GEOGRAPHY STAGE 6 URBAN PLACES

MEGA CITIES

ISTANBUL – ASIAN AND EUROPEAN CITY

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Macquarie University

DO YOU KNOW? FACTS ABOUT TURKEY:

<table>
<thead>
<tr>
<th>OFFICIAL NAME</th>
<th>Turkiye Cumhuriyeti</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPITAL</td>
<td>Ankara</td>
</tr>
<tr>
<td>LARGEST CITY</td>
<td>Istanbul</td>
</tr>
<tr>
<td>MAIN RELIGION</td>
<td>Islam</td>
</tr>
<tr>
<td>TURKEY</td>
<td>Developing Country (Classified by the Development Assistance Committee of OCED)</td>
</tr>
<tr>
<td>ISTANBUL</td>
<td>Mega city (Classified by United Nations)</td>
</tr>
<tr>
<td>HUMAN DEVELOPMENT INDEX</td>
<td>0.717 (Rank 73 out of 173)</td>
</tr>
</tbody>
</table>

OUTCOMES:

Students at the end of the topic on a mega city will be able to:

- Explain the changing nature and character of a mega city
- Investigate and communicate the challenges and the responses to those challenges for people living in a mega city
- Use a variety of geographical skills to describe patterns, linkages, networks, contemporary urban issues and changes in a mega city
- Interpret trends from statistics about the growth of a mega city
- Investigate the implications of infrastructure, health and social issues on a rapidly growing mega city
- Understand the relevance of a geographical understanding of a mega city to vocations such as urban planning, designing effective city infrastructure, preserving heritage sites, monitoring environmental quality and ecological sustainability
- Evaluate the impacts of, and responses of people to, environmental change
- Plan geographical inquiries to analyse and synthesise information from a variety of sources
- Evaluate geographical information and sources for usefulness, validity and reliability
- Apply maps, graphs, statistics and photographs to analyse and integrate data in geographical contexts

1. INTRODUCTION

Istanbul is the ‘heartbeat of the Turkish spirit’. The stereotypical image of Istanbul conjures up media generated images of harems and sultans, oriental splendour, mystery and intrigue. These inaccurate stereotypes have been replaced by a democratic, secular, rapidly modernising and western-oriented free enterprise city. These changes to the nature and character of Istanbul can be attributed to Kemal Ataturk, founder of the Turkish Republic in 1923. Under his economic and social reforms polygamy was abolished and the fez (hat worn by men), acknowledged as a sign of Ottoman backwardness, was prohibited (1925). Islam was removed as the state religion; new western-style legal codes were instituted; civil, not religious, marriages introduced (1926); and women obtained the right to vote and serve in parliament (1934). In 1923 Ankara replaced Constantinople as capital city of Turkey and in 1930 Constantinople was renamed Istanbul.
Istanbul, a dynamic mega city with a population of about 12 million, is Turkey’s largest primate city (see dialogue box). As Turkey has a history spanning 3,000 years, its nature and character has changed over time. Robbed of its importance and wealth as the capital of the vast Ottoman Empire it is today reassuming some of its former glory and fast becoming the ‘capital’ of eastern Mediterranean Asia.

PRIMATE CITY
A primate city outranks all other cities in that country in terms of population, commercial activity and industrial output. Population of major cities in Turkey include: Istanbul 12 million, Ankara 3 million and Izmir 2 million.

Because Istanbul is a multi functional city and possesses a diversity of facilities it attracts a disproportionate share of the population and economic growth of Turkey. Istanbul’s increase in wealth has been at the expense of smaller centres in Turkey.

2. SITE AND SITUATION
Istanbul is located at 41.02°N, 28.57°E on both the European and Asian sides of the Bosphorus Straits. It is bordered to the south by the Sea of Marmara. The European side of the city is further divided by the Golden Horn into Old Istanbul to the south and New Istanbul to the north (Refer to Map 1, page 7).

The topography of Istanbul was formed at the end of the last Ice Age, when melt waters created the Bosphorus Straits. These straits connect the Black Sea to the Sea of Marmara and are 32 km long, 500m – 3km wide and 50 – 120m deep. In the past the Bosphorus provided a naturally defensive site as Asian armies stopped on the eastern side and those from Europe stopped on the western side. Today this has given both sides of the Bosphorus Straits different characteristics, as the east side is more Asian and the west side more European.

Istanbul experiences a Mediterranean climate with warm dry summers followed by cool wet winters. Average temperature in January is 6.7°C with 104.5mm of precipitation, compared to June, with 23.3°C temperature and 21.4mm precipitation. Average annual precipitation is 700.4mm and average annual temperature 14.6°C. This moderate climate is suitable for urban living and tourism during summer when temperatures are mild and sunshine is plentiful (Refer to Climate Graphs 1, 2 & 3).
GRAPH 1.

GRAPH 2.
3. NATURE AND CHARACTER OF ISTANBUL

Humans have altered the ‘nature’ of Istanbul over time and the long-term impacts have led to unsustainable growth. In the study of human–environment relationships, Glacken (1967) stated that cities are examples of nature dominated by humans. Chorley (1973) questioned “to what extent is it proper to regard man as part of nature or standing apart from it”? Less (1972) added social relations, a key historical dimension to the concept of nature, such as social domination (Ottoman period) and social liberation (Ataturk reforms since 1923).

The ‘character’ of Istanbul includes the interaction of the biophysical, social, cultural, historical, technological, economic, political and environmental features that have changed over the last 3,000 years.

4. PAST INFLUENCES ON NATURE AND CHARACTER OF ISTANBUL TODAY

The diverse nature and character of Istanbul today is an outcome of its history. The mixture of Eurasian architecture, religions and culture is today still evident because the city links both Europe and Asia and was the capital of Byzantine, Roman, and Ottoman Empires. At first the city was called Byzantium, after the legendary Byzas, leader of the Greek colonists who established a fishing settlement on the natural harbour of the Golden Horn in 667BC. After its capture by Constantine the Great in 324AD it became the new capital of the Roman Empire and was renamed Constantinople. Eventually this city became the most civilised and wealthiest city in the world until its decline after the Fourth Crusade in 1204. The Ottoman Turks then conquered Istanbul in 1453, when Sultan Mehmet 11 entered Constantinople after a 54-day siege. Populations from all over the Ottoman Empire immigrated to Istanbul, resulting in a cosmopolitan urban society of Jews, Christians and Muslims. Throughout the 19th and 20th centuries, the Ottoman Empire steadily lost territories and after WW1 Istanbul was occupied by victorious French and British troops. The peace treaties rewarded the victors with Ottoman territory and as a result stimulated Turkish nationalists to take over from the sultan. This led to an ambitious program of political and social change by Kemal Ataturk. In 1922 the sultanate was abolished and Turkey became a republic in 1923.
5. CHARACTER CHANGES - ISTANBUL INVADED BY COUNTRY FOLK

The character of Istanbul is determined by its past as well as its present population. The city has a predominantly young population (94% under 65 years) and has experienced high rates of urban growth and urbanisation since the 1950s (Refer to Tables 1, 2, 3 & 4).

**TABLE 1. DEMOGRAPHY OF TURKEY**

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>AVERAGE ANNUAL POPULATION CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,810,000 (1950)</td>
<td>1975 – 1980 2.09%</td>
</tr>
<tr>
<td>27,500,000 (1960)</td>
<td>1985 – 1990 2.08%</td>
</tr>
<tr>
<td>55,870,000 (1990)</td>
<td>1995 – 2000 1.63%</td>
</tr>
<tr>
<td>61,580,000 (1995)</td>
<td></td>
</tr>
<tr>
<td>68,200,000 (2000)</td>
<td></td>
</tr>
<tr>
<td>87,700,000 (2025)</td>
<td></td>
</tr>
<tr>
<td>URBANISATION</td>
<td>30% (1960) 61% (1991) 74% (2000)</td>
</tr>
<tr>
<td>URBAN POPULATION ANNUAL GROWTH</td>
<td>4.9% (1960-1991) 3.7% (1991-2000)</td>
</tr>
</tbody>
</table>

**TABLE 2. CITIES IN TURKEY WITH AT LEAST ONE MILLION INHABITANTS 1999**

<table>
<thead>
<tr>
<th>% OF TOTAL POPULATION</th>
<th>NUMBER OF CITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960 12.9%</td>
<td>4</td>
</tr>
<tr>
<td>2000 23%</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 3. AVERAGE ANNUAL POPULATION CHANGE IN TURKEY 1960 – 2000**

<table>
<thead>
<tr>
<th>URBAN</th>
<th>RURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.9%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

**TABLE 4. PERCENTAGE OF POPULATION IN AGE GROUPS 1999**

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 15 years</td>
<td>34%</td>
</tr>
<tr>
<td>15-65 years</td>
<td>60%</td>
</tr>
<tr>
<td>Over 65 years</td>
<td>6%</td>
</tr>
</tbody>
</table>

When Turkey was proclaimed a republic in 1923, the government initiated a process of rapid modernisation, resulting in employment in secondary industry in Istanbul. This led to rural-urban migration as rural Turks ‘pushed’ by poverty were attracted to the ‘pulls’ of the city such as jobs, higher educational facilities, specialist doctors, entertainment and cultural activities (Refer to Table 6). This high rate of urban growth led to:

- Suburbanisation, as the city now spreads westwards beyond the airport 23km from the CBD, northwards halfway to the Black Sea and eastwards into Anatolia.
- Pseudo-urbanisation, as infrastructure could not keep pace with increasing population, such as in Beykoz (see dialogue box).
CHANGING NATURE OF THE URBAN VILLAGE BEYKOZ

Beykoz, located on the Asian side of Istanbul towards the Black Sea, was originally a fishing settlement then later in Ottoman times it was a place where sultans spent their summers. In the 1970s the Beykoz borough, with a population of 80,000, had the unsightly sprawl of squatters’ shacks in 5 of its 15 subdistricts. The settlements were called gecekondus, or ‘birds that come to roost during the night’. Over time these rural-urban migrants seldom left their hastily built homes and instead added onto them.

The rate of rural-urban migration was so fast that the municipal government could not keep up with the demands for housing, water, power supplies and sanitation services. The poorly paid residents had insufficient money for nutritious food, education for children and payment of medical services. This led to a gap between the rich and poor, as their quality of life was lower than the wealthier suburbs located around the Bosphorus Sea. Many discontented residents lobbied Mayor Atabey for better roads, water and refuse collection. Today these areas have adequate facilities and many squatter homes have been replaced by new high-rise apartments.

Istanbul’s character today is not only dependent on its national but also its international hinterland. As Turkey has a strong agricultural base Istanbul is linked to its rich hinterland that provides wool, cotton, wheat, sugar beet, hazelnuts, tobacco, fruit and vegetables for the urban market. It is also a dependent city in the global hierarchy with important links to the rest of the world through trade, migration, currency, stock exchange, tourism, overseas banks, embassies, consulates, television, movies, books, post, telephone, fax, email, ATMs and Internet cafes.

QUESTIONS

1. Research.
   • Compare these statistics with Australia (a developed country) and one other developing country.
   • Urbanisation in the ancient world received its greatest boost with the rise of the Roman Empire. Is this true? Give reasons for your answer.
2. From the statistics give evidence of increasing urbanisation and urban growth in Turkey.
3. Is there any evidence of rural-urban migration from these statistics? Give reasons for your answer.
4. List the reasons for lower average annual population change in rural areas compared to urban areas in Turkey.
5. Describe the changes to the population in Turkey and how they would affect urban infrastructure.
6. Today, people move to the city, often referred to as the ‘bright lights syndrome’. What does this mean?
7. What is a primate city?
8. Istanbul has a young population, with increasing demands on infrastructure. What type of infrastructure should be planned by the city council now?

6. THE COMPLEX CHARACTER OF ISTANBUL THE MEGA CITY

   Istanbul is Turkey’s leading centre of population, commerce, education and culture. It is a
dynamic multi functional city with port, CBD, industrial, retail and administrative areas as
well as a variety of residential suburbs (old, new, poor, rich). This residential differentiation
is related to the different socio-economic status of inhabitants and is expressed in the size and
style of dwellings and grounds in which they are set. Differentiation results in the
development of wealthy and poor suburbs. With high population growth and density most
people live in high rise apartments with no surrounding grounds. High rates of urbanisation
have led to major problems of urban blight, inadequate housing, traffic congestion and
inadequate infrastructure, with narrow roads and broken footpaths. Evidence of haphazard
urban planning and redevelopment appears piecemeal because of the pattern of ownership of
land.
The diversity of new and heritage architectural features in Istanbul illustrates a colourful, growing city. From old palaces, mosques, churches, museums and aqueducts, to modern 5 star hotels, apartments, offices, restaurants and suspension bridges, provides the growing tourist industry with an interesting streetscape.

Istanbul, as a fast growing, diverse city with a distinctive, unique character, is divided into Old European Istanbul, New European Istanbul, Asian Istanbul, Western Districts, Golden Horn, Bosphorus and Princes’ Islands (Refer to Map 1and Table 5).

**TABLE 5. THE DIVISIONS OF ISTANBUL**

<table>
<thead>
<tr>
<th>EUROPEAN ISTANBUL</th>
<th>ASIAN ISTANBUL</th>
</tr>
</thead>
<tbody>
<tr>
<td>West side of Bosphorus</td>
<td>East side of Bosphorus</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>ESKİ1</td>
<td>BEYOĞLU</td>
</tr>
<tr>
<td>OLD CITY</td>
<td>NEW CITY</td>
</tr>
<tr>
<td>South of Golden Horn</td>
<td>North of Golden Horn</td>
</tr>
<tr>
<td>Narrow streets, old buildings</td>
<td>Taksim Square, shopping street (İstiklal Caddesi)</td>
</tr>
<tr>
<td>Topkapi Palace, Blue Mosque</td>
<td>new five star hotels,</td>
</tr>
<tr>
<td>Hagia Sophia, hippodrome,</td>
<td>luxury offices, banks,</td>
</tr>
<tr>
<td>Grand bazaar, Archaeological</td>
<td>hospitals, consulates,</td>
</tr>
<tr>
<td>Museum, old Ottoman wood</td>
<td>high rise apartments</td>
</tr>
<tr>
<td>Houses, University, Caravanserai</td>
<td>such as Uskudar</td>
</tr>
</tbody>
</table>

**LINKAGES**

- e.g. Galata Bridge Ferries
- e.g. Bosphorus Bridge Ferries

For a more comprehensive map of Old European Istanbul, refer to the web site: [http://www.lonelyplanet.com/mapshells/middle_east/istanbul/istanbul.htm](http://www.lonelyplanet.com/mapshells/middle_east/istanbul/istanbul.htm)
A. OLD EUROPEAN ISTANBUL

The Old European part of the city was originally an ancient fishing village from 1000 – 657BC but today it is the location of Topkapi Palace, a popular tourist site. The nature and character of the city dates back to when Istanbul was a Byzantium, Greek city-state, from 657BC – 330AD and Constantinople, the ‘New Rome’, capital of the Byzantine Empire 330 – 1453AD. At its height, around 1200AD, there were 400,000 inhabitants, population density relatively low, and there was space within the city walls for orchards and fields. The city extended as far as the Walls of Theodosius, which withstood countless sieges until the Ottoman conquest of the city in 1453 (See Sketch 1). Daily life centred on the market squares and scarce fresh water was met by an advanced network of aqueducts and underground cisterns.

Sketch 1.

Little has changed to the character of Old European Istanbul with its old narrow cobbled streets and restored palaces, churches, mosques, universities and bazaars - but their functions have changed. This mega city is now facing the challenges of living in the 21st century with the effects of increasing population mostly from high rural-urban migration. This has led to increased demands on homes and infrastructure, such as schools, hospitals, transport, telephone, water, sewerage and electricity facilities. These changes have resulted in improvements in the quality of life of the population with increased life expectancy and decreased infant mortality rates.

Modern transport technology, such as trams, buses, cars and trains clutter the streets which originally only catered for walking and horse and carts. Urban decay still exists but there has been renewal with demolition of some old homes and construction of high rise apartments, hotels, retail and commercial areas. Some restored Ottoman homes have been converted into hotels and expensive restaurants, such as the Four Seasons. Internet cafes, belly dancing shows, the bazaar with cheap leather goods, gold jewellery and iznik pottery caters primarily for tourists. Socially the city has changed since 1924 when Ottoman titles were abolished as the Ottoman social structure divided people into privileged ruling class and tax paying subject
population. There is evidence that the city has married the old with the modern but its purpose has changed from the original settlement to a popular tourist area.

The old city formed in ancient Byzantium and Constantinople era is divided into Seraglio Point, Sultanahmet and the Bazaar Quarter.

- **Seraglio Point** located on a hilly wooded promontory marks the meeting of the Bosphorus Straits and Sea of Marmara. At this location between 1459 and 1465 the magnificent, opulent Topkapi Palace was built (see dialogue box). This palace was the residence of the Ottoman sultans and their harems for 400 years but today is a popular tourist site. Behind the palace are 19th century Ottoman wooden houses that have been restored as hotels for tourists. While the law forbids their demolition, it is difficult to obtain insurance on these buildings as Istanbul has experienced fires and earthquakes.

![TOPAKI PALACE](image)

Topaki Palace is a memorial to the opulence of Ottoman royalty. Here is housed the sultans 86 carat diamond, as well as jewel encrusted cribs and swords. The kitchen was used to prepare 6,000 meals a day. In the harem hundreds of concubines waited to be selected by the sultan. But work was not without problems. Legend states that a 17th century sultan Ibrahim the Mad once ordered 10,001 members of the harem to be weighted and thrown into the sea.

- Beside Seraglio is the **Sultanahmet** with the famous Blue Mosque (Six minarets, blue iznik tiles, built between 1609 and 1616), Hippodrome (chariot racing stadium built by Romans in 22AD), Basilica Cistern (Byzantine water cistern built in 532AD) and Hagia Sophia (Byzantine architecture over 1,400 years old). The restoration of historic buildings in this area, subsidised by the government and tourism, gives the city its unique character.

- **The Bazaar Quarter** has always been important as trade linked the continents of Asia and Europe. It still remains the centre of commercial activity in the old section of the city. The two main areas today are:

  The covered **Grand Bazaar**, built around 1453 along a labyrinth of 83 streets, has over 500,000 people passing through daily. The bargaining is intense amongst the 4,000 shops with 500 specialising in gold jewellery. Jewellers, mostly Jewish, help buttress the city’s economy, since Turks traditionally choose gold as gifts for weddings and circumcisions.

  The **Spice Bazaar** built in early 17th century with money paid as duty on Egyptian imports, specialises in spices from the orient. It is a place of wonderful smells with bins overflowing with edible roots and herbal medicine. There are even snake skins to be burned as incense to ward off evil spirits. Most of the shops have been in the family for generations but many of the young, educated youth are not as interested in carrying on the family tradition.

This old area with its Archaeological Museum, Turkish Baths, Caravanserai (provided food and lodgings for nomadic travellers and their animals), aqueducts, old men smoking water pipes, belly dances, Turkish carpets, Turkish bread, strong Turkish coffee and delicious Turkish delights - all add to the diverse character of this dynamic city.
B. NEW EUROPEAN ISTANBUL

Beyoğlu is located on a steep hill north of the Golden Horn. It is often referred to as the ‘new’ city but it is only ‘new’ in a relative sense as settlement existed before the birth of Jesus. The word ‘new’ applies to Pera, the quarter above Galata that was built in the Ottoman period. In this area all the great colonial powers maintained lavish embassies so that when the Ottoman Empire collapsed they could grab territory and spheres of influence.

Beyoğlu was originally home to the city’s foreign residents. First to arrive were the Genoese, who were given Galata, then arrived Spanish Jews, Greeks, Armenians and Arabs during the Ottoman period. From the 16th century, European countries established embassies in the area. Today Dutch, Swedish, British and Russian consulates are still located near Istiklal Caddesi, Beyoğlu’s main retail street. This street is lined with 19th century apartments and the narrow back streets cater for the wealthy with trendy jazz bars, stylish restaurants and expensive clothes and jewellery stores. The street swarms with people from morning until night. Istanbul’s middle class prefer to shop along this street rather than in the old European bazaar section. The area has changed little over the centuries and is still a thriving commercial quarter, especially around Taksim Square.

History has a major impact on the nature and character of this part of the city. For example the Pera Palas Hotel opened in 1892 originally catered for wealthy travellers on the Orient Express. It also had notable guests such as Agatha Christie, Jackie Onassis and Greta Garbo. This famous hotel is now frequented by inquisitive tourists. Nearby the Mevlevi Monastery now a museum is located. Here the Whirling Dervishes, a mystical branch of Islam called the Sufis, perform their famous ritual spinning dance. The whirling is said to induce a trancelike state that made it easier for the mystic to seek spiritual union with god.

Scattered throughout the area are old Greek and Armenian churches and Jewish synagogues, reminders of the time when virtually all of the Ottoman’s business people were non-Muslims.

C. ASIAN ISTANBUL

Around 700BC colonists from Greece settled at Kadıköy. Today Asian Istanbul is more rural than the other parts of the city, with farms and vegetated hill slopes. Uskudar and Kadıköy are the two major suburbs on the Asian side of Istanbul. Originally Uskudar was the starting point of Byzantine trade routes through Asia. It retained its importance during the Ottoman period but today its character has changed to a busy dormitory suburb. The majority of the population live in high rise apartments but work on the European side of Istanbul. The separation of workplace from residence has been possible with the growth of transport infrastructure but has created major traffic congestion across bridges and on the water during peak hours.

The area is renowned for its mosques as well as Bagdat Caddesi, one of Istanbul’s best shopping centres for clothes and shoes. There are a number of residential areas, such as the leafy suburb of Moda famous for its ice cream and lighthouse at Fenerbahçe. There is also a Polish village, Polonezköy, a relic of 19th century politics and the Crimean War. Only a generation ago Polish was the main language spoken in the village and for the last century Turkish people visit for a taste of authentic Polish farm food, such as wild boar.

FLORENCE NIGHTINGALE

During the Crimean War (1853-56) when the Ottomans, British and French fought against Russia, Uskudar’s Selimiye Barracks served as a military hospital. Florence Nightingale, a British nurse worked at the hospital and was horrified at the conditions suffered by the wounded. Over the years she was a tireless campaigner for hospital military and social reform and laid down the norms of modern medicine, turning nursing into a skilled profession. When she returned to Britain in 1856 the death rate in the hospital had fallen from 20% to 2%.
D. BOSPHORUS STRAITS

The Bosphorus has always been Istanbul’s maritime road. It was an important trade route in the ancient world along which ships carried wool, timber, salted fish and meat from regions surrounding the Black Sea, and wine and olive oil from regions surrounding the Mediterranean Sea. Today workers from Asian Istanbul ferry across the congested straits to work on the European side of Istanbul daily. It has also become popular for tourists to cruise along the Bosphorus to see old wooden waterside villas, called yalis, mosques, the Fortresses of Europe and Asia, opulent 19th century palaces (Dolmabahce Palace 1843-1856), and grand residences owned by the rich interspersed with former fishing villages. To cater for tourists and wealthy locals old grand residences have been converted into expensive hotels and restaurants.

YALIS

Surrounding the Asian shores of the Bosphorus Sea and Sea of Marmara are ‘centuries’ old wooden houses or yalis, with 40-50 rooms in which the wealthy spent their summers. Up to 40 years ago the Asian shores had few residents other than summer visitors. With increasing population, about 60% of the population now live in these permanently.

E. THE GOLDEN HORN

The Golden Horn, a flooded river valley, flows southwest into the Bosphorus providing a natural harbour for the city’s commerce. For hundreds of years ships off-loaded goods into warehouses lining the shores of the Golden Horn. According to legend the Byzantines threw so many valuables into its waters during the Ottoman conquest that the waters glistened with gold. Today its importance as a port has changed with the development of containerisation, as most ships now use the ports on the Sea of Marmara.

The character and nature of the Golden Horn has changed from the 18th century when the shores were bordered by forests, fields and palaces in contrast to today, where the shores are lined with high density housing, industrial plants and warehouses. This has led to the deterioration in water quality as many factories, despite legislation, still dump toxic waste into its waters which is evident from its powerful stench. In the 1980’s Mayor Dalan cleared some of the old buildings along the shores of the Golden Horn and landscaped the area into parks.

F. WESTERN DISTRICTS NEAR THE CITY WALLS

The tip of Seraglio Point was the ‘heart’ of the ancient city. But with increasing population the boundaries moved west towards the old Byzantine city walls. The city walls encompass the Old European city centre of Istanbul stretching in a large arc from Yedikule on the Sea of Marmara to Ayyansaray on the Golden Horn. The suburbs that lie adjacent to the walls, particularly Topkapi, are mostly working class, residential suburbs with lower socio-economic status compared to wealthier suburbs along the Bosphorus and near Taksim Square where many business and professional people live. Dotted around these western districts are important remnant’s of the city’s past, such as Church of St Saviour in Chora and Blachernae Palace.

G. PRINCES’ ISLANDS

In Byzantine times the Princes’ Islands, located 20km south east of the city in the Sea of Marmara, were the burial place of deposed monarchs, princes and nobles that had outlived their roles. Then during the 19th century the islands were favoured as a summer resort by the rich Ottoman business community of Jews, Armenians and Greeks. The nature and character has changed again as today these luxurious villas are used as tourist resorts, especially in summer. There are some major challenges to living on these islands, such as fresh water must be transported from the mainland, reliance on water transport to and from the islands and in Buyukada there are no cars.
H. BEYOND THE OLD CITY WALLS

Even beyond the city centre, diversity contributes to Istanbul’s colourful nature and character. Examples of suburbs whose character has changed over time include:

- Haskoy – was a royal park in 15th century, later supported orchards, then in 19th century became an industrial area; and
- Ortakoy – was a fishing village but today is better known for its Sunday markets and hub of Istanbul’s night life in summer.

7. NATURE AND CHARACTER OF ISTANBUL TODAY

Istanbul is an alive, vital city offering a variety of pleasure pursuits such as theatres, restaurants, sporting facilities, traditional music, belly dancing, as well as beautiful old historic buildings. The mixture of east and west, old and modern, Islam and Christian influences gives this economically growing city its unique character. Its heritage and architecture has enabled this colourful multicultural city to become a popular tourist destination today (Refer to Table 6).

**TABLE 6. EXAMPLES OF THE NATURE AND CHARACTER OF ISTANBUL**

<table>
<thead>
<tr>
<th>NIGHTCLUBS</th>
<th>Club 29 the most glamorous</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOISE</td>
<td>Call to prayer 5 times a day. Constant traffic and construction noise.</td>
</tr>
<tr>
<td>ROCK MUSIC &amp; JAZZ</td>
<td>Q Club and Rock House Café</td>
</tr>
<tr>
<td>TRADITIONAL MUSIC &amp; DANCE</td>
<td>Ottoman classical music, Belly dancing (Galata Tower), Turkish music (Basilica Cistern) and Whirling Dervishes.</td>
</tr>
<tr>
<td>WESTERN CLASSICAL MUSIC &amp; DANCE</td>
<td>900 seat Ataturk Cultural Centre in Taksim</td>
</tr>
<tr>
<td>FESTIVALS</td>
<td>Five Arts Festivals (film, theatre, music and dance, jazz and biennial Fine Arts Festival).</td>
</tr>
<tr>
<td>MARKETS AND BAZAARS</td>
<td>Grand Bazaar with 4,000 shops, flea markets and Egyptian Spice Market.</td>
</tr>
<tr>
<td>BEACHES</td>
<td>Swim, water-ski and windsurf around Princes’ Islands. Large beaches at Kilyos on the Black Sea 30 minutes from central Istanbul.</td>
</tr>
<tr>
<td>TRANSPORT</td>
<td>Bus, rail, road, air, tram, car and boat.</td>
</tr>
<tr>
<td>SPECTATOR SPORTS</td>
<td>Football has a large following in Istanbul, horse racing at Veldi Efendi, yacht regattas in Sea of Marmara, grease wrestling.</td>
</tr>
<tr>
<td>HEALTH CLUBS &amp; SPORTS CENTRES</td>
<td>5 star hotels with swimming pools, health clubs (Vakkorama Gym), Kemer Country Riding and Golf Club, Istanbul Golf Club.</td>
</tr>
<tr>
<td>CINEMAS</td>
<td>Latest foreign films released at same time as other European countries. Most cinemas are located on Istiklal Caddesi.</td>
</tr>
<tr>
<td>THEATRE, OPERA &amp; BALLET</td>
<td>Istanbul State Theatre and children’s musicals.</td>
</tr>
<tr>
<td>RESTAURANTS</td>
<td>Street food (chewy bread coated with sesame seeds), Turkish cafes with older men smoking water pipes, mixture of Turkish food (roast lamb, dolmas) and the global food (McDonald’s and pizzas).</td>
</tr>
<tr>
<td>MUSEUMS</td>
<td>Archeological museums, Mosques (Blue Mosque) and Palaces (Topkapi).</td>
</tr>
<tr>
<td>OLD &amp; NEW ARCHITECTURE</td>
<td>Roman Hippodrome, high rise modern apartments and hotels.</td>
</tr>
<tr>
<td>COLOURFUL STREET LIFE</td>
<td>Constant movement of 12 million people living and working in a high population density city.</td>
</tr>
</tbody>
</table>
8. COSMOPOLITAN CHARACTER OF ISTANBUL

Historically, Istanbul has always been an important international city linking the east with the west. For example, the Ottoman Empire ruled the entire eastern Mediterranean Sea for centuries and brought with them a myriad of customs, cultures, languages and religions from the sultan’s vast domains. This gave Istanbul its diverse character as it became the ‘melting pot’ of people who spoke Turkish, Greek, Armenian, Ladino, Russian, Arabic, Bulgarian, Romanian, Albanian, Italian, French, German, Maltese and English.

Istanbul is also the home of many refugees, such as the Iraqi Kurds who escaped the 1991 Gulf War and Spanish Jews who escaped the Spanish Inquisition. Jews were welcomed into the Ottoman Empire as they brought with them recent scientific and economic discoveries. In 1992 they celebrated 500 years of peaceful co-existence among the Turks. Today, 20,000 Jews live in Istanbul. Most live in a small community at Balat (12,000) located on the Golden Horn. Today, many synagogues are closed, except at Ahrida and Yanbol, because as Jews became affluent they moved from Balat to more attractive areas in the city, such as around the Bosphorus Sea or emigrated to Europe or Israel.

9. RELIGION AND MILITARY SERVICE PART OF THE CHARACTER OF ISTANBUL

The complex character of Istanbul is also influenced by religion, military service, age of population and globalisation. Population in Istanbul presents a more liberal western attitude in comparison to rural areas, such as Konya, that are more traditional, religious and conservative. Despite modern western changes to Istanbul most young women only shop with friends or mother. The segregation of men and women is common and restaurants often have separate tea gardens. Overt homosexuality is not legally or socially accepted.

A. RELIGION

Istanbul treasures a dual heritage for Christians and Muslims. One time capital of Christendom (e.g. Hagia Sophia) became a predominantly Muslim country with the Ottoman Empire (e.g. Blue Mosque). Although today Turkey is a secular country, 99% of the population are Muslims and 80% of the Sunni creed. Five times a day throughout Istanbul a chant is broadcast over loudspeakers set high in the minarets calling the faithful to prayer. In daily life a Muslim must not touch or eat pork, nor drink wine, and most of the older women wear a scarf over their head.

B. TO BE A TURKISH MALE IS TO BE A SOLDIER!!!

Turkey’s armed forces, recognised for their military prowess, have always retained a central role in the government and society from the Huns around 220BC until the Ottoman Empire. Even in other societies such as the Arab and Mameluke Empires, Turks formed a military caste. Today, with conflicts surrounding the borders of Turkey (e.g. Iraq, Iran, Georgia) and recent insurgency by the Kurdistan Workers Party (known as PKK, after its Kurdish name, Partiya Karkeren Kurdistan) in south east Turkey, there is compulsory military service for all Turkish males over 18 years. Unfortunately these conflicts have resulted in thousands of conscripts returning home in body bags.

The army is considered an honourable institution and also provides a social as well as a military function as army troops clean streets, perform garden duty around archaeological sites and plant new forests. The army has also been used for social cohesion as young men from the cosmopolitan, economically developed west are often forced to serve in the poorer, rugged, rural east and vice versa. This gives young boys the chance to have greater empathy with other lifestyles within Turkey.
10. CHALLENGES AND RESPONSES TO LIVING IN ISTANBUL

Istanbul today is still wrestling with the divided half Asian and half European identity that has been responsible for the city’s unique character and atmosphere. A booming economy has led to the building of new motorways and bridges and a public transport network revolutionised by the introduction of fast Catamaran sea buses, light railways, and modern trams (Refer to Maps 2 & 3). As Istanbul moves into the 21st century it is geared for the billion dollar tourist boom with adequate transport, water, sewerage and electricity supplies.

For a more comprehensive map showing the major transport routes in Istanbul, refer to the web site: http://www.turktravel.net/istanbul/index.asp
For a more detailed map displaying the Galata and Ataturk Bridges as well as other sites of interest, refer to the web site: [http://www.tylersterritory.com/travel//europe/turkey/istanbul/map_istanbul.html](http://www.tylersterritory.com/travel//europe/turkey/istanbul/map_istanbul.html)

**A. TRAFFIC INFRASTRUCTURE**

Infrastructure referred to as ‘social overhead capital’ includes roads, railways, ports and airports. The existence of an effective transport system aids the movement of people and goods as well as the economic development of Istanbul. The motorised turmoil is most intense around the Galata Bridge during the peak hours, as people move between residence and work.

High rate of urbanisation stimulates demand for improvements in the quantity and quality of traffic infrastructure and when infrastructure is limited, constraints on development occur. Today, Istanbul, the core of economic growth in Turkey, also requires more reliable, efficient and sophisticated transport as well as telecommunications and power so it can become more competitive in the global market.

**a. GLOBAL LINKAGES – AIR AND TRAIN**

- **Past** - Since 1889, Istanbul has been linked to other countries via the world famous train, Orient Express (see dialogue box). Wealthy and distinguished passengers included presidents, aristocrats and actresses. Travel on the train was associated with exoticism and romance that reinforced the orient view of Istanbul as a treacherous melting pot of diplomats and arms dealers. Since the break up of former Yugoslavia the train no longer travels to Istanbul.

- **Present** - Turkey’s main international airline, Turkish Airlines, has direct flights from all major cities in Europe and New York. Planes land at Ataturk Airport 25km west of Istanbul’s city centre. About 2 million foreigners and 1.5 million citizens arrive and depart from this airport annually, enabling Istanbul to be linked to the global business and tourist market.
**ORIENT EXPRESS**

Conditioned by spy thrillers and films, Istanbul was the place where spies did most of their undercover activities, especially at the Park Hotel where they could see enemy ships passing through the Bosphorus Straits.

As most of these spies came to Istanbul from Paris via the Orient, this train trip was associated with adventure and intrigue. Some interesting passengers included ‘the courier of the diamond cartel posing as a professor on sabbatical from a university in Sofia, the flaxen haired German woman fluent in Arabic and the Viennese art broker with an inventory of forged masters’ (National Geographic, October 1973, p256).

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**b. TRAINS, TRAMS, BUSES, DOLMUSES AND TAXIS**

Travelling around Istanbul is relatively easy as the city is well served by an expanding system of metro and tram lines as well as buses and dolmuses (see dialogue box). Istanbul has two main-line train stations, Sirkeci, on the European side of the Bosphorus, and Haydarpasa, on the Asian side, which enables people to move to and from work.

There is an abundance of taxis, or yellow cabs, that are cheap in relation to other major European cities. Buses are either run by the municipality, for example Belediye Otobusu, or rented out to private operators and most run between 6am and 10pm. There are no night buses. Trams run through Old and New European sections of the city as well as past the old city walls into the suburbs ending at Zeytinburnu. The Metro is new, with parts still under construction and more in the planning stage. The existing metro runs from city to suburbs in both old and new European sectors (Refer to Map 2). Trains run every 10-15 minutes seven days a week from 6am to midnight. The government, in response to the challenge of increasing urban growth, plans that the route of the metro will extend across the Golden Horn to link the airport to the suburb of Levent. With the potential of further population expansion or suburbanisation there are also plans to construct an overland metro line on the Asian side of Istanbul.

**DOLMUSES**

Dolmuses are a useful means of transport outside Istanbul’s city centre. These are shared taxis with fixed routes and points of origin and final destinations displayed in the front window. Passengers can get in and out anywhere on route. They are cheaper than regular taxis and more frequent than buses. The most distinctive dolmuses are large American cars made in the 1950s. These are gradually being replaced with new, yellow coloured, diesel minibuses.

Trams combine a congestion-free ride on popular routes with easy access and a comparatively comfortable journey, while the Metro provides an efficient means of linking the centre with the European suburbs and the Esenler coach station. With increasing population the Greater Istanbul Municipality aims to integrate the tram, Metro and train systems into a more comprehensive network covering the whole city, with a tunnel under the Bosphorus Straits linking the European and Asian sides.

Today the Akbil Travel pass, or ‘intelligent ticket’, can be used on the Metro, tramway, tunnel, ferries, sea buses and most city buses to enable a quick, efficient service for commuters.

**c. SEA TRANSPORT**

Perhaps the most relaxing means of transport in Istanbul is by the innumerable water-borne craft which ply the Bosphorus Straits between the European and Asian sides. These range from high speed catamarans to small, privately operated motor boats. As
36% of the population lives on the Asian side of Istanbul but mostly work on the European side, the ports are busy during peak hours as people move to and from work. Travelling during rush hours is difficult as main roads, bridges and waterways in and out of the city are congested.

**B. WATER SUPPLIES AND WATER QUALITY**

Istanbul has always been burdened with a lack of accessible fresh water and this is evident from the impressive aqueduct completed in 378AD to bring water to the city from outlying rivers. The Basilica Cistern is a vast underground water cistern built by Justinian in 532AD mainly to satisfy the growing demands for water at the Topkapi Palace. The cistern’s roof is held up by 336 columns over 8 meters high and today tourists visit this site with its atmospheric classical music and dripping water. The Cistern of 10001 Columns has been transformed into an atmospheric shopping centre specialising in merchandise inspired by Ottoman culture, such as carpets, jewellery and blue iznik tiles.

High rural-urban migration has led to inadequate water facilities and the response to this has been the construction of dams and the Greater Istanbul Water Supply Project. The length of the project area is 200km from the Melen River and Istranca Creeks. The aim of the projects is to ensure that 36% of the population that live on the Asian side and 64% that live on the European side of Istanbul will have sufficient water until the year 2040, taking into account the anticipated population growth of 4.56% in 1990 to 3.07% in 2000 and 0.51% in 2040.

Dams and lakes supply water to Istanbul. On the European side there are six (e.g. Tereko Lake, 142 hm³/year) and on the Asian side there are four (e.g. Omerli Dam, 130 hm³/year). In response to inadequate water supplies the Sazlilerde and Kirazdere dams are under construction to meet the long term water requirements of the city. A large TNC, GIBB, in a Japanese-led joint venture, is assisting the government to tap the water resources in the Melen River which will add 1,200 million cu/m to Istanbul’s annual water supplies, as well as the construction of a water treatment plant at Cumhuriyet.

Water quality in Istanbul has deteriorated with the rapid growth in industrialisation, chaotic urbanisation and absence of related infrastructure. This has caused serious health problems, such as ‘Sultans Revenge’, which is severe diarrhoea from drinking water in Istanbul. Today, tap water is chlorinated but not safe for tourists to drink and roadside fountains bear the words ‘not to drink’ or ‘drinkable’ to advise the Turkish population.

Another response to the poor water quality in Istanbul is the Yesilcay Project that has been built to treat 145hm³ of water per year from Canak and Goksu Creeks. This expensive project has been met by government (US$102.40 million) and overseas money (US$168.55 million).

Response to the challenge of poor water quality has led to Turkey holding the Gothenburg Symposium from 2nd to 4th October 2000. It is the only International Conference devoted entirely to the chemical treatment of water and waste water.

**C. SANITATION SERVICES**

Insufficient infrastructure and lack of environmental protection has led to inadequate sewage disposal. A French Company from 1918 – 1920 initiated the first Istanbul sewerage project, followed by the Berlin Reconstruction Company from 1925 – 1937. Both organisations only roughly screened the waste and discharged it back into the rivers and seas while the rest of the city used cesspools until 1968.

Urban protests led to the United Nations Development Program and WHO carrying out water and sewerage feasibility studies in Istanbul between 1966 and 1970. The Bosphorus Straits was decided as a place to dump waste water because there are sufficient currents to remove the waste water, with lower density Black Sea water at the top and higher density Mediterranean waters at the bottom.
In order to solve the sewage challenge the Metropolitan Istanbul Sewerage Project was established. The first step in this project was the Golden Horn Project launched in 1985 because factories and warehouses that lined the shores dumped 200,000 tonnes of toxic liquid waste into its waters daily. Of this, 67% was chemical, 27% washing water, 4% cooling water and the rest waste. By 1980s the water was no longer ‘golden’ but ‘toxic’.

As Turkey was only a developing country it lacked sufficient finance to provide adequate sewerage and water infrastructures. The World Bank supplied the finances on condition that Turkey establish the Istanbul Water and Sewerage Administration (ISKI). The city was then divided into 11 separate catchments to take into account different urban functions such as housing and industrial development. Treatment plants are being built and the Tuzla plant will function as a complete biological treatment plant. Housing and business units on the shores of the Horn are to move, occupied dilapidated dwellings destroyed and many industrial ventures relocated.

**TABLE 7. SEWAGE DISPOSAL OVER TIME IN URBAN AND RURAL ISTANBUL**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56%</td>
<td>96%</td>
<td>35%</td>
<td>91%</td>
</tr>
</tbody>
</table>

From these statistics (shown in Table 7), sewage disposal has improved over time but it is still a major problem as rate of population increase is faster than construction of efficient infrastructure. Most toilets in homes still have inadequate plumbing, as ‘used’ toilet paper is placed in waste paper baskets rather than flushed down the toilets, where it will block the plumbing.

**D. POWER SUPPLIES**

Istanbul receives electricity from HEP (Hrvatska Elektroprivreda) but still requires a 15% increase in the supply of electricity to keep pace with urban growth, industrialisation, information technology and tourism (Refer to Table 8).

**TABLE 8. POWER SUPPLIES IN 1999**

<table>
<thead>
<tr>
<th>HOUSEHOLD USE OF ENERGY IN TURKEY:</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>% OF HOUSEHOLD WITHOUT ELECTRICITY IN TURKEY</td>
<td>45%</td>
</tr>
<tr>
<td>% OF HOUSEHOLD WITHOUT ELECTRICITY IN ISTANBUL</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTOR USE OF ENERGY IN TURKEY:</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTRY</td>
<td>32%</td>
</tr>
<tr>
<td>TRANSPORT</td>
<td>22%</td>
</tr>
<tr>
<td>AGRICULTURE</td>
<td>5%</td>
</tr>
<tr>
<td>COMMERCE</td>
<td>1%</td>
</tr>
<tr>
<td>RESOURCES</td>
<td>38%</td>
</tr>
<tr>
<td>OTHER</td>
<td>2%</td>
</tr>
</tbody>
</table>

**E. EMPLOYMENT**

In Istanbul most people are employed in the service industry such as professions, retail, commerce, administration, tourism and the rapidly expanding information technology sector (Refer to Table 9). Other Turks are employed in the secondary industry, such as in construction, industrial and textiles jobs (e.g. leather jackets). With high rural urban migration, unemployment is high for those who terminated their formal education before high school graduation. Many of these have found jobs in the informal sector, such as the Sunday flee market near the Grand Bazaar area, as well as selling plastic flowers beside the road. Child labour is rare, as primary school education is compulsory. However poverty drives young children to earn extra income for the family, such as weekend shoe shiners.
TABLES 9 & 10. % OF EMPLOYMENT IN LABOUR FORCE IN TURKEY

TABLE 9. % OF EMPLOYED POPULATION IN EMPLOYMENT SECTORS

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE</td>
<td>75%</td>
<td>44%</td>
</tr>
<tr>
<td>INDUSTRY</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>SERVICES</td>
<td>14%</td>
<td>34%</td>
</tr>
<tr>
<td>SERVICES (ISTANBUL)</td>
<td></td>
<td>75%</td>
</tr>
</tbody>
</table>

TABLE 10. % OF POPULATION IN DIVISIONS OF THE LABOUR FORCE

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNEMPLOYMENT</td>
<td>8%</td>
</tr>
<tr>
<td>WOMEN IN THE LABOUR FORCE (as a percentage of labour force)</td>
<td>33%</td>
</tr>
<tr>
<td>WOMEN IN PARLIAMENT</td>
<td>1% of seats</td>
</tr>
</tbody>
</table>

Turkey has a reservoir of unemployed men who work overseas (Refer to Table 10). In the 1970s, 800,000 worked in Western Europe. Their savings are remitted back to Turkey and it is still a major source of foreign exchange and economic growth. Many Turks found it enabled them to get out of the ‘cycle of poverty’ and return home with money for a better quality of life, such as buying their own business or apartment.

In 1993 Prime Minister Demirel’s program included an accelerated privatisation plan. This led to massive job losses, with 700,000 people participating in the protests that took place in Istanbul. Fortunately growth in tourism has provided some of these people with employment as 90% of Turkey’s tourists visit Istanbul. Tourism has generated billions in foreign currency yearly as well as increased employment in ‘umbrella services’, such as hotels, tour guides, transport, artefacts and restaurants.

F. HEALTH ISSUES

The health of Istanbul’s population has improved over time, with a decrease in Infant Mortality Rate (IMR) and an increased life expectancy (Refer to Table 11). This has been in response to community protests and the construction of hospitals, training of health workers, immunisation of children and availability of medicines. Today there have been increased health problems from smoking and polluted environment.

Medical services are well distributed throughout Istanbul. Government run hospitals and clinics are run by the Red Crescent (Red Cross) and cost of services is cheap. Over 50% of physicians are women, as a Muslim woman must have a companion present during any physical treatment or examination and nurses are not always available.

TABLE 11. HEALTH OF ISTANBUL’S POPULATION

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANT MORTALITY RATE (Under 5 years)</td>
<td>138 per 1000</td>
<td>51 per 1000</td>
</tr>
<tr>
<td>BIRTH RATE</td>
<td>34.5 per 1000</td>
<td>25 per 1000</td>
</tr>
<tr>
<td>LIFE EXPECTANCY</td>
<td>58 years</td>
<td>72 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAILY CALORY SUPPLY</td>
<td>127% of requirements (well fed)</td>
</tr>
<tr>
<td>MATERNAL MORTALITY RATE</td>
<td>200 per 100,000 live births</td>
</tr>
<tr>
<td>BIRTHS ATTENDED BY HEALTH PERSONNEL</td>
<td>83%</td>
</tr>
<tr>
<td>POPULATION PER DOCTOR</td>
<td>1,400 people per doctor</td>
</tr>
<tr>
<td>PUBLIC EXPENDIURE ON HEALTH</td>
<td>% GDP- 3% 1999</td>
</tr>
</tbody>
</table>

Legally there are no vaccinations for entry into Turkey.
G. SOCIAL ISSUES

a. INEQUALITY

The inhabitants of present day Istanbul are descendants of ethnic groups from Central Asia that began to settle in Antolia in the 11th Century. Istanbul is a multi-cultural city with Kurds, Arabs, Jews, Greeks, Georgians and Armenian minorities; their cultural autonomy, including teaching in their respective languages, is severely limited.

Many poor Kurds, gypsies and refugees from former USSR have less access to credit facilities and jobs and live in substandard housing without water, sanitation and electricity. They also experience higher IMR and lower life expectancy. Also, many other Turks displaced from earthquakes in Bursa now live in tents or temporary accommodation outside Istanbul.

b. EDUCATION –HUMAN CAPITAL FORMATION

‘I can read and write, therefore I can control the world. If I can’t there is little hope I can.’

Paulo Freire, Brazilian educator.

<table>
<thead>
<tr>
<th>TABLE 12. % OF POPULATION WHO RECEIVE EDUCATION IN TURKEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITERACY</td>
</tr>
<tr>
<td>LITERACY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL ENROLMENT</td>
</tr>
<tr>
<td>PRIMARY</td>
</tr>
<tr>
<td>SECONDARY</td>
</tr>
<tr>
<td>UNIVERSITY</td>
</tr>
<tr>
<td>PRIMARY SCHOOL TEACHERS</td>
</tr>
<tr>
<td>SCIENTISTS AND TECHNICIANS</td>
</tr>
<tr>
<td>PUBLIC EXPENDIURE ON EDUCATION, % of GDP</td>
</tr>
</tbody>
</table>

Education should be a liberating experience, not a restricting one. Education in Turkey has improved over the last 30 years but there is still inequality between males and females, as well as rural and urban areas (Refer to Table 12). Istanbul has a more educated workforce compared to the remainder of the country as there is greater availability of higher educational facilities, such as Universities. Studies in Istanbul found that the education of women led to higher productivity, better family health and smaller families. Parents believe that by giving their children an education they are giving them a chance to escape the ‘vicious cycle of poverty’, as well as a better quality of life. An increase in the education of women has led to an increase in the number of women seeking employment.

Children between the ages of 7 and 12 are required by law to attend school and for those that aspire to a university degree excellent facilities are available, such as at the old Istanbul University, located near the Grand bazaar. Secondary, technical and vocational education is free as well as specialised schools for the deaf, blind, mentally retarded, orphans and very poor. There are also numerous licensed private schools and universities that charge tuition fees. School uniforms are worn to ease the distinction between wealth and poverty.
c. COMMUNICATIONS

Communication is important for the effective functioning of modern Istanbul. The city has an extensive communications system of post and telegraph services, telephones, radio stations, television channels and newspapers (e.g. Turkish Daily News) that links all parts of Istanbul with the world (Refer to Table 13). Today communication involves the transmitting of information through the internet, email and fax. The more educated the population, the more effective the communication process as feelings and information can be shared across different ethnic groups, genders and socio-economic classes. At times there have been restrictions on freedom of speech and information in Istanbul but the situation has improved with pressure from human rights activists.

<table>
<thead>
<tr>
<th>TABLE 13. COMMUNICATIONS MEDIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWSPAPERS</td>
</tr>
<tr>
<td>TV SETS</td>
</tr>
<tr>
<td>RADIO SETS</td>
</tr>
<tr>
<td>TELEPHONES</td>
</tr>
<tr>
<td>BOOKS</td>
</tr>
<tr>
<td>CARS</td>
</tr>
<tr>
<td>ANNUAL CINEMA ATTENDANCES</td>
</tr>
<tr>
<td>AVERAGE NUMBER OF PEOPLE SERVED BY ONE POST OFFICE:</td>
</tr>
</tbody>
</table>

d. OTHER SOCIAL ISSUES

Istanbul is the ‘centre of economic growth’ in Turkey with 63% of the nation’s industry, 56% of its commerce and 90% of its tourists. Huge overseas debt, absence of capital, and appropriate infrastructure, have been major obstacles to industrialisation. Other social issues include the growth in Islamic fundamentalism and militant Kurds (PKK), unemployment, high inflation rates (e.g. A$1 = 616,000 lira in year 2000), low incomes, as well as inequality between rich and poor, genders, ethnic groups and urban communities (Refer to Table 14).

Istanbul, the centre of economic activity in Turkey, is still hindered by inefficient state economic enterprises (KITS) and government-controlled enterprises subject to political influence, subsidies as well as payroll-padding and corruption. In 1999, 6 of the 10 largest corporations were KITS in major industries such as petroleum, electricity, tobacco, salt, sugar and alcoholic beverages.

In the 1970s labour unions and political parties were banned and the government accused of systematic human rights violations. In 1983 a new constitution heralded a period of political liberalisation to soothe European critics as the new government wanted to gain access to the EU. This gave further impetus to modernisation and growth of Istanbul.

Other social improvements include an increase in quality of life of the population over 30 years (HDI) and decrease in fertility rate, especially in Istanbul where there is greater use of contraceptives (Refer to Tables 15 & 16).
TABLE 14. INCOME IN TURKEY

| REAL GDP PER CAPITA | $5,000 (1999) |
| ANNUAL GROWTH       | 1.4% 1985-94  |
| GINI COEFFICIENT    | 0.51 (indicated marked inequality between the rich and the poor) 1998 |
| ANNUAL INFLATION    | 69% 1984-1994 |
| EXTERNAL DEBT       | $1,090 per capita 1998 |
| SOCIAL SECURITY BENEFITS EXPENDITURE (a % of GDP) | 4.5% 1999 |

TABLE 15. QUALITY OF LIFE IN ISTANBUL

WHAT IS HDI?

HDI is an average of three key components: life expectancy, literacy, years of schooling and income. It refers to the highest HDI. For example, Japan is 0.983 and Nepal 0.138.

| HDI OF ISTANBUL | 0.492 (1970) | 0.717 (1998) – Rank 73 |
| (Large improvement in quality of life over nearly 30 years) |

TABLE 16. FAMILY STATISTICS

| AVERAGE AGE OF FIRST MARRIAGE | 21 years (1999) |
| CONTRACEPTIVE PREVALENCE RATE | 63% (1999) |
| AVERAGE HOUSEHOLD SIZE (NUMBER OF OCCUPANTS) | 5.2 (1970 – 1999) |
| NUMBER OF ROOMS IN HOMES | 2.6 (1999) |

11. RESPONSES TO THE CHALLENGES – CONCLUSION

Most of the population that live in Istanbul in the 21st century want to determine their own destiny. The country in the last 30 years has suffered high inflation rates, corruption, cronyism and crime on the streets. This has led to the growth in lobby groups and community movements. These pressure groups have placed the following pressures on national and urban government bodies to change the following:

- Environment - improve the water quality in the Golden Horn, Sea of Marmara and Bosphorus Sea as well as reducing sulphur and other toxic chemicals in the atmosphere for an ecological sustainable future;
- Infrastructure - improve transport, education, health, electricity, water supplies and sanitation systems;
- Social changes - improved employment opportunities and wages, reduce inequality between rich and poor as well as between ethnic groups and genders, improved human rights and quality of life.

Some positive responses to these challenges have resulted in improved quantity and quality of education, increased life expectancy, decreased IMR, increased employment, improved water, electricity, sanitation and transport infrastructure and greater participation in politics. Some of the changes are as follows:

A. HOMES

The city has experienced a 2,500 year old cycle of demolition and reconstruction. Since the 1970s concrete apartments have been built at the top of hills throughout the city. Most of the new structures have replaced weathered pine mansions, or kosks, built in the 18th and 19th century. Urban decay has been replaced by urban renewal but preservationists hope to save
some of these old buildings, but as space is limited from high urban growth, the prospects have been dim.

In the late 1960s gypsies camped outside the city walls amid the ruins but then new neighbours surrounded them when 150,000 people arrived from the country each year and raised makeshift homes on the city’s outskirts. Today this area has been replaced by high rise apartments.

B. BRIDGES

In 1992 the functional Galata Bridge replaced the quaint 19th century floating, pontoon bridge that crossed the mouth of the Golden Horn. This inadequate pontoon bridge restricted movement of people and goods, and prevented the Golden Horn from flushing itself of polluted water. Unfortunately today, the Galata Bridge still experiences constant traffic jams as it barely copes with increasing traffic.

Spanning the Bosphorus Straits, the first bridge to be built linking the Asian and European sides of Istanbul was the Bosphorus Bridge (also known as Ataturk Bridge). It is the world’s sixth longest suspension bridge (1,560m) and was finished in 1973 to celebrate the 50th anniversary of the Turkish Republic. Today the construction of the Fatih Bridge has also helped to alleviate some of the transport problems as people and goods move from Asian to European sections of the city.

c. SOCIAL ISSUES

In 1991 the Prime Minister Suleyman Demirel acknowledged the identity of the Kurdish people when visiting SE Turkey. The government was met by local residents demanding the respect of human rights, the end of aggression, and a halt to the torture of political prisoners and activists.

The Purple Roof Women’s Shelter foundation, formed in 1980, found from studies that 45% of Turkish men agree that women should be punished and that 25% of single women and 33% of married women are battered. The movement has grown and has helped women speak out about their plights.

Istanbul today is straddling an environmental dilemma. Istanbul’s urban dwellers are changing into a ‘disposable society’. But communities, such as the Bosphorus restaurants, now refrain from disposing of food into the water, some local councils recycle glass, government is building more sewerage treatment plants, smoking is banned on Turkish Airlines and ships are prohibited from disposing of wastes into the seas. But as Turkey is not a rich country change will take time despite constant urban protests about litter on beaches, raw sewage near swimming areas and sulphur dioxide in the atmosphere. Istanbul consequently needs to follow a more ecologically sustainable growth path with effective anti-pollution legislation as well as encouraging social equity aimed at alleviating poverty and inequality in its multicultural society.
INTERNET REFERENCES AND QUESTIONS:
CHALLENGES TO LIVING IN ISTANBUL AND RESPONSES TO THESE CHALLENGES

A. WATER SUPPLIES AND SANITATION SERVICES

WATER
http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/CEVRE2.HTM
1. What is the total quantity of discharged waste water in Istanbul compared to Turkey?
2. Describe the amount and source of discharged city sewerage in Istanbul.
3. Where is most waste water discharged – sea, stream or land? Support your answer with statistics.

ISTANBUL’S WATER SUPPLY PROJECT
http://www.gibbltd.com/ (see Client Sectors/Utilities/Water Supply)
1. In response to severe water shortages in Istanbul what is the GIBB project?

DAMS AND POWER
http://www.gibbltd.com/water/dams.html
1. Discuss the construction of dams and the availability of HEP in Istanbul.

WATER AND POPULATION GROWTH IN ISTANBUL
http://www.dsi.gov.tr/isteng.htm
1. Describe population growth rate in the Project Area.
2. Which side of Istanbul (Asian or Western) had the highest population growth rate?
3. What is the anticipated population growth rate in Istanbul from 1990 to 2040?
4. What is the Project Area?
5. Where does Istanbul get most of its water?
6. The Greater Melen System is being developed to meet the long term demands for water in Istanbul up to the year 2040. Discuss.

ISTANBUL’S SEWERAGE PROJECT – THE GOLDEN HORN PROJECT
http://www.metropolis.org/Metropolis/gcities.nsf/AllDocs/7302743673102AC54A256B56001E597C?OpenDocument
1. Where is the Golden Horn?
2. What is the historical development of sewerage systems in Istanbul?
3. Why is the Golden Horn not so ‘golden’?
4. What is the Golden Horn Project?
5. Do you think the project will solve sewerage disposal for the present and future population increases in Istanbul? Give reasons for your answer.

WATER/ WASTE WATER TREATMENT PLANTS
1. Where is the plant?
2. What is the purpose of the plant?
3. How effective is the plant in improving the growing sewerage problems in Istanbul?

B. TRAFFIC INFRASTRUCTURE

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/ULASIM2.HTM
1. What are the three main modes of transport in Istanbul?

2. What mode of transport was recorded with the highest registration figures?
3. What mode of transport has the highest rate of growth?
4. The increase in vehicles on the road can lead to environmental problems. Discuss.
C. POWER SUPPLIES

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/ENERJI1.HTM

http://www.die.gov.tr/english/SONIST/ENERJI/151097e.html

http://www.die.gov.tr/ENGLISH/SONIST/ENERJI/250602i.htm

1. List in order the five highest consumers of energy in Istanbul.
2. What is the proportion of Total Energy (kWh) consumed in Istanbul compared to the total for Turkey and Marmara?
3. How could the consumption of energy be reduced in Istanbul?

D. EMPLOYMENT

UNEMPLOYMENT RATES

http://www.die.gov.tr/seed/labor/page4.html

1. Describe the changes to the unemployment rate in Turkey in the last decade. How does this compare with Australian statistics?

POPULATION BY MAIN OCCUPATION AND SEX

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/NUFUS4.HTM

1. Compare and contrast the number of males and females in the following occupations:
   - Scientific, technical, professional and related personnel workers
   - Without an occupation
   - Sales workers
   - Agricultural, animal husbandry, forest workers, fishermen and hunters
   - Managers and administrative personnel

E. HOUSING

CONSTRUCTION – FULLY OR PARTIALLY COMPLETED NEW BUILDINGS AND ADDITIONS

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/INSAAT1.HTM

1. Compare the number of dwellings, as homes and apartments, constructed in 1995 in Istanbul? Why do you think there are so many more apartments built than houses?
2. Write a paragraph on the trends in the construction industry in Istanbul. Give reasons for these trends.

F. HEALTH ISSUES

HOSPITALS

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/SAGLIK1.HTM

1. How many hospitals are in Istanbul? What is the ratio per person in Istanbul? Compare these statistics with Sydney.

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/SAGLIK2.HTM

1. How many specialist doctors in Istanbul compared to Turkey?
2. Why do you think there are more midwives in Istanbul than in Sydney?

ENVIRONMENT

Sulphur Dioxide (SO₂) and Particulate Matter

http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/CEVRE3.HTM

1. What are the average statistics for SO₂ and particulate matter in Istanbul?
2. How does this compare with Sydney?
3. What are the effects on the health of the population?
4. How can this problem be improved?
G. OTHER SOCIAL ISSUES

EDUCATION
http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/EGITIM1.HTM
1. How many schools in Istanbul?
2. Compare the number of students that enroll in primary schools with the number that graduate in Istanbul.
3. How many students enrolled in High Schools and Vocational and Technical High Schools? Account for the popularity of Vocational and Technical High Schools.
4. What is the proportion of students that graduate from High Schools compared to the number that graduate from Vocational and Technical High Schools?

LITERACY AND POPULATION BY SEX
1. Write a brief summary comparing literacy between males and females in Istanbul compared to Turkey. Is their a gender gap?

POPULATION
http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/NUFUS1.HTM
1. In 1990 the official population of Istanbul was only 7,309,190 but unofficially was larger. But in the year 2000 it is said to be between 8 and 12 million. Account for the increase in the population.
2. In what districts do most of the population live in Istanbul?

POPULATION MOVEMENT
http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/NUFUS2.HTM
1. What are the in-migration and out-migration statistics in Istanbul?
2. What is the net migration to Istanbul from 1985-1990?
3. What is the rate of net migration to Istanbul?
4. What are the forces attracting the population to Istanbul?
5. How does this high rate of urban growth affect the infrastructure in Istanbul?

INTERNET AND OTHER SECONDARY SOURCE RESEARCH

A. NATURE AND CHARACTER OF ISTANBUL
1. History shapes the nature and character of cities. Discuss using some of the following statements:
   - Istanbul was called the ‘Paris of the East’ and to reaffirm this, the first great international luxury express train, the Orient Express, connected Istanbul with Paris.
   - Istanbul was considered the most civilised city in the world at the time of Suleyman the Magnificent.
   - Hittites, Greeks, Romans, Ottomans, Christians, Muslims and Kemal Ataturk, have influenced the nature and character of Istanbul today.

2. The nature and character of Istanbul is determined by the biophysical environment. Discuss. The following internet site on the weather of Istanbul may be of assistance when answering this question.
   http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/IKLIM1.HTM

3. The nature and character of Istanbul today is influenced by tourism. Discuss the advantages and disadvantages of this city as a tourist destination.
4. Analyse the dynamic nature of Istanbul. Include in your answer the effects of high rates of population growth on infrastructure (transport, schools, hospitals, housing, water, sewerage, power), employment, urban renewal and suburbanisation.

5. How do governments, NGO’s, urban protest movements, lobby groups, self help projects and informal economies shape the nature and character of Istanbul.

6. Compare and contrast the nature and character of Istanbul with Sydney or another city you have studied.

B. SKILLS

Refer to the following Internet site and answer the questions
http://www.die.gov.tr/ENGLISH/ISTATIS/ESG/34ISTANB/IKLIM1.HTM

1. What is the average temperature in November?
2. What is the average range of temperature?
3. What is the difference between the highest and lowest temperature in January and July?
4. If you were travelling to Istanbul what months would you take a warm coat?
5. What is the cloudiest month? Why do you think it is that particular month? How does cloudiness affect a city?
6. What is the average annual precipitation?
7. What is the average monthly precipitation?
8. In what season does most rain fall?
9. What month receives more sunshine hours? Give reasons for your answer.
10. Referring to the weather statistics which month would you travel to Istanbul? Describe the weather you are likely to experience and what type of clothes you would pack.
11. How does the weather of Istanbul affect its nature and character?

C. SHORT RESPONSES

1. What is the site and situation of Istanbul?
2. Istanbul is said to be a multi functional city. What does this mean?
3. List the main city divisions and their specific characteristics.
4. Describe the difference between Asian and European Istanbul.
5. What would you find along the Bosphorus Straits?
6. The character of the Golden Horn has changed over time. Discuss.
7. What are the push/pull forces operating in Istanbul over time?
8. The Marmara Sea is contaminated with mercury. Rivers that run through Istanbul are heavily polluted by sewage and are lifeless 20 metres below sea level. What have been the responses to water pollution in Istanbul?
9. Why does Istanbul have a cosmopolitan character?
10. Explain why religion and the army have an important influence on the character of the city.
11. Describe the challenges of traffic infrastructure in a rapidly expanding city.
12. ‘Istanbul Suffers Worst Water Crises in Forty Years’ Headlines on 5th August, 1990. This led to protestors blocking Istanbul’s airport to highlight the failure of the government to deal with the problem. What were the government’s responses to these protests (Refer to the Water Projects)?
13. Istanbul is subject to earthquakes. What effects would an earthquake have on the city? How should the city prepare for this event?
14. Describe the responses to water and sanitation services in Istanbul.
15. Why is education and communications important in a mega city?
16. Why do you think Istanbul is a popular tourist destination?
D. ESSAYS – EXTENDED RESPONSES

1. The quality of life of the population in Istanbul has improved over time. Describe the improvements and how they were achieved.
2. Istanbul has grown from a small fishing village in 667BC with a few hundred people into a mega city with about 12 million people in the year 2000. The city now spreads west beyond the airport 23km from CBD, north halfway to the Black Sea and east into Anatolia. What are the challenges of living in this rapidly expanding city and what are the responses to these challenges?
3. Analyse the changing nature and character of Istanbul.

E. STIMULUS RESPONSE

1. Refer to the statistics in Table 17 and explain how the government is financially responding to Turkey’s and Australia’s challenges.

**Table 17. Government Expenditure**

<table>
<thead>
<tr>
<th></th>
<th>Turkey</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Education</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>Health</td>
<td>3%</td>
<td>10%</td>
</tr>
<tr>
<td>Social Security and Welfare</td>
<td>4.5%</td>
<td>29%</td>
</tr>
<tr>
<td>Recreation, Culture and Religion</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Transport and Communications</td>
<td>7%</td>
<td>3%</td>
</tr>
</tbody>
</table>

2. Refer to the statistics in Table 18:
   - List the reasons for improvements in safe drinking water in urban areas in Turkey.
   - Why is there inequality in access to safe drinking water between urban-rural areas?

**Table 18. Access to Safe Drinking Water – Rural-Urban Inequality**

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>95%</td>
<td>62%</td>
</tr>
<tr>
<td>1999</td>
<td>100%</td>
<td>72%</td>
</tr>
</tbody>
</table>