#### ISTANBUL PUBLIC SPACES AND PUBLIC LIFE

# stanbul.

An accessible city - a city for people





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#### EMBARQ Turkey - Sustainable Transportation Association

EMBARQ Turkey - Sustainable Transportation Association aims to improve quality of life in the cities by creating sustainable solutions for urban transportation problems which threaten environment and human health more and more each day. It is a non-profit, research and implementation based non governmental organization. It is affiliated with WRI (World Resources Institute) which is established in order to raise awareness in sustainable use of world's limited resources and it is a member of EMBARQ Network which operates in the field of sustainable transportation through a total of 6 centers

namely Turkey, Mexico, Brazil, India, China and Peru.

EMBARQ Turkey - Sustainable Transportation Association cooperates with local authorities and creates solutions for urban transportation problems, providing necessary local or foreign expert support for the implementation of these solutions. It develops projects to reduce air pollution, eliminate negative effects of transportation on the quality of life and create safe, accessible and clean public spaces. It implements these projects in cooperation with local authorities.

# introduction



If there is a notion of urban culture in Turkey, Istanbul has the biggest share for the emergence of this notion. We know that the Historical Peninsula which is also known as "Old İstanbul" is considered as the world's oldest metropolitan area by historians. This unique area which hosts cultural heritage of not centuries but millennia is in fact a great value, which is to be protected for whole world.

Nowadays, it is impossible to talk about an urban culture that contradicts with environmental consciousness. İstanbul has been growing without any regard for its historical and cultural features, sea and unique nature for many years and it still bears the burden of this negative process. As we all know İstanbul has to absorb high levels of domestic migration every year; nearly population of a city in the world scope is added on the population of İstanbul, all with their own traditions, education levels and habits.

Therefore I think that Historical Peninsula Report, prepared by distinguished, world-known Gehl Architects with their methodology tested and yielded in different countries, gives a significant and valuable contribution to conservation of İstanbul. In İstanbul where unplanned or wrongly planned city formations as well as a crowded traffic complicate urban life, I believe increasing consciousness on urbanization is our biggest assurance. We are pleased to see the same consciousness in local authorities as well as in public opinion and local public

platforms. We appreciate the efforts by both İstanbul Metropolitan Municipality and district municipalities in order to increase urban life quality.

Historical Peninsula has a key mission and it is a decisive symbol in the process of increasing life quality and giving İstanbul back again to its residents. Potentially Historical Peninsula have features and possibilities for every resident of this city, which can contribute to increasing life quality to higher levels. However, the Peninsula where pedestrians are seen as secondary elements and vehicle traffics as primary, is not able to offer these features and possibilities neither to residents, nor to visitors under these circumstances.

The report you are going to read offer simple yet effective and viable suggestions to change the current situation. It draws attention to current and potential problems. The research, enriched by examples from various cities throughout the world, aims to fulfill unique functions of Historical Peninsula. Istanbul's future and a sustainable increase in urban life quality are closely related to the creation of common mind and cooperation between numerous stakeholders like residents of İstanbul, local authorities, urban development experts and government foremost. I firmly believe that this work is a very important step towards creating common mind and harmony.

Best Regards,

Ayşe Canan Ediboğlu

EMBARQ Turkey –

Sürdürülebilir Ulaşım Derneği

Head of Executive Committee

# introduction



It is quite well known, "most livable cities" lists are put together and published every year. The criteria considered for these lists include some important factors such as traffic, public transportation and air pollution.

As EMBARQ Turkey, we are working on solutions that will increase the quality of life in our cities with the support of EMBARQ Network's expertise and knowledge.

We have been conducting a research with Gehl Architects for some time in Historical Peninsula of Istanbul, a region which embraces a unique historical and cultural heritage. Jan Gehl, a very famous Danish city planner, is known as the one who have increased the life quality of Copenhager which is among the top ten of the most livable cities list.

It is an occasion for delight and honor for us to see that İstanbul as a unique city with its natural beauty, location, as well as historical and cultural values it possesses, attains the value it deserves.

This research we conducted with Gehl Architects provides an important and valuable infrastructure for all the İstanbul-related projects we are aiming to realize in the future.

It provides enlightening information for us and all our stakeholders who strive to solve inner city transportation problems without giving any harm to environment.

This project, which is exciting for Gehl Architects as it is for us, undoubtedly gains more meaning and value with the contribution of our stakeholders. I would like to extend my sincere gratitude to Fatih Municipality Mayor Mustafa Demir who supported us from the beginning, Erhan Oflaz who was the previous Deputy Mayor and appointed as GIS General Manager of Ministry of Environment and Urbanisation and Bora Selim who is a member of Municipal Council.

From now on, we will be locked on for the practices that will transform the results of the research into sustainable transport projects and applications.

As part of this process, we have started new researches in order to analyze satisfaction level in the area due to economic and environmental effect of pedestrianization and regulations applied in Historical Peninsula.

We hope to conduct similar researches in other cities and historical centers, in cooperation with universities and other non-governmental organizations.

We hope and believe that this project, which combines a vision focused on increasing life quality with the sui generis cultural and social structure of Historical Peninsula, will be a reference for other cities of Turkey.

Best Regards,

Arzu Tekir

EMBARQ Turkey –

Sürdürülebilir Ulaşım Derneği

Director of EMBARQ Turkey

# introduction



Istanbul's Historic Peninsula is one of the most important urban areas in the world: an area of extraordinary beauty where 8,500 years of human history and culture embrace the sea.

Unfortunately, today this area is being strangled by unsustainable transport infrastructure. The chaotic network of old, narrow streets that gives the area its charm also makes it challenging to access the historic sites and to pass through the city walls to walk along the seashore. Happily, the local administration has been pedestrianizing streets. However, this by itself isn't enough. What is needed is an encompassing transport plan for the area as a whole.

The imbalance in the use of the Historic Peninsula

needs to be addressed in a sustainable manner. The resident population of 55,000 explodes into 2.5 million users every day thanks to the influx of students, business owners, shoppers, tourists and worshippers. This puts undue strain on the area, especially the transport system, which is forced to accommodate more travelers in one day than the total population of most European cities.

We are dedicated to working with the local administration and stakeholders in developing solutions that will protect the area from the ravages of unsustainable transport, and ensure that the Historic Peninsula is accessible to all people now, and for the next 8,500 years.

This report will be an important tool in this work.

Sibel BULAY

EMBARQ Turkey –

Sürdürülebilir Ulaşım Derneği

Member of the Board

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# How to read the report?

#### Introduction

The **Introduction** gives a general introduction to the study and the Gehl Architects's approach and methodology.

#### **Analysis**

The **Analysis** includes assessment of the physical conditions provided for public life and pedestrians in the historic peninsula. It includes issues related to the quality of the public realm as well as surveys of how selected streets and squares are used in terms of walking and spending time in the city.

#### Recommendations

The **Recommendations** illustrates the overall vision(s) based on the findings in the analysis. It identifies a set of recommendations for long term strategies as well as concepts for immediate actions.

The Recommendations is supplemented by a range of best practice examples for the qualitative principals outlined in the strategies to set standards for future implementations and initiatives.

#### **Appendix**

The **Appendix** encompasses collected data from the public life surveys conducted during 2010.

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# Gehl Architects - Ideology and methodology

With the human dimension as a starting point and by looking at the city from eye level, Gehl Architects have for over a decade, worked to improve city environments in Denmark and abroad.

#### Gehl Architects's approach

Gehl Architects's work aspires to address the aspects of urban quality from a 'people first' perspective. The objective is to create a stronger coherence between the life in the city and the either planned or existing building structures. Public life is at the top of the agenda and great care is needed to accommodate for the people using our cities.

Gehl Architects has developed an approach to urban design that places people at the centre of the planning process. Our philosophy is based on over 40 years of research conducted by Jan Gehl on how public life can be carefully considered in the design of places and spaces. Professor Jan Gehl has been heading the Centre for Public Life Research at the School of Architecture in Copenhagen, and has pioneered research related to people in cities ever since the 1960's.

Since 2000, Gehl Architects has translated this research into principles for sustainable urban development.

Gehl Architects uses the analysis of people and public life as a basis for design, rather than the traditional architecture methodology of focusing on buildings first. From the standpoint of empirical data, we then advise

cities on how to develop urban qualities to support lively, healthy, sustainable, attractive and safe city centres, districts, and urban spaces. This higher quality public realm welcomes both citizens and visitors to enjoy and interact; with the overall goal being a more people friendly environment.

Gehl Architects has previously been advising cities worldwide in making their city a place for people. These considerations go hand-in-hand with traffic and mass transit considerations and aims at introducing a new mind set with decisions makers, educators and citizens in general.



Adelaide - 2002 1.3 million inhabitants



**Londra** - 2003-2004 7.5 million inhabitants



**Wellington** - 2004 0.3 million inhabitants



**Melbourne** - 1994 and 2004 3 million inhabitants



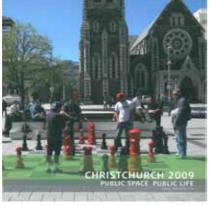
**New York** - 2007 8 million inhabitants



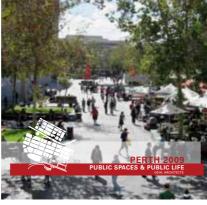
**Kopenhag** - 1986, 1995, 2005 1.3 million inhabitants



**Sidney** - 2006 4 million inhabitants



Christchurch - 2009 0.4 million inhabitants



Perth - 2009 1.6 million inhabitants

#### Overview of some of Gehl Architects Public Space & Public Life surveys

# Istanbul - Public Space & Public Life Survey

In June 2010 Gehl Architects was invited to conduct a Public space and public life survey in Istanbul. The survey includes mapping of the major potentials and challenges that the historic peninsula experiences in its present state and a survey of the public life taking place in selected areas.

#### A working tool

Gehl Architects has developed the Public space and public life survey methodology as a working tool, which can be adapted to several contexts. The survey aims to make people more visible and bring public life into focus in order to form a basis for developing strategies and policies and initiate a process to improve the urban quality.

Most cities have rather precise statistics about vehicular traffic flows and parking patterns. Just like information concerning commercial activities is in general equally well documented. But when it comes to insight and information about people moving and staying in the city - no such systematic collected

information is generally available.

The Public space and public life survey has proved to be a relevant and a most workable tool for a number of cities. The survey aims at presenting very complex problems in a simple and pedagogical form. This invites people to participate in the debate and obtain a greater understanding of their city. Public space & public life surveys tend to be a milestone in the planning process by formulating a vision and a general agreement of where the city is heading, aligning future developments and offering a common mind set.

The outlined Public space and public life methodology has been used for the Istanbul survey, so that it is possible to compare the current situation on the

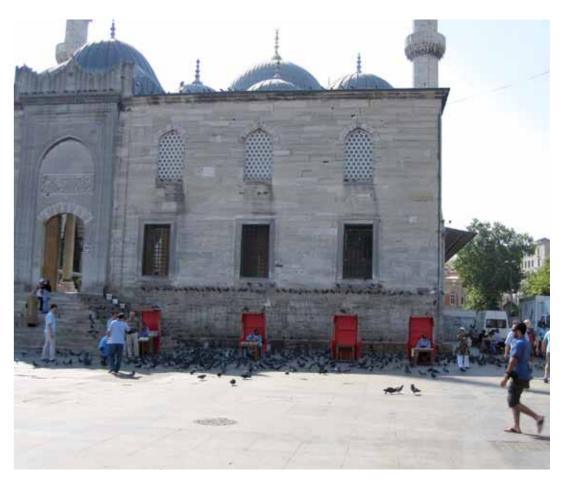
historic peninsula with other cities.

Public space & public life survey in Istanbul

This survey includes recording of pedestrian traffic in addition to registration of staying activities occurring in selected locations in the historic peninsula during a summer weekday and a summer Saturday. Additional surveys have been made on a summer Sunday and on a weekday out of summer season.

Look for supplementary information in the Analysis and Data sections.





The Public Spaces & Public Life Survey has been conducted in collaboration with EMBARQ, Fatih Municipality with assistance among others by students from the Istanbul Technical University and Mimar Sinan University of Fine Arts.

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Comparing Istanbul to other cities

# Study area - The historic peninsula

The focus of the Istanbul Public Space and Public Life survey is the central part of the historic peninsula bounded to the east by Atatürk Boulevard in the north and Mustafa Kemalpaşa Street in the south, including the waterfront along the coast of the Golden Horn and the Marmara Sea. The core study area is supplemented by selected areas to the east including the Theodosian land wall.

Definition of the study area

The core study area comprises approximately 5,040,000 m<sup>2</sup>. The outline and main focal points has been identified in collaboration with EMBARQ and Fatih municipality.

The survey encompasses a representative selection of streets and connections, squares and parks within the study area, that enables to investigate network, coherence and urban quality within the area. All areas comprise common as well as individual issues, and together provide a broad aspect of the challenges and potentials of Istanbul today. The survey focuses on the human dimension in the city, and the various aspects regarding the public realm and relationship between vehicular traffic and pedestrians - pinpointing the current and potential framework of public life.

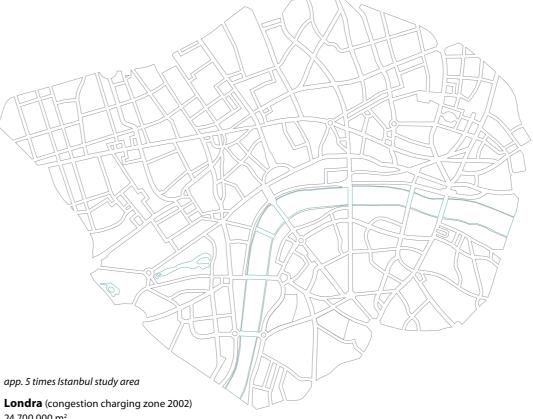
Hereafter the study area is refered to as the historic peninsula.

The historic peninsula holds the oldest settlements of Istanbul, and one of the oldest in the world, dating more than 8000 years back. As recent findings have dated a settling to the neolithic period in the 7th millenium BC. Until this find the generally idea of the city began with the greek settling of the city Byzans in the 7th century BC. Ensuing the city was colonised by the Romans in the fourth century AD, and founded as a port city and the second eastern capital of the Roman empire.

In 1453 the city was conquered by the Ottomans, and until the beginning of the 20th century home to the Ottoman empire. Thus the study area represents a vital part of Istanbul's historic and cultural legacy.

# Studies of other cities will be used for comparison with the Istanbul findings to provide insight and valuable

references for this survey. The comparisons are based on similar studies carried out in cities in Europe, North



24,700,000 m<sup>2</sup>

xxx residents in the city centre (2005)

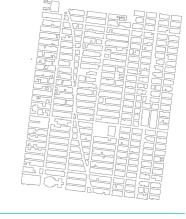
48 residents per hectare (Greater London) / 27 resident per hectare (City of London)

(14 million residents in the metropolitan area)

#### (Central part of the historic peninsula) 5,040,000 m<sup>2</sup> 55,635 residents on the historic peninsula (2011) 110 residents per hectare in study area (12 million residents in the metropolitar

app. 4/5 of Istanbul study area

**New York** (Midtown) 3,965,000 m<sup>2</sup> (19 million residents in the metropolitan area)



app. 1/2 of Istanbul study area

#### Melbourne

2,300,000 m<sup>2</sup>

12,000 residents in the city centre (2006)

52 residents per hectare in study area

(3.5 million residents in the metropolitan area)

app. 1/4 of Istanbul study area

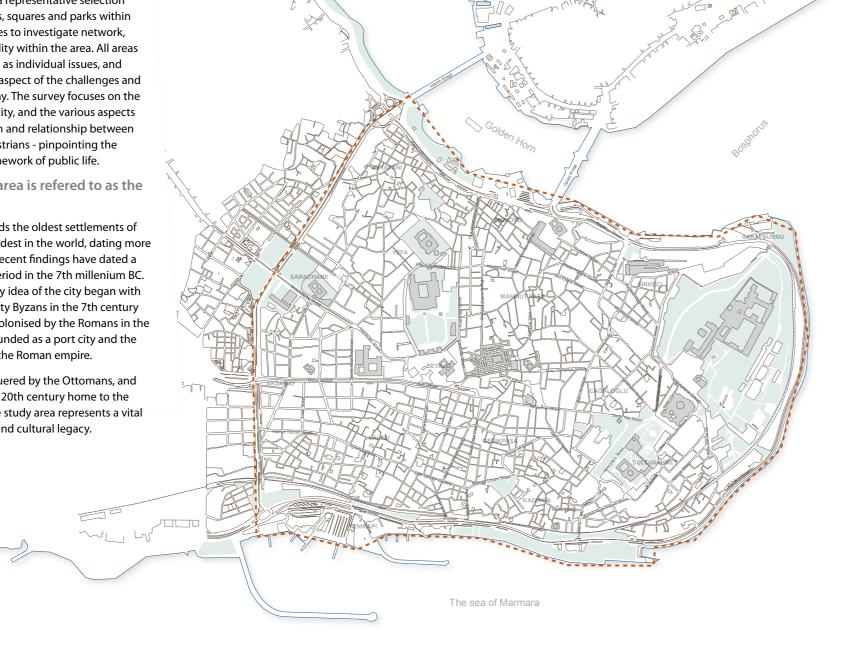
#### Copenhagen

1,150,000 m<sup>2</sup> 7,600 residents in the city centre (2005) 66 residents per hectare (1.2 million residents in the metropolitan area)



All maps are shown in 1:40.000

Source: Fatih Municipality 2010-2011



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# Part 1 CITY QUALITIES

#### **POTENTIALS**



#### A FANTASTIC SETTING

The city centre of Istanbul is situated on a peninsula surrounded by water and beautiful views.



#### **IMPRESSIVE TOPOGRAPHY**

The seven hills of Istanbul offer magnificent views, highlight its monuments and create a unique skyline.



#### A PRESENT HISTORY

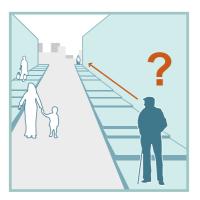
Istanbul is an extra-ordinary city with an ancient history still present in the public realm. The modern Istanbul has grown and developed side by side with ancient monuments as exceptional reminiscents from the past.

#### **CHALLENGES**



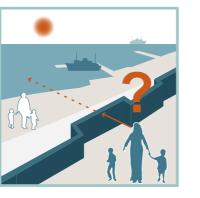
#### TRAFFIC CONGESTION

Due to the city centre being on a peninsula the city is constantly congested by vehicular traffic. Main arteries as well as access points are few and heavily used.



#### STEEP GRADES

In specific areas steep grades form a challenging pedestrian landscape particularly representing difficulties for people with disabilities, people with prams or the elderly.



#### HISTORIC WALLS FORM BARRIERS

The historic wall structures represent significant barriers in terms of integrating the central city area with the waterfront and in terms of integrating the historic peninsula with the areas to the west outside the wall.

With time the walls have been disregarded in terms of maintenance and inappropriate utilisation of surroundings.

#### **POTENTIALS**



#### INTRIGUING STRUCTURE

The urban structure is ancient and builds around old trading routes, concerns for the topography and stand in sheer contrast to the grandness of the monuments.



#### **FANTASTIC MONUMENTS**

Mosques, palaces, city walls, aquaducts. Istanbul is rich in faboulous historic monuments representing focal points for the city centre and and holding a great potential as unique 'storytellers'.



#### **SENSORY EXPERIENCES**

Colours, smells, textures, sounds, breezes from the sea. Istanbul stands out as a sensory explosion magnifying visitors.

#### CHALLENGES



#### LACK OF LEGIBILITY

Due to the maze-like appearance of the street network, the city centre is complex to comprehend, to orientate in and to access.



#### TICK-OFF TOURISM

Tourists tend to collect monuments from their checklist and forget or neglect the remaining splendours of the city.

Many monuments suffer under disrespectful use of surroundings and introvert appearence.



#### NEGLECT AND DECAY

Thousands of years of history has worn down various parts of the city. The introduction of somewhat uncontrolled vehicular traffic has caused a particular significant detriment to the public spaces including intrusive traffic infrastruture. As bold and uncoordinated signage and urban elements have entailed a degradation of the visual environment.

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#### Analysis - City Qualities

Intriguing views

Contourlines and significant views

# A unique situation

The exceptional silhouette of the historic peninsula reveals a powerful symbolism and emphasis on the topography by the consistent location of the monumental buildings as landmarks on the city's natural hill tops.

#### A characteristic natural setting

The historic peninsula is privileged by a fantastic location bounded by the waters of the Golden Horn, the Bosphorus Strait and the Sea of Marmara on three sides. The sea provides the peninsula with a distinct identity and constitutes an all-pervading appeal, and an immense recreational potential for the city's residents and visitors. At the same time the sea forms a barrier as access to the peninsula is limited to the two bridges that span across the Golden Horn. Thus it is crucial that the land-water interface and the water body is treated and developed in a way that support the water as a connector rather than a divider, and permit the public life to benefit from this great potential.

#### **Challenging ground**

The geographical basis of the peninsula entails both blessings and challenges. The contours of the landscape provide the city with magnificent views, and even from

the inner part of the peninsula it is possible to catch a glimpse of the sea. However in places unfortunate developments block up the view. In addition the distinctive topography adds a particular character to the city by creating an interesting cityscape, and by supporting a sense of place and identification. On the other hand the steep streets also compose challenges when moving around in the city.

#### Nexus between landscape and built form

Istanbul was refounded in the fourth century as the second capital of the roman empire - Constantinople. To stress a sacredness similar to Rome the city should reflect a theme of seven hills. Hence the present landscape was interpreted in a way that identified seven high points. These seven focus points was marked by monumental structures in order to honour the emperor.

When the Ottomans conquered the city in 1453 it was recreated to reflect their own culture. Based on the

former roman urban structures and components, the ottomans located their most prestigious buildings on the hill tops. Given that the city was designed to be experienced from the Golden Horn, especially the six hilltops facing north were celebrated as landmarks with domes and minarets creating the unique silhouette of Istanbul. Thus the seventh southward hill lost its importance in the over all city design and therefore never benefitted with an iconic mosque.

#### Focal points for the urban development

The great imperial mosques replaced the roman monuments forming the natural basis for the urban development of the city. These mosque complexes not only defined religious but also political, social and cultural centres, hence they made up urban focal points and key urban spaces.



2. hill: Nuru Osmaniye Mosque

3. hill: Süleymaniye Mosque, Beyazıt Mosque and Şehzade Mosque

7. hill: The seventh hill was never crowned with an imperial mosque

Steep streets with limited accessibility Sometimes unfortunate developments block

#### The unique silhuette of Istanbul towards the Golden Horn The Ottoman monuments on the 6 hills Proximity to the sea Fantastic views facing the Golden Horn Interesting streetscapes Historic footprints The mosques as points of orientation 4. hill: Fatih Mosque Topography create challenging streetscapes 5. hill: Yavuz Sultan Selim Mosque 6. hill: Mihrimah Mosque

# A strong historical footprint

Since ancient times Istanbul has been surrounded by protective city walls. Extensive land wall complexes as well as sea walls. The remaining historic wall structures hold the reminiscences of the city's growth outlining the boundaries of the city over the years.

#### Walls from coast to coast

The former city walls of Istanbul crossing the peninsula from the Golden Horn to the Marmara Sea, and framing the city along the coastline represent some of the most complex and elaborated fortification systems ever built. They have provided strong protection and made it possible for the city to evolve and flourish through the ages.

The oldest city walls are more or less vanished today, absorbed in the city framework or pulled down over time. However remaining parts are apparent here and there adding identity and character to the cityscape.

#### **Great city amenities**

The Theodosian land wall represents the last western addition to the defenses of the city. Hence the enormous structure it constitutes a distinctive characteristic, holding both huge potentials and challenges.

In the nature of a defense, the historic wall composes a

heavy barrier with only a limited number of gates to the historic peninsula. Presently these important access points to the peninsula appear indistinct and traffic dominated with a severe 'motorway spaghetti' leading to the gates from west. The barrier effect is additionally increased as the city fringe towards the wall in places appears incompleted and inarticulated in the form of wasteland and carparks creating a poor interface between the city and the wall.

This picture is furthermore enhanced by the large scale structures dominating the border land towards the wall from the west. The outer side is equally experienced as a backside affected by the heavy infrastructure framing long stretches of the wall.

Similarly the sea walls comprise barriers with only limited gateways and access points. The areas along the sea walls together with the railway make up a no-man's land separating the city from the water.

The historic wall complexes create unique sceneries

composing great recreational value and potentials. However currently the wall areas hold few invitations for staying, and the original terassed design of the land walls limits the access.

#### Disputed restoration

The walls of Istanbul have been replaced several times and numerous additions and modifications have been made throughout history. Thus large parts of the sea walls were demolished by the building of the railways. Just as parts of the land wall complex has been dismantled gradually. Poor maintenance over the years and disrespectful treatment has resulted in a mixed quality both physically and visually.

A large-scale restoration project from the 1980s has lead to some more or less successful renovations focusing on isolated parts of the historic wall complex. The restoration program has been critized for superficial restauration, use of inappropriate materials and poor quality work all in all resulting in destruction of valuable historical heritage.



Theodosian wall

The land wall complex composes a recreational landscape for promenades.



Sea wall at Kennedy Street

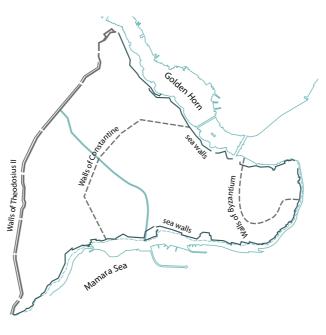
The land wall complex composes a recreational landscape for promenades.



City amenity and characteristic Strong cultural legacy Great recreational value and potential



Create a barrier and limit access to the city Partly demolished Lack of maintenance and disrespectful treatment Few activities offered



#### Istanbul city walls

The Byzantinum land walls: 7th century BF The Contantine land walls: 4th century AD The Theodosian land walls: 5th century AD The sea walls were constructed during the Byzan tine and Roman empire

# Complex city structures

When looking at the urban framework within the peninsula two main characteristics can be identified - the large scale structures and the fine human scale. Altogether this creates a cityscape of great complexity composing both potentials and challenges - pleasures and troubles.

#### Wide streets and fine grain

Generally two street types characterise the historic peninsula: the wide feeder streets primarily leading traffic into and around the centre, and the fine grained connections binding the city together in an almost organic composition. Altogether forming an urban network that offers multiple choises and alternative routes in addition to exciting spatial experiences. However the network lacks an overall legibility to clarify and enhance the important connections linking to key destinations.

#### Large anchors and small units

Some of the most prominent city components - the monumental building complexes - such as the Tokapi Palace, the grand mosques and the university form important anchors, both physically and visually by their size besides their functions as vital visitor destinations. Corresponding to these 'X-large' structures the city has an abundance of small units representing the human scale in a utmost complex and hive-like building fabric. This combination provides a great richness of urban experiences to stimulate the senses and activating our brains when walking about the city.

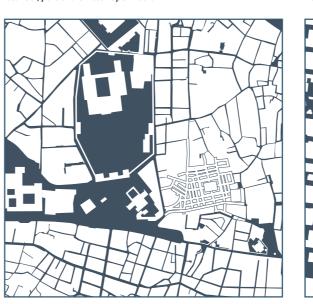
#### Urban structures as barriers

The large city structures - mosques, parks and bazaars - act as focal points being both magnets attracting people and city landmarks. However they also make up significant barriers due to their sometimes enclosed

character in terms of limited accessibility and somewhat poor interaction with the surroundings.

That is, although the Grand Bazaar during the day is easy accessible with numerous entry points and connections, it composes a strong barrier after closing hour when its many gates close up forming an enclosed and inaccessible area at night. A similar situation goes for the Gülhane Park as admittance is restricted to the opening hours between 7 am and 10 pm. The Istanbul University and university park represent a particular case as admission presently requires permission and control of business and purpose. Hence the university ground constitutes a cut-off city area yet holding a great recreational potential to complement the surrounding dense city.

#### Istanbul, part of the historic peninsula 1 km<sup>2</sup>



New York, Manhattan Midtown 1 km<sup>2</sup>.

# City grain structures options and routes when moving around in the city.

#### Comparison:

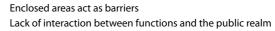
#### The Istanbul urban fabric reflects a development over an extremely long period of time thus featuring a great and extensive structural variation. New York symbolises the 'efficient' city with a

clear system of large urban blocks and regular straightforward streets. Comparing to New York the historic penisula stands out and distinguishes itself, holding ample experiences,



Great variation in urban experiences Natural anchor points Fantastic human scale streetscapes





# The monuments as focal points

The peninsula holds a strong cultural heritage in terms of a range of distinguished monuments including historic buildings. All are part of the city's special allure and characteristics, and act as focal points on the mental city map.

#### Valuable historical monuments

The monuments compose fantastic and popular visitor destinations rooted in the specific history of Istanbul telling stories about ancient Romans, Sultans and caravan trading.

The historic attractions can be divided into two categories: one type 'to look at', for example The Basilica Cistern and the Bozdoğan Aqueduct, and one type 'to act in', for example the Bazaars and the grand mosques. Both types holding great potentials to frame and enrich the urban life.

Still some of the monuments are situated in a distance combined with weak linkages that call for a strong network to connect them to the central city areas.

#### Lack of interaction

Unfortunately some of the monuments are experienced as isolated and detached from the surroundings with a weak interface due to enclosed facades and surrounding walls, for example the Basilica Cisterns, the

Hagia Sophia complex and the university. Especially the Topkapi Palace suffer from the topographic setting, the palace walls and only few entrances connecting to the

Thus more of the monuments appear quite introvert and without any interaction with the surroundings.

There are a lot of stories to be told in connection to the monuments. However the communication to the public is experienced as very one-dimensional, backward and undynamic, and without a contemporary interpretation of the historical context.

#### Poor patchwork of surroundings

An undesirable use of the environments close to some of the monuments contribute to a poor integration with the surrounding public realm.

Hence intrusive parking in forecourts and backyards to the important monuments create both physical and mental barriers, for example at the Blue Mosque, Sultanahmet and Gülhane entrances to Topkapi Palace, on the Çemberlitaş square and in connection

to the Bozdoğan Aqueduct and the Archaelogical Park. Additionally the parking contributes to a severe deterioration of the sensitive visual and physical environment, and downgrades the attraction and use value of the public spaces close to the monuments.

Besides some monument surroundings suffer from poor maintenance and a lack of staying possibilities with no or almost no public benches, for example on Hagia Sophia Square, Çemberlitaş Square and Beyazit Square.

#### 'Tick-off' tourism

The distribution of monuments, acting as key destinations, including the concentration of monuments in the Sultanahmet area, combined with the fact that many tourists are carried around in buses has lead to a tradition of 'tick-off' tourism. Where a typical tourist visit is restricted to selected destinations in a confined area according to a 'checklist' neglecting the other qualities and great richness of the city.

A fact furthermore reinforced be the present treating and staging of the monuments.

#### **Invasive parking**



3. Ahmet Fountain and the Topkapi Palace entrance Large number of tourist buses, taxis and private cars fill up the space on a regular basis.



Bozdoğan Aqueduct
Probably the city's most spectactular parking spaces.



Parking takes up much valuable space around the Blue Mosque and clutter the very forecourt.



Great monuments - great stories
Popular visitor destinations



Monuments are enclosed with little interaction to surroundings Limited accessibility to key destinations Inappropriate parking next to important monuments Poor integration with surroundings Some tourist visits are restricted to the 'Tick-off' destinations

# A wide range of monuments Historical monuments

the Topkapi Palace Museum was visited by more than 1,8 mio. visitors in 2010 (January to June). The Hagia Sophia Museum was visited

by more than 1,3 mio. visitors in 2010 (January to June).

Sirkeci Station

Central Post office

Yeni Mosque

Nuru Osmaniye Mosque

**Grand Bazaar** 

Spice Bazaar

Süleymaniye Mosque

Şehzadebaşhi Mosque

Laleli Mosque

Sultan Valide Mosque

Veniceriler Cd Cemberlitas

Hippodrome Hagi

applied to

Byzantine and Roman sea walls

Built structure

Area

Carpark

# A city related to water

Few city characteristics or landmarks can match the presence of water. Throughout history water has been one of the strongest and most attractive city features attracting and fascinating people of all kinds and ages.

#### Water as a starting point

Istanbul has always been a city identified with water. It is a city divided by water and it was founded on the basis of water as a port city. Water played a vital role in the organisation of the city by the Romans in ancient time, where social activities like bathing were part of the everyday life in the public spaces.

#### Iconic and symbolic water elements

People in Istanbul have a most active and visible relation to water due to both religious and social traditions.

Thus the city has strong traditions for water in the public realm and a range of water elements are encountered around the city in the form of cold water drinking fountains - çeşmes, hamams, contemporary fountains in squares and parks, historical open and

subterranean water cisterns and the traditional water facilities at the mosques.

The hamams, originally annexes to the mosques, frame the turkish tradition of steam bath and ritual cleansing as well as a pronouced social aspect acting as meeting places. Integrated into daily life the hamams used to be and still are centres for wellness and body culture as well as gathering and socialising.

#### Water - a must and a pleasure

In a climate with hot summer periods as in Istanbul access to cold drinking water is a basic necessity and the city's numerous cold water fountains - çeşmes - have throughout times provided the citizens with refreshing water. Hence the çeşmes occur as a frequent and characteristic feature in the streetscape. They are found in various layouts ranging from elegant and

prominent pavillons to more simple designs integrated in the building frontage. Sadly many çeşmes presently appear to be in poor condition and without running water.

More contemporary and traditional water fountains are located in some of the city squares and parks bringing ambience and underlining the recreational character. Regarding maintenance and service a situation corresponding to the çeşmes goes for some of the park fountains. Especially the fountain in the Bozdoğan Aqueduct park appears to be in a deplorable state.

Generally the fountains represent 'water-to-look-at' features and the possibility of interacting with the water is not considered thus neglecting the ever present magnetism and attraction of water.



Blue Mosque
Water fountains form an active focus in the mosque complexes.



Sultanahmet Mosque
The fountain underline the recreational park aspect with Hagia
Sophia as a remarqable backdrop.



Visible and accessible water elements enrich the public realm Çeşmes in many different designs



Many çeşmes appear to be out of order Mostly 'passive' water elements Poor maintenance of some park and square fountains



# An imbalanced city

The historic peninsula offes a diversity of functions but unfortunately the different functions are clustered in a way that create large monofunctional areas. The distribution of functions in addition to a high focus on business has contributed to a city out of balance.

#### Over-commercialised areas

To promote diversity and city vibrancy many different functions and activities must be present to invite and accommodate different user groups and ensure presence both day and night.

The historic peninsula is characterised by a number of areas dominated by single purpose activities promoting monofunctionality. Especially the large share of business and commercial activities leaves the Bazaar district active during daytime and deserted at night. The commercial activities encompass both formal and more informal business entailing a subculture of street traders active in some areas after hours and on Sundays. In total 65.000 merchants are enlisted within the Fatih Municipality.

#### Residents in enclaves

Having residents in the city centre is an advantage to any city, as residents contribute to the city's vitality during day and night. Furthermore residents support a sense of belonging and local ownership entailing personal attachment to the care of the city.

The peninsula has a nighttime population of approximately 55,635 people (2007) concentrated in two districts located on the fringe of the study area. A fact leaving the rest of the city centre predominantly uninhabited, and creating a general perception of 'a city without residents'. Even though the number of residents per hectare well exceeds the numbers of cities like Melbourne and Copenhagen. The disparity is furthermore stressed by the high population density

due to the size of the residential areas. Although the inhabitants are concentrated in certain areas these areas encompass other functions such as local service and retail, and thus promoting mixed-use and diversity. However few attractions for locals are registered.

#### User unbalance

The historic peninsula represents an extraordinary population profile given that approximately 2,500,000 people occupy the city daily. Exceedingly high volumes of people daily commute into the city to be engaged in trade, education and tourist activities, A fact that leads to a heavy load on the public transport system as well as the city's infrastructure - bridges, streets and parking facilities. All in all a scenario causing a highly negative effect on the environment and the city's overall sustainability.

#### The tourist city

Istanbul and in particular the historic peninsula is a popular destination for tourists, all year round, including both overnight guests as well as day trip tourists. The high occurence of key tourist attractions in and close to Sultanahmet has lead to a corresponding high concentration of hotels and other tourist facilities generating a 'tourist city' in this part of the peninsula. Tourists have the great advantage of a high degree of presence and visibility for the benefit of a lively city, supporting a cosmopolitan ambience. However the tourists are seasonal ensuing a more sparsely populated district in the winter period.

The Fatih district accommodates 6,693,460 tourists bed-nights a year corresponding to an average of

18.338 overnight guests per night. The average duration of a tourist visit is 2.4 days. Comparing the nighttime population of the historic peninsula with the overnight guests display a share of tourist on approximately 25% to the inhabitants's 75%.

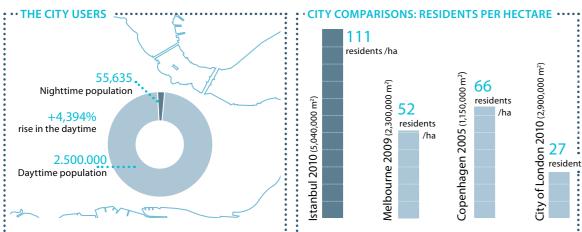
#### A university city

In general students make up an important stimulus and input to the life and cultural diversity of a city, as students tend to use the city more creatively and

The historic peninsula is fortunate to have a significant number of students attending the Istanbul University. Approximately 54,920 students are enrolled for the 2010-2011 term. Both the high number of students and the central location compose a great potential for the city, constituting crucial parameters in order to create a synergy effect.

Given that both the Istanbul University and the Commerce University are situated behind enclosed walls the city fails to exploit their strategic locations and benefit form the great potential to enhance the city's multiplicity.

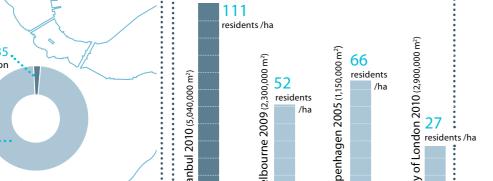
Unfortunately only few students live within the historic peninsula - 120 of the total number of students are accommodated in student residences. Thus the city miss the opportunity to gain from a natural contribution to supplement the user and city life profile.



Source: Turkish Statistics Institute, 2007

A popular tourist destination A university city with many students Strong neighbourhood feeling in selected areas Genuine atmosphere outside tourist areas

A city with monofunctional districts and overcommercialised areas Lack of residents in the central areas A city with an unbalanced user profile Few students live in the historic peninsula



Source: Fatih Municipality 2010, and Istanbul Culture and Provinsial

# *Analysis - City Qualities* Monofunctional city districts Distribution of functions Residental + mix Other functions -Functional division confirmed at meeting with Fatih Municipality October 2010

# A challenged visual environment

Aesthetic qualities and the visual environment are natural parts of the general perception of the city quality. What we touch and look at in distance and close by forms our urban experiences. The visual environment in the historic peninsula - in more places - tells the story of a city not being carefully looked after.

#### Poor visual and aesthetic coordination

The visual environment expresses the state of the city and communicates to the visitors: 'This is our city, welcome!'

The vocabulary includes infrastructure and urban elements such as street furniture, paving, planting, lighting etc., besides the overall treatment of the public realm, that is the layout of roadspace, footways, open spaces - spatial definition and treatment - scale and design. Making a beautiful visual environment is also about a careful addressing and enhancing of the specific gaulities in a given space.

The public realm is full of features and information in order to make traffic work, secure pedestrians from

traffic, ease wayfinding, and to provide lighting at night and other services to the city's users. These urban elements have developed to an extend where they dominate the streetscape in some areas of the historic peninsula, creating a confused, unpleasant and cluttered urban landscape. Altogether causing a negative impact on and a severe pollution of the visual

The current situation in some places, for example in the close surroundings to many of the great historic monuments, demonstrates a lack of holistic approach and thinking. Obstrusive and dominating traffic infrastructures as pedestrian bridges, flyovers and inappropriate car parks, unfortunate collections of urban elements in random locations, poor quality and

low standards of maintenance speak for them selves. A need of concern for cohenrence and coordination in terms of overall layout, detailing and choice of materials is noticeable.

Humans have an inherent need for sensory stimulus tied to our senses and to our natural way of experiencing the surroundings as walking beings During the last decades of traffic and urban planning initiatives in the historic peninsula these basically natural needs of people have apparently not been given high priority or consideration in more places. Hence the city experienced at eye level by the large number of people staying in the historic peninsula every day is neglected to a great extend.

#### **Intrusive traffic structures**



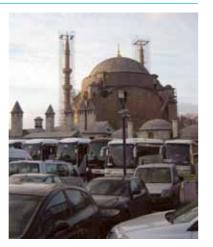
Flyover at Akasary



Confusing street scene



Blue Mosque



Çemberlitaş Square

The high focus on accessibility for the vehicular traffic has entailed a general deterioration of the urban environment in terms of difficult streetscapes and dominating infrastructure blocking views and sightlines to important monuments. Likewise have parked cars invaded the nearby surroundings creating an unsafe and visually unattractive zone of poor urban quality.



Public spaces and buildings form a fine basis for an intriguing urban environment and visual delight



Intrusive traffic infrastructure and features visually deteriorate the public realm Monuments and important public spaces suffer under uncoordinated urban elements Poor maintenance and low quality downgrade the visual environment











Ragıpgümüşpala Street



Ordu Street - Bus terminal







Muradiye Street



An abundance of bollards

The frequent use of bollards to call on pedestrians attention and to exclude cars from the footway often causes a difficult and cluttered walking landscape and visual environment. Poor maintenance along with diverse designs create an unsightly street feature.



service stands

Crowds of kiosks and

Ticket stands, kiosks and cash points (ATM) form inappropriate and uncoordinated colonies, and although providing desirable and essential service they often appear inhomogeneous and of poor visual quality. Altogether the overall impressions do not signal important public spaces.



Alemdar Cd - Gülhane Park

Ordu Street- Bus terminal



Mithapaşa Street



Sultanahmet Square



Ishakpaşa Street

#### **Dominating signage**

Bulky '60 km/h' commercial signage dominates the streetscape and in an ungainly and insensitive way neglects the urban surroundings and human scale. Signs have a tendency to multiply in a unfortunate way constituting a confusing 'forest' of signs. Some guides to close by destinations appear poorly adjusted and un-catchy.

Unappealing waste collection



# Part 2 WALKABILITY

#### **POTENTIALS**



#### PLENTY OF PEDESTRIANS

Istanbul enjoys a significant number of people on foot. These people bring life to the streets and promote a sustainable and healthy transport mode.

#### **CHALLENGES**



#### CROWDED FOOTWAYS

In specific streets footways are too narrow and crowding conditions appear, which deteriorate the walking experience substantially and exclude certain user groups.



#### PARKING ON FOOTWAYS

Footways are frequently used for parking often forcing pedestrians onto the road. This autonome driving behaviour represents significant challenges to families with children, to the elderly and the disabled.



## POORLY MAINTAINED FOOTWAYS

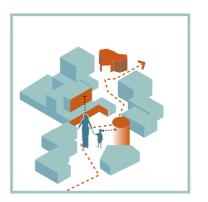
Lack of maintenance results in broken pavements, lack of street lights etc. When conditions for walking are poor it signalises a lack of respect and care for the people who have to walk everyday.



#### DIFFICULT CROSSINGS

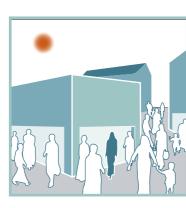
To increase capacity for the congested vehicular traffic compromises have been made in the pedestrian landscapes in terms of pedestrian bridges & subways as well as a lack of proper crossing facilities.

#### **POTENTIALS**



#### INTERESTING WALKING ROUTES

Due to the topography and the urban structure Istanbul has a number of interesting streetscapes constantly offering a varied walking experience.



#### LIVELY DURING THE DAY

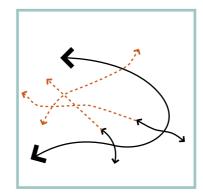
During the day plenty of merchants and visitors perform a fascinating pulse of activity. No street is found empty - everywhere there is people.



#### SUCCESSFULL TRAM

The tram is immensely popular with the locals. The tram has furthermore led to a successful closure of the eastern part of the main street, providing a peaceful atmosphere to this part of the historic peninsula in general.

#### **CHALLENGES**



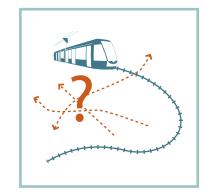
#### UNCLEAR PEDESTRIAN NETWORK

A clear pedestrian network has not been developed. There are only few significant walking routes and the connections between them are poor.



#### PERCEIVED UNSAFETY AT NIGHT

During the night the central city area appears absolutely deserted. The lack of residents, the closing off of the Grand Bazaar and adjoining streets and the general lack of activity make passers-by uneasy.



# INSUFFICIENT PUBLIC TRANSPORT

Apart from the commuter train and bus service at the waterfront, there is really only the tram to service all of the inner city area. Thus the tram is constantly over-crowded and insufficent to cater for the needs present.

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## Pedestrian movement on a summer weekday

The pedestrian counts were undertaken in a selection of streets throughout the historic peninsula. The survey includes a wide range of routes covering peripheral as well as central city streets in connection to public transport nodes, waterfront promenades and links to tourist and visitors destinations.

#### **Concentration of pedestrians**

The survey include the pedestrian flows at selected routes between 8 am and 10 pm.

The pedestrian survey indicates a quantitative hierarchy of pedestrian movements in selected streets. The arrow diagram depicts the pedestrian volumes within the surveyed streets and connections. The survey shows high numbers of pedestrians in some areas whereas other areas experience rather sparse pedestrian traffic.

The most extensive pedestrian traffic occurs in the central and northern part of the study area - at primary entrances and streets connecting to major visitors destinations and public transport. Whereas the more local and remotely located streets such as in the southern part and around the city wall experience quite low numbers of pedestrians throughout the day.

#### The busiest streets

The most busy places are found around the Galata Bridge - in the Ragip Gümüşpala Street pedestrian underpass connecting the northern waterfront to the centre, on Reçadiye Street next to the ferry terminals and on the very bridge including both top deck and lower deck. In addition many pedestrians are found around the Grand Bazaar - at the Beyazit entrance to the Bazaar and on Yeniçeriler Street close to the Bazaar and public transit. The Galata Bridge and Ferry Terminals compose key gateways to the peninsula from the Golden Horn, and the Grand Bazaar represents a popular visitors destination connected to a public transport hub.

#### Descending evening traffic

The evening traffic correspond to the daytime pattern with most pedestrians in the northern and central parts of the peninsula. Like in many other cities most of the surveyed streets experience a decrease in the pedestrian traffic intensity during the evening starting around 7-8 pm when the Bazaars and many shops close. The high number of commuters engaged in predominantly commercial activities further imply an enhancement of this pattern when leaving the peninsula in the evening. It is evident that the streets,

leading to the Bazaars after closing hour rapidly becomes almost deserted due to the lack of evening activities in this area.

#### Rise in pedestrian numbers

It is notable that some surveyed streets experience an increase in pedestrian intensity after hours among others Sultanahmet Park, which because of its status as a major tourist destination benefits from a vibrant evening street life. Likewise in the streets Akbıyık Street and especially Çapariz Sokak with restaurants and hotels more pedestrians are recorded at night. Also on Adnan Menderes Vatan Boulevard next to the Historia Shopping Mall, that includes restaurants and entertainment, more pedestrians are observed at night. Although Kennedy Street and the waterfront promenade in the south attract a low number of people throughout the day a notable increase in pedestrian activity is experienced in the evening when people concentrate in the park.

Note: Evening traffic on a summer weekday can be accessed on page 103 in the Data Appendix.



Swarming central streets during the day Rise in evening traffic close to the southern waterfront



Few pedestrians found outside the central parts
Drop in pedestrian traffic intensity in the evening in most centrally located streets
Bazaar streets become deserted at night

# Daytime pedestrian traffic on a weekday

Total amount of pedestrian traffic for each connection between 8 am and 6 pm

Date of survey: Thursday, July 15, 2010

Weather: Sun and 30-35°C

3.280









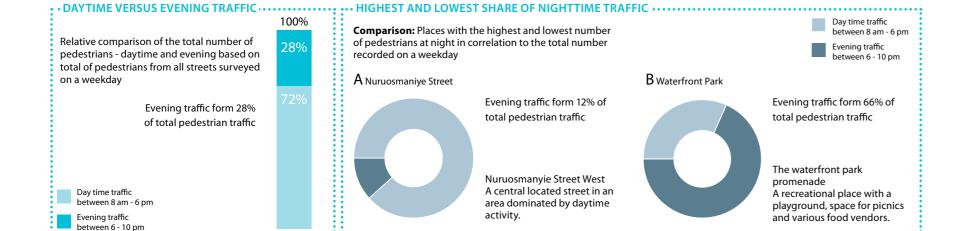


'The Theodosian Wall'

Vezneciiei 11.180

25.840





# Pedestrian movement on a summer Saturday

When comparing the pedestrian traffic on a Saturday with a weekday there is no significant changes in the movement pattern. The highest concentration of pedestrians is found in the central and northern parts of the peninsula on key streets and connections and the lowest numbers occur in the more local streets and areas in the periphery.

#### The most busy streets on a Saturday

Like on a weekday the highest number of pedestrians are recorded nearby and on the Galata Bridge, next to the ferry terminals and in the Grand

#### Minor increase in pedestrian traffic

The survey indicates that more people are walking on a Saturday, when comparing a Saturday to a weekday. More than half of the streets surveyed experience an increase in the pedestrian traffic volumes on a Saturday.

When looking at the streets with the highest increase of pedestrian traffic it is notable that Kennedy Street and the waterfront promanade in the southern area experience a considerable rise in walking traffic on a Saturday suggesting the recreational value and

use of the waterfront park. Also Ragıp Gümüşpala Street pedestrian underpass as a key entrance to the peninsula along with Alemdar Street leading to Sultanahmet and the tourist destinations experience more than 50% more pedestrians on a Saturday compared to a weekday.

#### Descending evening traffic

The Saturday evening traffic pattern corresponds to the daytime pattern with most pedestrians in the northern and central parts of the peninsula.

Like a weekday the pedestrian traffic volumes on a Saturday evening start to decrease in most streets after about 7-8 pm.

#### Saturday-night-effect

When comparing the total number of pedestrians on

a Saturday evening to a weekday a certain 'Saturdaynight-effect' appears - about four times more people are found walking on a Saturday.

Like on a weekday some of the surveyed streets experience an increase in pedestrian traffic in the evening. The areas with increased pedestrian activity on a Saturday evening are somewhat similar to a weekday evening: Sultanahmet area, Adnan Menderes Boulevard next to Historia Shopping Mall and the waterfront park and the restaurant street Çapariz Sokak

When comparing the total number of people recorded walking on a Saturday evening to a weekday the total number has increased by almost 25%.

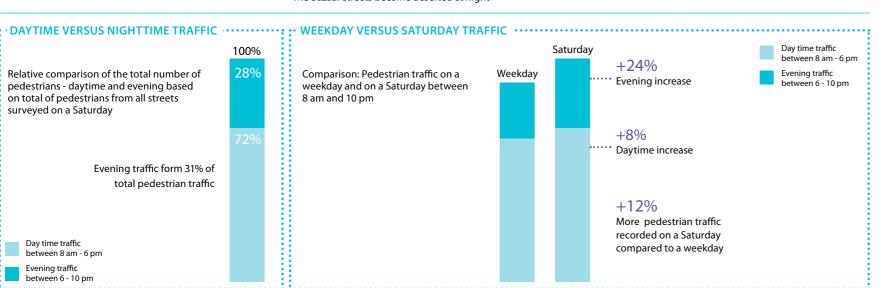
Note: Evening traffic on a summer Saturday can be accessed on page 107 in the Data Appendix.



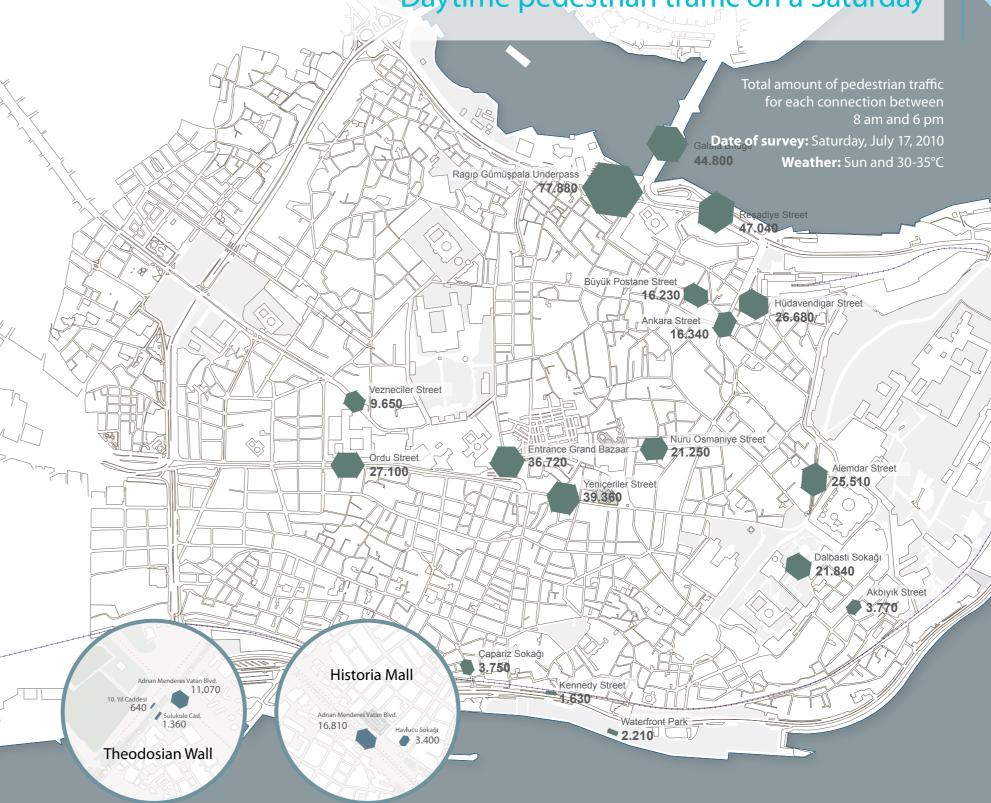
More people walking on a Saturday in the centrally located streets Rise in daytime pedestrian traffic along the southern waterfront Significant rise in evening traffic close to the southern waterfront



Few pedestrians found outside the central areas Drop in evening traffic intensity in most centrally located The Bazaar streets become deserted at night



# Daytime pedestrian traffic on a Saturday



# Comparison to other main streets

A comparison of the Divan Yolu Street - Yeniçeriler Street - Ordu Street to other main streets surveyed around the world shows that the historic peninsula's main street experience almost the same amount of pedestrians.

#### An important city street

Divan Yolu Street constitutes a key link within the historic peninsula connecting primary destinations as the Grand Bazaar to the Sultanahmet. The closure of the street to through traffic has resulted in great improvements for pedestrians. Thus it is notable that not more people are found, also taken in to account the large number of people staying in the city every day.

The evening pedestrian traffic volumes on Divan Yolu is corresponding to other main streets, but whereas other streets experience a decrease in pedestrian traffic on a Saturday evening Divan Yolu Street becomes somewhat busier.

#### The most busy connection

When comparing the pedestrian underpass at Ragip Gümüşpala Street underpass to prominent main streets around the world the number of people squeezed through this 'bottleneck' is exceptional.



A peopled main street



The pedestrian underpass is an overloaded connection



Divan Yolu Street, İstanbul



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Regent Street, Londra



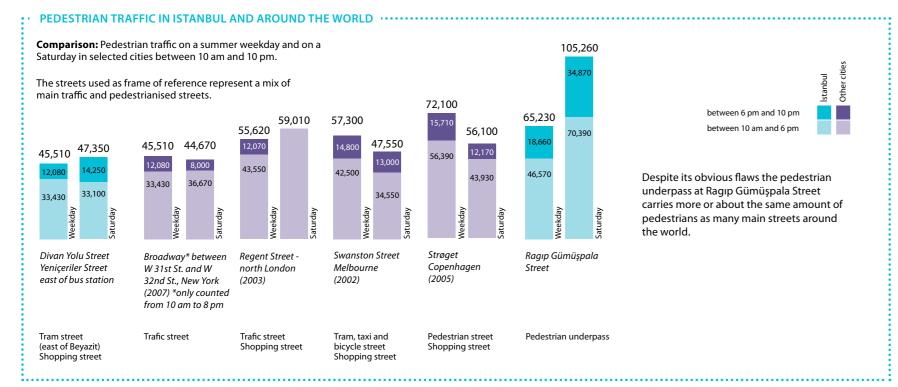
ork



Swanston Street, Melbourne



Ragıp Gümüşpala Street Pedestrian underpass, İstanbul



#### Corresponding patterns

When comparing pedestrian traffic on a summer weekday to a weekday out of high season a similar movement pattern emerge with the highest number of pedestrians found in the central streets.

A However more people are recorded in the Galata Bridge area on their way in or out of the city. Even though this is an increase that can be expected at a key entrance to the peninsula.

B The streets close to the university experience a remarkable increase in pedestrian traffic. Indicating the university students's great potential to promote lively streets.

# Daytime traffic on a weekday out-of-season

















# Sign Patter

# Significant patterns

Patterns emerging from the pedestrian traffic survey form the basis for some overall conclusions describing the flow of pedestrians in the historic peninsula throughout the day.

#### The busiest connections

The Ragip Gümüşpala pedestrian underpass, Reşadiye Street, the Galata Bridge, Yeniçeriler Street and Çadircılar Street are the most busy streets and connections surveyed at all times. Three of them are located adjacent to the Golden Horn waterfront in connection to public transport, ferry terminals, recreational urban squares and vital visitors destinations. Just as the Galata Bridge and the underpass form key access to the peninsula. The other two streets are located close to Beyazit Square, the Grand Bazaar, the university and public transport.

#### **Busy Saturdays**

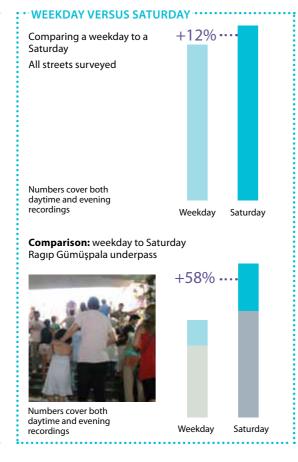
Many of the streets surveyed become more busy on a Saturday. The rise in pedestrian traffic is primarily recorded on streets in connection to central city destinations. Kennedy Street, the waterfront park promenade and Çapariz Sokak to the south show a significant increase in pedestrian numbers indicating the recreational aspect of waterfront park with playground and cafes including the seafood restaurants.

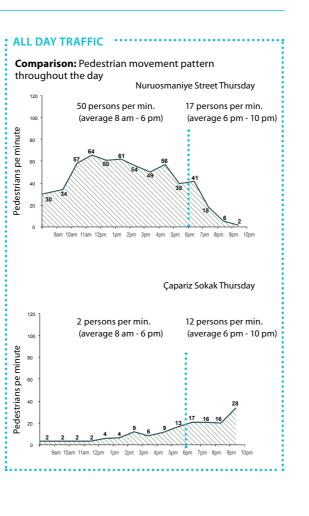
The Ragip Gümüşpala underpass represent a very busy pedestrian connection in a confined space, and it becomes even more overcrowded on a Saturday when the number of pedestrians increases by 58%.

#### **Evening traffic - Change of pattern**

Most of the streets experience a decrease in the pedestrian traffic volumes in the evening after hours. Especially in streets connecting to the Grand Bazaar the pedestrian activity drops dramatically, and they become almost deserted. It is notable that in some of the surveyed routes the pedestrian traffic increases during the evening. Theses routes link to tourist and other visitors destinations like restaurants and cinemas. The southern waterfront promenade stands out with more pedestrians counted between 6 pm and 10 pm than between 8 am and 6 pm. However the general low number of pedestrians along the waterfront indicate a more local character and relation.

# Comparison of the busiest streets Numbers cover both daytime and evening recordings TOP 5 weekday 71,190 62,820 53,600 49,490 46,250 TOP 5 weekday 112,750 TOP 5 weekday 73,740 67,360 67,360 477,520 477,520





# Widespread crowding

One of the key attractions of the historic peninsula springs from a vibrant public life. The lively streets with outdoor cafes, and colourful and sensuous shopping form essential parameters to promote an attractive city. However at times the narrow streets and the huge numbers of pedestrians passing compose an unfortunate mixture causing crowding and unpleasant walking experiences.

# PEDESTRIAN TRAFFIC FLOWS ALL DAY - SELECTED LOCATIONS



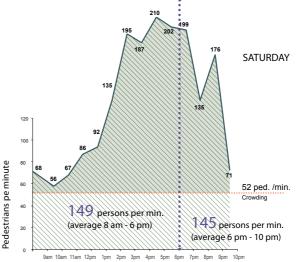
Ragıp Gümüşpala Street- pedestrian underpass

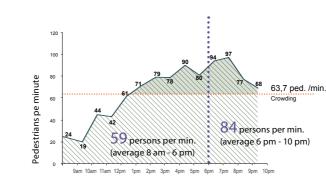


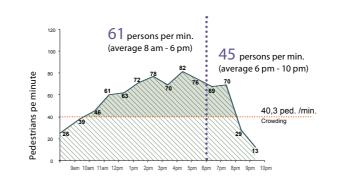
Reşadiye Street - northern waterfront



Çadircilar Street- Grand Bazaar, entrance







#### Crowded streets and footways

The ability to walk straightforward and untroubled are critical aspects of a city's accessibility and walkability. The passability of central streets in the historic peninsula is often restricted due to intense pedestrian traffic and limited physical space.

Gehl Architects's studies indicate that 13 people per minute per metre footway width is the upper limit for comfortable walking space. Beyond this level the situation turns into crowding. This definition relates closely to the level of experienced quality and not only the capacity in terms of the number of people that a street can actually carry.

When the main pedestrian street in Copenhagen - Strøget - reaches the level of 13 persons per minute per metre walking space, people start finding alternative routes. This has been the case for the last 30 years!

The correlation between pedestrian volumes and walking space has been studied at selected locations indicating crowding in some of the key connections: Ragip Gümüşpala Street underpass, Reşadiye Street and Çadicilar Street .

The effective width of the footway in terms of free space for walking is in many cases obstructed and diminished by street furniture, signs or commercial displays.

In the pedestrian underpass the effective width for walking is reduced by 40% due to commercial displays. Together with the high numbers of pedestrians this results in severe crowding.



Key connections experiencing crowding most of the day on both a weekday and on a Saturday

35

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# Missing diversity

A survey of 'Age & Gender' was performed on selected locations to determine the presence of different user groups in the public realm. A representative section of pedestrians passing through the day was classified into age groups and adults by gender.

#### Few children and seniors

Who visits the peninsula on a weekday? Countings at all locations throughout the day indicate that the major part of pedestrians passing encompasses the 15-65 age group including adolescents and middleaged adults - in all approximately 90%. Obviously this group covers the largest age range, however the survey indicates an unbalanced visitor profile. Thus the survey points to an underrepresentation of children between 0-7 years and seniors over 65 years in the streets.

A comparison of the distribution of children and seniors shows, that children account for the largest

The share of children varies during the day. However compared to other cities more children are recorded in Istanbul, and they appear to stay longer into the evening despite the fact that few invitations for children are found in the public realm.

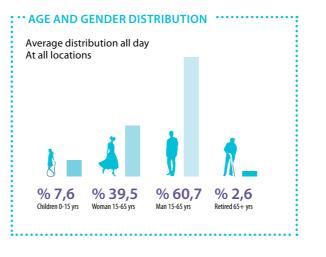
The presence of seniors also varies, but they seem to follow the pattern of many other cities, staying home

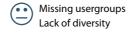
at night. The city's challenging topography composes a difficulty to the seniors combined with the lack of proper resting options along the streets.

#### A masculine dominance

The recordings show a distinct pattern in distribution of gender in the 15-65 age group. Men are with few exceptions overrepresented at all times. At most locations the male part of the pedestrians recorded accounts for more than twice the amount of women.

#### ..... AGE AND GENDER DISTRIBUTION ..... Galata Bridge Ragıp Gümüşpala Street underpass 12 noon - 8 pm % 5,6 % 24,8 % 11,7 % 39,5 % 46,2 % 2,6 % 68,4 Vakif Hani Street - entrance Spice Bazaar Çadircilar Street - entrance Grand Bazaar 12 noon - 6 pm % 59,3 % 0,8 % 8,7 % 31,6 % 29,5 % 57,3 % 4,9 Yeniçeriler Street Nuruosmanive Street 10 am - 8 pm 10 am - 6 pm % 7,5 % 26 % 63,1 % 3,3 % 5,2 % 22,2 % 69,6 % 3





## Two cases

#### Negligible female share at night

Nuruosmaniye Street represents one of the key connections to the Grand Bazaar and a linkage to the Sultanahmet area. The recordings at this location reflect the general pattern showing a significant majority of men at all times - roughly about three times more men than women. After closing hour around 7 pm this imbalance becomes even further enhanced, and at 8 pm the male share by far exceed the female part by almost 9 times as many men.

The survey indicates that women for some reason feel uncomfortable and deselect this route at night.

**COURSE OF DAY** 

Ragıp Gümüşpala

Underpass

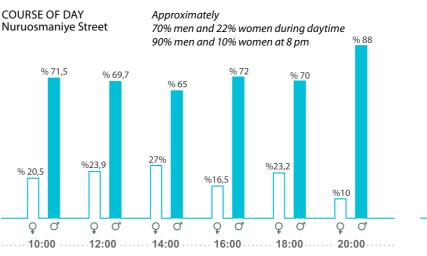
A gender-neutral connection

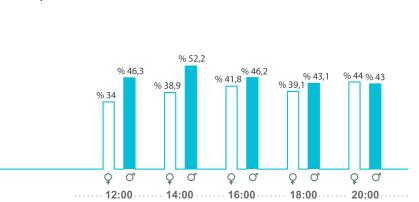
The Ragip Gümüşpala Street underpass stands out as the most 'equal' place compared to gender. At this location the male part in average represents approximately 46% and the female part approximately 40%. The survey suggests that the underpass represents the most diverse of all locations surveyed with the largest share of children and women as well as some seniors recorded. This seems to be in good keeping with the fact that the underpass composes a key access point to the peninsula. Thus people are left with few alternatives to enter the historic peninsula but to pass through the pedestrian subway.

**Approximately** 

46% men and 40% women during daytime

43% men and 44% women at 8 pm











Nuruosmaniye Street - in daytime

A lively connection during daytime leading to the Grand Bazaar, however after closing hour only few people make use of it, and it turns into a male dominated meeting place.

Ragıpgümüşpala Street - underpass

Men and women are almost equally represented in the underpass. It compose a crucial but also difficult connection thus parents have to carry their children up and down the stairs.

#### **Analysis** - Walkability

# The city as a trafficmachine

The historic peninsula presents itself with a wonderful skyline facing the sea. However pedestrians entering are met with a completely different reality. A harsh traffic environment tells the story of a city that through the years has priortised vehicular traffic over pedestrians.

#### Uninviting and confusing entry points

The heavy infrastructure encircling the peninsula creates a complicated landscape for pedestrians to maneuvre in when entering the city. The key entry points appear overpowered by vehicular traffic, and are uninviting and difficult passable for pedestrians. Little is done to accommodate pedestrians basic need for safe and convenient crossing possibilities. Pedestrians are often put in absurd situations either stranded at intersections and forced to take inconvenient detours or at worst crossing illegally exposing themselves to danger.

#### **Traffic-related barriers**

Whilst facilitating vehicular movement the wide streets - Atatürk Boulevard, Kennedy Street, Resadiye Street, Ragıp Gümüşpala Street, Şehzadebaşi Street and Ordu Street - constitute heavy barriers within the historic peninsula, and effectively restrict access to adjacent neighbourhoods as well as to the waterfront.

#### **Congested streets**

Over the years vehicles have entered the historic peninsula in increasing numbers resulting in a traffic scenario with severe congestion in many streets. Especially the fine grain structure of narrow streets

suffer from overcrowding additionally stressed by the high number of tourist buses infringing the streetscape.

#### Unfortunate commuting

The fact that many people commute by car to the peninsula contributes substantially to the present unfortunate situation and entail much strain on the infrastructure. Thus pedestrians have to put up with a poor traffic dominated walking environment intensely polluted with a high noise level, fumes and annoying

#### Widespread pedestrianisation...

As a response to these challeges an extensive implementation of pedestrianised streets has been initiated. In February 2011 the Fatih pedestrianisation project encompasses closure of >90 selected streets mainly north of Grand Bazaar between 10.00 am and 6.00 pm with a system of flexible barriers that permit access for emergency and service vehicles besides other special vehicles.

This has definitely been a significant step in the right direction towards creating a more pedestrian friendly city. The street scene, in the streets in question, has changed drastically in a positive direction towards a

more peaceful pedestrian environment. Nevertheless the street layout and design still need to reflect this new pedestrian priority.

However as long as no action is taken to reduce and tame the incoming traffic it will only lead to even more pressure on the remaining streets.

#### ...but also more traffic

The ongoing efforts towards a more traffic regulated city are in serious conflict with the planned car tunnel connecting Asia to the historic peninsula. As the tunnel inevitably will direct numerous vehicles into the historic peninsula south of Kumkapı, 65,000 - 70,000 cars are expected daily. Consequently Kennedy Street will be enlarged with four new roadways westward of the tunnel exit entailing heavy negative impact on the waterfront park. The tunnel project will be fatal to the use and recreational value of the waterfront park as one of the penisula's most needed recreational spaces.

The current traffic issues regarding extensive traffic jam, poor air-quality and unpleasant noise levels will be enhanced as well as an increased number of conflicts between pedestrians and vehicles can be expected.



Intrusive driving dominates the narrow streets creating traffic jam and chaotic situations.



Ragıp Gümüşpala Street

A traffic orientated street design generates unpleasant and undue pedestrian conditions with frequent barriers and pedestrian islands



Atatürk Boulevard / Ragıp Gümüşpala St.

Entry points greet pedestrians with an unclear and low-quality urban realm.

Above 70 dB(A)

Above 90 dB(A)

: A voice level equivalent to shouting is needed.

: Damages hearing after 8 hours of exposure.

41% of Istanbul's residents have a desire for traffic improvements\* 55% of Istanbul's residents are concerned about traffic congestion\*

\*Source: 'URBAN AGE ISTANBUL CONFERENCE, NOVEMBER 2009'.



Comprehensive pedestrianisation 90 streets are covered in February 2011

Unclear and uninviting entry points Wrapped in traffic infrastructure Traffic dominated - for cars not for people Heavy traffic barriers

Congested streets Intrusive driving at high speed A stressful noise level in many streets Planned infrastructure entails even more

### A system of freeways Major traffic infrastructure layout and noise levels in selected locations min 62,6 dB8A) max 75,6 dB(A) (69 dB(A)) min 65 dB(A) App 80 dB(A) max 90 dB(A) min 69,6 dB(A) max 80,5 dB(A) App 72-75 dB(A) min 63,4 dB(A) max 86,9 dB(A) min 65,8 dB(A) max 97,7 dB(A) App 78-80 dB(A) App 72 dB App 85 dB with busses in speed min 55,1 dB(A) max 73,5 dB(A) train enters min 71,8 dB(A) max 90.5 dB(A) PHYSICALS RESPONSES TO NOISE LEVELS Noise is a widespread problem generating an ueasy and stressful environment. Test measurements have been carried out in selected locations. Under 57.5 dB(A) : A normal voice level can be used. FUTURE VEHICLE TUNNEL Between 57.5 - 64 dB(A): A raised level of voice is needed. : A very loud level of voice is needed and puts a strain on the physical environment.

# An indistinct pedestrian network

Istanbul has a great potential in the form of an abundance of fine grain structures providing ample and exceptional urban experiences and numerous options of routes, but walking in the streets of the historic peninsula the absence of an overall legible coherent pedestrian network is evident.

#### The historic city spine

Divan Yolu Street has since the early days composed the key east west route. Together with Ordu Street it stands out as the city spine linking Sultanahmet Square to Aksaray. The route links to some of the major city destinations, and carries large numbers of pedestrians during both day and night. As part of the ongoing pedestrianisation of the historic peninsula the Divan Yolu Street is reserved for public transport and pedestrians creating a notably improved and traffic calmed street environment. However a continuing high focus on the street as a transit corridor with only few places for resting neglect the staying dimension of the street. From Sultanahmet Square it continues in a less apparent course towards the Golden Horn. However it is poorly linked to the waterfront, and is not experienced as part of a larger network.

#### The stimulating fine grain

The areas north and south of Divan Yolu Street are characterised by an intriguing complex of narrow streets. This fine grain fabric represents a great potential of experiences along with numerous options and flexibilty when moving around in the city. However these urban structures often constitute a uniform maze, where it is easy to get lost. This

The closure of Divan Yolu Street to vehicular traffic has significantly improved the pedestrian environment.

is enhanced by the the fact that many streets lack street signs. In addition the narrow streets frequently suffer from severe congestion during daytime involving both large numbers of pedestrians and vehicular traffic - which also contributes to the lack of orientation.

#### Weak connections

A high quality pedestrian network is characterised by plain, pleasant and coherent routes linking to key destinations, and connecting the various districts of the city.

In general the connections leading north and south from Divan Yolu appear weak and less accessible. In the present layout few routes stand out as parts of an overall legible network guiding people around in the peninsula. Thus some of the city characteristics and great amenities suffer from the lack of clear and accessible connections to benefit from their inherent potentials.

#### Few nighttime routes

Large parts of the historic peninsula are comprised by monofunctional commercial activities. Hence the daytime buzzing Grand Bazaar area at night completely changes personality and becomes almost desolated. When fewer 'eyes' are present on the street, the real and perceived risk of crime increases. Subsequently these popular streets are avoided after closing hours. This fact is clearly reflected in a confined nighttime pedestrian network with routes closely related to the tram line and to popular visitor destinations like the Sultanahmet and nearby restaurant streets.

#### Missing links to the waterfront

The waterfront promenade composes a strong counterpart to the dense and noisy city streets as a recreational route providing fantastic views and fresh air. However the waterfront is perceived isolated from the pedestrian network due to the strong impact from the busy traffic streets surrounding the peninsula.

The waterfront is decribed in detail on p. 62-63.

#### The critical walking distance

Research has shown that 1 km is a generally acceptable distance for most people to walk to use the city's facilities, but if the route is inviting - interesting and of good quality - many people happily walk much longer.

The illustration to the right depicts how far one potentially can reach within 10 - 20 minutes of walk.



After hours streets in the central city area quickly become deserted and people feel obliged to follow other more inviting night routes.



Fine grain urban structure with many routes and options
Intriguing urban experiences



Lack of overall legible pedestrian network Weak north-south connections Confined nighttime network

The fine grain streets provide an exciting but at times also

challenging pedestrian landscape.

Missing links to the waterfront Lack of orientation Poor wayfinding - lack of street signs

# Reasonable walking distances Pedestrian routes and walking distances Botanical Garden Ferry Terminals Spice Bazaar Süleymaniye Mosque Aqueduct Sirkeci Train Station Istanbul University Town Hall Topkapi/Palace Nutu Osmaniye Mosqu Beyazit Squa Hagia Sophia Transit Centre (under construction) Yenikabi Ferry & Bus Little Hagia Sophia Waterfront Park

# Complicated crossing

For the comfort of pedestrians and to ensure good connectivity throughout the city it is crucial that people can cross the streets frequently in an easy and convenient manner. In the historic peninsula pedestrians experience several challenges when having to cross the streets.

#### **Inconsistent crossing design**

The layout of crossings is critical for a well functioning and safe urban environment as well as for pedestrian accessibility. Pedestrians are currently met with much inconsistency in the form of a wide range of crossing designs: footbridges, underpasses, crossings with or without signals, and crossings with or without marking. Altogether this ever changing layout reveals a traffic culture with a high focus on efficiency and road capacity for vehicular traffic generating potentially complicated crossing circumstances for pedestrians.

#### Difficulties crossing

Troublesome and inconvenient crossings for pedestrians are frequently the case. The crossings along Atatürk Boulevard, Kennedy Street and Ragip Gümüşpala Street exemplify the present situation here 9 out of 22 crossings force people to cross the street either under ground or on elevated bridges. This produce disadvantages for people when entering the city centre or getting to and from the

waterfront. Especially for people with disabilities these complicated crossings compose severe hurdles to overcome.

Long distances between the crossings add further difficulties to the pedestrian accessibility.

Most of the present pedestrian crossings are situated with far more than 200 m in between. Neglecting pedestrians need for adequate crossing possibilties has contributed to dangerous habits of illegal crossing and jaywalking - meaning people randomly crossing the street outside the formal crossings to follow desirelines and get to key destinations.

#### Lack of pedestrian prioritisation

Slip lanes for vehicular traffic at street intersections along with crossings without signals or marking or with only half-way marking produce confusing and sometimes unsafe crossing situations for pedestrians. Weak markings in crossings due to poor maintenance enhance this picture.

Additionally frequent occurrence of high kerbs

without ramps plus raised refuges and medians testify to a generally low pedestrian priority.

#### A challenging crossing

The pedestrian underpass at Ragip Gümüşpala Street connecting to the Galata Bridge forms a key link to the peninsula. It demonstrates a range of issues creating an inconvenient and unpleasant crossing.

It stands out that people at this important entry point are forced under ground and hence have to climb several stairs to cross the street. Thus the underpass composes a strong bottleneck, carrying the highest number of pedestrians recorded, in a most restricted space. Because of extensive goods displays in the underpass the avaliable space to pass through is further reduced resulting in a sense of crowding both day and night.

Hence the underpass represents a very stressful environment with an extremely high noise level making crossing an utmost uncomfortable experience.

#### easy and inconvenient pedestrian crossings



Ragıp Gümüşpala Street

Slip lanes accommodating the vehicular traffic constitute difficult conditions for pedestrians.



Ragıp Gümüşpala Street

Design of the refuge form an unnecessary obstacle making people change course.



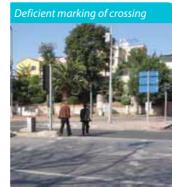
Ordu Street

Narrow drop kerb limit access at crossings for the vulnerable user groups.



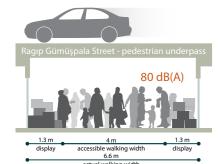
Yerebatan Street

High middle kerb creates an uneasy pedestrian crossing.



Kennedy Street

Weak and limited marking of pedestrian crossing.



The underpass suffers from overcrowding 100% of the day on a summer Saturday. Research indicates that the upper limit for comfortable walking space is 13 persons per. metre per. minute.



Inconsistent crossing design
Few pedestrian crossings along key streets
Pedestrians are forced to use footbridges and underpasses
Incomplete and unclear pedestrian crossings

# **Analysis** - Walkability towards Atatürk Cad: Lack of crossing possibilities Pedestrian crossings in selected streets of 253 total crossings in15 min. ossing Kennedy Caddesi: of 847 total crossings in 15 min. Station crossing: 656 jaywalkers in15 min. Primarily to/from bus station **EXAMPLE: AN UNNECESSARILY** COMPLICATED CROSSING The crossing at Aksaray is a busy crossing in connection to a key access point and tram stop. A complicated traffic structure including pedestrian islands makes it most difficult to get accross. This is even further enhanced by a severe lack of formal marked crossings.

# A challenging walking environment

Walking is a natural and simple mode of transportation, but there is more to walking than just transportation. Walking is a flexible and sensuous way to go about the city, and in a comfortable pace experiencing the surroundings - fine details, beautiful buildings, intriguing views and not least other people.

#### Pedestrian blessings and challenges

The streets of Istanbul offer numerous experiences, that appeal to the senses and enrich the walk. A widespread human scale, exciting spatial sequences and a colourful and vibrant streetlife all contribute to a great and stimulating urban environment. However the pedestrian accessibility and pleasure is affected by a range of factors.

Easy and comfortable walking requires space to walk freely without being disturbed by physical elements, parked cars, vehicular traffic or other people.

The ongoing process of pedestrianisation of the historic peninsula has reduced the traffic-related pressure on several streets in selected areas, yet many



Smooth surfaces on footways and good quality materials support

Comprehensive pedestrian upgrading... - but much is to be done!





Exciting edges in the daytime...





Walls and stairs compose characteristic and intriguing urban features but also compose barriers and restrict accessibility. Especially people transporting goods or people with special needs - disabled, seniors and children are affected by stairs and steep streets.

#### streets still suffer from the negative effects due to the high priority given to vehicular traffic.

Considering the high numbers of pedestrians walking about in the central areas, it is essential to improve walkability and provide increased accessibility and convenience for pedestrians.

#### Hard topography

Due to the topography the historic peninsula is characterised by steep streets, and various adaptions to the landscape affecting the pedestrian environment on different levels. Together with the ancient terrace walls streets with stairs compose barriers in terms of enclosed areas and difficult access throughout the city.

Active and lively ground floor facades support a stimulating

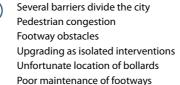
- but metal shutters dominate after closing hours!

The accessibility is furthermore challenged by a sometimes complicated and inconvenient layout of the footway. In addition the walking scenario is influenced by an extensive lack of resting options in terms of public benches along the streets.

#### ... also for cyclists

Just as the landscape causes difficulties times for pedestrians, it causes difficulties for cyclism, and one hardly see any cyclists in the streets.

Another serious constraint to the development of a cycle culture is the severe lack of dedicated cycling infrastructure and facilities making cycling a daring act.



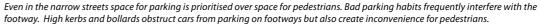




Footways in multiple levels and stairs to basement shops create high risks for tripping.







Poor quality paving from unfortunate materials and lack of maintenance create a difficult and an unbecoming patchwork of walking surfaces.







Bollards at minor street intersections and driveways indicate the hiah priority given to the vehicular traffic - that pedestrians have to yield. Unfortunately high kerbs generate a disrupted walking rythm and unfortunate difficulties.

# Complicated footway layout

#### **Complicated footway layout**

Pedestrians are frequently exposed to a walking environment that requires both attention and a high degree of mobility due to varying footway levels and frequent stairs to basement shops. Individual adaptions of the footway have thus resulted in detriments of the pedestrian conditions

Additionally general low standards of maintenance and poor quality materials make walking a tiresome experience and enhance an unfortunate visual



#### Narrow and cluttered footways

The footways are generally narrow owing to the original dense urban structures.

The pedestrian landscape is additionally affected by an irregular building structure making footways disappear from time to time given that any free

#### Intrusive parking

Extensive on-street parking is a dominating feature with a highly negative effect on the pedestrian environment. Both organised onstreet parking and uncontrolled parking on footways invade on a large scale the pedestrian realm leaving little space left for walking.

Bollards are a generously applied street feature, to make pedestrians aware of street traffic but also along with severe high kerbs, to keep cars off the footway. Altogether generating a complex pedestrian landscape.

Continuous tourist buses parking along footways make up barriers and lack of overview for pedestrians and deteriorate the

#### Frequent interruptions

Footways along the key streets are in many cases unecessarily interrupted by minor sidestreets, or driveways to buildings in both cases obstructing the walking flow. Thus people have to walk up and down kerbs - sometimes quite high - and look out for traffic while



Random placing of urban elements minimise walking space forcing people into unsafe situations. Shop displays create







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# An undeveloped public transport system

Regardless of our means of transportation we all end as pedestrians, when we get off our bike, leave the car or get off the bus, train or tram. Thus it is crucial that the public transport system in terms of routes, interchange nodes and stops closely relate to key destinations, and are well connected to a high quality pedestrian network.

#### A popular mode of transportation

A high number of people commute to work in the historic peninsula by public transport.

The current public transport system servicing the city centre can be divided into two types - a perimeter system with buses and train, and a central thoroughfare with tram and partly buses. Each can be characterised as 'back and forth' routes with limited connections. More of a network is required to accommodate the many users, and to present an alternative to the private car.

#### New metro and rail line

Two new public transport lines are planned to ease the current pressure on the connections between the historic peninsula to Asia and Europe across the Golden Horn. One metro line across the Golden Horn and one rail line across the Bospherus Strait. Thus it is vital to ensure strong links between the coming metro stations, other modes of public transport and the key pedestrian routes.

#### Overloaded public transport

The present bus and ferry system - including the planned new lines - have success in feeding high numbers of people into the historic peninsula, however once arrived one has to a struggle for the single tram.

The lack of options and routes through the historic peninsula leads to a heavy strain on the central bus and tram lines often resulting in congestion at stops

and carriages suffering from overcrowding.

#### Water transit

Ferries are widely used as a transport mode for commuters to get to the historic peninsula. Ufortunately the ferry terminals are separated from the centre by heavy road infrastructure and suffer from poor legibilty and difficult pedestrian accessibility.

#### Weak connections to public transport

The perimeter services are affected by various complications encountered when trying to enter the city or reach the bus stops or train stations. The wide street layout of Kennedy Street, Ragip Gümüşpala Street and Attaürk Boulevard together with high traffic speed and limited crossing opportunities constitute severe barriers. The ancient sea walls and the railway only providing a limited number of gates and underpasses add more layers to the challenges getting to and from the bus stops on Kennedy Street. Furthermore a poor legibility of the routes leading to the centre in connection with the steep streets call for an enhanced network of distinct high quality pedestrian routes to interlink the public transport services to the city network.

#### Scattered stops

When looking at the location of stops on both bus and tram line it appears that rather long distances - more than 400 metres - in between stops dominate. In central city areas the distance between stops are normally between 200 - 400 m. This indicate a

limitation of the service level, and especially for people with special needs the long distances constitute a challenge.

The lack of stops along the waterfront illustrate how public transport fail to support the recreational dimension of the waterfront as an excursion spot.

#### Poor accessibility

In general little consideration is taken to accommodate people with special needs - disabled, seniors and children - as stairs and high steps lead to many public transport platforms.

The closure of Divan Yolu Street to through traffic has significantly improved the possibilities for informal pedestrian movements across the street. As opposed to this is the design of tram stops with 50 metres long enclosed platforms, constituting unfortunate barriers obstructing desirelines.



The tram is a popular mode of transportation Divan Yolu Street as a dedicated public transport corridor



Undeveloped public transport network
Heavy strain on buses and tram
Long distances between stops
Large areas without access to public transport
Difficult access to stops and stations

67% of Istanbul's residents are satisfied with the tramway, 59 % with the train and 59% with the bussystem\*



\*Source: 'URBAN AGE ISTANBUL CONFERENCE, NOVEMBER 2009'.

**Analysis** - Walkability Public transport in corridors **Public transport system: Tram** line, buses, train and ferry lines including stops Existing rail line Future metro line Future rail line Source: Fatih Municipality (2010) Istanbul City Guide (http://sehirrehberi.ibb.gov.tr/Map.aspx?&scl=6&cx=90711&cy=97286&ap=harita&ing=en#)

The combination of long platfoms and fences divide the streets and form barriers.

# Public transport hubs as islands

It is essential to arrive in an inviting and welcoming place. It should be easy to orientate, and comfortable and safe to walk towards the planned destinations. A strong transit hub identity enhances a 'sense of place' indicating that you have arrived in an important place in the city.

#### Weak points of arrival

Entering a public transport hub in the historic peninsula is often a mixed experience. Although located at scenic settings blessed with fantastic views and in fine urban context it has generally seen failed to capitalize on these amenities. Overall the transit hubs appear indistinct and without stimulating features. A lack of overview makes it difficult to orientate and to locate information regarding routes, arrivals and departures. Just as local oriented information to visitors is missing.

#### A traffic oriented design

The layout of most of the hubs reflect a high priority

to vehicular traffic leaving pedestrians and public transport passengers to navigate in a confusing and unsafe landscape. This landscape consists of pedestrian islands with lighting designed for cars and not people. Additionally to the high focus on the traffic functionality the hubs provide only few civil amenities such as public benches and other functions to enrich the place. This emphasises the hubs as monofunctional transit spaces.

Large bus terminals as the one on Ragip Gümüşpala Street and Ordu Street are not appropriate in the central city area as they appear unnecessarily dominanting and create a poor quality streetscape with congestion, noise and fumes.

#### Lack of integration

All in all the transit hubs are poorly integrated in the public realm with inadequate and difficult pedestrian links to surroundings, and weak connections to other transport modes. Thus the transit hubs appear isolated with limited accessibility. In general the transit hubs lack active edges and overlapping functions to provide presence and passive surveillance supporting a general sense of safety.



#### **PUBLIC TRANSPORT HUBS**

Five key transit hubs have been identified representing a range of challenges:

- 1. Bus terminal at Ragip Gümüspala Street
- 2. Ferry terminals at Reşadiye Street
- 3. Sirkeci Station
- 4. Bus terminal at Ordu Street
- 5. Ferry terminal and bus terminal at Kennedy Street -Yenikapı
- 3 examples are described more detailed.



#### Scenic settings

(<u>••</u>)

Low legibility and lack of character
Difficult access - especially for people with special needs
Inadequate waiting fcilities - short and narrow platforms, lack of comfort

Lack of safety due to traffic

Limited and difficult information concerning public transport timetables and routes

#### **Crowded Bus terminal**

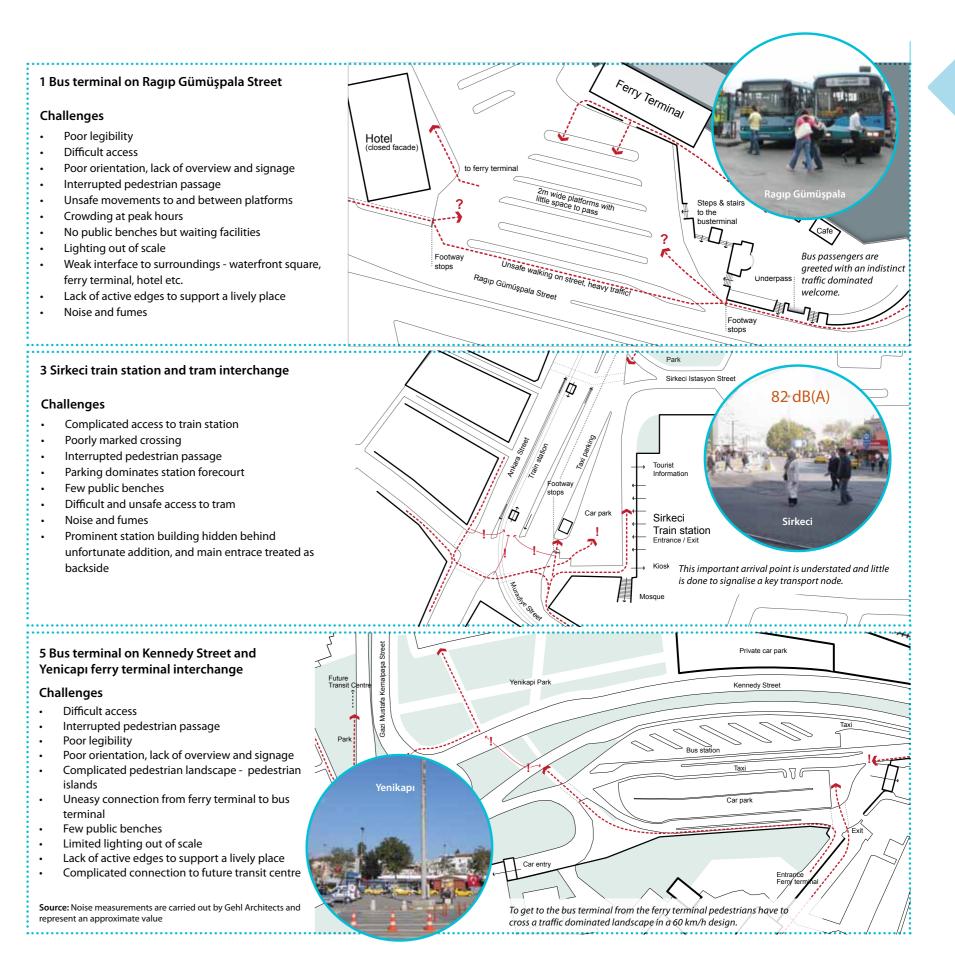


Bus terminal - Ragıp Gümüşpala Street

Overloaded platforms and confusing bus terminals create a difficult 'welcome' to the historic peninsula.



Bus terminal - Ordu Street



# Missing feeling of safety

The general perception of safety is a vital factor in creating a vibrant city both day and night. People need to feel safe to spend time in the public realm. Perceived safety might not be the same as real safety, and it relates closely to the experience of an inviting and friendly urban environment.

#### A dark city by night

To support an attractive and pedestrian friendly city by night is it important to ensure a well lit public realm. The present lighting situation reveals that rather large areas in the peninsula have only scattered or almost no street lighting. Poor and insufficient lighting of the pulic realm enhance a feeling of insecurity due to a missing ability to orientate and read the surroundings as well as to recognise passers-by.

Especially the Grand Bazaar area appears as a 'black island'. The dark streets combined with the fact that most activity ceases after closing hours make a clear signal that the 'area is closed'. This is furthermore enhanced by the dominance of metalshutters covering the ground fl oor frontages after hours. Altogether leading to a strong feeling of insecurity. As darkness acends a vicious circle is created. The fewer attractions and 'eyes on the street', the less people are inclined to walk through, resulting in an abandoned 'dead' area at night. This picture is supported by the conducted pedestrian countings indicating a signifi cant drop in pedestrian traffic after closing hours.

The residential areas to the north and to the south also suffer from poor and scattered street lighting. Compared to the occurence of light in the Sultanahmet area the current prioritisation is striking.

The everyday residents must tolerate insufficient lighting while the visiting tourists seem to be most well accommodated.



A street lighting suitable for 60 km/h but not accommodating the human scale and pace of pedestrians.

#### Street lighting out of human scale

Lighting in the city serves various purposes, and the overall street lighting should address both the vehicular traffic and the pedestrians to ensure general traffic safety but also to support a pleasant pedestrian environment.

Much of the present street lighting is sporadically placed and not oriented toward pedestrians or human scale. Particular tall lampposts, due to vandalism, have been implemented to reduce dim areas attracting anti-social behaviour and criminal activities. A negative side affect is an uneven and unfriendly pedestrian environment consisting of overexposed areas followed by more dark and obscure areas.

A possitive initiative is the planned application of a street lighting system mounted on wires to be implemented in the narrow streets. This will contribute to a reduction of street elements and subsequently less clutter to obstruct the footways.

#### Missing evening activities

It is a fact that actvities attracting people start a positive spin - 'something happens because something happens'. Thus the presence of people day and night is crucial for the vitality of a city. As mentioned before inactive areas tend to be perceived as unsafe. The peninsula is characterised by a range of more or less monofunctional enclaves. In general the evening activities are confi ned to restricted areas primarily comprising restaurant streets related to tourist

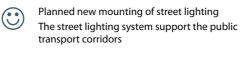
destinations and the tram line. This, together with the lack of residents in the central areas, create a city where large areas appear deserted and dark at night magnifying a feeling of insecurity. Hence these areas act as barriers within the city given that people generally avoid the foreboding streets.

#### Lack of maintenance

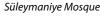
Unappealing surroundings and a lack of maintenance points towards a lack of care for the city's physical environment, and not least for the users of the city. Many of the public spaces - streets, squares and parks - on the peninsula appear in poor conditions due to missing maintenance and service.

Experience indicate that poor visual quality affect the general feeling of safety, and particularly women are sensitive to and affected by poorly maintained environments.

Lack of diversity The 'Age and Gender' survey point to an overall unbalanced gender scenario with a heavy male dominance. A situation with such an underrepresentation of women in the public realm can potentially create a self-defeating circle. As people tend to feel uninvited and unsafe when isolated in environments predominated by another gender, and thus avoid going there.









Uninhabitaded buildings, metal shutters and inadequate street lighting change a potentially inviting street to a dark empty tunnel.





# Part 3 RECREATION

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#### **POTENTIALS**



#### FANTASTIC LOCATIONS

The public spaces have significant potentials in terms of their setting, their history and their adjacent monuments.

#### **CHALLENGES**



#### BARRIERS AT THE WATERFRONT

The waterfront is difficult to access due to the ring road, the sea wall and the railroad. Crossings are sparse. The spaces along the water are underdeveloped.



#### UNINTEGRATED PARKS

Parks appear as isolated islands either with difficult access or closed off to the public, e.g. the university park, or in the form of mosque grounds having such a significant religious meaning that they are underused as retreats for people wanting to rest in a peaceful spot.



#### UNEXPLORED PUBLIC SQUARES

Squares appear not to be part of the usual vocabulary and thus are leftover bits and pieces with no individual character or identity, e.g. Beyazit Square.

#### **POTENTIALS**



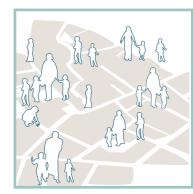
#### A GOOD CLIMATE

Istanbul is blessed by the mediteranean climate offering wonderful summers and mild winters. Excellent conditions for a outdoor life.



#### INTENSE NEED FOR SEATING

People in Istanbul enjoy their city and happily bring chairs or use the outdoor cafes to enjoy their city. Frequently streets are occupied by people enjoying their tea and observing the bustling street life.



#### MANY CHILDREN

Compared to other cities Istanbul have a significant amount of children visiting. These children represent a welcome variety to the usual user groups and infuses the city with their laughs, play and talk.

#### **CHALLENGES**



#### NOISE AND FUMES

Istanbul is challenged by a traffic congested city centre infringing the public realm, causing serious problems with noise and fumes. Thus outdoor life in the streets is severely compromised.



#### LACK OF PUBLIC BENCHES

The streets in Istanbul experience a severe lack of resting options in terms of public benches. Thus it is stressed that streets are for walking and parks for recreation.



## LACK OF FACILITIES FOR CHILDREN

The many children are constantly dissapointed by the lack of facilities for them within the city centre's urban open spaces.

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# Staying activities on a summer weekday

Staying activities were recorded in a selection of public spaces within the peninsula. The survey encompasses 14 locations representing different types of public spaces. The activity survey provides information on what kind and how many activities take place in selected spaces.

#### What do people do on a summer weekday?

The study includes the number of staying activities over a period between 8 am and 10 pm, besides the distribution and type of activity. The diagram shows the average number of activities found between 12 am and 4 pm within each surveyed space. Thus the graph depicts a snapshot of the activities taking place at any given moment during a summer afternoon showing where the 'people magnets' are to be found.

The good climate and the many visitors create a fine basis for a thriving outdoor urban life.

#### Many central active places

In general high levels of activity are found in most of the public spaces located in the centre, although limited seating options and activity offers are provided.

Beyazit transit hub is the most widely used space. Populated mostly by commuters and people waiting indicates that this is not a place for pleasure staying.

The squares close to New Mosque, Spice Bazaar and the waterfront are all well attended holding a range of

different activities, but mainly standing and sitting.

The Sultanahmet squares and parks attract many tourists during the day. The different type of spaces create an area of great spatial complexity. However they all provide the same type of offers and are more or less used in the same way.

Also Beyazit Square surrounded by the university, Beyazit Mosque and close to Grand Bazaar experiences a high number of people engaged in different staying activities.

#### Minor activity attractors

In the Sirkeci Station forecourt and the adjacent park a more modest number of activities is recorded. Considering the cental location and a substantial pedestrian traffic a higher number could be expected. However the spaces are of a somewhat mixed quality with limited invitations to stay - not a single bench can be found in the park.

Also the waterfront park and especially the City Wall park experience low activity levels. These destinations

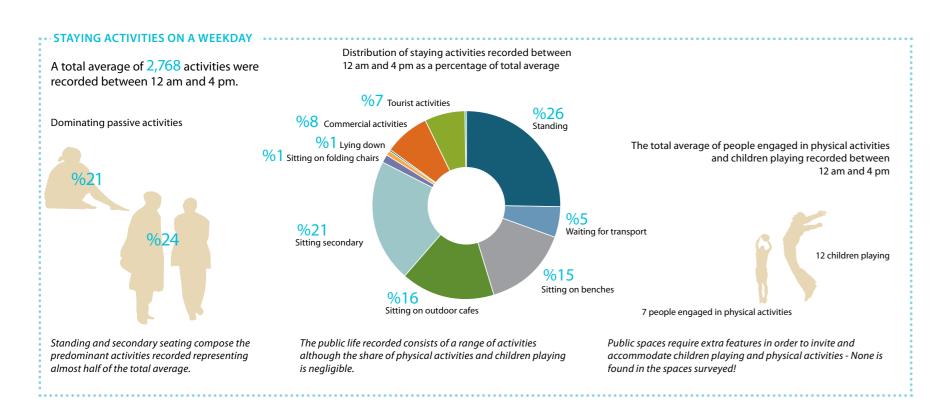
represent more recreational green spaces at city level. The limited number of users registered indicates a more local use and a lack of common awareness and rank of these places on the mental map, possibly due to the character and extent of the current activity offers. It is evident that the physical distance and the topography producing steep streets also constitutes a vital challenge to invite people to visit these places.



Many active places in the peninsula



Passive activities dominate in most spaces
Almost none physical activities or children playing
Some places do not invite for staying
Poor / weak pedestrian connections to some spaces





# Staying activities on a Saturday

A survey of staying activities on a Saturday indicates a general rise of activities occurring when comparing to a weekday. However a similar pattern of activity distribution appears.

#### More staying activities on a Saturday

Most of the central spaces, besides the waterfront park, experience more people engaged in stationary activities on a Saturday compared to a weekday.

The increase in activity is distributed across the majority of the 14 public spaces surveyed.

#### A corresponding activity distribution

The urban spaces in connection to Spice Bazaar, New Mosque and the waterfront continue to be the most active areas followed by Sultanahmet and Beyazıt.

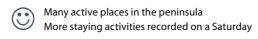
Whereas the above-mentioned places plus the waterfront park experience more activity on a Saturday, fewer people are found in the Sirkeci Station area and in City Wall park. A result indicating the City Wall park's low status as a city destination and attraction. A similar

situation applies to the Sirkeci area which miss out on a potential increase in Saturday pedestrian traffic due.

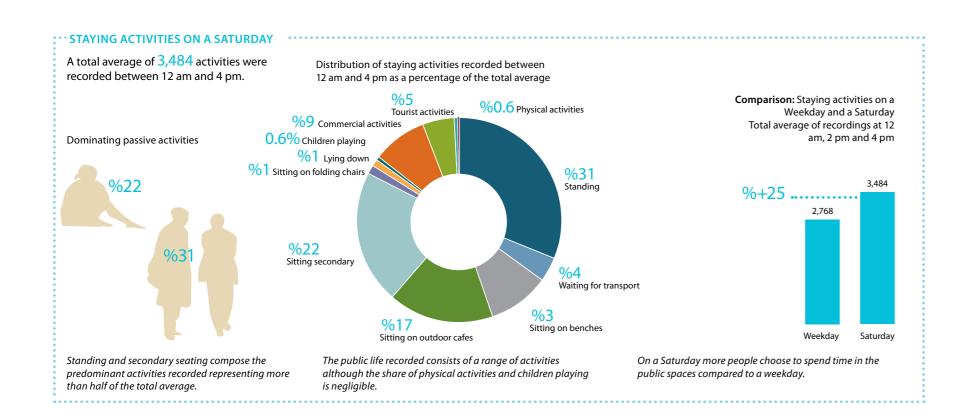
#### Limited diversity in staying activities

The distribution of activity types on a Saturday resemble the weekday situation with standing and secondary seating as the predominant activities.

Althoug the waterfront park only counts for about 3% of the recorded activities in total, it demonstrates a diversity in use representing a wide range of activities.



Passive activities dominate in most spaces
Almost none physical activities or children playing
Some places do not invite for staying
Poor / weak pedestrian connections to some
spaces





# Staying activities at the waterfront on a Sunday

An additional survey was conducted in the southern waterfront park to investigate the park's performance on a Sunday.

#### A popular Sunday destination

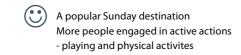
It is striking to see how the waterfront park comes alive on a Sunday. The average number of activities recorded between 12 pm and 4 pm are more than tripled compared to a Saturday and accounts for more than five times the activity level on a weekday.

#### Picnics and playing

The park's recreational potential fully manifests itself when looking at the activities taking place. Secondary seating - picnics and barbeques - compose almost half of the activities recorded in average between 12 am and 4 pm. However the park frame active staying activities as well. The share of people engaged in physical activities including swimming and children playing represents about a fourth. The survey pinpoints the importance of recreational public spaces to accommodate a more active lifestyle and childrens natural need for play and action.

#### Increasing activity during the day

The activity pattern shows a significant increase in activities starting around noon towards the evening and continuing into the night. At 8 pm a total of 623 activities were recorded corresponding to 6 times the number of activites found at 12 am.





Sitting on folding chairs

Poor / weak pedestrian connections to the waterfront park

Toplam ortalamanın yüzdesi olarak 12.00 - 16.00 arasında kaydedilen

#### Comparison: Staying activities on a weekday,

a Saturday and a Sunday
Total average of recordings at 12 am, 2 pm and 4 pm

%8 Standing
arbeques ties recorded in
h. However the
s as well. The
cal activities
playing
vey pinpoints
a Saturday and a Sunday
Total average of recordings at 12 am, 2 pm and 4 pm

%11 Physical activities
%5 Commercial activities
%131

%1417

%15 Commercial activities
%16lic spaces
estyle and
d action.
%3 Laying down

Weekday Saturday Sunday

On a Sunday the waterfront park bursts with life
experiencing a significant rise in activity level compared
to a weekday and a Saturday.

The waterfront holds a wide range of activities representing vital aspects of the park's recreational potential.

# Course of day on a Sunday Total number of activities recorded 509



Numerous anglers capture the waterfront on a

Sunday creating their own realm.



vendors accommodating refreshments.



%1 Waiting for transport

Sitting secondary

3 Sitting on benches

Sitting on outdoor cafes

The park playgrounds and fitness stations stage the visitors playing and exercise.

# A seasonal city

Events can create festivity and add a bit of spice to the public realm and thus contribute to more urban intensity. Besides adding layers to the urban vibrancy, events can be important factors in supporting a cultural embedding of the public life.

#### Events staging of the public spaces

Source: Fatih Municipality (2010)

Events can be arranged under various guidelines such as special days, theme events or festivals. Istanbul hosts a range of festivals and events during the year celebrating cultural and religious occasions and special days along with national anniversaries. The different seasons

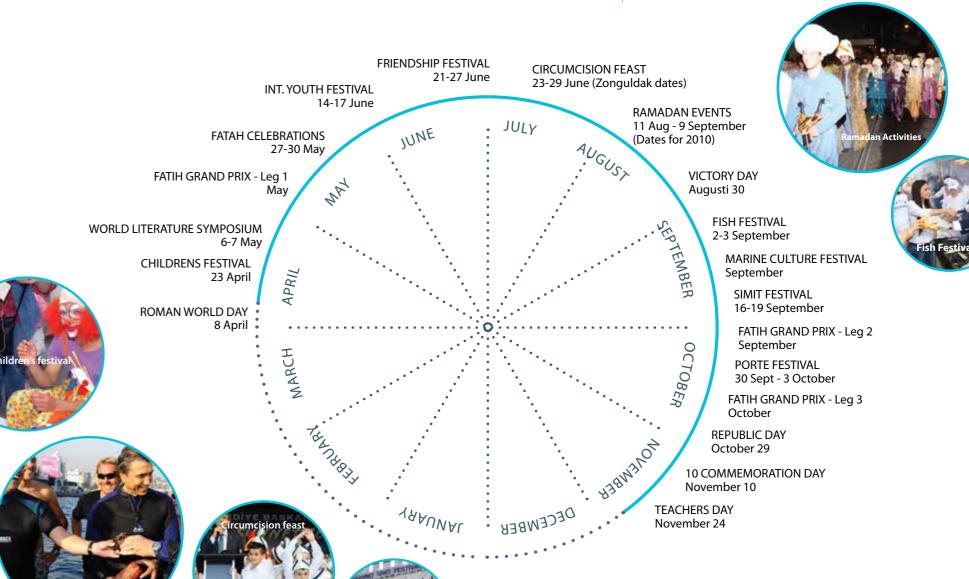
bring various recurring events creating traditions and involving the public spaces in new ways.

Majority of summer and fall activities

The activity calendar shows that Istanbul is most active during the spring, summer and autumn.

A variety of events and festivals

No events take place during winter



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# Open spaces are underperforming

The open spaces compose a vital part of a city's recreational potential. The opportunity to stay, interact and enjoy the city adds important dimensions to public life. Depending on the outdoor spaces the public life can take different forms, and the public life can be accommodated through a careful design of the public spaces.

#### Scattered open spaces

The open spaces cover a wide range of public spaces - squares - and parks widely scattered across the peninsula with rather long distances and difficult linkages between them. A fact emphasising the need for a range of attractive links to connect the open spaces and create a strong public space network.

#### Limited space for recreation

The activity surveys show that people are generally willing to spend time in the open spaces. Taking into account the size of the city and the high number of people visiting the historic peninsula every day only limited space is presently allocated for staying and recreation. Without sufficient staying options the city becomes a transit zone simply inciting people to keep

However the mosque grounds represent another aspect of the city's recreational potential and supplement corresponding to the mosque complexes original status as social and cultural centres.

#### Missed opportunities

Most of the public spaces are situated in strategic locations in fine scenic and urban context, and in connection to some of the key city destinations, access points and historic landmarks. However these obvious opportunities and potentials are generally not



Waterfront square at the Galata Bridge

The waterfront square is a popular place - although crowded sometimes - with fantastic views but also limited opportunities to

Fine locations
Large parks

utilised to create unique spaces with great attraction value. Thus most spaces suffer from poor interaction with surrounding amenities and functions. With few exceptions both squares and parks broadly appear with little mutual variation.

#### Uniform offers and use

Due to the fact that most of the public spaces offer little variation in use, except from some playgrounds in the parks, they are predominantly experienced as 'sittingrooms' and thus presently underperforming compared to their inherent potentials.

Furthermore a general lack of maintenance contribute to make the them appear less inviting and appealing.

It stands out that parked cars on Çemberlitaş Square, Beyazit Square, in the Sirkeci Station forecourt and along the waterfront take up large amounts of space that could be used for more attractive purposes.

#### Indistinct public spaces

The public spaces are short of an individual identity and a distinctive character. Currently they suffer from a low quality design profile and they appear anonymous without stimulating features. In general the squares are dominated by large open surfaces with limited invitations for other activities than standing or sitting. Even sitting can be a mixed experience given that a public bench can be hard to find and therefore people



Ragıp Gümüşpala Street

Enclosure of the city's recreative spaces force people to jump the fences to find a place to rest.

Few and weakly connected public spaces Lack of individual character and identity Few attractions and staying invitations Lack of interaction with surroundings Lack of diversity in use and layout Lack of maintenance Unfortunate location of parking in attractive spaces

are forced to sit on the ground or on various street elements. Both the squares along Ragip Gümüşpala Street and Beyazit Square are experienced as indistinct and 'floating' spaces with a poor spatial definition. In addition the Beyazit Square and the waterfront square are both difficult to access due to level differences and the surrounding traffic barriers.

#### Majority of green spaces

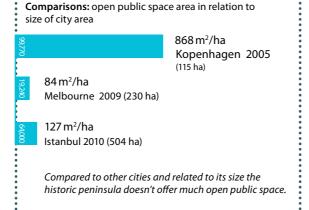
The open spaces mainly consist of parks of varying green character from the lush green of Gülhane Park to the Hippodrome's and Mehmet Akif Ersoy Park's mix of green and hard surfaces. The parks hold a much needed haven from the bustling streetlife.

In different ways most of the parks suffer from difficult access due to enclosing walls - Gülhane Park, and decentralised locations combined with weak conections - the parks next to the Bozdoğan Aqueduct, and more of the waterfront parks.

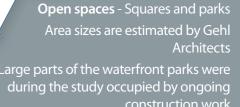
Equally the university park appears separated from the public realm due to the enclosing walls. However it holds a great potential to become a green match to the Beyazit Square.

Extensive fencing of a number of smaller green spaces within the city centre and along Ragip Gümüşpala Street, and in some parks make them currently less accessible and usable.

#### OPEN SPACES .....



# Well distributed open spaces



















64,000 m<sup>2</sup>





Public park

Mosque gardens

Semi-public park

Park - currently construction site

# An unexploited waterfront

The historic peninsula contains a wide range of merits making up it's unique identity, and the waters of Istanbul have ever since the dawn of time played a crucial role for the city. The Waterfront holds a huge potential to become a key asset enhancing the city atmosphere and attraction.

#### **Untapped possibilities**

A vibrant and inviting waterfront is an important element in attracting people but also beneficial for the image of the city as a whole.

It has been stated that the historic peninsula benefits from a fantastic proximity to the water, but at present several parameters inhibit the city from flourishing in its privileged environment.

#### A disconnected waterfront

Various elements separate the city from the water: Kennedy Street and Ragip Gümüşpala Street both constitute severe traffic constraints with limited pedestrian crossing possibilities and the railway only provide selected underpasses. Although of great narrative and iconic value the old sea walls along some stretches block off to the waterfront with only limited gateways. Just as the northeastern tip of the historic peninsula is closed off by the Topkapi hill and the railway grounds, altogether creating both physical and visual barriers leading to a poor stitch between the city and the water. This is furthermore enhanced by the fact that many access routes appear indistinct and that linkages consist of underpasses, gateways and pedestrian bridges.

#### Disrupted waterfront walks

Walking along the water should be a most fantastic experience but it is currently unfavourably influenced.

The waterfront promenade between the fish market in Kumkapı and the Sarayburnu Park is a popular spot for Sunday strollers and anglers along Kennedy Street, but it is highly affected by the vehicular traffic with fumes and high noise levels.

The promenade terminates close to the Sarayburnu Park and from here until the ferry terminals at Reşadiye Street one has practically no access to or sense of the water. The walk along the central part of the waterfront is influenced by the traffic on Ragip Gümüspala Street and the hustle and bustle in front of the ferry terminals creating a stressful atmosphere. Passing under the Galata Bridge the experience of a promenade dissolves completely and people must be very observant to be able to locate the continuation after the bus station. Besides poor legibility the waterfront connection to the tour boats and parks in the west is of low pedestrian quality.

#### Underuse of attractive spaces

Much centrally located space along the water is presently taken up by functions closing off the public access and not contributing to an inviting or attractive waterfront, e.g. large surface car park or parking in relation to the car ferries. At the same time they downgrade the urban environment and entail more traffic to the congested historic peninsula. Although an important function, the bus terminals currently do not contribute with any possitive aspects to the waterfont experience.

#### Underdeveloped staying dimension

Outside the waterfront parks public benches can only be found along selected stretches. Hence the public spaces along the water are in need of inviting spaces to sit. The public spaces along the waterfront generally appear run down and less attractive, and

few recreational activities are offered aside from commercial and a playground and fitness station in the southern waterfront park.

#### Lack of interaction

The waterfront has difficulties interacting with the water hence no specific water related activities are provided, and no particular relation to or celebration of the water is noticeable.

Similar to this most of the existing buildings along the northern waterfront appear quite introvert with enclosed facades and surroundings: the business university, Zinda Han Hotel and the Sepetçiler Kasri - International Press Centre - as the most prominant. However these functions and the public realm have great potentials to enrich and beneficiate from each

The ferry terminal and the fishing industry to the south are perceived as enclosed and inaccessible to



Great recreational value and vital city amenity

Waterfront promenade along the Marketine Waterfront promenade along the Mamara Sea



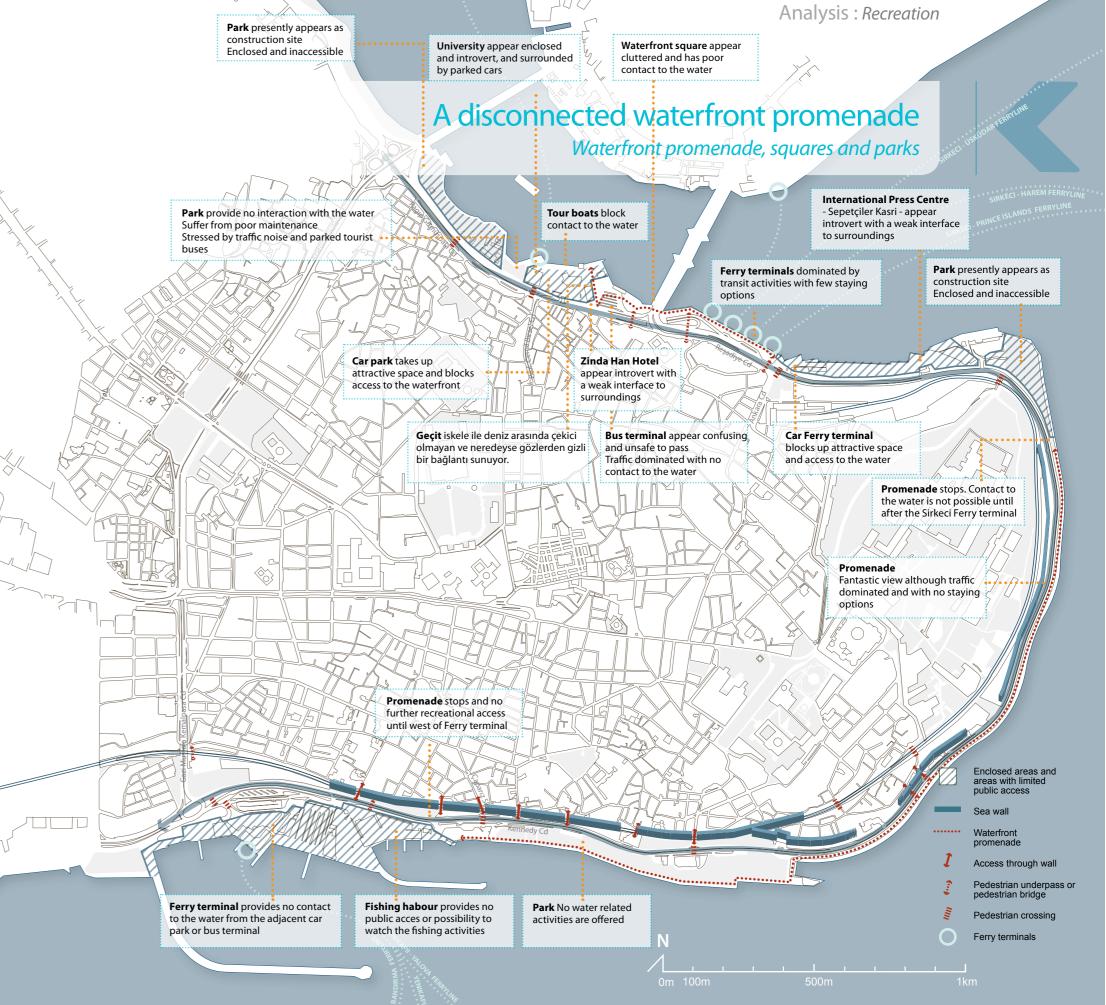
Separated from the city Inaccessible waterfront areas Waterfront squares and parks are understated, and do not celebrate the water Disrupted waterfront promenade Few recreational water-related activities are recorded Enclosed functions and introvert buildings Traffic dominated functions take up attractive space



A great view - but no places to sit and enjoy, and only a narrow band separates the waterfront promenade from the traffic.



Waterfront park at Ragıp Gümüşpala Street A green oasis linking to the Golden Horn - however it appears



# Lack of public seating

Resting is an integrated part of the pedestrian activity pattern. Good quality seating gives people the option to pause and rest in order to enjoy the public life and be able to walk further. Thus seating along streets transform the streets from mere transit spaces to places for recreation and socialising.

#### The best of all worlds

A city should be a fine meeting place which invite people to take pleasure in the amenities and social dynamics of the city. Seating is a vital component of a friendly city taking good care of it's visitors and inhabitants. To provide good quality seating a range of factors must be taken into account: high comfort, nice vievs, good micro climate and not least the possibility to watch other people just as the right siting is crucial for an ideal sitting situation.

#### A well-developed sitting tradition

Keyif - to sit quietly enjoying the sun and letting life pass by is an essential aspect of the turkish culture. Sitting is a popular urban activity in Istanbul, and you find people sitting almost everywhere. Hence it is striking how few public benches are found along the streets of the historic peninsula. Accordingly a culture of 'bringing you own chair' has developed, and people sitting on private stools and chairs is a common street scenario.

#### Lack of benches in the streets

Approximately 4,315 seats on public benches are recorded in selected streets, squares and parks.

Compared to other cities Istanbul has a fair number of public benches.

Generally only few are located in the streets to offer a proper rest for the large amount of people walking the streets every day. Especially due to the challenging topography of Istanbul, it is essential that ample opportunities to sit and rest are provided in the streetscape. Unfortunately no benches are found in connection to the steep streets.

Nuruosmaniye Street stands out as an exception to this rule. In this recently refurbished and pedestrianised street 95 seats are recorded in 170 metres corresponding to approximately 56 seats per 100 metres. Hence this street offer the visitors a maximum of advantages: an attractive streetscape with an abundance of comfortable sitting options, a nice micro climate and a view to the street life.

#### Extensive secondary sitting

Most of the public benches are located in the adjacent squares and parks, with a majority of park benches. A fact that has lead to widespread secondary seating in streets and squares where people sit on 'whatever' they can find - steps, ledges, niches or on the ground. The scarcity of benches stands out when comparing the relatively low number of public seating on e.g. Beyazit Square to the recorded number of 'people sitting secondary'. This imbalance becomes even more distinct as the enclosed university park holds numerous of attractive and available seats.

Different types of seating appeal to different users, and a well equipped urban space can provide different ways of sitting. However predominant secondary seating is a symptom of a lack of benches - of a 'city without seats'.



Generous seating in parks
Many public benches in the pedestrian street Generous seating in parks



Most streets have no public benches Most streets have no pur Few benches in squares

> 15 public seats are recorded on Çemberlitaş Square compared to 120 parked cars

Not a single public bench is provided in the Sirkeci Park

480 public seats are recorded in

front of the Blue Mosque compared to 18 public seats on Divan Yolu Street and Ordu Street in approximately 2 km

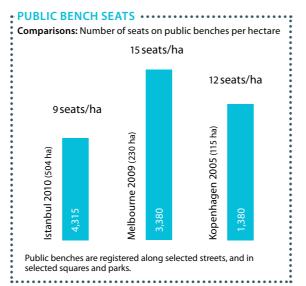
56 public seats per 100 metres in Nuruosmaniye Street



People enjoying good company and the pleasures of street life from a private chair is a widespread street scene.



Beyazit Square Istanbul is a very 'sittable' city and secondary seating is a frequent way of sitting - however more comfortable public seating is



# Public benches in the parks Number of seats on public benches in selected squares, parks and streets Public benches on streets 5% (206) Public benches on squares 10,5% (450) Public benches in parks 71% (3,055) The 3 largest park areas hold 60% of all public seating!

#### Analysis: Recreation

# A strong outdoor cafe culture

Outdoor cafe seating is a large contributor to the liveliness and spirit of the public realm. The possibility to sit outside having a meal or a tea, and at the same time being able to both observe and be a part of the public street life has a strong appeal to people worldwide.

#### Widespread outdoor cafe seating

Istanbul has a great outdoor cafe culture covering Alfresco dining in large restaurants to more modest and informal tea serving places with only a few seats.

Approximately 8,814 seats on cafes and restaurants are recorded in selected streets, squares and parks.

Compared to other cities the historic peninsula offers a fairly low number of seats on outdoor cafes.

#### Many small outdoor cafes

Several smaller cafes bring ambience to many of the streets surveyed. The often informal character of the outdoor serving add colour and diversity to the streetscape. However in many cases the outdoor seating takes up too much space neglecting the need for free walking space leading to crowded footways.

Not many outdoor cafes are found in the Grand Bazaar area. Obviously the narrow streets compose an inherent limitation to meet this recreational side of public life.

#### Outdoor serving in clusters

The distribution of the outdoor serving areas show a picture of specific streets and areas with a significant high density of outdoor seats including: Şeftali Sokak, Yerebatan Street and Akbıyık Street in Sultanahmet area, Çedik Paşa Street along with Ordu Street next to the Beyazit transit node, Çapariz Sokak close to the fishmarket in the Kumkapı area besides a stretch along south of Ordu Street next to the night club district.

Also the tea garden in Gülhane Park offers a great number of outdoor seating and as an additional benefit a world class view of the Bosphorus.

The utmost high concentrations of outdoor seating in Akbıyık Street and Çapariz Sokak create an unique atmosphere and setting for good or bad. They become a destination in themselves where people come to enjoy the exceptional feel of the place but at the same time they make up almost monofunctional 'restaurantstreets'. Another aspect of this scenario is that the extensive commercial seating infringe and more or less occupy the footways forcing people to walk in the street. Fixed outdoor sitting arrangements privatise the footway besides blurring the experience of the buildings ground floor.

#### 'Cafes around the corner'

It is notable that Divan Yolu Street and Ordu Street as the primary connection only accommodate a moderate number of outdoor servings. However Divan Yolu Street is characterised by frequent side streets holding cafes and restaurants just around the corner providing refreshments and outdoor seating to the many people passing along Divan Yolu Street.

#### Few waterfront cafes

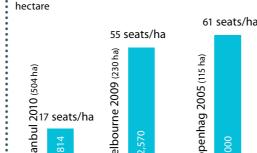
The water composes a fantastic scenery for outdoor seating although only few cafe seats are found along

Süleymaniye Mosque and a stretch of Atatürk Boulevard the water apart from a large number on the waterfront square next to the Galata Bridge and in the waterfront park. Most of the current cafe seating along the waterfront has an informal character.

> Although outdoor serving make up a substantial contribution to the vibrancy of the public realm it is important to note that cafe seats can never replace public benches as one have to pay to enjoy the service.

- Outdoor serving areas create ambience and lively public spaces
- Commercial seating dominates in some areas Few waterfront cafes

#### OUTDOOR CAFE SEATS .....



Comparisons: Number of seats in outdoor cafes per

Outdoor cafes are registered along selected streets and in selected squares and parks. 



The outdoor cafes support the streets as places for socialising and recreating.



Humble cafe seating under the footbridge - so close to the water







Recommendation: Vision Recommendation: Vision

# Voices of Istanbul

'I have a dream...'

I have a dream that we are able to save the historic fabric of the Historic Peninsula for future generations!



Erhan OFLAZ

"Sutanahmet gives me a sense of peace...

It was the capital city of four Empires, and today it gives one a sense of peace.

It needs to be protected for future generations. We are working on unearthing the archaeological finds of the many different civilizations that were here at one time.

My hope is that this study will result in an important project that will help move the dreams into the future"

Erhan Oflaz

Former Deputy Mayor of Fatih Municipality, Istanbul

My dream is that children continue to play where children played thousands of years ago...



Sibel BULAY

"We should continue to learn about the history of the area as archaeologists uncover more treasures; and the residents of the area and people from all over the world should continue to enjoy the Historic Peninsula in a setting that is in harmony with its culture, its history, its natural surroundings and the vibrant city that embraces it all."

Sibel BULAY EMBARQ Sürdürülebilir Ulaşım Derneği Member of the Board I have a dream for Istanbul to show that you can do it in another way, and I think it is possible by encouraging people that they can bike, walk or even ride a horse inside the city.



Kevser ÜSTÜNDAĞ

'Transportation in the future should be planned so that it is equal for everyone to be able to get to work, or school or where ever it is they need to get to.

Until now, we have paid a high price for all the cars and the individualistic way of transport we have today in Turkey. The attitudes need to change to be able to change this traffic culture. We need to think all of the transport modes together, connected, as a whole system, especially at the points of interchange. For instance if people want to bike to the historic peninsula but can't take it onto the ferry.

Also people complain about the topography when discussing biking in Istanbul. But we have 5 smaller islands outside of Istanbul where they have no cars and therefore bike a lot, and here no one complain about the hills. I would like to bring something from these island into Istanbul.'

Prof. Dr. Kevser ÜSTÜNDAĞ Professor dep. City and regional planning, Mimar Sinan University of Fine Arts I want to blend locals with the tourists making everybody benefit from each other, and making it a living and vibrant place for everybody.



Urban planning student

'A big issue is the level of tourism in the historic parts of the city. It is highly concentrated in some parts reaching levels where you only will see tourists or people connected to the tourism. This makes it less vibrant and alive and less interesting to visit for local Turkish people which is bad for tourists who does not get to meet the local people.

I want to spread out the touristic area, making it larger, incorporating all of the historical peninsula and adding local functions to the parts today based only on tourism.

If this was the case and some new public spaces was made allowing different people meet and start to accept each other, I would like to live here. I would like to have a house with my wife and raise our child here in the historic peninsula.'

Urban planning student

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# A city for people

More cities across the world recognise the values, that an active and diverse public life brings to the central areas. Public life is gradually identified as an economic driver, that increases real estate values, make businesses prosper and city centres flourish.

Putting people and people's needs first re-adjusts the general focus and achieves a number of positive extrawins on the side. As such bi-effects are cities that are safe, sustainable, lively, attractive and healthy.

#### Sustainable cities

Sustainability in cities is closely linked to the transport issues. A sustainable transport system is focusing at walking and cycling as well as a high effective public transport system. These three major modes of transport are the fundamental parts of a long term sustainable traffic system. Finding a reasonable balance between vehicular traffic and these three is thus essential.

#### Healthy cities

In a city where people are able to walk and cycle, even for longer distances, and where walking and cycling is enjoyable and attractive, the general public health increases and funds for health care are saved. In cities like Copenhagen, where 37% cycle to work every day, 4% walk, 26% drive their car and 33% catch public

transport it is generally found, that people live 7 years longer, their general health condition is improved, and there are substantial amounts saved for the health care

#### Safe cities

Cities where a number of people are present, also in the evening, are generally perceived as safe cities. People are present on the footways, in the cycle lanes and frequent running trams or buses, carry people who equally serve as passive surveillance. Other important factors are the presence of residents, people living in the city, caring for the city, and looking after it at night, where light in the windows are clear signs of people close by. People spending time in the city in the evening, in terms of visiting the outdoor dining, the parks, the pedestrian areas for evening strolls are equal important parts of a city not closing down with the shops, but a city, that continues to have a life also in the

#### **Attractive cities**

Cities that invite people to walk and cycle and to spend time in the public realm need to focus at the qualtiy level of the public spaces in terms of being able to invite people to walk or cycle or to spend time. Unattractive spaces attract very few people, often the ones who need a rest, like the elderly and families with children. Attractive spaces attract a variety of users, who take joy in experiencing the city and a number of city events and performances start to take place in the

#### Lively cities

Cities with people in them at various times of the day, walking, cycling, resting, talking, watching, running, selling, buying, playing and all the other activities, that people perform are essential in creating cities, where a wide variety of people enjoy to come and where they take pride in living.



Sustainable city

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Attractive city

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Liveable city



Safe city



Healty city

# A change of mindset

The historic peninsula is an unique composition of topography, an intriguing street structure, a homogenous built form, grand monuments, artwork, waterfronts etc. Today the experience of the historic peninsula is jeopardized by an invasion of vehicular traffic causing great detriment to the experience of the historic peninsula and to the quality level of the area as a whole.

#### Unique potentials

The historic peninsula has a number of extraordinary potentials, that are unique in their quality, their age and in the way they create a synergy across the peninsula. These potentials need to be further developed and made accessible to visitors as described in the following pages.

#### Challenges

The historic peninsula faces a number of challenges as described on the previous pages. Most importantly is the invasion of vehicular traffic into every street, laneway and square of the city. Istanbul is flooded in traffic and parking, which create natural barriers on how the city can be further developed as an attractive place for walking and recreating.

Dealing with the traffic imbalance in the city is crucial for increasing the quality level of the public spaces.

The predicted increase in vehicular traffic, with the planned Marmara Tunnel, in the historic peninsula and especially on Kennedy Caddessi - more than 60.000 vehicles - is an unacceptable gesture, that will inevitably result in even worse conditions for public life.

#### Way forward

A collected and shared vision for the historic peninsula needs to be developed, that can unite various units working in the area.

How should the historic peninsula be experienced, what are the aspirations for residents, commerce and tourism. And more importantly, how can an integrated transport network support this vision, thinking holistically about public transport, walking, cycling and vehicular traffic.

In the coming pages a set of strategies is presented, that looks at unlocking the potentials of the historic peninsula and enable people to experience it and

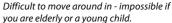
#### Create an 'accessible city'

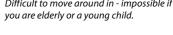
The historic peninsula should be a fabulous

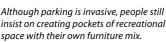
experience, and it should be obtainable and convenient and pleasant to experience for all!

The historic peninsula should be easy accessible for people both living and working in the area as well as for visitors. Accessible on many levels - pleasant to move round in and getting from one place to another, but also an area that offers and unfolds itself with it's public spaces, buildings, activities and

To reinforce the experience and create a city that can be sensed the human way of moving and perceiving must be brought more into focus. Human beings have not changed through modern times, and our basic needs and senses are consistent across the globe. We are sensitive and slowly moving beings with an average walking speed of 5 km/ and an eye level at 1.7 m. Thus the basis for the work on the historic peninsula should be this biological point of departure regarding experience, behaviour and communication in the uban spaces.









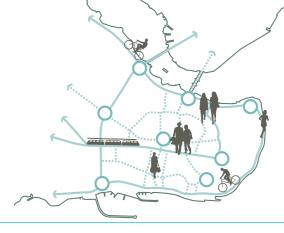


Recommendation: Strategies

Recommendation: Strategies



# Create a city for people - an accessible city



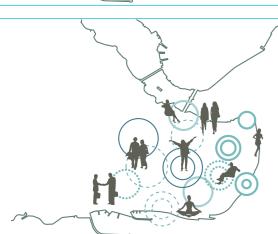
#### A pedestrian oriented city

- Promote traffic calming
- Promote walkingPromote public transport
- Promote cycling



#### A unique and recreational city

- Promote a great waterfront
- Promote attractive public spaces
- Promote an integrated history



#### A diverse and inviting city

- Promote multifunctionality
- Promote a variety of activities







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A diverse and inviting city

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# Promote traffic calming

#### Restrict the negative traffic impact!

The peninsula is currently car dominated and many streets serve as traffic corridors for ascending incomming traffic. Thorough action must be taken to lower the present amount of vehicular traffic to support urban quality and reduce noise and fumes.

A comprehensive traffic study and analysis should be carried out to determine who drives into and through the peninsula and in which purpose.

Reduce traffic volumes and create a better balance step by step giving a high priority to pedestrians.

Investigate a congestion charge area in the peninsula to regulate traffic volumes entering the peninsula.

An environmental impact assessment (EIA assessment) and a social impact assessment are recommended in connection with the planned vehicle tunnel south of Kumkapı.

Address present traffic barriers and downscale wide streets, e.g. Ragıp Gümüşpala Street, Reşadiye Street, Kennedy Street, Atatürk Boulevard, Ordu Street and Sehzadebaşi Street.

Reinforce speed limits to improve safety.

Investigate relocation of car ferry from Kennedy Street as it generate traffic in the central city area. Besides valuable space at the waterfront is occupied by parking in connection to the ferry.

Encourage a change in traffic culture to regulate the current behaviour addressing intrusive driving and parking.

#### Minimize the impact of tourism traffic

Tourist buses have a severe impact on the streets and squares in the peninsula today.

Narrow streets around the Grand Bazar and in Sultanahmet are used as bus routes. Squares as e.g. Çemberlitaş are used primarily as a parking space for tourist buses causing detriment to the area as a whole.

Develop an overview of the current tourist bus movements in the historic peninsula and the future forecasts. Unravel specific needs and challenges of the tourist industry in terms of moving tourists between destinations.

Investigate alternative ways (other than buses) to get tourists from the cruise terminal to the historic peninsula, e.g. via ferries.

Convey alternative ways of moving tourists within the historic peninsula, e.g. via mini-buses, lightrail, by foot or by cycling (on future cycling facilities).

Increase the information level in streets on wayfinding, to ease orientation and to encourage tourists to walk shorter distances and experience more of the city.

Fold out the public transport infrastructure to visitors. Simplify information on routes, ticketing, transport nodes etc.

Simplify the ticketing system for public transport. Introduce 24 h tickets. Integrate ticketing for lightrail with buses, metro, trains etc.

# Develop a parking policy for the historic peninsula

Parking is currently a visually dominating, space consuming feature, which increases the general traffic levels in the historic peninsula. Cars are parked everywhere; on footways, in squares, in parks, around mosques, at the waterfront - wherever space is available. The peninsula should primarily be explored by foot and your private car left outside.

Generate an overview of the current parking patterns in the historic peninsula.

Identify public spaces where parking is causing severe detriment to the experience of the spaces, the monuments and the surroundings.

Develop a long-term plan to reduce on-street parking along key streets and connections, and remove parking from prominent urban spaces.

E.g. in Sultanahmet especially around the Blue Mosque, at Beyazit Square, at Çemberlitaş Square and at the waterfront.

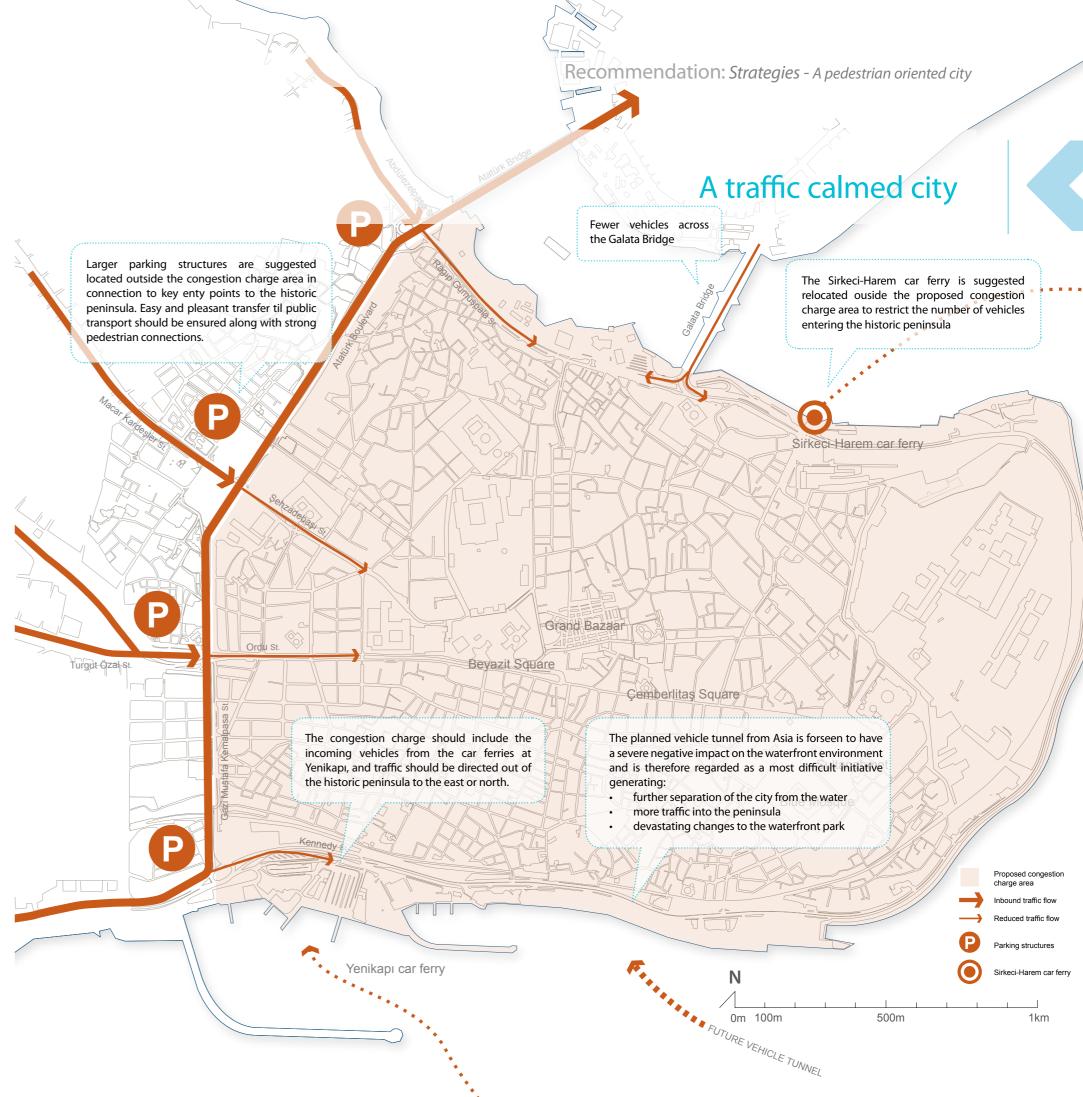
Investigate set up of a parking ring at the outskirts of the historic peninsula, e.g along Atatürk Boulevard and/or at the outer city wall, where parking structures can be built.

Locate high efficient parking structures in relation to key entry points points, and ensure close links to walking routes, and between parking and public transport to ensure a smooth transition zone.

Promote high visual quality and integration with the public realm with active ground floor functions.

Ensure a legible and informative parking system, where drivers can easily find accessible parking spaces in structures.

Control the level of parking in the historic peninsula through pricing. Let the level of pricing follow the level of demand to ensure that parking spots can always be found as long as you pay for it.









At present the historic peninsula lacks an overall legible network of walking routes to bring more of the city into play. A network of appealing, comfortable and continuous walking routes could invite people to walk and experience the peninsula.

Create an expanded and refined overall network of walking routes.

Ensure inviting and accessible entry points to the historic peninsula.

Ensure connectivity and restore missing links.
Strenghten north south connections to the waterfront.
Refine connections to enhance important likages, e.g.
Çemberlitaş and Nuruosmanie Street as links to Grand
Bazaar.

Upgrade existing pedestrian crossings with signals and markings.

Clear obstacles from crossings and remove slip lanes along Ragip Gümüşpala Street and Kennedy Street. Replace pedestrian underpasses and bridges with new crossings at grade.

Ensure direct, clear and simple pedestrian crossings at grade at key intersection and at strategic locations to accommodate desire lines.

Provide dedicated pedestrian signals at traffic intersections.

Limit pedestrian waiting times at crossings.

Ensure accessibility for all - seniors, physical impaired, parents with small children and prams etc.
Reduce level differences, and avoid high kerbs and steps in footways.

Widen footways where needed. Introduce dedicated zones for walking and for street furniture. Provide wide drop kerbs at intersections.

Ensure well maintained pedestrian friendly surfaces.

Reduce clutter and street elements on footways to ensure free walking space.

Avoid unnecessary footway interruptions by taking footways across minor side streets.

#### Develop attractive and safe routes.

Ensure sufficient and attractive street lighting.

Support climatic protection and provide sufficient drainage of stormwater.

Ensure active and lively ground floor frontages along walking routes.

Investigate how to reduce impact of dominating metal shutters and promote more active ground floor frontages after hours.

Promote invitations to stay and rest along pedestrian routes.

Support and enhance the existing spatial experiences and human scale along pedestrian routes.

Develop recreational routes fine for promenades in connection to the city amenities e.g. the waterfront, the sea wall and the outer city wall.

Ensure strong linkages with the overall walking network in the historic peninsula.

#### Develop distinct street characters!

A new set of street typologies could be identified to improve the legibility of the walking network and to indicate a hierarchy and a variety of use of the various streets.

Introduce a well-defined street hierarchy defining street layout and usage to support a good balance between street users.

Support a development of different street identities and characters to enhance variation and legibility contributing to a sense of place.

Create a city offering different types of experiences.

Pedestrian priority needs to be stepped up in all streets, and good conditions for walking assured.

A vocabulary of new streets types can be developed in terms of pedestrian streets, pedestrian priority streets and city streets supporting all means of transportation.

Transform ring roads and feeder streets into dignified green boulevards with good conditions for walking and cycling.

Ensure that streets are not only for transport, but also serve as meeting places and cater for a wide range of more recreational activities.

#### Improve orientation and wayfinding!

When arriving to and moving around in the historic peninsula visitors should be able orientate themselves and find their way to key destinations as well as local places and treasures.

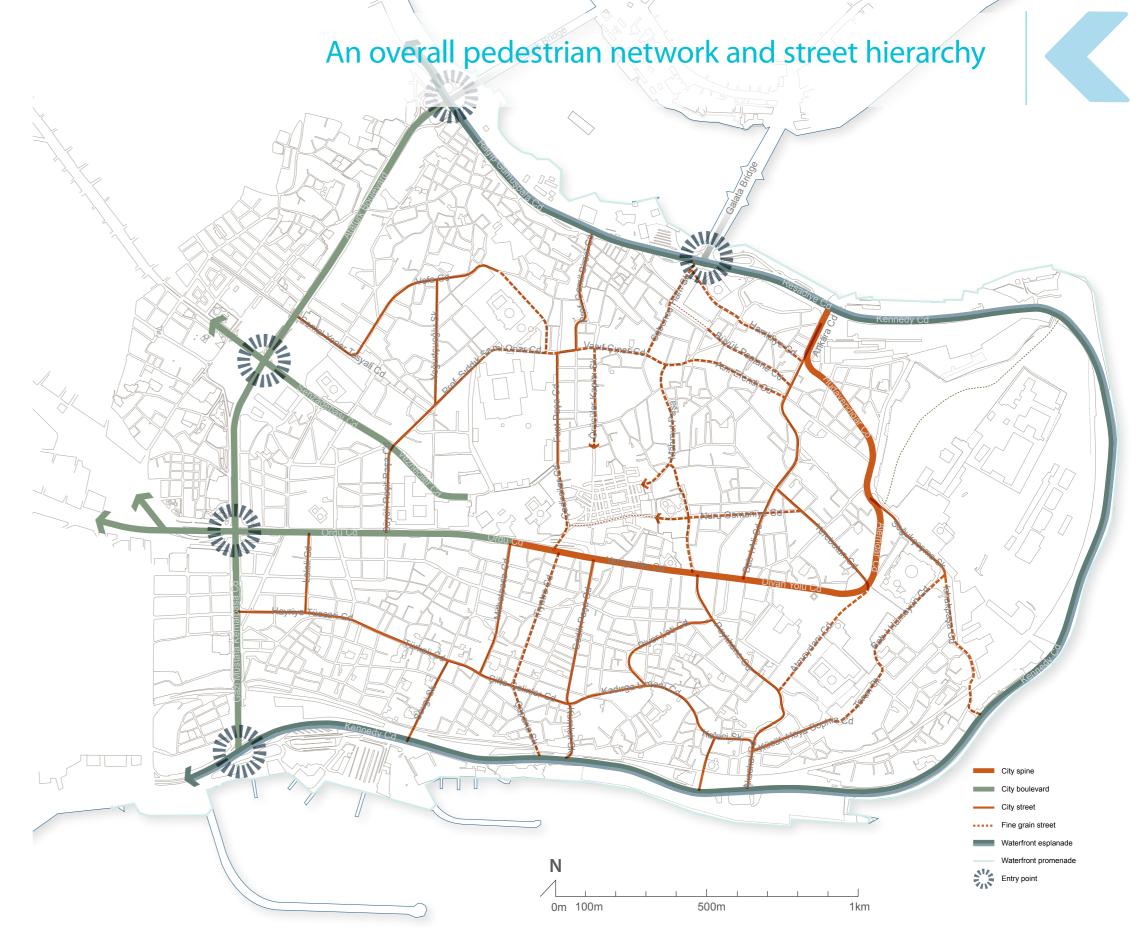
Develop an integrated wayfinding system introducing both streets signs, and narrative elements to guide people around in the peninsula.

Provide easily read maps and directions to guide visitors.

Develop and implement a range of easy recognisable urban elements along key routes. E.g. characteristic benches, art, paving, lighting, greenery etc.

Make use of the topographic setting to create special places for orientation.

Preserve and enhance vistas to important destinations and local neighbourhood focal points.





# Promote public transport / Promote cycling

#### Refine the public transport system!

Public transport should be an attractive and strong alternative to the use of private cars. An expanded public transport network could provide more accessible options and promote further linkages.

Focus on transfer and interchange in the historic peninsula and develop fine transit nodes.

Rethink the public transport system and develop a system of dedicated city routes and suburban routes.

Introduce two tram loops to service the central part of the historic peninsula as well as the periphery.

Remove the heavy rail service from Yenikapı to Sirkeci and reuse area for other purposes.

Supplement the tram network with electric service buses across the historic peninsula.

The outer ring could be supplemented with single bus routes along Kennedy Street, Ragip Gümüşpala Street and Atatürk Boulevard.

The tram lines could act as 'lifelines' in the city supporting safe routes at night.

Remove bus routes from the central part of the historic peninsula and reduce number of routes on on Kennedy Street and Ragip Gümüşpala Street.

The bus terminals on Ragip Gümüşpala Street and Ordu Street could be relocated to the outside of the historic peninsula possibly in connection to key entry points to the historic peninsula to reduce the present negative impact on the surrounding environment.

Public transport nodes including stops and interchanges need to be upgraded to promote access for all, safety, comfort and visual quality.

Develop a system of easily accessible information system regarding routes, waiting times etc. possibly also providing locally related informations.

Promote frequent stops with app. 300-400 m intervals and ensure placement of stops in relation to important

city connections and destinations, e.g. key pedestrian routes, sea wall gateways, primary functions and interchanges to other modes of public transport.

Investigate possibility for an additionally stop on the planned rail line at Beayzit Square to create a new access point at this important central location.

Rethink design of tram platforms to integrate better with the city and reduce barrier effect. A more flexible payment system could be investigated.

Look into the necessity for guardrailing in connection to the tram line and stops to reduce barrier effect.

The ferry terminals along Reşadiye Street could be merged into a new central terminal to intensify the transit hub and keep attractive spaces clear for more recreational use.

#### Introduce cycling routes and facilities!

Cycling could be supported as an alternative mode of transportation in relation to commuting, for shorter distances within the historic peninsula including transport of smaller goods as well as for recreational purposes.

Alongside a traffic calming scheme for the historic peninsula cycling could successively be introduced along the natural contour lines in terms of dedicated cycle facilities in connection to selected streets, e.g. Kennedy Street, Ragip Gümüşpala Street, Şehzadebaşi Street and Ordu Street.

Develop recreational cycling routes in connection to the waterfront promenade and along the sea walls reusing the former railway tracks.

Support commuter cycling to the historic peninsula by establishing cycle lanes along feeder streets, e.g. Adnan Menderes Vatan Bulvarı and Turgut Özal Millet Street linking to strategic focus points, e.g. Beyazit Square and the university.

Atatürk Boulevard and Atatürk Bridge, Galata Bridge and the comming metro bridge should also provide cycle facilities.

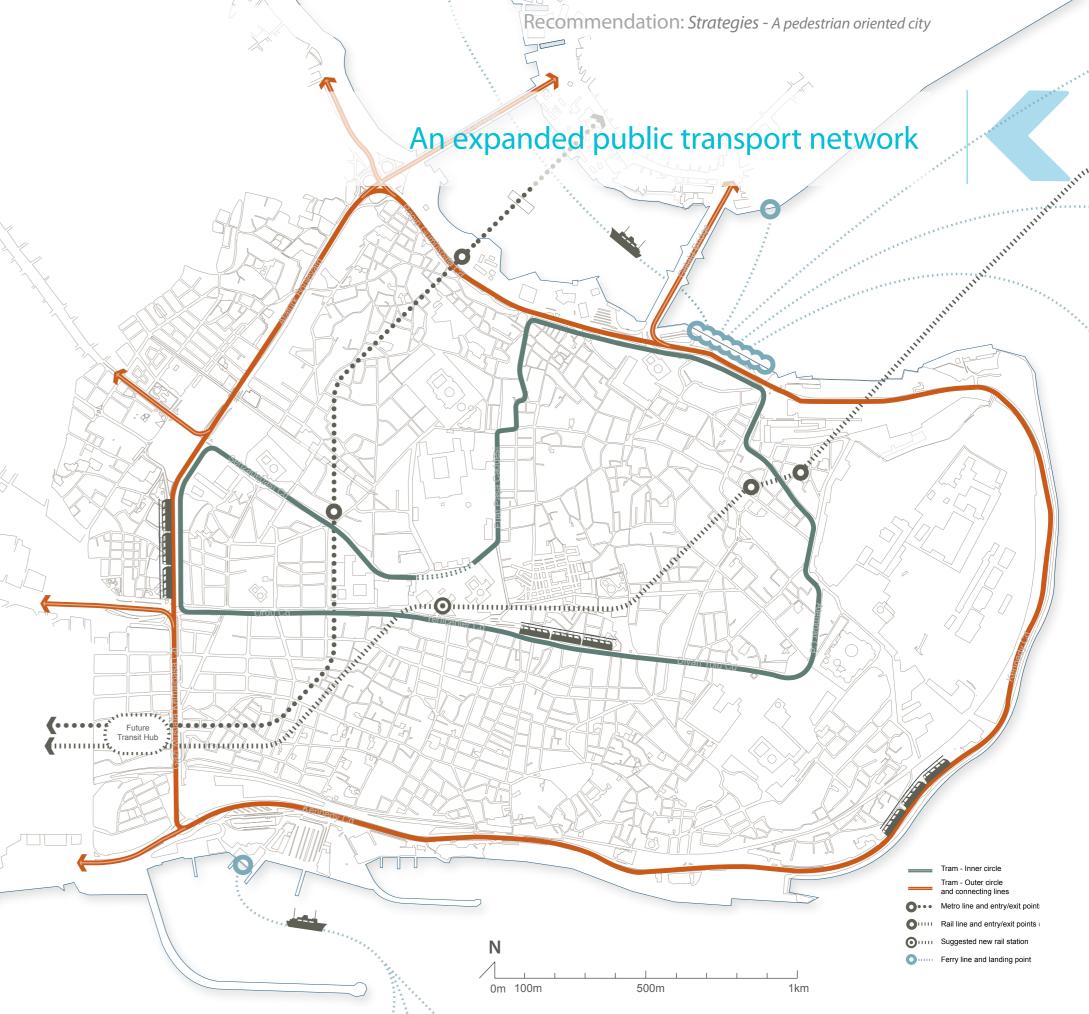
Promote safety and comfort for cyclists.

Develop accessible and safe cycle parking facilities at strategic locations, e.g. Beyazit Square and at the university.

Introduce cycle events and 'closed-streets' on Sundays to draw attention to cycling.

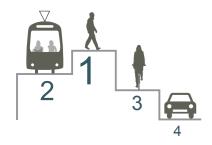
#### Cycling routes principles





# Promote traffic calming

#### A people focused planning proces Put people first!



Think of people before vehicular capacity and plan for people first. Improve the basic quality of the urban environment by upgrading streets into more attractive, inviting and safe routes for pedestrians.

#### People friendly parking



Copenhagen, Denmark.

Parking in bays - with at most 3-4 cars in a row - could be a way of keeping cars less dominating, and avoid long stretches of parked cars. Street trees form a pleasant divider and soften the streetscape. Copenhagen, Denmark.





Introduce double use of parking spaces. Shared parking & playground during

#### Congestion charge

#### Congestion charge in London

In 2002 the City of London instituted road pricing for people driving into the city centre. The immediate effect of the congestion charge was an 18% traffic decrease in the 24 km<sup>2</sup> central city zone.

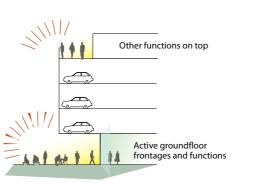
Ensuing the fee is raised to control an increased ammount of incoming traffic, and additionally the fee zone is expanded. 18% immediate traffic

#### Congestion charge in Stockholm

In 2007 the City of Stockholm instituted road pricing for people driving into the central city areas. The congestion charge has led to less air pollution and a decrease in time spend in congested roads.

50% reduction in tailback waiting time 12% reduction in air pollution

#### Parking structures - more than just parking!



Parking structures should be developed as diverse and attractive urban blocks with other functions integrated.

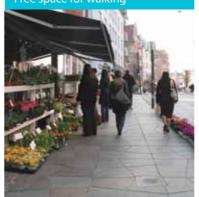
# Promote walking

Pedestrians are first priority

Pedestrians have the right of way! The footway

is taken over minor side street to signal high pedestrian priority. Copenhagen, Denmark.

## Comfortable walking ee space for walking



Footways may include various elements, hence designated zones for walking and furnishing support the pedestrian accessibility. *Aalborg*,

#### Well lit streets and connections



Street lighting in human scale contributes to a comfortable walking environment and adds to a general feeling of safety. *Vejle, Denmark*.

#### Safe crossing



Clearly marked and wide pedestrian crossing at grade allows for a high number of pedestrians. Copenhagen, Denmark.

Smooth tracks in the paving create a pedestrian friendly surface considering access for e.g. strollers or wheelchairs. Arhus, Denmark

Dedicated lighting of street corners and signs ease orientation. Copenhangen,

The combination of delicate river walk lighting and street lighting creates an attracttive pedestrian setting. Seul, South Corea.



Trafik ışıkları yayaları bekleme ve geçiş süreleri hakkında bilgilendiriyor. Kopenhag, Danimarka



Signals informing pedestrians about waiting / crossing time. Copenhagen, Denmark.



The median provides a refuge while crossing streets to support informal crossings without forcing a specific route. Copenhagen, Denmark.

Parking in bays - with at most 3-4 cars in a row - could be a way of keeping cars less dominating, and

avoid long stretches of parked cars. Street trees form a pleasant divider and soften the streetscape.

# Promote walking

#### City spine

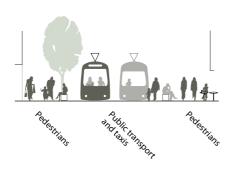
#### Main street and commercial link







Principle sections



A 'no drive-through' street with first priority given to pedestrians, public transport and taxis. A pedestrian oriented design with dedicated zones for walking on a single level surface. Generous opportunities for public seating to rest and socialise. Art and street trees add to a distinct character and atmosphere.

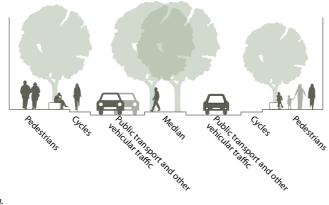
#### City boulevard

#### Green connector









A green street suitable for all means of transportation; walking, public transport, cycling and vehicular traffic. Footways with designated zones for walking are taken over minor side streets. Dedicated bicycle lanes support alternative ways of transportation. Widespread opportunities for public seating to rest and socialise. Coherent street planting and green medians add character and ease informal crossing.

#### City street

#### Urban connector





Receptions Double Light Agency Delicities and Delic

An urban street supporting walking, public transport, cycling and vehicular traffic. Footways with dedicated zones for walking are taken across minor side streets. Medians support informal crossing. A 'shared space' street concept giving high priority to pedestrians could be considered in selected streets. Several resting and socialising opportunities is provided along the street.

# Promote walking

#### Fine grain street

#### Pedestrian connector





A pedestrianised street or a street with limited vehicular acces on terms of the pedestrians. A single 'wall to wall' surface defines the streetscape supporting movement and a multitude of activities. Plenty of opportunities for for public seating and staying. Small scale greenry add character and ambience.

#### Principle sections



Primarily pedestrians, possible cycles besides limited vehicular traffic within restricted periods of the day

#### Waterfront esplanade

Blue - green connector







A street forming a strong connector between the city and the waterfront - comfortable for walking, cycling, public transport and vehicular traffic. Wide zones for walking and dedicated bicycle lanes support the soft road users. Numerous opportunities for public seating to relax and socialise. Medians support informal crossing and street trees and water features add to character and the recreational dimension

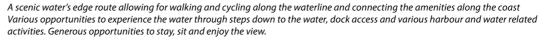
# Actes Cities Action Selicition Indignation and Other Cities Actes

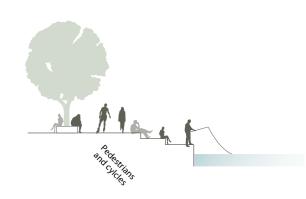
#### Waterfront promenade

Foreshore walk









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# Promote walking

#### Wayfinding systems - New ways to find one's way

#### Easily read signs and guides



Simple and iconic signs guide visitors to important destinations. Barcelona, Spain.



Marking on the paving ease orientation and wayfinding. Lyon, France.

#### Communicate information



Well placed, easily read maps and directions are crucial in guiding both visitors and locals. Sydney, Australia.



Map with walking distances illustrates and relate time and destinations in a pedagogical way showing how far you can get within 15 minutes. London, UK.

#### Routes and connections - Different identities to enhance orientation and legibility

#### Green elements



direction and identity.
Place de la Bourse, Lyon, France.



Movable small scale planting pots emphasise A vertical garden enlives a dull building front and bring a green touch to a dense urban environment. Paris, France.

Trees and borders of various species create an individual street character. Copenhagen, Denmark.

#### Distinct surfaces and characteristic paving



Artistic marking identify an innovative laneway. Tokyo, Japan.



Wooden surfaces indicate a pedestrian route. Tokyo, Japan.

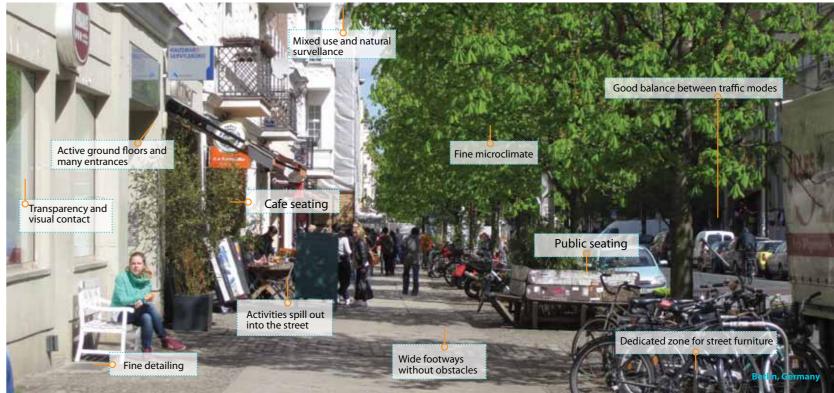


A distinct lamp post characterise a local pedestrian link underlining a strong identity. . Copenhagen, Denmark.



Canopy and lighting accentuate an inviting evening connection. Brisbane, Australien.





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# Promote public transport

# A strong public transport system



Accessible information

Pillar shows routes and schedules, as well as estimated arrival time. Copenhagen, Denmark.



Continuing informations regarding departures and lines compose important and desirable service to the passengers. Berlin, Germany.

#### Public transport network



A system of frequently running buses covers the inner city and connect to the most important public transport interchanges including train and mero stations. Copenhagen, Denmark.

#### Inviting waiting facilities



Bus shelters as part of the general street furniture. Aalborg, Denmark.



The daily waiting for the bus becomes pleasant and stimulating if the surroundings are comfortable. Melbourne, Australia.



Combine waiting facilities with public seating to invite both pedestrians and passengers to sit. Stockholm, Sweden.

#### Legible transport hubs with high urban quality and a strong identity



Besides the transit purpose the ferry terminal has become a popular city wide recreational excursion spot. Yokohama, Japan.



A complex tranport hub made into an attractive urban space. Strassbourg,



An overall design concept supporting a high quality commuter environment. Auckland, New Zealand.

# Promote cycling

#### A good environment for cyclists

#### Cycle routes



A recreational route along the water invite for an enjoyable sunday trip. Battery Park City, New York, USA.



Green route connects downtown with surrounding neighbourhoods and nature.



Cycling is permitted in car free streets at certain times of the day. Linz, Austria.

#### Signs providing route information



Good signage raise awareness of the cycle routes and signal that cycling is an important mode of transportation. Odense, Denmark.

#### Dedicated cycle facilities



To support safety for cyclists lanes should always be located between the footway and on street parking. Copenhagen, Denmark.



Cycle tracks distinct marked at major and difficult crossings raise attention to the cyclist. Copenhagen, Denmark.



An alternative way of marking out a cycle crossing. Paris, France.

#### Accessible cycle parking



Covered cycle parking provide comfortable and safe parking, and constitute an iconic urban element. Odense, Denmark.



Cycle parking should be provided in all places where people want to go and as close to the destination as possible. Melbourne, Australia.

#### Treats along the route



Simple features supply with comfort to the cyclists. Copenhagen, Denmark.

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#### Make the waterfront a true city attraction!

The waterfront should be a fantastic place for people; easy accessible and covering public spaces of high quality inviting people to enjoy the water in its many aspects.

Create a continous waterfront promenade linking all activity nodes along the waters edge. Ensure accessibility along the waters edge, avoid detours, disruptions and closed off reas.

Ensure visual contact along the waterfront promenade.

Ensure a high quality waterfront promenade with a high level of maintenance, street furniture, lighting, pavillons etc.

Develop more places for recreation and introduce public functions to support the waterfront as an attractive and lively place during daytime and in the evening.

Upgrade the possibilities for physical contact with the water, through steps boardwalks, sliding planes into the water, pontons on the water, boat berths etc.

Introduce more water related activites and functions as e.g. sailing, rowing clubs, kayaks, swimming and bathing, water polo e.g.

Celebrate and exploit sight lines to support the experience of being on a peninsula.

Introduce water-related elements in the public realm in the historic peninsula referring to the surrounding waters and emphasising Istanbul's identity as a waterfront city.

Recognise and feature the waterfront history.

The waterfront parks should in general be upgraded in terms of more variation in layout and activity offers.

#### Connect the city to the waterfront!

In order to enable an increased use and appreciation of the waterfront, people need to be offered direct and legible walking links to actually get there.

Improve accessibility to the waterfront by upgrading important walking links leading to the water. Ensure that routes go from somewhere to somewhere. Avoid interuptions, long waiting times, lack of crossings, lack of penetration through the sea wall etc.

Link waterfront routes back into the overall pedestrian

Signalise waterfront routes along the main street and ensure connected, legible routes.

Ensure attractive routes with activities along, support active ground floor frontages, residents, lighting, good quality paving to invite people to make use of the

Strengthen views to the water, where possible, along

Create clear arrival points, when at the waterfront.

Reduce barriers separating the city from the waterfront, - the railway track, the sea wall and Kennedy Street.

Investigate possibilities for creating more access points through the sea wall.

Downscale Ragip Gümüşpala Street and Kennedy Street and improve crossing possibilities.

#### Develop focus areas!

A range of target areas along the water have been identified as points of specific interest in terms of linking the various parts of the waterfront and in terms of promoting more attraction and recreational value.

Reinforce an overriding waterfront concept to enhance an overall green recreational identity with sequences of more urban character including public transport and other city functions.

An important aspect of 'completing' the waterfront is to keep a sensitive approach when stiching the city and the water together and not overload any new development areas with building structures.

1. Investigate the possibility of opening Yenikapı ferry terminal to the surroundings and improve visual and physical contact between the ferry terminal and the bus terminal to strenghten a sense of place and create a distinct transit hub identity. Strong links to the coming transit centre for new metro and rail lines east of Atatürk Boulevard are crucial.

Investigate the possibility for people to experience the active fishing habour.

- The railway line running in parallel with the sea wall is suggested removed and the railway tracks converted into a recreational adventure trail for pedestrians and cyclists in connection to the remaining sea wall and additionally creation of local spaces for recreation. Potential building opportunities along the prior railway tracks need to be studied in greater detailed.
- The military area is suggested used for a new leissure park focusing on sport and physical activity. Strong links to the surroundings need to Investigate new access point through the sea wall.
- The Sarayburnu Park should frame the spectacular view of the Golden Horn and Bosphorus Strait and compose an attractive completion of the Gülhane Park promenade.
- The smaller ferry terminals to the north are suggested merged in a new central terminal located at Reşadiye Street.
- 6. The area around the Gatala bridge is suggested developed into a great 'Welcome' to the peninsula celebrating view and water. Here the city kisses the water through a grand square linking the water
- The area west of the Galata Bridge currently bus terminal and car park - is suggested developed into a new multi functional area celebrating Istanbul's maritime history - a modern version of a maritime and city museum is suggested including e.g. outdoor workshops and anchoring of historic ships, as well as storytelling of Istanbul's grand past. The waterfront park to the west is suggested upgraded to hold and embrace the new cultural and existing educational activities.
- The commerce university area is suggested opened up towards the surroundings along with an upgrading of the outdoor spaces for the students and staff members.

Recommendation: Strategies - A unique and recreational city A reinforced waterfront Line of sight towards Potential celebration



# Promote attractive public spaces

#### Develop attractive public spaces for urban recreation!

The existing public spaces need a rethink to release their potentials. They should form inviting frames for the recreational public life and act as strong counterparts to the busy streets. In their current layout they most often fail to represent oases in the urban fabric. Local amenities should be celebrated to reinforce attraction.

- Enhance the recreational dimension and provide a wide range of staying options and recreational possibilities. Support streets, squares and parks as places for staying.
- Develop public spaces as platforms for meetings and social intercaction, relaxation and enjoyment.
- Develop a public space network and ensure good linkages in terms of attractive pedestrian
- Reduce clutter in the public realm to improve functional and visual quality.
- Provide high staying comfort, fine conditions for seeing, hearing and talking.
- Ensure easy access and safe movements.
- Promote soft and lively edges to stimulate a sense of activity and presence.
- Create attractive spatial experiences and support the human scale.
- Make the best of the climatic conditions and support an attractive micoclimate. Introduce elements to provide shelter and shade where needed.
- Introduce more public seating and ensure a good balance between public seating and commercial seating.
- Introduce more interactive features to enhance public space vitality and invite people to engage in the public realm.
- Remove parking from attractive open spaces, e.g. Beyazit Square and Çemberlitaş Square.
- Investigate relocation of petrol station from Sirkeci Park.
- Ensure at network of versatile public spaces fulfilling a wide range of different purposes

#### ranging from passive to active recreation. Develop a hierarcy of spaces!

A public space hierarchy should be identified to promote strong identities and more targeted invitations for urban life.

- Promote distinct and individual public space identities. Support variation in design and character.
- Exploit and cultivate the city characteristics to promote specific and attraction.
- Ensure variation of scale and significance by creating a public space hierarchy. Develop a range of spaces covering form large spaces for gatherings to intimate meeeting places including 'City spaces', 'Neighbourhood spaces' and 'Local hot spots'.
- Introduce more small scale neighbourhood public spaces and local spaces to embed local recreation. Strengthen existing local green spots - 'Keep the village green'.
- Create strong overall concepts for the public spaces; squares and parks to support a holistic approach considering urban life, functions and
- Create better access to parks and green areas, e.g. the university park.
- Investigate possibilities for more visual contact and possible new access points to Topkapi from Gülhane Park.
- Promote linkage and access to the mosque gardens to invite passers-by to experience the spiritual atmosphere.

#### Develop overall long term city strategies to enhance visual delight!

- Green strategy
  - a. Introduce street trees along selected streets. Primarily along the boulevards and the main street. Select a handful of specific species, underlining the flora of the Istanbul region. b. Introduce trees in selected squares and supplement planting in parks. Make use of flowering trees to strengthen the individual c. Introduce green elements in squares - flower

beds, portable green etc. d. Introduce greening of buildings, on walls, from balconies, on roof tops.

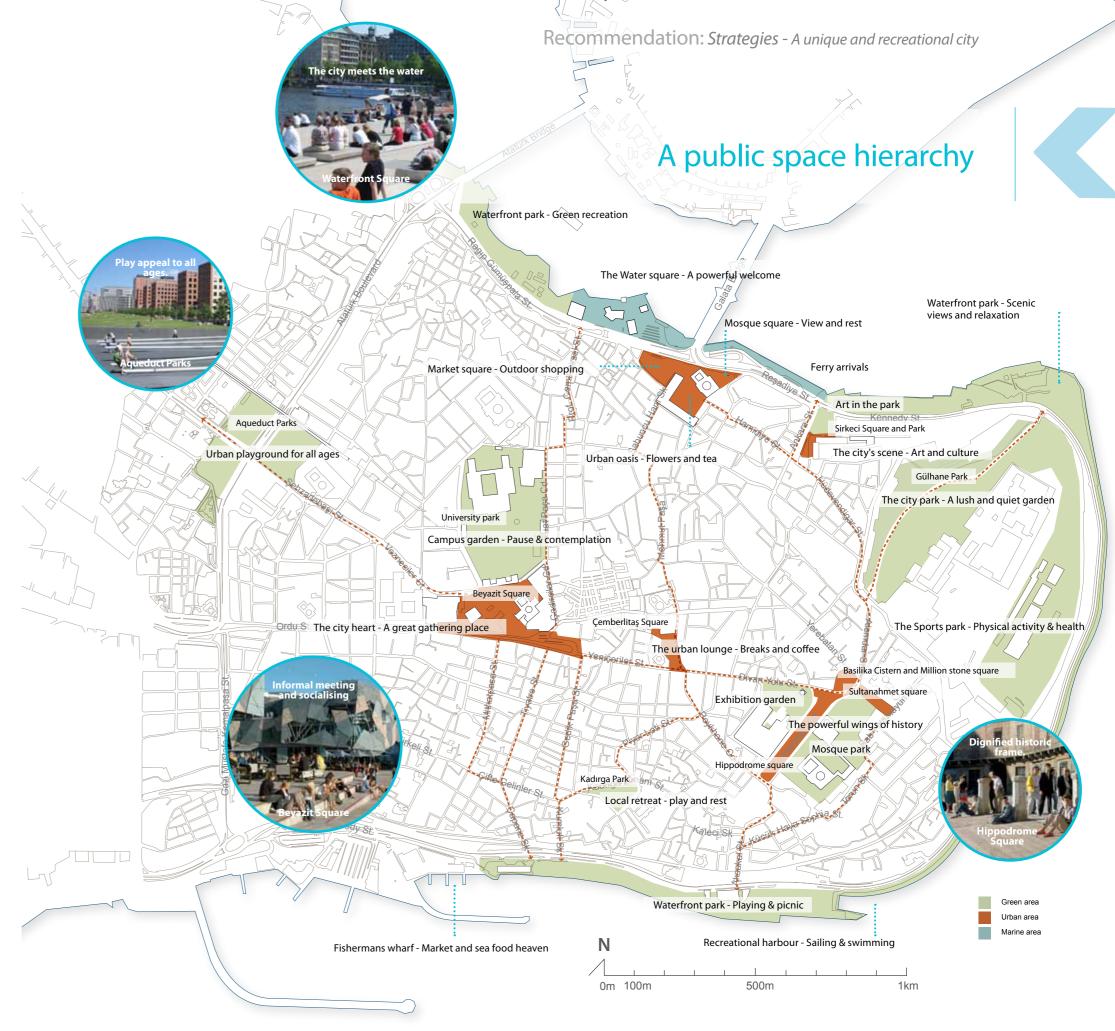
2. Lighting strategy

- a. Street lighting, how to support streets as vital thoroughfares also in the b. Square lighting programmes strengthening individual characteristics. Enabling a variety of events to take place. c. Building lighting, enhancing significant buildings, ornaments etc. d. Artistic lighting program telling stories from the past, or playfully
- Art strategy a. Strengthen the appearance of historical artefacts, statues, obelisks etc. b. Develop art strategies for important streets or squares, aiming at developing or strengthening specific characteristics. All art objects along a specific street are carefully developed by a selected group of artists and support each other and enhance the overall ambience of the place. c. Developing a vocabulary of art elements, that serve as dual functions, e.g. seating elements, pavillons, fountains, lighting, bicycle racks,

interpreting cultural patterns.

- drinking fountains etc. d. Introduce mural paintings on blank building gables to emphasise the story telling and to enliven the street ambience.
- 4. Street design manual Develop a catalogue of selected street furniture to be used in the main streets of the historic a. Street furniture, benches, lighting posts, rubbish
- b. Signage, road signs, wayfinding. c. Paving, different types of paving for various
- types of streets. d. Outdoor serving furniture, chairs, tables, umbrellas can be designed by the municipality to reach a certain quality level and even colour code. Furniture can be rented out as part of the licensing
- e. A commercial strategy, what types of signs and commercial elements are permitted. Is there a specific standard, that needs to be followed.

of outdoor spaces.





# Promote an integrated history

#### Celebrate history and monuments!

The peninsula holds an execptional variation of historical footprints composing vital foundation stones in the city composition. An enhanced visual profiling and a better integration with the surroundings should be developed to support the history and monuments as part of the experience of the historic peninsula, and making the history more accessible.

- Strengthen the monuments as powerful destinations and urban focal points.
- Improve accessibility to the monuments from adjacent public realm. Ensure connection to the pedestrian network.
- Enhance the spatial experience around monuments and historic buildings.
- Rethink layout of monument surroundings in terms of use and design. Remove parking from prominent locations nearby the monuments, e.g. the Blue Mosque, the Bozdoğan Aqueduct, and the Archaeological Park. Improve the recreational dimension and provide attractive public seating options.
- Upgrade visual contact and interface with the built structure and functions.
- Improve the story telling. Unfold and display stories related to the monuments in the public realm improving signage and communication.
- Accentuate the history and make it more accessible, intelligible and eventful. Locations could be the historic city walls and the archaeological excavations and reminiscences etc.
- Promote more interaction between the monuments and the surroudings to support a positive synergi. Let the monument surrounding introduce and transmit the fantastic interiors to the exteriors.
- Respect and support vistas to monuments.
- Bring out the hidden and forgotten! Create a comprehensive map of monuments and historic reminiscences. Develop a series of walking tours - '100 things you didn't know about Istanbul'.
- Develop programs for intriguing lighting of
- Introduce thematic routes to accentuate different experiences and link the city in new ways, e.g.

Sinan route (architecture), Han route (alternative shopping and workshops), food route (the Sultan's kitchen), mosque route (buildings, gardens and

- Celebrate the historic çeşmes and develop a long term plan for upgrading and restoration.
- Emphasise acces points.
- Remove parking from entrance to Gülhane Park. Investigate re-opening of closed gates to Topkapi
- Palace from the park. Investigate reopen gates and new openings in the
- outer palace wall from Alemdar Street.

- Address barriers walls and fences to Hagia Sophia to improve interface with surroundings and connect to city network.
- Remove parking and create new access points to the Blue Mosque
- Develop a zone of transition and create synergi between the Blue Mosque, the Mosaic Museum and the Arasta bazaar.
- Clear up the Hippodrome area and recreate a spatial interpretation of the historic hippodrome.
- Develop a more attractive and active interface to the Basilica Cisterns.
- Investigate new openings in the sea wall.
- Develop a route of adventure and experience along the sea wall. Upgrade spaces close to the

- Create a better connection to Little Hagia Sophia by upgrading network and providing new opening in the sea wall.
- Remove parking from Cemberlitas Square.
- Improve connection between Nuru Osmanyie Street and the Grand Bazaar.
- Enhance acces points to the Grand Bazaar and create focus to and from the city network.
- Clear up and make wall colonnade on Ordu Street reminiscenes stand out and more visible.
- Consider to open the university park to public during afternoons and weekends - using all four gates. Investigate possibility for public acces to Beyazit Tower.

- Upgrade and make access points gates more clear and inviting.
- Create a better connection to Beyazit Square.
- Clear up and remove parking from Beyazit Square create, develop attractive and active interface to surrounding building and functions.
- Clear up around the Spice Bazaar and create a better connection to the city network.
- Clear up and make sea wall reminiscenes at Ragip Gümüşpala Street more visible and accessible.

- Remove parking from aqueduct suroundings.
- Support acces and movement along the entire
- Make the archeological site a more accessible part of the park while unfolding the history of the site.
- Remove, limit or reorganise ajacent parking to reduce negative effect.

#### **Celebrate historic Hans!**

A significant structural element of the retail core of the historic peninsula is constituted by the Hans. The Hans are reminiscents of the past and hold a wonderful asset of calm and quiet along the busy streets in the commercial core.

Introduce a Han regislation aiming at preserving the existing Hans.

Map and study in detail the existing Hans to get an overview of exact location, architectural value, size, current use, current building state, current owner situation.

Publish a folder about the Hans for the wider audience to support the understanding of the value the Hans

Develop a programme of funding the preservation and upgrading of the Hans.

Encourage a residential programme for the Hans aiming at getting more residents to live in the central retail core by offering residences at upper floors of Hans.

Encourage greenery in the Hans.

Encourage multiple uses of the Hans for recreative, passive purposes as well as for events, outdoor serving

Make the Hans more legible from the retail streets by clearing entrance ways from signage, goods, rubbish and temporary building structures.

Recommendation: Strategies - A unique and recreational city Reinforced historic recollection Constantinople sea wall New Mosque Bozoğan Agueduct Archaelogical excavation Beyazit Nuru Osmaniye Mosque Grand Bazaar Beyazit Square Million ston Little Hagia Sophia Constantinople sea wall Important monument • • • • Colonade reminiscene Access point 0m 100m 500m

# Promote a great waterfront

#### The waterfront - a place for people

#### A public route and continuous walk



A place to walk and enjoy the view is an amenity to be appreciated by all ages throughout the seasons. New York, USA.



The waterfront promenade should allow strolling as well as exercise and cycling. Toronto, Canada.



A pavilion for different recreational use and temporary events like music, theatre performances or just for shade on a sunny day. New York, USA.



High quality public seating in the front row to the water. New York, USA.

#### Activating the water



Water activities add new dimensions to the public life and release the water's recreational potential. Copenhagen, Denmark



Public bathing establishment in a protected and intimate environment. Copenhagen, Denmark.



bring out pleasure and excitement to the

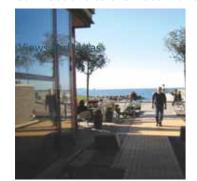


Opportunities to interact with the water



Steps and low level decking form an attractive access to the water's edge. Malmoe, Sweden

#### Connections to the waterfront



Well located view corridor provide an intriguing sight line to the water. Malmoe, Sverige.

#### Water references



A playful water square set the tone for a strong waterfront city identity. Lyon, France.



Water streams integrated in the street design compose characteristic clues thoughout the city. Freiburg Germany.



'Misty days' - steam as an artistic interpretation of water sparks the imagination.

# Ortak yaşam alanlarını daha cazip hale getirin

#### Recreation and enjoyment

#### Public seating - an accessible option



Public seating is a simple and convenient way to make streets more sociable. Sydney, Australia.



Well located benches are always sought! Forming a gentle and desirable gesture towards the city's users. New York, USA.



An intimate seating composition invite to a little resting time. Cordoba, Spain.



Organise some of the street furniture as talkscapes to allow for both groups and individuals. Brighton, UK.

#### High sitting comfort



Public benches for resting at regular intervals. Armrest and backsupport provide a high sitting comfort. Bilbao,

#### Movable and flexible



Moveable seating can change the streetscene and create a dynamic urban staying environment. New York, USA.

Portable chairs broaden the park's recreational potential offering a variety of choices. New York, USA.

Playful seating



Sitting sculptures invite for new experiences and enjoyment. Malmoe, Sweden.

#### Safe and accessible



An urban landscape priortising pedestrians encourage easy acces and safe movements. Sienna, Italy.

#### Pleasant microclimate



Sunlight and shade in a beautiful and pleasant balance bring out the recreational potential. New York, USA.



Windscreens provide protected places for staying at exposed locations. Barcelona, Spain.

Promote attractive public spaces

# Promote attractive public spaces

#### Strong urban space identity A powerful design concept



A powerful composition forms an inviting scene for city life and activities. Portland, Oregon, USA.



A square design based on strong contextual relations to built form and landscape. Venice, Italy.

#### Characteristic elements



Artistic elements for multiple purposes addi a strong visual character. Barcelona, Spain.

Iconic surfaces - a beautiful floor



Characteristic paving creating an unique experience. Lisbon, Portugal.

#### Hierarchy in use and sense

#### Large gathering and activity spaces - City wide attractions



A great meeting place framing large events and everyday meetings. Melbourne, Australia.



An urban space inviting for a wide range of side-by-side activities. Barcelona, Spain.

Strong urban elements make up focal points anchoring the stay in the public space. London, UK.

Intimate meeting places - Local retreats



A talkscape forms a local spot for socialising. Palma de Mallorca, Spain.



Green pocket providing a local pause in the urban landscape. Lyon, France.



Playground close to housing - playing is an important part of childrens daily life. Copenhagen, Denmark.

#### Soft and lively edges Activity and interaction



An open ground floor frontage creates a flexible transition allowing activities to flow outside. Brighton, UK.



Temporary extension generate a soft edge fine for staying. Berlin, Germany.



The build edge offers secundary places to rest, wait and stop enjoying the city life. London, UK.

#### Green enrichments

Climatic protection



Trees provide shade on a warm day and create a sheltered outdoor space.

## Soften the streetscape



A green area for activity and resting compose an attractive interspace in the urban structure. Copenhagen, Denmark.

# A green vision 500 ağaç...

Apply trees strategic to enhance green routes and spaces.

## Active landscapes



A playful landscape invites for exploration and activity. Malmoe, Sweden.

### Illuminating the city



An overall lighting system accommodating human scale creates a pleasssant streetscape. Lyon, France.



Lighting underlining movement and direction as part of an integrated urban space design concept. Copenhagen,

#### Artistic lighting



Poetic lighting creates a powerful urban 'carpet'. Lyon, France.

#### Temporary actions



Temporary lighting puts focus on specific buildings and urban spaces. Venice, Italy.

# Promote attractive public spaces

#### Delight and adventure

#### Art as invitations



Artistic elements as starting point for childrens investigation and play. Oslo, Norway.



Accessible art creates an stimulating and interactive environment. Paris, France.



Public art can invite to engagement on various levels. Paris, France.



Fountains make up a natural playful invitation to activity. Sydney, Australia.

#### Landmarks and focal points



An artistic 'landscape' add new dimensions to the park experience. Barcelona, Spain.



Art can bring focus to public spaces, buildings or special events. Bilbao, Spain.



Sculptures can form a simple base for enjoying city life. Copenhagen, Denmark.



Inspecting the city's cultural heritage - a temporary installation. Malmoe,

#### **Temporary initiatives**



For a period temporary art installations can bring new life to a 'forgotten' connection. London, UK.



Out door exhibitions may bring the public spaces into play defining a new identity. New York, USA.



Art can invite for both staying and dialogue. Melbourne, Australia.

# Promote an integrated history

#### Making history more visible and accessible

#### Paving communicates and interprets city stories



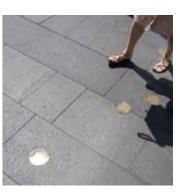
Outlines in the paving reflect the connection between the urban 'walls and floor'. Cordoba, Argentina.



A city map creates a reminder of the larger city context. Verona, Italy.



Grates covering sewers can be beautifully designed and share the stories of the city. Drammen, Norway.



The former coastline is marked in the paving indicating the actual point in time. Sydney, Australia.

#### New windows to history



Display of historic findings in an exposed excavation. Lyon, France.



Screens as wind protection and story teller. Melbourne, Australia.



A new connection is created through the city museum in the daytime. Amsterdam, Holland.

#### Staging of historic reminiscences



Structures of a former train station in a scenic composition with water and planting . Barcelona, Spain.



A regional history of coal and steel production can be experienced and tracked in a park with memory as an important aspect of the design. Duisburg, Germany.

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Currently the historic peninsula suffers from large areas of monofunctional and single character use.

- More mixed use and multifunctionality should be encouraged within the peninsula to support a better balance reducing the overcommercialisation and turist domination.
- · Introduce new public life generators in terms of more widespread and better distributed housing along with more culture and sport.

#### Capitalise on adjacent city functions!

The surrounding cultural, historical and educational functions could be celebrated to balance the present commercial dominance in most public spaces, and to refine and develop the public space identity and character.

- Allow nearby functions to spill over and add new layers to the public spaces. Let activities provide inspiration for new patterns
- Integrate local city functions in the public space layout to embed culture and history. Improve interface to surrounding functions.

#### Promote a 'safe' city!

A general perception of safety can be addressed by promoting people presence and inviting more people to spend time in the city both day and nigh to support 'passive surveillance' and 'eyes on the street'.

• One way to encourage 'eyes on the street' is to maintain a flow of people in the streets all day. An important aspect is to support an overlap of different activities in time and place. A network of active nighttime 'safe' routes linking to key detinations and public transport could be developed. New evening activites could be concentrated along these routes. Promote attractive ground floor frontages along 'safe' routes and avoid metal shutters closing

streets off at night.

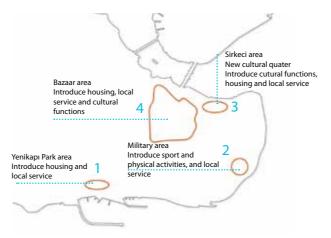
- Ensure a well-litt streetscape and a high level of maintenance.
- To encourage people to stay and pass through the Bazaar area at night is an important key to link the
- Divan Yolu Street status as the primary connection should be supported by enhancing active functions both day and night.
- The suggested frequently running tram lines support the 'safe' routes at night providing an

Develop focus areas and supply with more functions!

A range of focus areas have been identified to potentially supplement the historic peninsula with new functions to promote diversity and broaden the existing activity pattern.

- The area between Yenikapı Park and the railway is suggested used for new residential developments.
- The military area east of Topkapi is suggested used for public recreational purposes focusing on sport and informal physical activities for a variety of user groups also allowing for passive reacreation. Strong connections to links are vital.
- Railway grounds north and west of Gülhane Park are suggested developed to a new cultural quater with the Sirkeci station as a culture and contemporary art centre and Sirkeci Park as a sculpture park. The area could also include new residential developments - student housing.
- The Bazaar area require a broader user basis and a wider range of activities should be supplemented by functions supporting a lively city district both day and night. A long term plan for introducing a wider range of activities should be developed. As a step one student housing is suggested intgrated in the existing structures, on top of shops or possibly in the old Han complexes.

#### **FUTURE DEVELOPMENT PRINCIPLES**





# Promote a variety of activities

#### Create invitations and facilities for all user groups!

A diverse and attractive city should be open and inviting to people at all ages comprising many and varied activities to promote a good balance of users. Presently the central open spaces in the historic penisula offer only few invitations to stay, interact and enjoy the pleasures of the city.

- Develop versatile public spaces and make the city more intriquing and diverse.
- Provide multiple invitations for a wide range of users and make the public life more vibrant.
- Different types of public spaces should be identified to accommodate different use and activities - some fixed others more flexible.
- Develop public space programs ensuring a wide range of activities. Invite the missing city users: children, youngsters, women, elderly. Encourage integrated invitations for playing and physical activities in the public space design.
- Promote an overlap of activities and side-by-side activities to support a lively place inviting different usergroups at the same time.
- Unfold and accentuate the tourist experiences. Introduce more hands-on tourist offers and activities: kelim workshops, mosaic workshops, 'make your own lokum' etc.

#### Plan for various use!

The public spaces should provide invitations addressing both the various times of day as well as the different seasons, permanent and temporary.

- Plan and consider for '24-7-365' city life. It is important to consider the different aspects of the climate, change of season and day. Promote activity all day and all year round.
- Promote alternative use of the city spaces. More events and temporary use could contribute to create a more dynamic and surprising city

Introduce a formal outdoor market adjacent to the

Plan for both the necessary activities - the things people have to do - and the optional activities - the things people do because they feel like it.

#### Touch the water

Views and water access from low decks, stairs or floating elements. Public seating and outdoor serving and refreshments. Playful water elements.

#### Learning and exchange

Maritime museum: exhibitions and workshops. Outdoor activities: old boats and learning activities related to the city's maritime background - historic, cultural and geographic origin. Public seating. Outdoor study and reacretional facilities for students and staff at the university

#### Shopping and outdor serving

Farmers market and specialities. Public seating and outdoor cafes and restaurants

#### Scents, colours and pleasure

Flower market. Tea salons and outdoor serving, and public seating, Delightful planting

#### Pause and relaxation

Public seating, outdoor cafes and playful elements childrens play and scenic water and lighting features.

#### Student life and public recreation

Outdoor student and staff facilites for lunch, studying, a game of chess or petanque. A relaxing green lung with public acces. A place providing interchange between education and public life.

#### **Events and socialising**

The city heart. A large gathering space for events, festvals and meetings but also offering public seating and more intimate places for conversing and outdoor cafes. Places for children to play and adults to socialise.

Playgrounds and adventures for all ages - swings, clim-

bing walls and interative water element relating to the aqueduct. Playful public seating.

#### Performance and art

Culture and contemporary art centre - incubator and ideastore. Stage for outdoor performance - theatre, music and dance. Outdoor contemporary art exhibitions - sculptures and art installations. Public seating and outdoor cafes. 'The Orient express' hotel in old train

#### Peace, rest and culture

A quiet green heaven, flourishing with trees and flowers - land art, childrens play and cafes. Closely related to the original historic and cultural surroundings.

Outdoor Islamic art exhibitions. A new hippodrome staging the history - annual racing event, skating in the winter, urban exercise and childrens play. Public seating, outdoor cafes and restaurants. Historic and religious celebrations and intriguing communication to visitors.

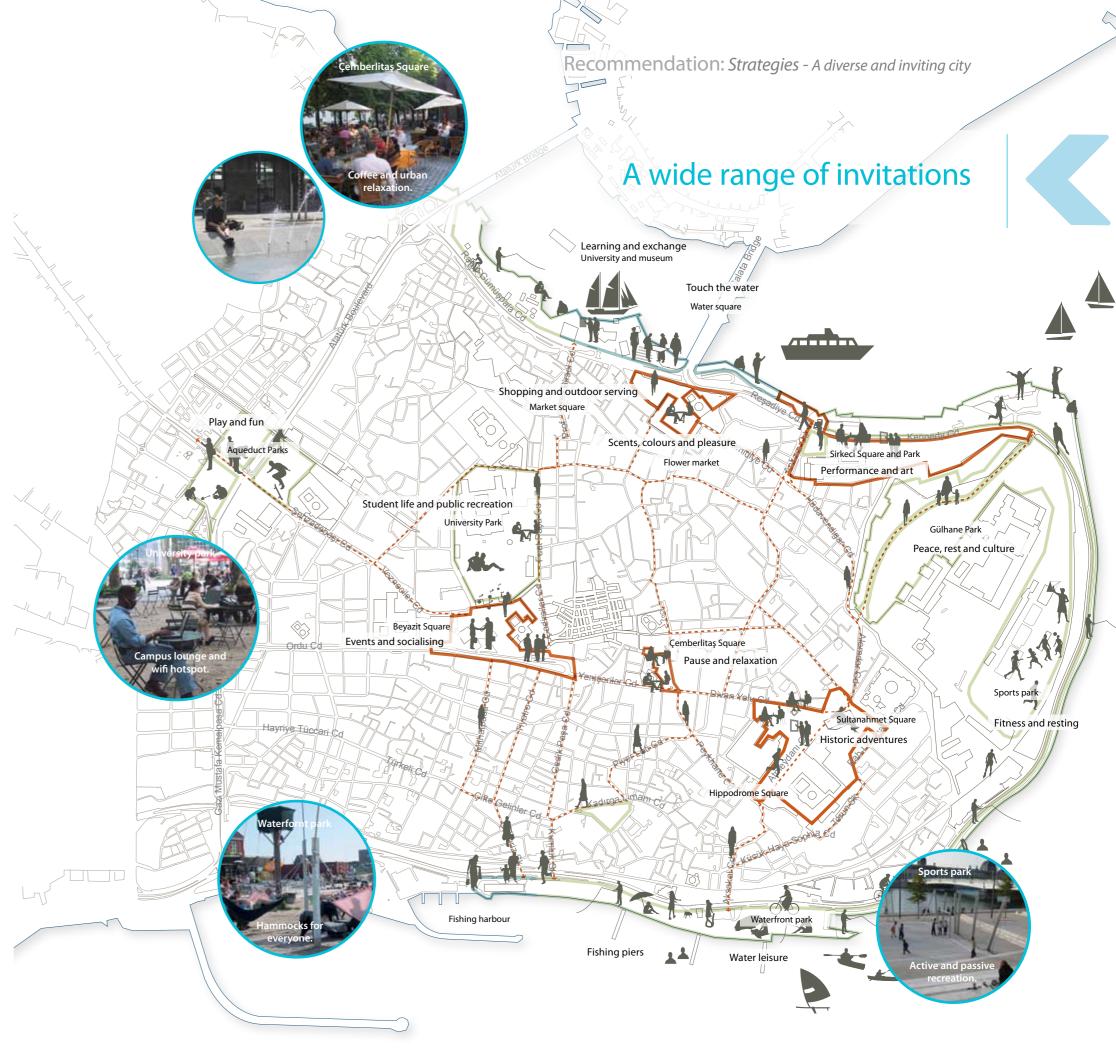
#### Fitness and resting

Physical activities for all ages - sport fields and fitness tracks. Public seating and places for rest and relaxation.

#### Water leisure

Watersport facilities: windsurfing, kayak, diving. Marina for small sailboats - private and rental. Fishing piers and angling service facilities. Barbeque facilities' and outdor cafes. Potected public bath for adults and shielded rockpools for children. Childrens play and adventure.

An active fishing harbour accessible for people to visit and watch. A seafood heaven with fish market, cafes and resaturants, and public seating.



# Promote multifunctionality

# Promote a variety of activities

#### Mixing functions and activities

Feeling of safety



Public ground floor activities at night generating coming and going support a lively city. Copenhagen, Denmark.



Housing and housing related functions promote active streets.

Copenhagen, Denmark.



Visual contact between outside and inside support a feeling of presence and safety. Malmoe, Sweden.



Kiosks and street vendors make the streets populated as well as providing services to passers-by. New York, USA.

#### Creating 'eyes on the street'



Housing provide presence and lights in windows at night. Malmoe, Sweden.



Transparent and weel lit ground floors along key routes stimulate the walking. environment. Copenhagen, Denmark.



Outdoor reading rooms in connection to libraries, museums and universities add new dimension to the public realm. New York, USA.



Students - studying and living - bring dynamism and colouring to urban spaces. San Francisco, USA.

#### Side by side activities - active and passive recreation, sport and playgrounds...



Sporting facilities close to housing enrich both. Hamburg, Germany.



Playground providing invitation to more agegroups. Copenhagen, Denmark.

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A good balance between different types of activities. Copenhagen, Denmark.



Quiet reflection in a peaceful environment. New York, USA.

#### Diverse invitations to attract all user groups

#### Creating a good balance inviting all ages



Nice places to sit, meet and watch other people, enjoy the sun, flowers and beautiful details attract most elderly people.



Physical activitiy and new ways to engage with the public realm stimulate youngsters. Copenhagen, Denmark.



Playground integrated in the urban environment support an overlap and mix with other users of the city. Copenhagen, Denmark.



A flexible, robust and careful layout of the urban spaces can allow for a multitude of activities and different users.

#### Temporay use and events



Exhibitions can add a new dimension to the public space bringing new knowledge and excitement to the visitors. Copenhagen, Denmark.



A wide range of activities can take place in the public realm to the delight of both participants and bystanders. Copenhagen, Denmark.



of the city's museums, galleries, theatres and educational institutions. Copenhagen, Denmark.



Events and festivals can dress the city in colours and light on special occasions.
Barcelona, Spain.

#### Planning for the time and season



Inviting people around the clock is one of the keys to interesting and active city life. Melbourne, Australia.



Evening and night activities stage the urban spaces after closing hours. Copenhagen, Denmark.



ban Blankets at cafes is an easy way to extend the season for outdoor seating. Copenhagen, Denmark.



Activating the urban spaces all year round based on the unique qualities of the season. Copenhagen, Denmark.





## Method

The purpose of the public life studies was to examine how public spaces are used. Providing information on where people walk and stay either as part of their daily activities or for recreational purposes.

#### Method

The method for collecting this information has been developed by GEHL Architects and used in previous studies world wide, for example in New York, Sydney, Perth, Melbourne, Adelaide, Wellington, Christchurch, London, Copenhagen, and a number of provincial cities in UK and Scandinavia.

The surveys took place during summerdays with fine sunny weather in July 2011 and during a day out-of-season in November 2011.

The data was collected on weekdays (Tuesday /Thursday, Friday), a Saturday and a Sunday - selected location.

#### Data collected

Pedestrian traffic

Staying activity (behavioural mapping)

Age and gender

**Study locations** 

The positions for the pedestrian traffic countings have been chosen to provide the best possible overview of the pedestrianflows.

The areas for recordings of staying activities are equally chosen with the intention to achieve knowledge of the study area as a whole.

#### **Pedestrian traffic counts**

As vehicular traffic volume data is typically available, pedestrian traffic counts have been conducted to provide comparable figures for pedestrian usage, allowing for a clearer understanding of how street usage is prioritised. Pedestrian traffic counts are also essential in understanding the hierarchy of streets, as well as how pedestrian usage varies throughout the day and evening hours.

The pedestrian traffic counts were carried out at selected locations by counting pedestrians for

10 minutes every hour beween 8 am and 10 pm. The count results were subsequently extrapolated to produce an hourly estimate.

#### Stationary activity surveys

Activity mapping essentially is a snap shot of 'staying activities' occurring in carefully chosen public spaces, at a given time. Mapping was carried out in selected locations every second hour between 10 am and 8 pm.

Activities recorded include, but are not limited to, sitting on benches, physical activities such as children playing, as well as commercial activities, such as buskers or sidewalk merchants.

The number of people and type of activity was registered on a map (standing, sitting, playing, selling...) and the various types of activities were subsequently consolidated.

Survey dates and conditions of the surveys:

Thursday, July 15, 2011, 8 am to 10 pm.
Weather: Fine, sun, 30-35 degrees C.
Friday, July 16, 2011, 10 am to 8 pm.
Weather: Fine, sun, 30-35 degrees C.

(Age and gender survey)

Saturday, July 17, 2011, 8 am to 10 pm.

Weather: Fine, sun, 30-35 degrees C. Sunday, July 18, 2011, 8 am to 10 pm.

Weather: Fine, sun, 30-35 degrees C.

Tuesday, November 2, 2011, 8 am to 10 pm.

Weather: Fine, sun, 18-20 degrees C.

#### Pedestrian counts locations:

- A. Galata Bridge
- B. Ragip Gümüspala Street (pedestrian underpass)
- Reşadiye Street
- D. Hüdavendigar Street
- E. Büyük Postane Street
- F. Ankara Street
- G. Alemdar Street
- H. Dalbasti Street
- I. Akbıyık Street
- J. Waterfront promenade
- K. Kennedy Street
- L. Çapariz Street
- M. Yeniçeriler Street
- N. Nuru Osmaniye Street
- O. Çadircilar Street
- P. Ordu Street
- Q. Vezneciler Street
- R. Havlucu Street
- S. Adnan Menderes Vatan Boulevard east
- T. Adnan Menderes Vatan Boulevard westU. 10. Yıl Street
- V. Sulukule Street
- v. Sulukule Street

#### Staying activity survey locations:

- 1. Waterfront square Ragıp Gümüşpala Street
- Spice Bazaar square
   Yeni Mosque square
- 4. Beyazit Square
- Ordu Street
- 6. Ordu Street Bus terminal
- 7. Waterfront park
- Sultanahmet Square Sultanahmet Park
- 0. Blue Mosque Park
- 11. Theodosian Wall Park
- 12. Sikeci Station forecourt and SirkeciPark
- Million Stone Park
- 14. Hippodrome Square

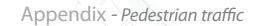




# Pedestrian movement on a summer weekday Pedestrian movement on a summer weekday

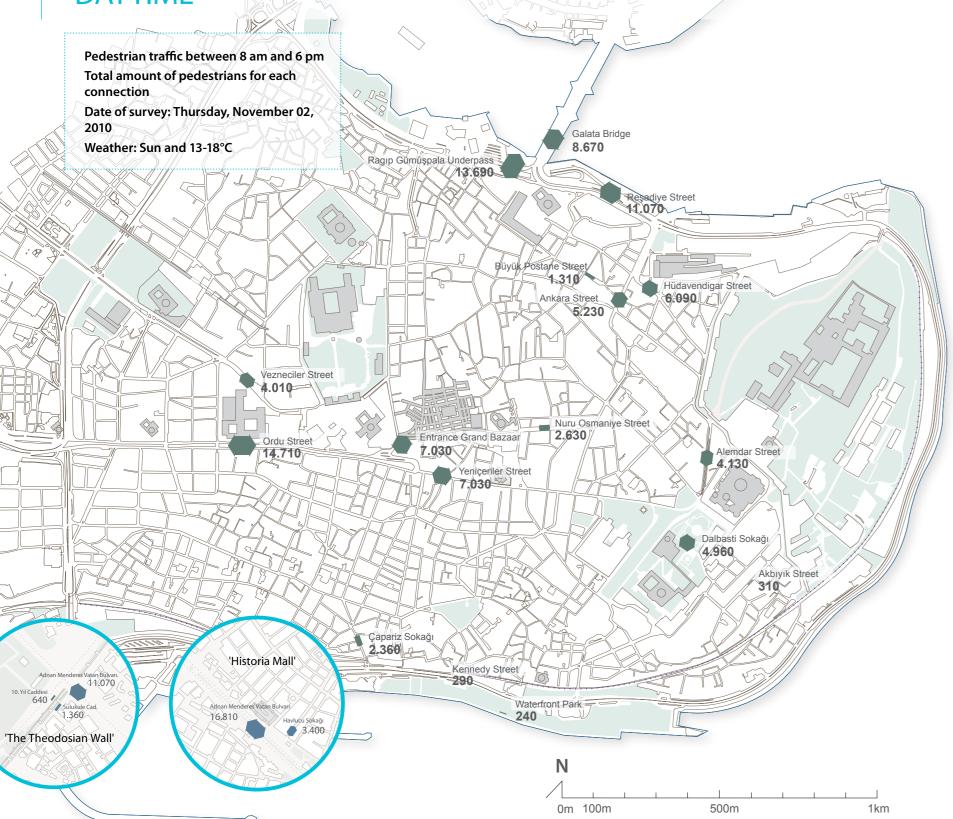


Appendix - Pedestrian traffic

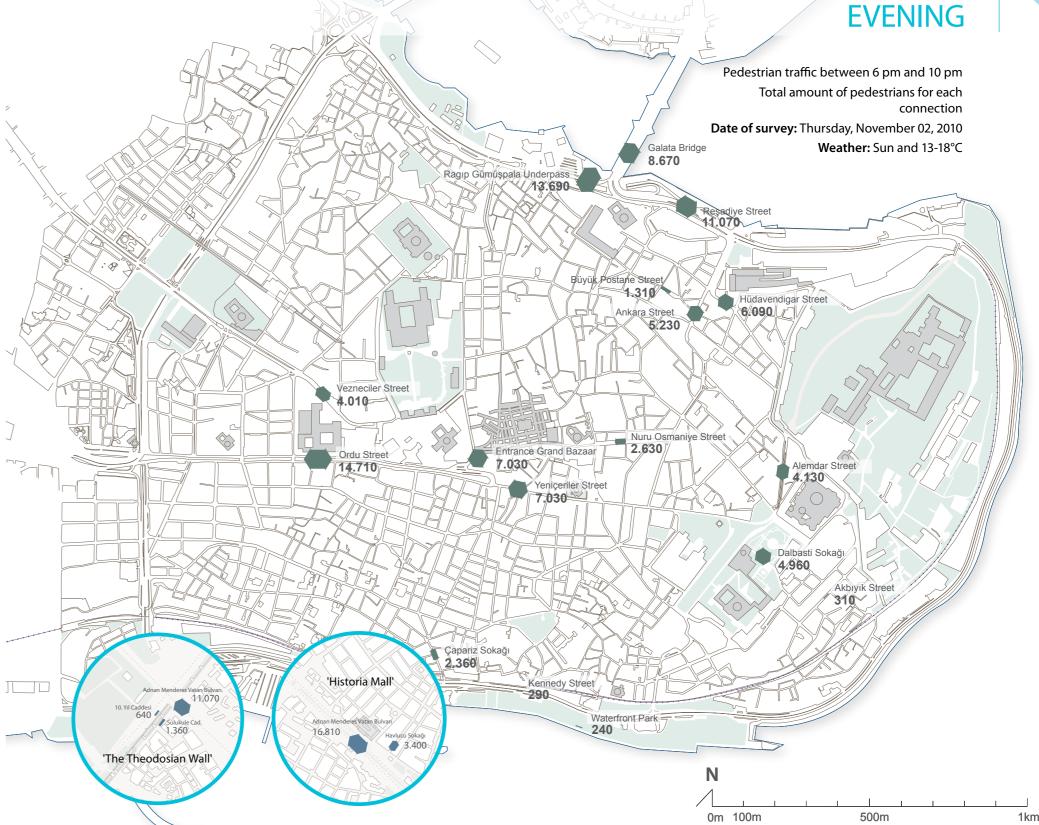


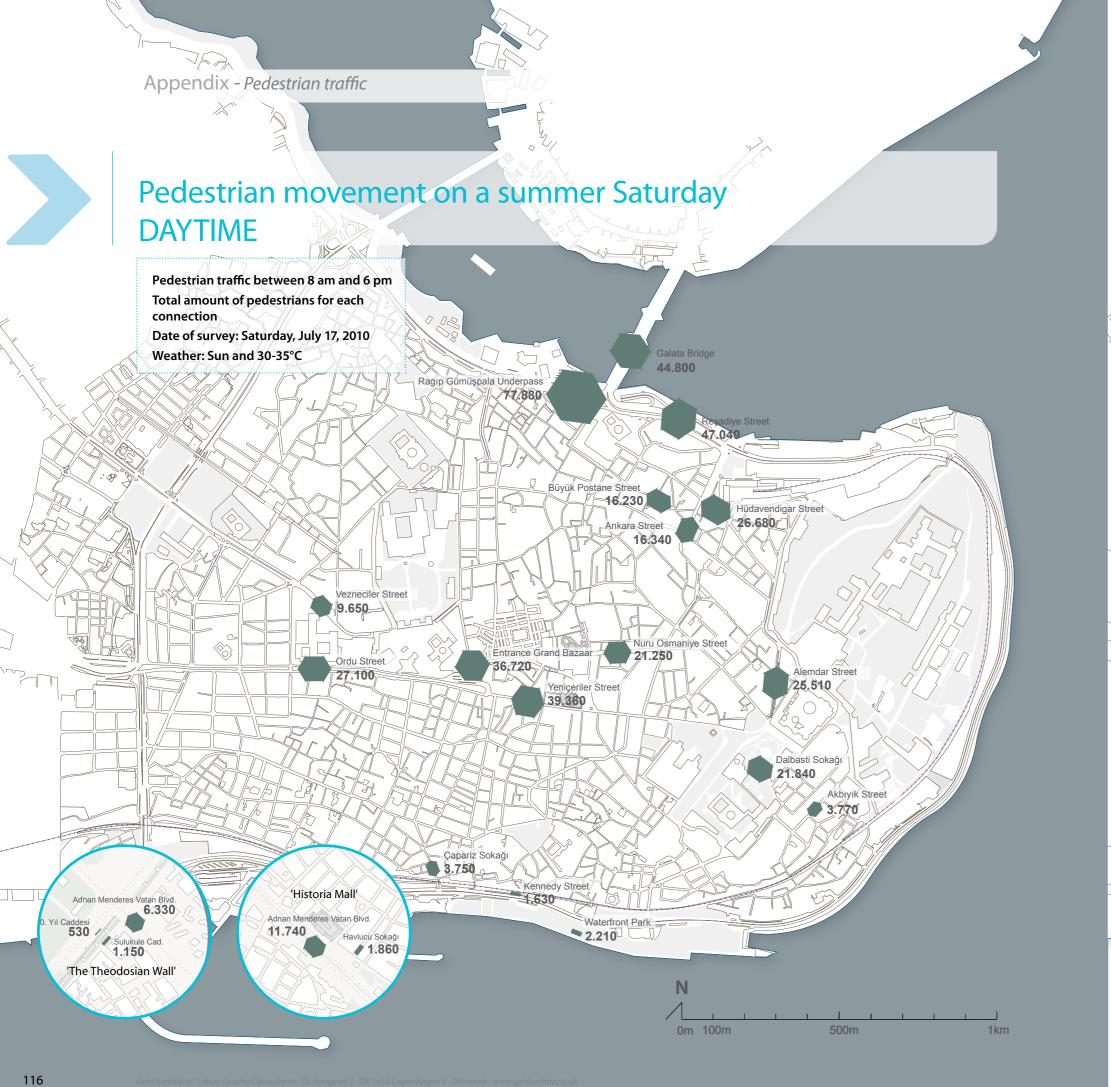
## Appendix - Pedestrian traffic

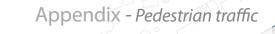
# Pedestrian movement on a weekday out-of-season DAYTIME



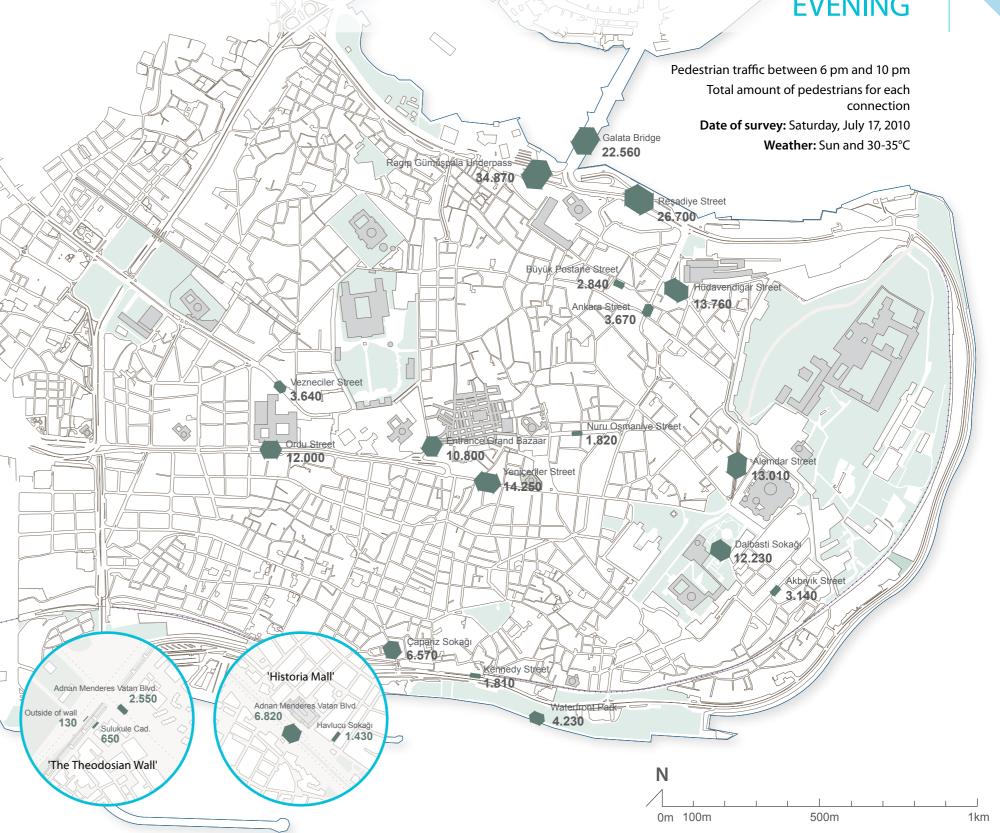
# Pedestrian movement on a weekday out-of-season







# Pedestrian movement on a summer Saturday **EVENING**



#### ISTANBUL PUBLIC SPACES AND PUBLIC LIFE



GEHL ARCHITECTS
URBAN QUALITY CONSULTANTS