

The proposed ways are based on a balanced and careful combination between a number of means as detailed below:

#### A. Development in the existing residential neighborhoods:

Residential areas that are not amenable to development and construction (areas with relatively low historical, architectural and visual susceptibility) were located and defined.

A number of development means are recommended in these areas:

- Housing units addition in the built on lots, floor additions, wings and buildings' addition in lots, building in pillar levels etc. The financial resources that stem from this activity should be allotted to upgrading and cultivation of the lot and the buildings' appearance.
- Principles have been set according to which housing extensions should be enabled in existing flats.
- Encouragement of the materialization of building in available lots designed for residence inside the existing neighborhoods by increasing building rights.
- Encouragement of high rise building in big lots in the search areas that were set in the plan by giving out incentives of high building rights and setting their date of expiry. The development of these lots may serve as a catalyst of the residencies' environment and get maximal public benefit.
- The cultivation of the open public spaces in the neighborhoods and the improvement of the residents' comfort by adding open spaces, avenues, gardens and squares. Handling access and traffic and creating areas of traffic moderation that allow an improvement in the quality of life.

The recommended policy of densification does not apply to structures with architectural quality that are designed for preservation and in crowded residential neighborhoods. The densification policy of existing structures in the visual basin of the Old City is more moderate, in light of planning limitations of building height.

## B. Expansion of residential neighborhoods and building new neighborhoods

The difficulty in the pace and actual materialization of the construction within existing residential areas and the absence of an authorized planning supply on public owned lands necessitate an additional solution of augmenting the planning supply of housing units by designating areas that are not built-on for building. About a half of the municipal area of the city is not designed for building. However, part of these areas constitutes a basic component of the city's model-the foundation of the open space which is the succession of valleys and the ranges that divide the building in the city and provide it with its own unique qualities.

Locating the areas that are appropriate for development is part of a long and convoluted procedure that includes numerous stages of examination at the end of which, the areas with landscape qualities that are essential to the array of open spaces in the city, are not being utilized.

About 7,200 squared kilometers have been located, all of which are not built- on and most are situated in the outskirts of existing neighborhoods and have been designated for residencies. The proposed building in these areas will be done by a number of principles:

- Building in an average high density to maximize the utilization of the land but in a diversified mix of sizes to create a supply for populations in different life phases.
- The new building model will be in harmony with the environmental conditions. Limitations will be applied to height, surface layout and design features according to other elements of landscape including the definition of an urban building border.
- Areas of new building that are close to neighborhoods will be developed as part of the existing neighborhoods in order to supply the missing public services and enhance the appeal of the existing neighborhoods.

# C. The residential areas of residents in the eastern part of the city

The residential areas of the Arab residents in the eastern part of the city are the most problematic in the array of residential areas in the city. The unique characteristics of the residential areas in the eastern part of the city are:

- An illegal development activity by both economic and political elements that leads to an urban and planning chaos.
- A big part of the residential areas feature rural characteristics thin, random building that fails to efficiently utilize the land resources for building.

- The absence of suitable engineering infrastructures despite the fact that the municipality has been investing considerably in developing these infrastructures.
- A severe dearth in the public services array to provide for the population's needs.
- Vague land ownership and an absence of registration and land settlement.
- Low applicability of plans including instructions for unification and division due to an absence of tools and budgets for land registration and settlement.
- The absence of planning and budgetary tools in a reasonable extent that will enable coping with ongoing planning problems.
- A considerable part of the residents ignores the planning and building law on the one hand and on the other hand the enforcement mechanisms of the authorities in charge are weak which has led to an illegal building including taking control over lands that are designed to supply public needs and thus prevent this provision.
- The absence of agreed and consistent policy which stalls planning process.
- In the last work stages of consolidating the plan, the Israeli government decided to build the separation barrier- "Jerusalem envelope". The motives for this barrier are unmistakably connected to security and stem from the need of the security system to ensure the safety of the city's residents. The planning elements did not have a say in setting the route of the fence. Undoubtedly, the route creates complex situations which can not be influenced by the physical planning, especially not at the outline level.. The Municipality will have to deal with those complex situations that were created by the fence.

The principles of the proposed policy of development in the eastern part of the city:

- The establishment of a municipal unit in the planning administration in the Municipality of Jerusalem for planning and development in the eastern part of the city as part of the process of raising the issue to higher position in the city's list of priorities.
- Finalization of the statutory infrastructure by preparing detailed plans that provide answers to the special needs in the eastern part of the city.

- Increasing the residential building capacity by densification of neighborhoods and by thickening.
- Restoration of the refugee camp Shoafat by international and national resources.
- Continuing the implementation of the infrastructure projects in the eastern part of the city, funding them by the state's budget according to the decisions of the existing government.
- A special judicial arrangement for regulating the problem of land ownership in collaboration with the Ministry of Justice and state funding.
- A significant augmentation of the enforcement of the planning and building law as a condition for applying the principles of the outline plan with means which are at the disposal of the Municipality and with a significant governmental aid.

#### D. Planning means and building extents.

The policy of residential area development includes reference to the following themes:

- Examination of the nominal building capacity and setting real building capacity considering the limitations of realization in each of the city planning zones.
- Definition of the building extent (building rights) in the different areas to enable the proposed development in a way that the deviation from the existing built pattern is minimized except for areas which were defined in the plan as enabling deviation from the existing structure or in cases where deviation from the existing structure helps get other goals that were defined in the plan.
- Definition of the means and the planning proceedings that are needed in each zone so as to enable development within a reasonable time without waiving planning principles.

# 5. The City Center/ Employment Centers

The policy regarding the employment field and city center is based on the planning perception that maintains that the city center should be reinstituted to its position as a multifaceted center supplying employment services, residential areas, entertainment, tourism, and commercial services to the city residents and visitors from all over the country and overseas. Accordingly, priority must be given to developing the city center over alternate centers that have developed in recent years and pulled business away from the center of the city, thus contributing to its decline.

The employment field has been divided into three different types, in accordance with the programmatic framework defines in report number 3 of the outline plan:

Traditional industrial areas – These are large plots of land located far from the center and which are suitable for traditional industries such as industrial factories, low tech, garages and logistical centers. Their importance is in creating the possibility of evacuating use of more central areas, such as Givat Shaul, Talpiot, and the eastern city center, in order to use them for more intensive and "clean" uses which suit the location. The industrial area in Atarot is a clear example of an appropriate industrial area for this type of employment. Flexibility must be maintained in order to locate advanced technologies in the area, however, such that in situations of peace and local cooperation Atarot has considerable advantages in location.

Mixed areas of employment – Former traditional industrial areas which have undergone a process of change and on which there are mixed uses of the area (trade, offices, and industry). Givat Shaul and Talpiot are these types of areas, in the first there is a large concentration of offices and the second is characterized by commerce in an abundance of land. The continued development of these areas in their current format threatens the possibility of renewal of the city center, and the issue necessitates appropriate intervention in order to grant priority to initiatives in the center of the city. It should be emphasized that the interpretation that the industrial areas have a right to develop commerce and offices is wrong.

Areas of advanced industry – In the opinion of the program team, development of sources of employment in advanced industry is necessary in order to actualize the program goals. It is suggested to concentrate them in an "employment cluster" chosen according to the following criteria: highly accessible location for the center of the country and as far as possible from the border, good accessibility for residential areas, location near centers of higher education, research, and medicine, while creating a quality, "green" environment different from the character of the industrial areas in Givat Shaul and Talpiot. A range of employees and territory that will enable a high level of development of services. The outline plan suggests locating the "employment cluster" between the western entrance intersection into the city and Malcha, along road number 4 whose length is already planned as an industrial area. In addition to territories constituting the "employment cluster," the outline plan adopts areas of employment in

Har-Heret, Ora intersection, and the Hadassah site planned as part of the plan for the western part of the city.

The purpose of the recommended means of policy for developing the aforementioned areas of employment is to allow for their continued development alongside the renewal process in the city center. These means include:

- Limiting usage, in order to prevent processes that will lead to the decline of the city center. The definitions determined in the program regulations and the allowed uses in the employment areas are different from those allowed in traditional industrial areas.
- The recommended stages of operation are: in the first stage to develop the areas constituting part of the "employment cluster," to utilize the approved building rights in Malcha to the fullest and group the areas of employment in Har Chozvim. In the second stage, to develop the employment areas in Har Heret and Ora intersection.
- Creation of a planning inventory that would allow construction beyond the demand in order to avoid the escape of factories from the city in the event that there are no available development options.
- Development of areas which the state owns, enabling control of the processes of land marketing, development, construction, and price policy.
- In the Talpiot industrial area there are a number of large building areas that have not yet been utilized. The planning team maintains that these areas could serve as future development for advanced industrial areas at the same time as the improvement of the quality of the area. The development of advance industry in these areas should take higher priority than the development of commerce damaging the city center.
- The policy of prioritizing advanced industry must continue, through subsidization of land and development costs, investment return for entrepreneurs, and tax relief policy of this sort necessitates a governmental decision.
- Development of convenient access between the areas of employment and other centers in the city as well as to residential areas. It is advisable to develop, during the first stage already, a system for mass transportation along the connection between the governmental area, the Hebrew University campus on Givat Ram and the intended employment area in Shikunei Halef, as well as the university campus and hospital on Mount Scopus and the Hadassah hospital in Ein Karem through the center of the city. Until the development of a system for mass transportation, flexible parking regulations must be enabled which would allow for high accessibility for commuters with private vehicles.

It is advisable to establish an employment director to prepare development plans and follow the preparation of plans for employment areas, prepare an investment plan for developing foundations and take responsibility for the implementation of municipal policy in the field of employment.

One of the main goals of the outline plan is the renewal of the city center and the revival of its status as the main center for diversified urban activity. This means that it is necessary to combine public and private investments on a large scale.

The planning team identifies six central variables with decisive influence over the renewal of the city center:

- Creation of a center of main employment, combining the activity of offices, businesses, commerce, hotels, higher education, and residences.
- Development of a mass transport system in a manner that the city center becomes the central focus point for all the various alternative centers.
- Establishment of crowd-drawing institutions, such as national and district government institutions.
- Establishment of crowd-drawing institutions in the fields of culture, entertainment, higher education, and student dormitories.
- Creation of a quality public space for pedestrians, well kept streets, gardened squares and boulevards, rehabilitation and preservation of structures.
- Drawing residences into the city center in order to revive it, by granting higher building rights and shorter planning procedures, and ensuring a high level of service to residents in the field of public services (schools, nursery schools, parking, etc.).
- Flexible parking regulations making it easier for private ventures, including exemptions for commerce, hotels, and offices if an entrepreneur should so desire.

The recommended means of implementing the renewal of the city center were determined according to subsections with different characters, therefore each of them requires different treatment. The different sections of the city center are:

**The Eastern Central Business District** – Its proximity to the old city requires low pattern reference. Along with densification, the area requires a significant improvement of infrastructure, improvement of the public space, widening of roads and establishment of a center for public transportation.

The Core of the Central Business District – The area needs densification of construction combining the existing structures, intensive construction, and higher

buildings. This is the intensive center of the city in which great potential for densification exists. The abundance of areas being preserved requires sensitive treatment in order to combine new structures.

The Central Business District Part in the Entrance to the City from the West – This area has potential for serving as a development focus on a high intensive level, including especially high buildings, due to its main features including – high accessibility for all means of transportation, large divisions of land, few historic structures, and distance from the visual basin of the old city. Its development requires a close connection to the heart of the city center and creation of a quality public space, which does not yet exist.

The outline plan defines a package of rights and a maximum number of floors for each of the previously mentioned areas, in accordance with urban characteristics in order to encourage new construction. As a central means of intervention, the program offers two options: The first, a package of rights whose usage necessitates the approval of a detailed plan by the local committee authority. The second option is a package of rights whose usage necessitates the approval of a detailed plan, in line with the outline plan, by the district committee authority. This framework is intended to significantly reduce the amount of time required in order to approve detailed plans in the city center.

The proposed package of rights is divided into two categories – a package for construction and a package of rights for intensive construction (high risers). The allowed usages are of commerce on the ground floor (obligatory on commercial streets), including commerce in internal and back courtyards. The rest of the floors are available for very flexible usage, including hotel usage. Regarding the height of construction, the plan stipulates that the height of buildings on streets in a commercial area shall be a result of the width of the street at a 1:1 ratio on wide streets (over 30 meters) up until a 1:3 ratio on alleys whose width are up until 10 meters.

The parking regulation enables the provision of parking exemptions in commercial buildings, offices, and hotels, and on additions onto preserved buildings and residential buildings, in order to encourage construction in the city center. This is also in light of the existence of the first line of the mass transportation system, passing through the city.

The plan also defines conditions for providing an "additions basket" of building rights, whose purpose is to attain public goals for allocating open public territory or development of a public square, allocating built territory for public buildings and building preservation. An emphasis is placed upon the quality of the architectural design such as height, an emphasis on the contact with the street, creation of a quality public space at the base of the structure, an emphasis on the entrance hall of the building from the street, and unique design for the top of the structure. Since reception of the additions basket is conditional upon public duties which exceed the requirements of the planning and construction law (allotment for public purposes), a financial assessment of the public tasks required of entrepreneurs should take place in order to avoid harming the financial desirability of construction. Based on the report, "An Assessment of High-Rise

Buildings: The Guide for Assessing Plans for High-Rise Buildings" published by the Ministry of the Interior, principles for assessing detailed plans for high-rise buildings were set in the outline plan.

The long procedures for approval characterizing large plans in the city center demand that the municipality create an approved plan inventory which exceeds the demand. The phenomenon of long procedures leads to low actualization rates, thus contributing to the degeneration of the city center. The creation of an excess of planning would provide entrepreneurs interested in building with actualization possibilities within a reasonable time frame, with control over the real estate prices.

In addition to the package of rights, the program recommends additional means of intervention in various fields for the purpose of attaining goals related to the renewal of the city center. The planning team is aware that some of the following recommendations are already in practice:

Improvement of Public Space: The center of Jerusalem has great potential for creating a quality public space due to its historical structures, picturesque alleyways, and its diversified population. In order to utilize its full potential, public space must be improved by emphasizing pedestrian areas. A concentrated effort should be made to improve the main roads and in conjunction develop a shuttle system, build plazas, gardened streets, local playgrounds, paths, trees, and boulevard. Uniform design on a high level should be used for street furnishings, lighting, signposts, and gardening. Independence Garden should be developed as the significant green lung in the city center, along with Sacker Garden in the west. A number of sites should be identified for placing additional public spaces in response to the expected increase of population.

Attraction of Activity-Generating Uses: In order to change the trend of emptying out in the center, crowd-drawing usage should be encouraged which could generate a chain of additional activity such as commerce and services. In the field of employment, it is advisable to make an agreement between the municipality and the governmental offices in order to return the county governmental offices to the city center. The County Court Hall, which is supposed to be established in the city center, is an example of this. Cultural institutions, which are almost nonexistent in the city center, should be attracted and encouraged. Extensions and clinics of hospitals should be attracted. Academic institutions such as the Bezalel Academy, film, theater, and photography schools, and continuing education schools will stimulate the attraction of young people to the city center. Additionally, student residence in the city center should be encouraged by granting discounts on municipal taxes and other incentives. Initiatives in the field of building hotels should be encouraged, as well as initiatives to establish quality boutique hotels on the one hand, and hostels at convenient prices on the other hand.

**Administrative Means of Intervention**: Declaration of the city center as a "rehabilitation area", as defined in the law of planning and construction, would enable the provision of special tax relief and discounts. The discounts and relief would be balanced by rise in the level of economic activity it the city center. A full or partial exemption

from capital gain taxes would, in the short term, provide the city center with an advantage over alternate centers. Alternatively, if the city center is not declared as a rehabilitation area, in light of the governmental policy it is recommended that a foundation established by the government provide an "establishment grant" for projects in the city center. The establishment grant would cover up to 15% of the establishment costs of the projects. Municipality tax reductions should be granted in order to execute the improvement and rehabilitation of historic structures. It is advisable to focus on areas or districts according to a set list of priorities in order to increase the effect of the renewal. Reduced mortgages or loans at convenient rates for young couples or renters and for renovating or improving building facades could serve as an economic stimulus. At the same time a number of administrative restrictive measures should be taken such as: determining an expiry mechanism for plans that have not been actualized. Competitive development in alternate centers should be restrained particularly regarding usages that were deemed suitable for the city center, including a discriminatory taxation policy in favor of the city center as opposed to alternate centers. Non-conforming usages, such as offices among residential areas, should be evacuated once appropriate alternatives are created. A "green" track for approving plans matching the outline plan for the city center should be created, as opposed to the regular track used for approving plans at the alternate centers.

It is advisable to prepare an urban development plan on two levels – the macro level will define the necessary balance between developing the alternate centers and renewing the city center. The micro level will formulate a plan of action for developing every sub-area in the city center.

**Organizational Means of Intervention**: The municipality must develop an organization system, in cooperation with private entities active in the city center, in order to direct the daily activity in the area and create crowd-drawing activity such as specialty markets, street activity and more. For this purpose it is advisable to manage the city center in the framework of a shopping center, to position and market it as a brand label, and establish a special managing body to be responsible for all the managerial aspects of the city center.

# 6. The Building Code in the City

The premise regarding the pattern of building in Jerusalem is that the city is characterized by a special code of stone-layered construction, which is used mainly in green linear areas and enables a line of vision between neighborhoods and the open valleys. This is a quality urban resource which should be preserved while maintaining a special emphasis on the visual basin of the old city. Additionally, the goals of the outline plan necessitate the expansion of the city and its densification as opposed to the trend of open spaces in construction with a low density that has characterized the city's pattern of expansion over recent years. The issue of increasing density and building height is not solely quantitative. Any changes in the levels of density, covering, and building height have repercussions for the character and pattern of construction. Therefore any change must be carefully and intelligently weighed in order to enable development which matches the

goals of the plan without injuring the resource of the existent building code. An intelligent assessment requires wide and balanced systematic vision, which takes into account the contents and qualities of the public space, the status of the city center as opposed to alternate centers, the relationship between the inner city and residential neighborhoods, the issue of traffic and accessibility, urban renewal, various topographical situations, and extreme conditions. For this reason questions regarding where, how, and how much must be examined by the planners as well as by the decision makers.

The values of the building code in the inner city especially characterize the physical image of Jerusalem and serve, for discussion purposes, as a desirable model. In this model, relatively high densities can be achieved without making a substantial change in the building code, as has already been done in other historic cities all over the world. In select locations, mainly the city center, the possibility of straying from the typical building code was assessed and policy principles were determined in order to implement the desired conclusions in the fields of building structure and height, which are desirable in various areas of the city.

Regarding building height three accepted approaches were assessed:

The Restrained Approach – A conservative approach which maintains that the preservation of existing building code patterns necessitates a ban on (unusually) high construction. Extremists of this approach claim that this ban must be extended to all areas of the city, even to areas that are distant from the heart of the historical city. Alternatively, there are those who claim that the discordant construction can be used in distant areas such as Givat Shaul and Talpiot, and the western part of the city center.

**The Design Approach** – This approach maintains that high construction must be harnessed as an instrument with visual-structural purpose, which may contribute to the urban code by improving certain areas. This approach opposes the current existent pattern of random scattering of high buildings, which does not contribute to a clear and uniform pattern.

**The Functional Approach** – This approach views high construction as the cause of a process of renewal and a contributor to attracting new usages of certain areas. The base of this approach is intentional-functional, as opposed to the design approach, however its result may be a random pattern of development.

Jerusalem's particular sensitivity requires an approach to high construction that integrates all three approaches. Harnessing high construction in the visual basin of the old city, most of the inner city, and in the eastern part of the city center, while adopting the design approach in the central and western parts of the city center.

The matter of high rise construction was assessed on a functional level regarding various usages. It was found that high construction for the purpose of employment was appropriate and desirable. Quality construction for offices and additional business purposes could contribute greatly to the improvement of the city center's status as a quality, active urban center on the condition that a system of quality public spaces was

developed in conjunction, as well as greater accessibility to the area. High construction for residential areas is more problematic. High residential buildings are not suitable for all sectors of the population. It was decided that in any event, most of the residential construction would remain relatively low in accordance with the existing pattern and that only a small percentage would be constructed with unusual height and condensation.

As mentioned previously the issue of placement for high rise construction is of great importance to the building pattern of the city and its vision of an "urban skyline." The skyline of the city center was broken back in the 70s by a number of structures such as the city tower, Plaza Hotel, and more. Construction today is relatively random and there is reason to assume that additional high construction in the city would unify it into a consolidated and intensive center, both functionally and visually.

In residential neighborhoods that are distant from the city center, a combination of dense and high construction can be used which is alternative from the current pattern. The criteria for examining the placement and character of construction shall be derived from the relationship between the proposed construction and the existent environment, and the reciprocal influences between them. In order to determine rules for placing high construction in the various areas of the city, a number of general locations were assessed and weighed according to their advantages and disadvantages. The locations that were assessed are as follows: high construction on hilltops or ridges, high construction on slopes and high construction on the low slopes. At the same time a number of alternatives for maximum spread in specific locations were assessed, in order to evaluate their effects on their environments. The locations that were assessed are: on the axes of the mountain ridges – along road number 1 through Shuafat and Beit Hanina in the north, Herzl Azis in the west and the boardwalk road near east Talpiot. On the axes of valleys – Golda Meir Boulevard in Ramot Alon, Begin Road, Hebron Way, Bate Road and more. On local hilltops – Gilo Center, Ramat Rachel, neighborhood centers such as Kiryat Menachem, Givat Mordechai, and more. On unseen slopes – the northern edges of Ramat Alon, the southern slopes of Givat Shaul.

After examining all the aspects that were previously mentioned, the planning team maintains that from a spatial and topographical viewpoint high residential structures should be reserved for mountain ranges, however high construction in the existing residential areas can only occur through evacuation and construction in a process of urban renewal which is, usually, long term. The planning team believes that the available lands in existing neighborhoods, and especially on the outskirts of neighborhoods, which are suitable for densification have construction potential as a catalyst for urban renewal in the meantime. In light of this, "search areas" were marked in the building code appendix which would allow for residential high construction on mountain ranges and "neighborhood outskirts." The exact location, meaning, the location of plots for high construction in residential areas, will be decided in a detailed plan authorized by the district committee in accordance with a series of additional tests. It should be noted that due to the complexity of the matter, a number of possible areas on the outskirts of neighborhoods have been marked and that the completion of the matter is subject to additional work.

The suggested conclusions and recommendations in the field of building code, densification and height are:

In the Old City – Within the realm of the walls and for a strip of 75 meters north and west, construction should not exceed the height of the wall.

Around the old city – from the south – until the axis of Hass Boardwalk-Jabal Mikbar, from east-until the mountain range of Har Hazaytim-Mount Scopus – This area is not suitable for high and dense construction in all respects, and therefore it is recommended that the allowed height of construction in this area does not exceed four floors or 15 meters.

In the inner city – in the area spreading between the old city westwards until the watershed line located 100 meters from the east and parallel to Keren Hayesod, King George, Strauss, and Ezekiel Streets, and north of Shimon Hatsadik street, the outskirts of the Sheikh Jarach neighborhood, Baka and Mount Scopus – Construction shall be solely patterned, with all of its dense characteristics, at a maximum height of up until six floors and another two floors in retreat, except for preserved areas.

In the city center – in the east of the triangle area, in a parallel line with King George Street and about 200 meters east of it, from Nevi'im Street in the north until the outskirts of Gan Ha'atzmaut close to French Square in the south. West and south of the eastern side of King George Street (the watershed line) and west of the hall of Yafo-Agripas streets until the eastern entrance into the city at the intersection of Yafo-Shazar and Weizman streets. North of Hanevi'im-Yafo Street from the corner of King George and westward – in this area only high, dense construction will be permitted under the following restrictions: high construction will not be allowed in preserved neighborhoods. When possible, construction will be a combination of textural building along the street with the highest structure being in retreat, and extra attention being paid to the integration on the street (physically and functionally). Basic building rights will be 450% (main area) dunam. A basket of additional rights beyond the basic rights will be provided for allotting land for public use on the street level at the expense of the plot area, for rehabilitating historic buildings, for allotting constructed land for public or educational structures in the realm of the project, and more. Strict design instructions will be determined with an emphasis on the entrance halls, lower floors, and more. The maximum height will be 24 floors in the heart of the Central Business District (triangle area) and 33 floors in the entrance to the city from the west.

In the rest of the city an additional two floors will be permitted, up until a maximum height of six floors and no more than two floors in accordance with the following restrictions: in an area in which only two floors are allowed a maximum height of until four floors alone will be permitted. This regulation does not apply to existing low neighborhoods or constructed areas that have been defined as such, such as the build-your-own-home area in Ramot Alon and more.

# 7. Population and Society

The population forecasts prepared in the framework of the outline plan serve as an instrument for creating a wide framework for the expected developments that will take place in the time period of the planning horizon. The forecast is intended to provide the planning team with a means of measurement for the planning of foundations at the base of the outline plan. At this stage of the process, the likelihood of attaining the goals put before the planning committee during the beginning stages is being assessed.

The target of a population of 950,000 residents is derived from demographic forecasts that were presented in the strategic master plan and selected after population forecasts under various scenarios were examined. The selected population target is in accordance with the desired future for the city-fathers and living conditions in the city. The population forecasts prepared in the framework of the outline plan indicate that this goal is attainable.

Demographic Balance "According to Governmental Decisions" – This goal, as presented by the municipality and adopted in governmental discussions regarding the matter, seeks to maintain a ratio of 70% Jews and 30% Arabs. The population forecast, like forecasts prepared in other frameworks, indicates that this goal is not attainable and that demographic trends in place since the end of the 1960s distance Jerusalem from the set goal. It can be assumed, very probably, that if the demographic trend of recent years continues without any significant change, the situation in 2020 will be a population of approximately 60% Jews and 40% Arabs, and this is only under the condition that assumptions at the base of the outline plan are actualized.

From assessment of the social policy, a number of central challenges were defined which, if met, would also meet main policy goals that should be worked towards:

- Maintaining a Solid Jewish Majority in the City In order to maintain a Jewish majority in the city, negative migration from the city should be reduced and residents should be drawn from other areas in the country. For this purpose, sufficient housing should be offered by densification of existent neighborhoods and building new neighborhoods. Moreover, it is necessary to build residential structures at reasonable prices so that the city can compete with housing costs in the suburbs (which are significantly lower than the costs in Jerusalem). In addition, the quantity and quality of a number of employment places, services, quality of life, and urban experiences should be ensured (as opposed to in the suburban environment).
- A Significant Part of the Residential Arrangement of the Arab Population within the city is originally rural. The Arab population suffers from housing problems due to the significant size of the population and lack of financial resources. The outline plan enables a densification of the rural villages and densification and thickening of the existing urban neighborhoods, and recommends a rehabilitation of the refugee camps within its borders. A

combination of all these factors with a thorough treatment of infrastructure will minimize the housing problems of this population.

Creation of Balance Between Jewish Cultural Groups – Until the 1990s, the non-orthodox population of the city mainly left Jerusalem for the suburbs. The result was a growth on the part of the orthodox population, especially in light of the naturally high reproductive rates that are accepted among this population. Establishment of orthodox suburbs over recent years has somewhat slowed the growth of the orthodox population in Jerusalem. Moreover, there is a lack of available housing among the orthodox population in the city. According to the plan, it is proposed to densifiy some of the orthodox neighborhoods and existing neighborhoods, establish new orthodox neighborhoods near the existent ones, and establish new non-orthodox neighborhoods in order to enable the younger orthodox population to buy apartments in the city.

# **☑** Planning Support of the System of Spatial Segregation of Residences in Jerusalem –

Within the boundaries of the city of Jerusalem a process of spatial segregation between the various populations inhabiting the city has occurred, and continues to occur. In a multicultural city such as Jerusalem, spatial segregation of the various population groups in the city is a real advantage. Every group has its own cultural space and can live its lifestyle. The segregation limits the potential sources of conflict between and among the various populations. It is appropriate, therefore, to direct a planning policy that encourages the continuation of spatial segregation with a substantial amount of tolerance and consideration. However, there is also great importance in creating meeting points between these groups. The plan suggests the planning of new residential areas for all the national and cultural groups in the city; the establishment of public institutions for every group close to its residential area, having the meeting place between all parts of the population occur in a public space in the city – the city center.

# 8. Economy

The economic chapters in previous reports reviewed and analyzed Jerusalem's main assets and the central problems that it faces. The main conclusions are drawn from this analysis and the fact that the city is composed of three distinct communities in culture, wealth, dynamics, and unutilized potential. The poorer population group is larger due to the city's unique demographic structure. The rate of participation in the work force is small in relation to the potential work force, and the rate of academics is two times lower for these populations relative to the urban average and the national average. We see, therefore, that an important part of the work force and "brain power" of the weaker layers is not utilized for making a living.

The city center still maintains a large and diversified concentration of activity, yet it is under threat and is unable to meet the competition. By 2020 another 170-220 thousand employment seekers will arise in the city and optimal locations must be located and prepared for employment areas in which they will work. Today the interaction between the "players" taking part in technological innovations is lacking to the structural and organizational differences between institutions of higher education and the industry. Centers for education and research as well as factories dealing in advanced industries are scattered all over the city. Even Hebrew University is split up into three separate and distant campuses with a fourth campus in Rehovot. The territories for additional residential buildings on the Jewish side of the city have been almost completely used up. This is a limitation that restricts Jewish population growth in the city and causes a rise in housing costs. Moreover, annexation of territories in western Jerusalem is essential for the continued development of the city. This is a central reason why Jerusalem suffers from negative immigration, both among relatively high income Jewish residents and lower income Jewish residents, especially among the orthodox population. Many of those who leave move to the suburbs. Even if no room or sufficient incentive is found for everyone to live in Jerusalem, the preferred solution is that residents of suburbs "act in the city, even if they live outside of it." In the neighborhoods of Arab residents in eastern Jerusalem there is great potential for construction that has not yet been realized.

Since Jerusalem cannot compete with the suburbs, neither in terms of the cost of apartments or the proximity to centers of activity in the "heart of the country", the city can attract and concentrate the economically strong populations if it can offer a proven advantage in the quality of life and urban and environmental effectiveness.

The necessary means do not fall into the narrow category of economic. Some relate to the field of education, some to traffic, to land allocation, and to organization. Following are the main proposed means, which will be elaborated on in this chapter:

**Urban Environment** – Densification of the city, while maintaining quality of life. Organization and maintenance of the quality of the open landscape within and between neighborhoods.

Concentration and Diversification of Centers of Activity in the City Center – The city center attracts (to itself and to its surroundings) a wide range of activities and employment. It includes unique sites such as the old city and seat of government, as well as religious girls' high schools on a high level, advanced yeshivas, colleges, the Bezalel Academy, the Academy of Music and Dance, Hadassah College, and so on. Nearby are the entrance into the city, the government campus, and the Givat Ram campus of Hebrew University. Not far from the city center are the Mount Scopus campus, Sha'arei Tzedek Hospital, and most of the academic colleges.

The planning team proposes a cluster of study and research employment, situated around existing cores such the entrance into the city, the government campus, Hebrew University in Givat Ram, industrial centers with abundant knowledge and Sha'arei Tzedek Hospital. Begin Boulevard will connect the cluster to the city entrance and highway number 1, which links Jerusalem to the center of the country, and the first light railway, which is being established, will shorten the distance in terms of time between the centers of activity and employment in the center and in the cluster, to a "cafeteria distance." In this manner the center will expand its area and range of activities, and include the Mount Scopus campus, city entrance, and government campus as well.

**Specialization** – Jerusalem must attract and invest in advanced industries creating for an external market, which also competes well in the national market for the higher education industry (both secular and orthodox) and even in the next wave of industries (biotechnology and bioinformation). Both are advanced industries producing for an external market. Moreover, Jerusalem has a clear advantage in the tourism industry, including international conferences.

**Higher Education Industries** – In order to strengthen and base the competitive advantage in the field of higher education, it is advisable to take the following measures:

- **E**stablish a university for technology and management in the city center.
- Transfer the Agriculture Department to Jerusalem.
- Establish a Jewish/international university in the city center, in which English is the language of instruction.
- Encourage and assist the establishment of student dormitories in the city center.
- **E** Establish the art colleges and additional small colleges in the city center.
- Strengthen the interaction between the market and the rest of the work force.
- Establish a matricial research institute (see chapter 8).
- Provide an appropriate response to the city's Arab population in the field of higher education, whether through an existing institution (Al-Quds) or otherwise.

**Strengthening of Weak Populations** – Strengthening populations with unrealized potential could, if utilized, contribute greatly to the city. Extracting the "brain power" potential can be advanced through establishing orthodox universities and colleges, a university for Arabs and the creation of places of work close to home in a religious environment.

**Fast Transportation** – Improvement of accessibility within the city via a mass transportation system between the suburbs and the city center on a suburban train (on a track that will be used by suburban trains) and between Tel Aviv and Jerusalem on an express train.

**Organization** – The dynamic of the populations inside the city and between the city and its environment necessitate renewed thinking regarding the organization of the urban and metropolitan system. The unflattering performance of the educational system in Israel calls for renewed thinking of its organization. The poor state of the city center requires renewed thinking and creativity in organizing the center. The difficulties and bureaucratic clumsiness necessitate new thinking regarding the organization of the planning and licensing system.

**Governmental Assistance** – The Knesset legislated the Founding Law of Jerusalem (1980) because it recognized the complexity of problems faced by Israel's capital. The law enables and even built a mechanism for unique assistance to Jerusalem. An assessment of the city's financial reality leads to conclusions that could only be dealt with the help of the government:

- Investment in a transportation system: an express train to Jerusalem, roads, and completing a mass transportation system.
- Preferred encouragement of investment in hi-tech companies, especially in the field of biotechnology.
- Assistance to academic institutions, including an investment in research and development in the fields of hi-tech and biotechnology.
- Cultivation of personal wealth in the city, and especially assistance in professionally training the weaker populations.
- Strengthening the status of the city as the capital of Israel by transferring financial institutions, managements of governmental companies, and the IDF institutes of higher education.
- Providing assistance to strengthen the status of the city in the field of higher education by transferring the Agriculture Department to Jerusalem, establishing an international university instructed in English in the city center, establishing a university and/or colleges for the orthodox population in an orthodox environment, and strengthening the interaction between the academic world and the various branches of the economy.
- Increasing governmental participation in a foundation that encourages small businesses.

Providing priority and grants to advanced industries in the field of land prices, costs of development, expropriation for public uses.

## 9. Higher Education

Jerusalem has a long historic reputation and proven experience for the past few generations as a significant center of education on both national and international scales. This reputation was earned due to traditional Jewish learning over the years. To the credit of Hebrew University, we will note that it was a pioneer in determining the excellence of academic education during the renewal of the Jewish nation in its state and, simultaneously, assisted the development of higher education in the state of Israel by participating in and developing research universities established after itself.

During the last decade of the past century, a real change occurred in Israel in the realm of higher education. An abundance of academic colleges rose in Israel, mostly in the "soft" subjects, which brought higher education to the periphery. This process, which intensified, diminished the number of students beginning their studies for bachelor's degrees at Hebrew University. Additionally, the development of other research universities and the Open University reduced the number of students coming to study in Jerusalem, including those studying towards advanced degrees. Jerusalem still maintains precedence in the number of students studying towards advanced degrees in Israel.

A test of the size of Hebrew University, like a test of the city itself, is to ensure the quality of studies and excellence of research with universal access to academic, non-research institutions.

The planning team suggests a compromise. A combination of alternatives that we suggested (see Chapter 9) may produce better results as combined steps towards the development of a system for higher education in Jerusalem.

A step like this could occur by granting Hebrew University's sponsorship over all the institutions that should so desire. The colleges which join this network will be improved, their power of attraction will increase, and their alumni will ensure a base of research students for the university. It is essential that this type of sponsorship would ensure the development of a college for "soft" subjects, the first of which should be a school of government which is so necessary in Jerusalem. The transferal of the National Security College and the College of Command nearby are a central step of the process.

An additional method, for institutions that want to maintain their independence, is to create a "consortium" of colleges in the city with an organizational framework that is not too demanding, which could ensure willing cooperation and advance higher education in Jerusalem. Via a college consortium, existent schools and "boutique" colleges that have not yet won academic recognition can be academically authorized. A public and academic figure should stand at the head of the college consortium and lead the process.

The next few years, especially in light of the financial situation in Israel, will lessen the growth rate of new institutions and the rise in the number of students. Jerusalem has real potential, especially during a period of stagnation, to greatly increase its number of students since two entire populations are at the beginning stages of flowing towards tracks of academic studies – the orthodox and the Arabs.

With regard to the orthodox population, the plan offers two solutions with the point of departure being that in the next generation as well there will be religious studies, the "base" itself. Institutes for vocational training which have begun to open and develop, providing profession training alongside religious studies for yeshiva students and students enrolled in advanced Judaic studies programs, and female seminary students separately. In addition, the higher school for technology is developing (the Lev Institute in its male version and the Tal Institute for female students) as an entity which could serve as the head of a university for the orthodox and religious public. In the event that the institution develops the study of "soft" subjects as well, the school could successfully compete with other institutions opening in the center of the country.

The solution for the Arab population, which is opening up to technological professions and higher education, is more complex since it is dependent upon the political situation. It is sufficient to say that in a united city, in a configuration with wide consent, a solution is required for this population. It could occur through the development of Al-Quds University in Jerusalem, or through alternative solutions proposed by the state at institutions of higher learning in Israel and specifically in Jerusalem.

Despite our doubt of the possibility of development for research universities, in light of the policy of the Committee for Higher Education it appears that there are two institutions with potential for winning recognition, both intended to serve, separately, the orthodox and Arab populations.

Regarding the general population of students, in addition to the quality and excellence of studies and research, Hebrew University and other institutions must develop their multi and interdisciplinary studies because this is a central direction that could increase the attraction of the city. The new transportation solutions to and within the city, including the express train, must take into account the need to make transportation to and in between the campuses more accessible (see Chapter 13).

The proposed matricial research institute in intended to utilize sources of information created in the academic world, together with specific initiatives of entrepreneurs from the industry. The more accessible the exchange of knowledge and information, the better the situation for higher education and industry.

Jerusalem must strive to attract Jewish students from all over the world to study there. The greatest attraction is reserved for Hebrew University, yet there is attraction to the higher school for technology, in Jerusalem College, and attraction may spread to other directions in the fields of culture, the arts, music, and communications.

Jerusalem has been blessed with a large number of student dormitories. Discussions are being held regarding the establishment of additional dormitories, in the B.O.T. system. Appropriate housing for students coming from all over the country and from overseas are the guarantee for maintaining the city's power of attraction. We have already requested taking into account the **encouragement of studies and residence in the city center** in the development of academic campuses and creation of housing opportunities for students in the city.

A critical component for all of these factors is the city's state of political calm and security.

The more higher education in Jerusalem develops in new directions and expands to include sectors that have not yet completely integrated, the more the financial situation, employment, positive immigration, power of attraction of the city, and the academic institutions in the city will benefit. In other words, the planning team regards higher education in the city as an Archimedean point for the development and prosperity of Jerusalem.

## 10. Preservation of the Building Heritage

Jerusalem is a nationally, religiously, and socially pluralistic city. It has several archaeological and historical sites and its urban structures, both inside and outside the walls, are unique in their lack of architectural uniformity; the temporal-stylistic blend of buildings in Jerusalem reflects the changes that have occurred in the city over time and the mosaic of communities and nationalities.

The architectural importance of Jerusalem on an international level, stems, among other things, from the fact that Jews, Muslims, and Christians of different nationalities – German, Russian, French, English, Italian, Greek, Armenian, and Ethiopian – have left their physical mark and contributed, according to their needs and their style, to the construction of the city and its visual complexity.

The strengthening of Jerusalem in the international and national fields and its development as a center of tourism, economy, and society, is dependent to a great degree upon the preservation of its physical, architectural, and environmental qualities which reflect cultural, religious, and social values. The outline plan must express these values and enable their preservation and rehabilitation.

The preservation of neighborhoods and buildings is not an independent field. It constitutes a part of a more wide and comprehensive web of preserving the city's unique character. In this context additional elements important for preserving the city's image were assessed, such as the system of open spaces, landscape views, traditional skyline, and condensation of construction.

Problems related to preservation within the walls of the old city are simple in relation to the difficulties that arise regarding preservation in constructed areas outside the walls. Most of the constructed areas built inside the walls are defined as indisputably important assets for preservation. Differences of opinion and public struggles arise, however, with regards to the preservation of structures outside the walls.

The planning methodology has been divided into three main stages; the first stage included study and familiarity of the history of preservation in Jerusalem from the Ottoman Period, through the mandate period, and divided city till this day. Plans for preserving historical cities such as Prague, Dubrovnik, and Istanbul were examined. In the second stage past plans were examined, in order to learn from the achievements of the past and draw appropriate conclusions for the future. In the third stage the desired preservation policy for our time period was determined, with standards and criteria for the types of preservation.

The various stages in the planning work were presented to several of the city's residents via the community proceedings in "historical neighborhoods" and other neighborhoods. The responses and comments of residents were carefully examined and some of them were integrated into the principles of the preservation plan.

For the first time the preservation plan deals with two fields that did not arise in the previous plan: the first is the preservation of architectural-historic values from the "recent past", meaning, from the establishment of the state of Israel until the present day. The second deals with the preservation of rural and urban areas within the Arab sector, in the eastern part of the city.

"Preservation and rehabilitation" versus "new development" is a controversial issue because it is emotionally loaded and very subjective. World views and different value approaches guide the professionals, decision makers, and public in relation to the subject. The professional and public dialogue accompanying the public battles regarding preservation includes a wide range of terms that are used by debaters on both sides in order to attempt to convince the authorities and the public of the righteousness of their arguments. Terms appear in this dictionary such as: surrendering to the real estate sharks, professional ethics, nostalgia, sentiment (both authentic and rooted), forgery and lies, aesthetics, "right" proportions, changing compositions, financial incentives, and more. The clearest questions regarding the issue of preservation are: Which buildings or neighborhoods have architectural-historic, environmental-ethnographic, "anecdotal" or other values? Who will determine this, and under what authority?

Since there is no "scientific" form of measurement for assessing solitary buildings or complete urban structures, decisions can be made based upon examination of alternatives and professional consideration based upon experience and practical knowledge regarding planning, historic, architectural, environmental, ethnographic, and other issues. In addition, the decision makers must have intelligent foresight, understanding, and sensitivity regarding the situational reality in order to adopt a creative, pragmatic policy

of urban "give and take", in order to avoid atrophy in the city and bring forth rehabilitation and renewal.

The preservation plan is based on the fact that the municipal and governmental authorities will have only a few of the resources necessary in order to in order to fund preservation and rehabilitation projects. The authorities can, however, fund projects such as upgrading the public space in the areas of preservation (such as the Nachalat Shiva neighborhood and the Even Israel neighborhood), but they will never be able to fund compensation in order to bridge the gap between building rights that were actualized on a certain plot of land and larger building rights allowed in the area, from the approved plan. The preservation and rehabilitation must, then, be based mainly upon creating financial incentives for the property owners themselves, or for the contractors and entrepreneurs acting on their behalf. Conditions must be created which would enable a change in designation for the properties and buildings (for example, from a residentially designated area to a commercially designated area) and for additional construction, on the condition that these changes do not harm the unique architectural elements of the buildings worthy of preservation.

The scales for determining if structures or buildings should be preserved or destroyed are subjective. There are no objective and "scientific" measurements for determining, unequivocally, a value for a certain structure. On the subject of preservation an infinite number of factors come into play – emotional, nostalgic, national, religious, historic, and ethnographic. Nonetheless, an attempt can be made to try to evaluate the value of neighborhoods and buildings through use of a few criteria (such as historic-period measures, religious measures, architectural-stylistic-design measures, environmental measures, etc.), which serve as a base for a "true" and balanced evaluation and allow for making weighed decisions regarding either preservation or destruction.

The basic principles guiding the planning team in consolidating a preservation plan at the base of the outline plan were, among others: recognition of reality and understanding that there is no contradiction between development/new construction and preservation/rehabilitation. A policy for preservation should be determined, based on financial considerations, with presentation of financial sources for actualizing the preservation. Additionally, an effort was made to learn from mistakes of the past and try to avoid preservation policies based on the principle of preserving "everything and at any cost," or presenting unrealistic plans that contradict the rehabilitation needs of a historic city undergoing a process of renewal.

The plan suggests that for 29 areas in the east and west of the city belonging to three categories of the distant past, medium past, and recent past, detailed plans including instructions for preservation should be prepared (for example the American-Swedish Colony area in the eastern part of the city, the Rehavia neighborhood, the old Beit Hakerem neighborhood, some of the kernels of the Arab villages, the Natsiv Castle area. These plans must make detailed reference to each building and determine the level of preservation, possibility to add construction area, and so forth. With the publication of the announcement of the preparation of the aforementioned detailed plan, according to

clause 77 of the planning and construction law, conditions should be determined according to clause 78 of the law in order to avoid causing harm to building defined as buildings worthy of preservation. Similarly, in figure number 2 the main buildings for preservation were listed, part of which are designated for preservation in approved programs and the other part suggested as being designated for restoration, however there is no determination of buildings for preservation in the outline plan. In addition to descriptive instructions that are intended to anchor the detailed plans for these areas, additional means of intervention were determined in the outline plan in order to promote the issue of preservation in Jerusalem, including accompanying the detailed planning and supervising the execution in the field, provision of opportunities to alter building rights, transforming historic buildings for new usages, and increasing the administrative-legal control, supervision, and enforcement of the preservation plan.

## 11. Archaeology

The chapter deals with the issue of archaeology as it relates to the plan, and serves as pioneer work regarding everything related to determining combined policy for ancient sites in the framework of a local outline plan. The Antiquities Authority, as a statutory authority, acts according to the law of antiquities (1978) which provides it with the authority to approve or refuse plans relating to declared ancient sites. This power is supposedly sufficient in order to enforce the authority's opinion on anything relating to ancient sites. In actuality, however, with the lack of a combined systematic plan, the issue of ancient sites in the city is not handled appropriately.

Archaeological remains serve as testimony to the importance of Jerusalem throughout history, and as a religious and political center. The remains reflect previous usage of the land, as well as ethnographic, religious, demographic, social, financial, and political changes. These remains influenced the urban pattern of construction. The importance of these findings is in their independent value and in their contribution to the development of the city, the urban structure, and the relationships between the city and its nearby surroundings as well as with the entire country. A large part of the findings have global relevance, and not merely local or national significance. This importance grants Jerusalem its status as one of the most important cities in the world.

The treatment of ancient sites is within the planning framework, and not alongside it. A comprehensive review of the legal statutory system was made in order to clarify the essence and goals of archaeological preservation. A long chapter was devoted to the old city, which is declared as an ancient site in its entirety, and in accordance the law of antiquities applies to structures built in the old city after 1700 as well.

The Antiquities Authority has thus far avoided assessing one archaeological site in relation to another. In light of the new vision of the plan, which views an integration of archaeological sites into the comprehensive plan for the city as the only way to contribute

both to the development and preservation of the city, special sites within the territory of the city of Jerusalem were selected according to criteria accepted in several countries. The criteria determined for assessment were, among others, a site with scientific archeological value, a site with historic value, a site with religious or cultural value, a site representing a certain period, a rare site, a site with a high level of vulnerability, and additional criteria. The key question for any development initiative is – what is the right balance between the development needs and the preservation needs, and how to maintain this balance. The answer to this issue in a city with many archaeological sites, such as Jerusalem, is that when the needs for archaeological preservation are taken into account at the earliest stage possible of the planning process.

Out of approximately 1,500 sites in the western part of the city declared in the framework of the antiquities law (1978), 120 "special sites" were selected according to the aforementioned criteria as being worth of preservation and special protection due to their value. A detailed review was conducted for these special sites, including the description of the site and its archaeological findings, its physical condition, and recommendations for treatment of the site in order to enable its opening to visitors. This review was published as an intermediate report.

It should be emphasized that non-inclusion of other sites as "special sites" should not be viewed as permission for their destruction, but rather as ancient sites that should not be turned into archaeological sites available to visitors "in situ."

The "special sites" are noted in the preservation appendix. In the program instructions there are guidelines for preserving archaeological findings, as well as instructions for construction and development nearby in order to prevent damage to the sites.

#### 12. Public Institutions and Services

The public service system is one of the tools that could be used to increase the city's power of attraction and base its image in the eyes of residents and outside visitors.

Creating land reserves for public use is essential for the versified mosaic of population groups living in the city. Providing an appropriate response is a challenge for the planning team, especially in light of the characteristics and restrictions that make Jerusalem unique, such as: the limited supply of land for urban development in Jerusalem and the different lifestyles of the various population groups in the city, the geographic segregation of the various population sectors, a young population necessitating greater allotment of land for educational purposes and a lack of a precise, uniform base of data detailing the outline of land available.

The inventory of public buildings and institutions is divided into two main groups:

- A. "Population dependent" institutions that serve residents on a neighborhood, quarter, and city level.
- B. "Capital City dependent" institutions that are not influenced by the program's population goal, but are dependent upon Jerusalem's status as a capital and religious center.

#### "Population Dependent" Institutions

The assumption that the outline plan should avoid damaging the rights of land owners does not enable the allocation of land for public usage since any determination of this kind would necessitate compensation payments. In addition, the measurement scale of the program does not allow for exact allotment of "plots" for public usage and therefore the determination of needs stemming from the population size was assessed on the planning area and planning quarter levels.

The limitations stemming from the unique characteristics of the population in the city, on the one hand, and the limited land supply on the other hand necessitated that the planning team propose a "complex basket" of solutions. The goals of the outline plan and the desire to plan a large city in which there is municipal and urban integration (and not a collection of neighborhoods with not connections between them), require a conceptual revolution in the allocation of land for public usage. The recommended means of implementation are as follows:

- Creation of multipurpose centers by establishing "life centers", through allocation of land in the valleys connecting the neighborhoods which would enable the concentration of public services with a high threshold for the population on a larger scale.
- In areas of the inner city intended for densification, especially the three parts of the city center, the solution should be based upon finding solutions outside the area, even if that means transporting students.
- An increase in the density of buildings and the number of floors on plots currently intended for public use, in order to enable maximal utilization of the land.
- Take advantage of initiatives in the private sector market in order to find solutions for public usage in areas in which there is limited available land, by combining nursery schools and day care centers in buildings intended for residential use, or a clinic and day care center for the elderly in buildings intended for employment.
- Combine a number of public institutions in one plot of land.
- The planning team recommends using a flexible definition of permitted uses of land intended for public use (public use only).

- Take advantage of opportunities for multi-layering and air rights above and below roads, in order to enable multipurpose usage of lands intended for public usage.
- Encourage public usage of buildings intended for preservation.
- The planning team recommends reducing the parking standards for public buildings in order to enable a reduction of the land allotments required for educational institutions.
- Prepare an master plan for the orthodox educational system, public school system, and public religious school system within the framework of the recently prepared master plan for the educational system in the Arab sector. A master plan defining the needs of social services in the city and their maximum spread should also be prepared. A combination of all the master plans should include a multi-annual plan of development which will ensure the implementation of the recommendations of the outline plan.

In accordance with the aforementioned definition of a basket of means, 17 life centers were located that had been mentioned in the program documents and were calculated in terms of a program for public use for five planning districts.

#### "Capital City Dependent" Institutions -

The public administration and planning team recommend that no more additional "destination areas" be allotted for government offices. Moreover, the team suggests taking coordinated measures with the governmental housing committee, returning county governmental offices that have strayed over time to alternate centers (Givat Shaul and Talpiot) back to the city center, and changing the purpose of some of the plots on the governmental campus to employment purposes.

Religious Institutions – The planning team believes that there is no need to allot lands for these types of institutions in the outline plan, and that they should be located in the residential areas of residents sympathizing with the religious institution and who would be served by such an institution.

The program for houses of worship (synagogues, mosques, and churches) is derived from the size of the population in the various areas of the city and is expressed in a detailed plan regarding allocation for public purposes. A detailed analysis of the issue is included in report number 2. In the opinion of the planning team, there is no need to alter the existing policy.

Institutions of Higher Education and Research – In Chapter 8 dealing with higher education, there is comprehensive reference to the subject of higher education in the city and its institutions (universities, advanced yeshivas, and colleges). In order to strengthen Jerusalem's status as a capital city and its structure of employment, it is essential to

utilize the inherent potential in this field. Following is a summary of the planning team's recommendations on the subject:

- Increase Hebrew University's relative portion of all students attending institutions of higher education in Israel, including transferal of the Agriculture Department to Jerusalem (which does not necessitate additional allocation of land since the intended land reserves on the three campuses on Mount Scopus, Givat Ram, and the Medical School in Ein Karem, are sufficient for the proposed building addition).
- In the framework of a policy to strengthen the city center, the plan to transfer institutions of higher learning in the fields of art, culture, and design to the city center should be actualized, and in addition, the establishment of student dormitories in the city center should be encouraged.
- Establish an Arab university at the "eastern gate", or provide any other response to the need for an institution for higher education that will serve the city's Arab residents.
- Establish an orthodox university and/or colleges in an orthodox environment.
- Encourage the continued development of advanced yeshivas, especially through increasing their allowed construction areas, and locating suitable territories along the border close to the orthodox neighborhoods in the northern part of the city.
- Transfer the IDF institutions of higher education to Jerusalem. Land for this purpose has been identified on Mount Scopus, which does not necessitate additional allocation of land.
- Establish a college for public management in the city center.
- Enable Hadassah College, which is located in the city center, to expand to structures adjacent to the Central Business District.

Hospitals – In order to maintain its level of services and the status of Jerusalem as a city that supplies national and metropolitan medical services, an additional 1800 beds must be added by 2020. The response to this need can be found by utilizing the expansion potential of about 1000 beds at the existing hospitals, and establishing two new hospitals with 400 beds each – one in the northern part of the city and the other in the southeastern part of the city. The preferred placements of the proposed hospitals were found in the program scheme, since their precise location necessitates coming to an agreement regarding the ownership of the land.

Culture – Jerusalem is a cultural center. It concentrates a large number of cultural institutions. The cultural centrality of the capital can be derived from the number of museum visitors in Jerusalem during its peak year – 1999 – which was approximately

four million. The recommendations submitted to the mayor and the municipal CEO dealing with cultural institutions and art colleges are in the chapter on higher education. The main idea is to transfer cultural and artistic institutions to the city center. (Returning Bezalel Academy, locating film and photography schools in the Menorah region, establishing a central urban library and a main archive of the history of the orthodox population in the city center.)

Parallel to the preparation of the outline plan, the municipality of Jerusalem requested that the Jerusalem Institute for the Research of Israel prepare a master plan for cultural institutions for the orthodox population. The main intermediate conclusion, as submitted by the planners, is that there is a serious shortage of public institutions and structures intended for cultural activity, both on the neighborhood level and the city level. The recommendations of the outline plan team agree with the recommendations of the master plan team and complete them in a manner that part of the needs indicated by the planners of the Jerusalem Institute could be solved by the life centers proposed by the outline plan team.

A similar shortage of cultural institutions exists in eastern Jerusalem and it is expressed by the treatment of residents in the planning process. In order to determine the needs, it is necessary to asses the subject by preparing a master plan for cultural institutions in accordance with the needs of the Arab population in the city. It is suggested that an assessment of this sort be done prior to the preparation of a detailed plan for the first life center established for the Arab population.

Sports – While the achievement-competitive sports development should be left to the market, the municipality must provide an appropriate response to the need for leisure by installing sports equipment in life centers and regional parks in accordance with the needs characterized by every population group.

In the field of national and international competitive sports, the planning team maintains that the sports center in the southwestern part of the city – including a soccer stadium, tennis center, and basketball court – should continue to be developed. In addition, an "arena" is being planned that would enable hosting large sports and cultural events and satisfy the needs of the city residents, as well as serve as a tourist attraction with an Olympic swimming pool. It should be noted that on the Hebrew University campuses in Givat Ram and Mount Scopus there are sports facilities, including a soccer and athletics stadium, which can continue to be developed and serve as an additional focus point for the development of achievement sports in Jerusalem.

The Welfare of Special Needs Populations – The purpose of welfare services is to advance the welfare of the city residents and reduce social gaps in the city by respecting the human and cultural uniqueness of every person and community.

The welfare branch of the Jerusalem Municipality, in accordance with the outline plan team, has defined the welfare needs in a division of 22 service areas in accordance with

the destination population of the program. The document constitutes a plan of action for the welfare branch of the municipality whose main principles are as follows:

The characteristics of the population in Jerusalem which affect the scope of welfare services are:

- A split between three different population groups, geographic segregation of these populations, and the need to provide separate services for men and women for part of the population.
- A relatively high rate of lower income earners living in the city.

The welfare services in Jerusalem suffer from a deficiency in the allocation of land and structures suitable for these kinds of services rendered directly by the municipality and through non-profit organizations.

The services are rendered on three different levels: A neighborhood level such as the neighborhood welfare department, and a center for the elderly. Services on a regional level such as centers for family treatment of special needs populations on the municipal level – the largest land consumers in this category are senior and protected housing for the elderly.

Senior housing – Based on the population predictions, in 2020 there will be a need for approximately 3600 beds in old age homes, meaning an additional 1000 will be needed. Therefore about 50 dunam will be required throughout the entire city. The planning team assumes that some of the old age homes will be established through private initiatives on privately owned land, and it will only be necessary to allocate some plots from the municipality's public usage territory for this purpose. It should be noted that in light of the income level of the orthodox and Arab sectors, it will be necessary to allocate more publicly owned land for this purpose in the residential areas of these sectors.

Allotting plots of land for protected housing for the elderly is done both by private initiatives and the public authorities. It should be made certain not to cancel the allotment of plots of land intended for protected housing towards other purposes, since 5000 units of protected housing will be required in the city for the destination year of the plan.

#### 13. Hotels and Tourism

The "tourism industry" is a combined industry including, in addition to hotel housing, restaurants and cafes, guides, and travel agents. The tourism industry has been undergoing a trend of growth over the years, despite great fluctuation. Tourism has been a leading industry over the years, and its element of export is relatively large. The

tourism industry in Jerusalem has a number of unique characteristics, among which the important ones are: utilization of an existing local resource, a sacred place to all three monotheistic religions, providing an opportunity to employee a work force with no other qualification.

The main conclusions incorporate previous program conclusions:

- There is no need for additional lands to be allocated to hotels beyond the plots intended for hotel use in the approved plan, and the plan undergoing processes of approval. The working assumption of the planning team is that a quota of hotel rooms determined in the national master plan for hotels can be achieved through more effective utilization of the areas intended for hotels, and determining instructions for flexibility in usage (including hotels) as well as other tourist uses in the area of the city center.
- It is not sufficient to designate plots of land for the establishment of hotels in order to develop the tourism industry. There is a need for a comprehensive policy of developing the tourism infrastructure, including the development of tourist attractions and tourist services.
- The activity of hotel infrastructure should be concentrated, as much as possible, to the city center in light of the obvious advantages of this location to the tourist, and not be spread around other regions.

In determining "tourist sites", their borders, and instructions for their development, the planning team is basing its planning upon the regulations of the National Outline Plan 12. The planning team avoided defining other tourist sites and restricting areas that are not worthy of being developed as tourist sites, and does not recommend creating isolated "campuses" for tourism. The position of the team is that a combination of hotels (especially in areas that are close to urban tourist areas of attraction) and activities should be encouraged, and as a rule balance should be made of the tourist sites between hotel use and additional uses, both for supporting tourism and for uses that promote the welfare of the city residents.

The borders of the hotel regions, marked in National Outline Plan 12, are marked in a polygon on the plan scheme and instructions enabling the development of hotels, tourism, and complementary tourist usages were determined. In accordance with the instructions of National Outline Plan 12, "tourist sites" were defined as follows:

The mountain range site, the train site, the Mamila site – King David Street, the Russian Court, Mandelbaum Gate, and Binyanei Ha'uma – the entrance into the city.

In addition, historic tourist sites were defined: the old city, Ein Karem and Lifta, which necessitate that in any new building plan, preservation instructions for historic buildings and limitations on harming the historic structure be integrated, as well as the

encouragement of the rehabilitation of existing historic buildings for hotel accommodation.

The city center area (the section included in figure number 2) was defined as a "constructed tourist area" relying on cultural services, entertainment, and restaurants located in the existing urban structure. It was determined in the framework of instructions for the outline plan that in the commercial area in the city center there should be greater use of hotels and complementary tourist activities whose construction does not require an additional detailed planning procedure. In residential areas (in figure number 2), however, the establishment of hotels necessitates an additional procedure of approving a detailed plan.

The planning team assumes that the quota of rooms determined for Jerusalem in the national master plan for tourism (18,500 rooms) can be achieved without allotting additional plots of land for hotels, via the following means:

- **Expanding hotels on their existing plots of land.**
- Versifying the means of accommodation by, among others, allowing the establishment of inexpensive lodgings, boutique hotels, and providing the possibility of mixed use of plots of land, especially in the city center.
- Providing flexibility for private initiatives, without a specific designation for hotels.

A necessary condition in the development of a tourist outline in Jerusalem is the strengthening of the Jerusalem city center and its revival as a center for accommodation, entertainment, an as an area of entertainment and tourist commerce via the following means:

**Development of the Public Space** – Creating a sequence of streets, squares, and open spaces with a priority to pedestrians.

**Development of "Street Life"** – A combination of municipal and private initiative in order to stimulate activity in the public space, both permanent and temporary.

**Cultural Institutions** – Establishing and encouraging institutions that create activity.

**Development of a Mass Transportation System** – This system is a main factor in the development of the city center, and especially important with regards to the tourist aspect.

The strengthening of Jerusalem's status as a capital, international, and metropolitan city, in addition to the renewal and strengthening of the city center in its entirety and as part of the historical center of the city, necessitate a special emphasis on the development of the eastern city center as a tourist center in light of its proximity to the old city.

In addition to determinations of the plan that will be expressed in the statutory planning documents, the planning team recommends a number of organizational and administrative means such as:

- Concentrating treatment of the tourism issue into one central authority that incorporates all the factors dealing with municipal tourism, the government offices, the authority on antiquities, the national parks and nature authority, the society for the development of east Jerusalem, and the authority for the development of Jerusalem, whose purpose will be, among others, to implement the policies of the proposed outline plan.
- In order to prevent destruction of the current hotel infrastructure, we propose establishing an "emergency fund" into which part of the branch's incomes during successful years will be deposited, for years of unsuccessful business.
- The preparation of a long-term plan for developing the tourism industry and which will define priorities, sources of income, and the type of tourist projects.

## 14. Transportation, Roads and the Mass Transportation System.

The main goal of the outline plan in the field of transportation is the promotion of a transportation system in a manner that supports the proposed urban development, while significantly prioritizing public transportation over private transportation. A necessary condition for the reduction of traffic and the clear prioritization of public transportation in the inner city is the clearing of road rights in favor of public transportation, in all forms. This is attainable only through creating a peripheral road system (an eastern ring and a western ring) that can absorb the traffic originating from the inner city. The transportation infrastructure includes: the road system, the means of public transportation beginning with the train and including local bus routes, the system of public parking garages, the centers of public transportation, train stations, the airport in Atarot and both the existing and planned helicopter pads.

In order to implement the policy of prioritizing public transportation in practice, the "stick and carrot" approach should be taken. The "carrot" is a convenient, reliable, and effective system of public transportation, and the "stick" is the limitations on parking options for private vehicles in the crowded areas in the city center and areas of employment. In order to avoid migration of activity to the outskirts of the city and outside the city, a combined approach of the two factors should be taken by creating "park and go" garages in areas that are accessible from residential areas, and the development of quick public transportation from these garages to the city center and areas of employment.

One of the main difficulties in developing a policy of balanced transportation is the multiple factors influencing the transportation choice of people, and the planners and policy designers only have control over some of these factors.

The transportation development policy includes a number of fields, to be detailed as follows:

#### **Improved Public Transportation and Expedited Development of a Mass**

Transportation System – The strategic decision to base the mass transportation system in Jerusalem on the light railway puts the city at the head of technology in the field. It should be taken into account that the success of the system is dependent upon gaining the trust of the users with efficiency and reliability. For this purpose proper management is necessary, via a control and timing system that will ensure the continuity of travel and connection between various means of transportation, the development of stations, the marketing of the system to the public of users, and more. It should be noted that the light railway routes noted in the transportation appendix of the outline plan are a consequence of the national outline plan and that in the local plan additional lines may be added. The routes and destinations of additional lines will be determined with consideration of the spread of the population and locations of employment centers on one hand, and the preferred directions of the city's development according to the outline plan on the other hand. It should be emphasized that the priority to indicate the lines does not stem merely

from a prediction of demand, but is based on the assumption that the building of a mass transportation system will serve additional purposes whose actualization will increase the demand for transportation in any event. The principles of indicating additional lines can be pointed out, accordingly, as follows:

- The lines must connect interface points in order to create a network.
- The lines must support the city center in order to cause its revival.
- The network of lines must be connected to large centers of transportation (the central station, train stations, park-and-go parking garages, near the main road system).
- The lines must enable service to the large concentrations of population in the north (Neve-Ya'acov, Pisgat Ze'ev, Ramot, and the orthodox neighborhoods) and in the south (Gila, Katmonim, Har Homa).
- The lines must serve the centers of activity and connect them. A short traveling time between the centers of activity is a necessary condition for creating a cluster of employment that includes educational and research institutions, services, trade, and employment.

In light of these criteria, following is a detailed list of the important lines that should be promoted and established by first priority, without determining specific routes in order to respond to the goals and destinations of the plan:

- A connection between the central bus station in the western part of the city, Kiryat Haleum, Kiryat Ben Gurion, Givat Ram campus, Mateam, and Malcha.
- A connection between Hadassah on Mount Scopus and the university campus in Mount Scopus to the system.
- The continuation of the line to Hadassah in Ein Karem.

#### **Second Priority:**

- Connection of the industrial area in Givat Shaul (and Har Nof) to the system.
- Connection between Talpiot, the city center (north-south), the orthodox city center, Boach Har Hotzvim (and continuing through Ramah Mishnit, from Neve Ya'acov to Atrot).

#### Third Priority:

Only at a later stage and after the actualization of the development of the employment cluster, the connection between employment centers and residential areas in western Jerusalem (Har Harat and Mevaseret Jerusalem) should be created.

The Completed Execution of a Main Highway System and the Creation of Interfaces with the Inter-Urban Highway System – The completion of planning and authorization procedures for the execution of ring roads (the eastern ring road and the western ring road), the completion of road 4 and the paving of road 16 are the main goals of the outline plan in this field. This system plays an important role in decreasing the amount of traffic passing through the inner city, scattering the traffic coming into the city from the inter-urban roads, and in creating a stronger connection between neighborhoods on the outskirts of the city. In order to attain these goals, the planned roads must provide a high level of service expressed in the speed, planning of wide lanes, proper slopes, and the development of interchanges instead of traffic lights. In order to strengthen the importance of the ring roads, parking garages and transportation centers must be placed along them. An additional emphasis is on the visual blending of the roads passing through open spaces. It should be noted that in the outline plan, approximately 20% of the main highways are being planned in tunnels, the length and exact location of the tunnels is not certain, but the marking in the transportation appendix includes distinct instructions for designating highways.

Establishing a Parking System that Suits the Transportation Policy – The parking system is composed of a number of factors: the parking regulation is divided into the city center, an area rich with public transportation, and the rest of the city. In the first two the proposed regulation would reduce the offered parking in order to encourage use of public transportation and in the third a larger offering of parking would be available. The parking arrangements n the street also serve as a tool for controlling available parking – in the two aforementioned areas regulations can make parking difficult for private vehicles and limit the time and quantity of parking. The parking regulation will enable the "transfer" of obligation to install in the field of parking garages by paying a special fund that will invest the money in developing parking garages. "Park and Go" parking garages will be placed at transportation and employment centers, between the main network of roads and the public transportation. Parking garages for buses will be required mainly in new neighborhoods as part of functional terminals. The parking of tourist buses is a problem mainly in the basin of the old city. It is recommended to create parking garages intended for waiting purposes for these purposes and operate an organized system of enforcement for handling drivers who violate regulations in this area. Overnight parking for heavy vehicles will be arranged at sites located in advance, and it especially important to establish garages for vehicles carrying dangerous substances. Today there is a garage in the Givat Shaul region, and an additional garage is being planned in the transportation center in Malcha.

**Reducing Traffic** – A means intended to lessen the threatening presence of the motorized vehicle in residential areas and which allows for clearing the street space for

pedestrians. Areas of traffic reduction and their treatment should be determined in cooperation with neighborhood residents.

**Flight** – The outline plan adopts the determination of TAMA/15 for airports regarding the Atarot airport. Lengthening of the airport track eastward necessitates moving Ramallah highway and transferring it to the tunnel. The new designation is marked in the highway appendix of the outline plan. The outline plan will determine addition locations for helicopter pads in addition to those already in existence. Under the current conditions it is clear that actualization of the intentions of this plan is conditional to a great extent upon the geopolitical reality.

## Outlined Means of Intervention for the Purpose of Implementing the

**Transportation Policy**: The regulations of the plan are the most important means for determining the conditions for implementing the transportation system in the city. Definitions and conditions for executing a main system of highways were determined in the regulations, as well as other regulations including the requirement for, in certain cases, the preparation of a "document for assessing transportation impacts" and transportation solutions necessary in order to solve arising problems. An additional condition which was determined is the inclusion of main highways within the blue line of the adjoining detailed plans, in order to take measures to ensure the quality of residential areas and prevent opposition and delays during the creation of the highways.

The outline plan recommends that, immediately with its adoption by the planning authorities, a joint "program of implementation and development" be prepared by all the entities involved in the development of the city (the Jerusalem Municipality, the Department of Transportation, the Department of Housing, the Department of Land, and the Treasury). The plan should set priorities for developing the system of transportation, the stages of development, and funding arrangements for the next ten years. It should include all the transportation projects in the city such as the express train connecting Jerusalem and Tel Aviv, road number 39, and the continued development of a shuttle system. The stages of development should include, among others, the beginning of the residential and employment areas proposed in the outline plan. Traffic and parking arrangements stemming from the central policy goal should be determined in the plan, meaning, the preference to public transportation.

#### 15. The Environment

Jerusalem, like other cities in Israel and the world, suffers from local environmental problems that are expressed in air pollution, noise, the creation of waste in quantities difficult for the municipal waste evacuation services to handle, decrease in water sources, sewage pollution, neglect, and litter all over the city. The environmental problems damage the quality of living and attraction of the city.

The environmental issue signifies loss of resources, and financial, social, environmental, and health costs. However, implementation of the existing strategy for solving the environmental problems faced by Jerusalem could strengthen the city's attraction to a range of populations.

The principles of the policy in this field including planning guidelines for the uses and intentions of the various plots of land that will serve the decision makers in attaining environmental goals determined in the outline plan. The instructions of the policy include measures for assessing the implementation of the set goals.

The environmental policy in the plan includes the following elements:

- Determining means of intervention for dealing with the environmental weakness that are based in the difficult financial and urban functioning conditions of Jerusalem.
- Directions for actualizing the means of intervention for transforming weaknesses into strengths and attaining goals in the environmental field through fundamental guidelines and recommendations for the development and encouragement of the improvement of the urban environment.
- Directions to create a system for encouraging existing development, such as "green construction."
- Directions for establishing service circles in the municipality for city-wide solutions for the various waste problems. Definition of a waste treatment system in order to decrease the bulk, and increase the financial attraction of recycling.
- Determining a policy for decreasing pollutants emitted by the industry and transportation.
- Guidelines for including the environmental policies in a detailed plan of construction and development.
- Measures for assessing the implementation of the environmental goals.

#### **Strategy for Sustainable Development**

Sustainable development is development which does not hurt the base of resources on which it relies, utilizes its resources at a pace which enables renewal and does not create irreversible damage that may cause a breakdown over time.

The perception of sustainable development is geared towards integration between the environmental systems, economics, and society, such that benefit can be attained in the fields of the environment, society, and economics as well.

## **Transportation**

One of the main reasons for the poor environmental conditions in Jerusalem is transportation. The air pollution resulting from an abundance of transportation is one of the highest in the country, including exposure to noise. These conditions are worsening with the rise of private vehicle use.

The continuation of the existing trend of transitioning from public transportation to private vehicle use may cause a loss of resources, as well as financial, social, health, and environmental costs, as well as a decline in the quality of life and urban environment.

The means of transportation proposed in order to handle transportation pollution causers are:

- Prioritizing Public Transportation Includes a recommendation to advance the operation of the planned mass transportation system as a whole functioning system, from the day of activating the first line and building routes, as needed.
- Lessening the Desirability of Private Vehicle Use in the Inner City Through raising the parking costs in the city center and defining non-parking areas for private vehicles, and, in conjunction, developing park-and-go parking garages close to public transportation centers.
- Prioritizing Non-Motorized Transportation Encouraging advanced industries in specializing in work from home.
- **Use of Clean Gas** and, especially, gas and electricity for public transportation.
- **Recognizing Bicycle Use and Walking** as an important factor in transportation.

#### Water and Sewage

The growth of the population and change in life habits has caused a rise in urban water consumption. This rise faces an increasing shortage in water supply whose source is a

consecutive number of arid years and the lack of an effective system for managing water supply. The sewage on the eastern basin is not treated at all and/or is not treated at the required level. The activity in the city is another factor contributing to the damage of ground water quality as a result of covering the land with dense surfaces that damage the ability of the water to trickle to the soil, and from the pollution of water by the industry which partially disposes of untreated sewage. The outline plan proposes a number of means of intervention including:

- A city-wide plan for saving good water for gardening.
- Determining guidelines and instructions for the seeping of water underground.
- Encouraging treatment to return industrial sewage, qualifying it for reuse in factories.
- Requiring the installation of water saving means (accessories with a blue standards label), as part of the approval requirements for all types of construction in the city.
- Treatment of all the sewage in Jerusalem, including the sewage in the eastern basin.
- All of these must be accompanied by an educational and explanation program, in order to encourage water saving in all sectors of activity.

#### Waste

The waste deposit site serving Jerusalem, in Abu Dis, is not managed in accordance to current environmental regulations and will reach its capacity in the near future.

A lion's share of waste in Jerusalem (96.5%) is designated for landfill due to the lack of a recycling infrastructure. The cost of burying waste in Abu Dis is cheaper than the cost of recycling and treating waste.

The many deposit sites available for illegal dumping of dirt and construction waste excess and the lack of an urban system for control enable unorganized dumping in open spaces all over the city. The waste must be turned into an urban resource that obligates devising a plan in order to turn it into the desirable product. The proposed means of intervention are:

- Implementing a master plan for solid waste, Jerusalem 2010, prepared by the Jerusalem Municipality and the Environmental Department.
- Implementing a district master plan for construction waste and dirt prepared by the Environmental Department, the Ministry of the Interior, and the local authorities in the county.

#### **Industry and Employment**

The industrial areas in Jerusalem constitute a potential source for dumping dangerous sewage and brine from industrial procedures into the urban sewage system, emitting

toxins into the atmosphere as a result of production procedures, and creation of industrial and dangerous waste.

Through collection of the sewage fee which is currently collected from polluting factories that do not pay the full cost of treating the pollution they cause and which is paid for by the public.

The proximity of the industrial areas to residential areas and the densification planned in the outline plan necessitate finding ways to limit the risks. The means proposed by the outline plan in order to treat this issue are:

- Sewage In accordance with the "polluter-payer" approach, adopt a urban law dealing with industrial waste fees and capital return fees, according to the quality and quantity of the sewage.
- Air Pollution Determine clear boundaries, according to the emission regulations, of the amount of permitted polluters.
- Employment in Residential Areas A detailed procedure was determined for sorting the businesses requesting to move into residential areas, in order to ensure the quality of the environment in these residential areas.
- **Industry** − Determining industrial and employment areas, and setting environmental limitations and "security distances" for polluting businesses.
- Establishing administrations for each of the industrial areas in the city, which would enable creation of a managerial, supervision, and enforcement mechanism.

#### **Open Spaces**

The supply of open spaces is one of the factors in determining the quality of life in the city. Without appropriate open spaces, the attraction of "living well in Jerusalem" will decrease.

As such, a renewed evaluation of the ecological, social, and financial importance of the open spaces is necessary.

The force of development and one-dimensional vision for the open spaces have at times cause the allotment of lesser quality lands and land unworthy of development and use. The means proposed by the plan are:

Maintenance of the Ecological and Natural Values – Determining open spaces with unique natural values as "urban nature" sites in which supervised development will take place in order to preserve the plant and animal life on site.

- An urban "nature catalog" will be built, which details the sites and their natural values in order to fit them into the guidelines of urban natural planning.
- Make nature sites more accessible to the public in order to increase the possibility of use, and increase the public supervision of these sites.
- Increase the inventory of open spaces by using constructed spaces in order to expand the open spaces: gardening on the roofs of water pools and public parking garages are examples of this.
- Designating underground usage for purposes that are not light sensitive, such as infrastructure.

#### **Green Construction**

Green construction aims to maximize energy exploitation, prevent the dwindling of natural resources, recycle, and promote usage of recyclable materials. As such, the effect of green construction on the environment is minimal. Green construction also treats the convenience and health of its user by increasing natural lighting and ventilation, and by abstaining from using toxic materials in the interior.

#### 16. Infrastructure

#### General

Jerusalem's placement along the watershed line and especially its geopolitical placement necessitate that the city rely on infrastructures on its western side, along the Israeli coastline.

The linear infrastructure system includes water, sewage, drainage, electricity, and communications including antennas and optic fibers, and the gas and fuel systems. The program provided detailed treatment of the transportation infrastructure, the environmental infrastructure such as solid waste in other chapters. This chapter relates to two additional subjects: earthquakes and cemeteries.

A general guideline relating to the field of infrastructure, regardless of the specific type of infrastructure, is that the aim should be to transfer all the infrastructures along communal routes and parallel to communal highways or tunnels, because this double usage will prevent the waste of expensive land and limit the costs of development, operation, and maintenance.

#### Water

The main goals regarding water are the high quality of the water, maintenance of a sufficient level of water supply from various sources while balancing them, maintaining a regular supply while effectively and economically distributing in consideration of the total consumption per person, maintaining a sufficient level of collection of water into a lake for emergencies, preferring pipe transfers, water saving, using treated waster water and purified water, and other solutions. The means of intervention for attaining these goals are: transferring a fifth water line in addition the existing four lines at maximum usage. It is recommended to establish a number of water reserves at different heights, in new neighborhoods, in order to reduce the need for pumping from a great height and prevent the waste resulting from pressure breaks. As a general guideline, the water authority should pass through roads including the ring roads – this guideline necessitates a solution for transferring pipes through tunnels, bridges, and interchanges. In side roads in the city center expected to house shuttles and experience increased condensation, the use of service tunnels should be considered. The main water lines can pass through public open spaces on the condition that they are attached to service roads and roads that do not experience intense construction.

#### **Drainage**

In the field of drainage the main goals are: increasing the possibility for water to drain in an intelligent and supervised way, decreasing the sedimentary damages and separating the drainage system from the sewage system. This goal is important in light of the development and construction trends that will cause the increase of floored areas and the reduction of the surface's soaking ability. In order to attain this goal it is recommended that in each new plan drainage solutions be integrated for a 25 year standard, and that the drainage and sewage systems be separated especially in the older neighborhoods. Similarly, instructions ensuring available space in a plot of land have been determined in order to enable the percolation of water underneath the surface.

#### Sewage

The expected growth in the city's population in conjunction with the improvement of the central sewage system will noticeably increase the quantities of sewage. The sewage flowing through a number of basins to open spaces and water sources necessitates thorough purification in order to avoid pollution of the environment and water. Therefore the central goal for sewage is the establishment of advanced purification devices while prioritizing dense constructed areas. In order to deal with the sewage issue, it is recommended to prepare a new master plan for sewage with a number of alternatives according to various geopolitical situations. Sites for purification of sewage will be determined on the urban and local levels. In the event that the geopolitical situation does not enable the establishment of appropriate devices in the eastern part of the city a solution must be found for the sewage of the eastern city, including leading them from

the eastern basins to a selected basin and other possible solutions as detailed in the environment chapter. Since the sewage system is mainly gravitational, clear instructions for transferring the pipes in highways and valleys were determined, such as the solution given to the purification instate east of Shoreq. Instructions enabling the establishment of compact purification devices in metropolitan parks for the purpose of creating purified water for water plants were determined. Clear instructions were determined for handling toxins and pollutants that may damage the purification process or harm its results – the best solution is the "pretreatment" instruction in the field of factories or industrial areas. Policy guidelines for private factories and campuses were determined for treating pollutants; the clause of this policy is of great importance especially in industrial areas and the biotechnology industry.

#### Electricity

The central goals in the field of electricity are: maintaining an electric level of supply in all parts of the city in light of the expected growth in consumption. Creation of an additional line of supply from the coastline along the Ayalon valley in the direction of Gezer station in order to ensure a regular supply in the event of a dysfunction. The creation of a line or two for leading electricity from the west to the east of the city in light of the predicted development in the east. Creation of a back-up for peak hours and emergencies via local stations. The planning of electrical equipment (current lines, etc.) that is environmentally friendly, and changing the old equipment. The means of intervention are: determining agreed upon guidelines with the electrical company for planning a new 400 KWA line for placing lines, for the stages of development, and for the underground and above-ground designations. The determination of rules provides priority for underground lines and the reduction of above-ground lines, including the advance coordination of placing the lines, parallel to the creation of roads. As a rule, instructions obligating the establishment of new underground lines were determined, either covered lines, or lines integrated into buildings. Alternative sites for placing the lines intended for transferal should be found. A new location for electricity lines will be found in the city, especially in the denser areas and in the city center. In spreading the electricity lines, the mass transportation system and the express train to Jerusalem will be taken into account. Guidelines were set for establishing transformer stations in structures, or integrating them into support walls, and regulations were provided for the prevention of electromagnetic radiation.

#### **Energy**

Regarding gas and fuel, the central goals are: distributing facilities and terminals in the various parts of the city while considering the operational storage for emergencies in limited concentrations due to security limitations. Encouragement of the use of gas over fuel because it is less harmful to the environment. Assessment of the use of energy centers based on heating water with natural gas, and preferring them to heating with electricity, which is currently being used. Location of distribution devices, terminals, and gas stations on the city's periphery in order to reduce the transportation of substances in containers in the city, reduce the pollution caused by the operation of gas stations, and ease the supervision and management of the devices. The necessary means in order to attain these goals are: Moving Pi Glilot farm, which is jeopardizing the Har Nof neighborhood, to an alternate location. Determining sites, in the program scheme, for establishing two gas and fuel terminals in the Atarot region and in the eastern part of the set. Determining guidelines for laying a natural gas line to feed the three terminals (the existing one and two proposed ones), and from there on to the proposed power station in Atarot and other various energy centers. Determining guidelines for providing gas to consumers, with an emphasis on large consumers that have a central system for creating energy (hotels, factories, and various institutions).

#### **Communications**

The vision of the open and advanced city at the base of the outline plan necessitates treatment of the communication infrastructure as a condition for effective functioning of the employment areas as smart and clean areas connected to each other and to the "global village." Laying an advancing communications infrastructure is one of the essential conditions for the city and area's potential economic development, and for this purpose coordination between the various types of communications infrastructures – linear and wireless, public and private – is necessary. A central goal of the plan is the laying of proper infrastructure for city-wide communication between the areas of employment and residential areas, enabling a supply of advanced public and private services. In addition, diversified communications options should be maintained, and rules for various wireless communications considering environmental limitations and the public's health. The means of intervention in this field are: establishing new Bezeq centers in new neighborhoods only. Guidelines were determined for transferring underground lines, including Bezeq lines, television lines, and optic fibers. Instructions were provided which enable the transfer of communications pipes, unrelated to Bezeg, as part of the development of the network of highways which will prevent the opening up of new roads and sideways to supervisors as occurs today. The instructions for placing cellular antennas will be in accordance with the instructions of TAMA/36, and the planning team was asked to set detailed instructions, however this is not possible due to the national outline plan. Additionally, the planning team recommends that unique antennas, such as the Channel 2 or Zahav channel antennas, be moved to industrial or employment areas.

## Earthquake

Regarding earthquakes, the outline plan relies on an earthquake risk survey prepared by the Geological Institute for the city's engineers. Following the conclusions of the survey and based on them, six types of sensitivity areas in which there is likely existences of risk factors as a result of earthquakes were defined, and obligatory planning guidelines were determined, some of them to be integrated into the detailed outline plan and some to be integrated while approving a license. It should be noted that both the earthquake risk survey and the descriptive instructions stemming from the survey are pioneer ventures in the local outline plan.

#### **Cemeteries**

Regarding cemeteries, the programmatic needs were defined and it was decided that there is a need to expand the cemetery on Givat Shaul for the Jewish population, mainly through saturated burial (burial on levels) and for this purpose the approval proceedings for the detailed plan to expand the Givat Shaul cemetery should be continued. Similarly, guidelines were set for locating areas for Christian and Muslim cemeteries. The location of these cemeteries is not determined in the program in light of the ownership problems of the land. Locating plots of land for these cemeteries can only be achieved after settling the ownership problems of the land in the framework of the outline plan.

## **The Planning Zones**

The various chapters in this document relate to the zones and districts of planning. Following is a list of planning zones and the grouping of planning districts (see Figure 1 and Table 1).

כפר עקב Legend עטרות Planning district north Planning district east Planning district center Planning district west נוה יעקב Planning district south בית חנינא פסגת זאב רמות אלון מ.פ. שעפט רמת שלמה עמק ארזים הגבעה הצרפתית חוצבים עיסוויה א.ת. גבעת שאול רוממה בית דוד הר הצופים לבעת גאולה חר נוף הר חרת לב העיר א טור קרית הלאום בית הכרם העתיקה יהנדי הר הרצל סילוואן גינות העיר עין כרם בית וגן הדסה בקעה /קרית היובל גוננים ג'בל מוכבר א.ת., תלפיות מזרח קרית מנחס רכס לבן בית צפאפה רמת עמק רפאים צור באהר גילה הר חומה

Figure 1 – The city's division into planning districts

Table 1 – Division of the City into Planning Districts and Planning Zones.

Planning District	Planning Zone	Statistical Area
		751-755
		761-769
		111-113,771,772,124
		115
		731-736, 741-745
		116
		114,121,122,177-
	110111111111	178,211-216
North	Mount Scopus	773
		221-222,245,246
		223
		231-234
		711
		712
		713-717,721,722
		724
Zust		,2:
East	<u> </u>	723,781
		785,791-193
		(781)782-784
		641-643,611,621
		811-815
		816,821,822
		(822)823,824
		825-826,547
		123,125-128,171-176
		131,132,141-
		147,162-169
Center	•	251,253-254
Center		631
Center	` `	263
		241-244
		261-2,264-5,421
	, ,	151-
		154,161,252,423,511-
		514,521-522,531
Center	Bakah	532-536,542-544,546
South	Gonvim	411-417,422
South	East Talpiot	541,831-835
South	A.H. Talpiot	545
	Center Center Center Center Center Center South South	North Pisgat Ze'ev North Pisgat Ze'ev North French Hill North Ramat Shlomo North Ramat Alon North Har Hotzvim North Mount Scopus North Givat Shaul North Har Nof East Kfar Ya'acov East Atrot East Beit Hanina East Shoafat Refugee Camp East Beit David East A-tur East Beit David East Silwan East Jabal Mukbar East Silwan East Beit Tsafafeh Center Geula Center The Jewish Quarter Center Har Herzl Center Beit Hakerem Center The City Gardens  Center The City Gardens  Center Bakah South Gonvim South East Talpiot

36	South	Emek Refaim	(411), 335
37	South	Kiryah Hayovel	311,312,324,321-
			324,266
38	South	Kiryat Menachem	313,331-334,336
39	South	Gilah	841-848,826
40	South	Har Homah	852
41	South	Ramat Rachel	
42	West	Ein Karem	325
43	West	White Range	337
44	West	Hadassah	326,327
45	West	Har Harat	328
46	West	Emek Arazim	224
47	West	Har Shalmon	338