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UNIT 1. THE USE OF URBAN SPACE

1.1 The Use of urban space

PRE –TEXT EXERCISES

I. Mind the pronunciation of the following words:

1	urban	міський
2	distribution	розподіл
3	employment	зайнятість
4	customer	покупець, клієнт
5	isolation	відокремлення
6	availability	наявність
7	accessibility	доступність
8	facility	засіб

II. Learn the following word combinations:

to take place – відбуватися, траплятися

urbanized areas – міська територія

rural areas – сільські райони

to be sparsely populated – мати рідке населення

to observe a tendency – спостерігати тенденцію

developed countries – розвинуті країни

to show declining population – показувати зниження росту населення

land cost – вартість землі

labour force – робоча сила

stage of development – ступінь розвитку

low housing density – низка щільність житла

wide road network – широка мережа доріг

higher cost per house – висока вартість житла

attractive living conditions – привабливі умови життя

parking facilities – засоби паркування

III. Translate the following international words: urbanization, service, tendency, population, process, concentration, isolation, factor, infrastructure.

IV. Give the initial form of the following words: distribution, relatively, sparsely, developed, employment, availability, attractive.

THE USE OF URBAN SPACE

In many countries all over the world urbanization is taking place. The urban population is increasing.

The distribution between urbanized and rural areas can take different forms. In France and Hungary about 20% of the population live in the metropolitan area around the capital, but the rest of the country is relatively sparsely populated. In Australia, New Zealand and Spain also the cities are few in number, but large in size.

On the other hand, in Germany and U.K. the population is spread more evenly throughout the whole country. That's why interurban relations are more important here than in countries with a single metropolitan area. One tendency can be observed in all countries: the process of suburbanization. Cities grow with low density suburbs on the outskirts. In all developed countries the city centers show declining population and a concentration of employment in the service sector.

The process of urban development is characterized by an isolation of urban functions: living, working, shopping, etc.

The process of suburbanization takes place in the countries which are different in the stage of development and in their government policy.

The availability of the private car and wide road network are major factors in the development of new residential areas with low housing density. Lower densities is generally characterized by higher cost per house for the infrastructure but offer more attractive living conditions. Shops are concentrated in the places with excellent car accessibility and parking facilities.

TEXT – BASED ASSIGNMENTS

I. Choose Ukrainian equivalents:

- | | | | |
|-----------------|----------------|--------------|--------------|
| 1. rural | a) сільський | б) міський | в) заміський |
| 2. distribution | a) засіб | б) розподіл | в) скупчення |
| 3. urban | a) сільський | б) гірський | в) міський |
| 4. sparse | a) густий | б) тонкий | в) рідкий |
| 5. to develop | a) відстоювати | б) розвивати | в) поспішати |

6. employment	a) зайнятість	б) затримка	в) безробіття
7. density	a) товщина	б) щільність	в) ширина
8. availability	a) відсутність	б) причина	в) наявність
9. attractive	a) примітний	б) привабливий	в) гарний
10. condition	a) умова	б) угода	в) утримання

II. Translate into English: щільність, окраїна, міський, відносини, важливий, розвинутий, населення, зайнятість, обслуговування, вартість, покупець, відокремлення, наявність, обставини, доступність.

III. Match words from columns A and B to make word combinations:

A	B
1. parking	a) conditions
2. urbanized	b) countries
3. developed	c) car
4. labour	d) facilities
5. interurban	e) network
6. service	f) force
7. private	g) sector
8. government	h) relations
9. living	i) policy
10. road	j) area

IV. Insert appropriate prepositions where necessary:

1. The distribution... urbanized and rural areas can take different forms. 2. Interurban relations are more important here than in countries ... a single metropolitan area. 3. The process of urban development is characterized ... an isolation of urban functions. 4. Cities grow ... low density suburbs on the outskirts. 5. The population is spread more evenly ... the whole country.

V. Complete the following sentences:

1. In France and Hungary about 20% of the population live in.... 2. That's why interurban relations are 3. In all developed countries the city centers show.... 4. The process of urban development is characterized by.... 5. The process of suburbanization takes place in.... 6. The availability of private cars and wide road

network are.... 7. Lower density is characterized by.... 8. Shops are concentrated in....

VI. Form sentences using the following words:

1. The, urban, increasing, is, population.
2. Rest, sparsely, the, is, country, the, of, populated.
3. The, spread, is, more, population, evenly.
4. Can, tendency, be, one, in, countries, all, observed.
5. Few, in, cities, number, the, are, size, in, large, but.

VII. Answer the following questions:

1. What is taking place in many countries?
2. What is the common feature between the processes of urbanization in France and Hungary?
3. How can we characterize the process of urbanization in Germany and U.K.?
4. What tendency can be observed in all countries?
5. What do the city centers show in all developed countries?
6. How is the process of urban development characterized by?
7. What are the major factors in the development of new residential areas with low housing density?

VIII. Translate into English:

1. Розподіл між урбанізованими та сільськими районами може приймати різні форми. 2. У Німеччині населення розподіляється більш рівномірно по всій країні. 3. У всіх країнах спостерігається та сама тенденція. 4. Процес міського розвитку характеризується ізоляцією урбанізованих функцій. 5. Наявність приватних легкових автомобілів та широка мережа доріг – це основні фактори розвитку нових житлових районів.

IX. Write down the main idea of the text and key words.

X. Make up a plan of the text, prepare a short report on the text.

1.2 Migration and public transport

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1	leisure	дозвілля
2	frequency	частота
3	noise	шум
4	radial	радіальний
5	orientation	орієнтування
6	commuter	пасажир
7	phenomenon	явище
8	reverse	зворотний
9	adequate	відповідний
10	periphery	периферія

II. Word combinations to remember:

to increase average trip length – збільшувати середню довжину подорожі

to become more attractive – ставати більш привабливим

waiting time – час очікування

to cover a longer distance – проходити більшу відстань

public transport – міський транспорт

extra time – додатковий час

to meet needs – відповідати потребам

peaking phenomenon – явище години пік

to move out of the city center – виїжджати із центра міста

a ring road – кільцева дорога

to increase car usage – збільшувати використання машин

adequate service – відповідне обслуговування

economic growth – економічний ріст

high standard of living – високий рівень життя

III. State the part of speech of the following words:

urbanized, lower, travel, attractive, move, these, which, towards, suburb, operating.

IV. Translate words with the same root:

1. to develop – developed – development

2. urban – urbanized – urbanization

3. travel – traveller – travelling

MIGRATION AND PUBLIC TRANSPORT

The growth of the urbanized area together with the segregation of residential, business, shopping and leisure area has increased the average trip length. Because of lower population densities, the level of service of public transport declines to the fewer passengers, the lower service frequencies and longer waiting times. So car travel becomes more attractive.

The migration of inhabitants to the outer parts of a city can be considered as the first stage of urban development. The second stage takes place when business also moves out. These two stages cause the major shifts in transportation.

Firstly there is a massive radial passenger movement towards the city center. Even if the traveling times by car and by public transport are similar, the private car is more attractive when a longer distance must be covered. People should choose between extra time spent in public transport and the higher cost of car travel. The traffic volumes are characterized by congestion, pollution, noise and parking problems.

Public transport meets only the needs for radial movement, because nearly all networks were built with radial orientation. Commuting is the main cause of the peaking phenomenon, which increase the operating cost of public transport.

When business moves out of the city center, a reverse flow of commuters is generated. Besides, the movements between the suburbs increase. But being radially oriented, public transport offers no adequate service for these needs. So car usage increases because of traffic in the periphery, on ring roads.

The increasing use of cars takes place not only in countries with economic growth and high standards of living but also in countries with economic problems and deteriorating standards of living.

I. Form nouns of the verbs by means of the following suffixes: - tion, - ion, - ment, -ation: to migrate, to transport, to develop, to move, to operate, to deteriorate, to urbanize, to compete.

II. Give English equivalents: житловий район, дозвілля, щільність, час очікування, переміщення, пасажирський рух, міський транспорт, висока вартість, забруднення, головна причина, потреби, кільцева дорога, відповідний, рівень життя.

III. Match Ukrainian and English equivalents:

A

1. segregation
2. decline
3. service
4. migration
5. inhabitant
6. shift
7. volume
8. network
9. flow
10. need

B

- a) об'єм
- b) мешканець
- c) потік
- d) мережа
- e) потреба
- f) відокремлення
- g) обслуговування
- h) переміщення
- i) зменшуватися
- j) переселення

IV. Match words from columns A and B to make word combinations:

A

1. leisure
2. average
3. public
4. waiting
5. passenger
6. extra
7. higher
8. traffic
9. car
10. economic

B

- a) cost
- b) growth
- c) time
- d) usage
- e) volume
- f) time
- g) movement
- h) area
- i) transport
- j) length

V. Find out synonyms:

A

1. decline
2. growth
3. trip
4. population
5. stage
6. choose
7. flow
8. offer
9. standard
10. use

B

- a) stream
- b) level
- c) select
- d) application
- e) propose
- f) travel
- g) period
- h) decrease
- i) inhabitants
- j) rise

VI. Complete the following sentences:

1. So car travel becomes....
2. The second stage takes place....
3. Firstly there is....
4. People should choose between....
5. The traffic volume is characterized by....
6. Public transport meets....
7. When business moves out of the city center....
8. So car usage increases....
9. The increasing use of cars takes place....
10. These two stages cause....

VII. Answer the following questions:

1. What do lower population densities cause?
2. What two stages of urban development do you know?
3. What does the word “commuter” mean?
4. What choice should people of modern cities make?
5. What are the negative characteristics of great traffic volumes?
6. What does public transport meet?
7. Where does the increasing use of cars take place?

VIII. Translate into English:

1 Пересування на автомобілі стає більш привабливим. 2. Перша стадія міського розвитку – це переміщення мешканців міста за його межі. 3. Обсяги руху характеризуються заторами, забрудненням, шумом та проблемами паркування. 4. Міський транспорт відповідає тільки потребам радіального руху. 5. Використання автомобілів збільшується через рух по кільцевим дорогам.

IX. Discuss how migration affects public transport.

X. Prepare a short report on the text.

UNIT 2. URBAN TRANSPORTATION

2.1. Urban transportation in different countries

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1	observe	спостерігати
2	minor	незначний
3	abundant	багатий
4	competition	конкуренція
5	influence	вплив
6	share	частина
7	recent	останній
8	opinion	думка
9	split	розщеплення
10	capacity	пропускна здатність

II. Word combinations to remember:

to leave city center in decline – залишати центр міста в занепаді

to play a minor role – відігравати незначну роль

abundant resources – надлишкові ресурси

heavy competition – сильна конкуренція

poor infrastructure – погана інфраструктура

to cause great problems – спричиняти великі проблеми

socio-economic conditions – соціально-економічні умови

to change the way of life – змінювати спосіб життя

modal split of transport – сучасне розщеплення транспорту

traffic accident rate – рівень аварій

to construct roads – будувати дороги

maximum capacity – максимальна пропускна здатність

public opinion – суспільна думка

to focus on the quality of life – сфокусуватися на способі життя

III. Translate the following international words: transportation, process, system, investment, sector, infrastructure, problem, service, economy, role, period.

IV. While reading and translating the text keep in mind meanings of the following words:

observe – 1. спостерігати 2. вести наукові спостереження 3. примічати.

competition – 1. змагання 2. конкуренція 3. конкурс

volume – 1. том, книга 2. об'єм, кількість 3. сила

URBAN TRANSPORTATION IN DIFFERENT COUNTRIES

A process of migration of the population from rural to urbanized areas is observed in many countries. In addition suburbanization is taking place leaving city centers in decline and public transport is only playing a minor role in the transportation of people. Low density suburbs and segregation of urban functions lead to an increase in the use of private cars.

The countries can be divided into four groups:

- Western European countries suburbanized: public transport system has declined for decades (abundant resources but heavy competition for investments).
- Other industrialized countries (USA, Canada, Australia, Japan): car-oriented society; public transport has never played a major role, more influence from private sector and less from the public ones.
- Countries in transition (Eastern Europe, newly industrialized countries): highly urbanized, poor infrastructure, high share of public transport, little resources, transport competes with other short-term needs.
- Developing countries: trying to catch up on all fronts, resources for all kinds of basic needs are lacking.

European countries have particular characteristics:

- the typical city pattern has a dense, pre-war, multifunctional center surrounded by large, single function complexes and high rise housing districts, constructed in the 60's and 70's.
- This policy caused an unexpected travel demand increase but the increase volume of traffic on the transport network has not taken place together with the necessary infrastructure investment.

- The recent increase in private passenger car traffic has caused great problems with parking in city centers. In smaller towns these problems are stronger because of the inadequate public transport services.
- The new socio-economic conditions have changed the way of life and the modal split of transport, the levels of car ownership are growing rapidly, the economy is stagnating, and traffic accident rates are growing.
- After a period when it was politically necessary to build as many houses as possible, construct roads with the maximum capacity, public opinion has begun to focus on the quality of life and environmental protection.

TEXT – BASED ASSIGNMENTS

I. Choose English equivalents:

1. переселення	a) migration	b) transportation	c) addition
2. занепад	a) decrease	b) increase	c) decline
3. щільність	a) width	b) density	c) length
4. конкуренція	a) competition	b) production	c) population
5. вплив	a) income	b) influence	c) quality
6. приватний	a) public	b) parking	c) private
7. потреба	a) need	b) demand	c) wish
8. обслуговування	a) security	b) supply	c) service
9. володіння	a) property	b) ownership	c) opinion
10. здатність	a) capacity	b) volume	c) ability

II. Translate into Ukrainian: rural, segregation, decade, heavy competition, society, private sector, transition, short-term needs, catch up, housing districts, unexpected, daily trips, parking problems, inadequate.

III. Match words from columns A and B to make word combinations:

A	B
1. private	a) rates
2. abundant	b) opinion

3. heavy
4. poor
5. developing
6. daily
7. economic
8. accident
9. maximum
10. public

- c) capacity
- d) conditions
- e) trips
- f) cars
- g) competition
- h) infrastructure
- i) countries
- j) resources

IV. Find out synonyms:

A

1. rural
2. observe
3. influence
4. characteristic
5. necessary
6. trip
7. way
8. rapidly
9. construct
10. opinion

B

- a) travel
- b) view
- c) fast
- d) mode
- e) build
- f) impact
- g) essential
- h) country
- i) property
- j) watch

V. Decide whether the statements are true or not. Correct the wrong ones:

1. A process of migration of the population from rural to urbanized areas is observed in many countries.
2. High density suburbs and segregation of urban functions lead to an increase in the use of private cars.
3. The countries can be divided into five groups.
4. The recent increase in private passenger car traffic has caused great problems with parking in city centers.
5. The levels of car ownership are not growing.

VI. Complete the following sentences:

1. Low density suburbs and segregation of urban functions lead to....
2. This policy caused an unexpected travel demand increase but....
3. In smaller towns these

problems are stronger because of 4. The new socio-economic conditions have changed.... 5. The recent increase in private passenger car traffic has caused 6. Traffic accident rates are.... 7. Public opinion has begun to focus on.... 8. The countries can be divided into....9. European countries have.... 10. Until the 1970's about 80-90% of non-walking daily trips were...

VII. Answer the following questions:

1. What leads to an increase in the use of private cars?
2. What groups can the countries be divided into?
3. What characteristics have European countries?
4. What are the negative aspects of the increased volume of the transportation network?
5. What characteristics of the European countries can be applied for Ukraine?
6. What have changed the way of life and the modal split of transport?
7. What has public opinion begun to focus on?

VIII. Translate into English:

1. Процес міграції населення із сільських районів у міські спостерігається в багатьох країнах. 2. Низька щільність населення в пригородах та сегрегація міських функцій приводять до збільшення легкових автомобілів. 3. Недавній ріст руху легкових автомобілів викликав великі проблеми з паркуванням у центрі міста. 4. Нові економічні умови змінили спосіб життя людей. 5. Суспільна думка почала зосереджувати ся на якості життя й проблемах захисту навколишнього середовища.

IX. Speak about:

- countries division
- particular characteristics of the European countries

X. Make up a plan of the text; prepare a short report on the text.

UNIT 3. TRANSPORTATION PLANNING

3.1. Transportation planning

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1.	congestion		затор
2.	facilitate		сприяти
3.	politician		політик
4.	priority		пріоритет
5.	subsidization		субсидія
6.	cycle		цикл
7.	path		доріжка
8.	pedestrian		пішохід
9.	initiative		ініціатива
10.	authority		влада

II. Word combinations to remember:

travel demand – потреба в пересуванні

to make attempts – робити спроби

to gather results – збирати результати

high capacity roads – дороги з високою потужністю

delivery of freight – доставка вантажу

to establish parking restrictions – установлювати обмеження в паркуванні

to introduce speed limits – впроваджувати обмеження швидкості

to give the cycle traffic priority – давати пріоритет руху велосипедів

public initiatives – громадські ініціативи

local authorities – міська влада

to establish pedestrian areas – впроваджувати пішохідні зони

III. Translate the following international words: problem, transport, plan, park, limit, system, control, information, initiative, national, region.

IV. Translate words with the same root:

to transport – transporting – transportation

to plan – planning – planner

to develop – developer – development

TRANSPORT PLANNING

The problems of congestion are in most countries solved by improvements of the transportation system in order to facilitate the increase in travel demand. The approach in which land use planning is regarded as means to influence on travel demand has just started off.

In some, mostly western European countries, the first attempts have been made and some first results have been gathered. On other countries the planners are working hard to make the public and the politicians aware of the problems and the necessity of solving them.

Nearly all countries state a wide range of actions both in urban planning and transport planning.

The main efforts are:

- locating new developments within the existing urban areas instead of extending the urban area;
- reinforcing the city centers;
- recentralizing or creating smaller centers in the suburbs in places with a very efficient public transport;
- establishing high-capacity roads around cities or city centers;
- restricting car access to sensitive areas;
- making special efforts for the delivery of freight ;
- establishing parking restrictions;
- introducing traffic and speed limits;
- making or extending strong public transport systems(railways, light rail) ;
- giving the buses priority;
- making better use of the new technology, control and information systems;
- improving the economic efficiency of public transport systems either by rationalization or subsidization;
- giving the cycle traffic priority (separate paths, tracks along roads) ;
- establishing pedestrian areas and giving the pedestrians priority where needed;

The efforts should be made in every administrative level and include main public initiatives.

Both national, regional and local authorities should take part in the process. Each of them should know their obligations and a high level of co-operation should be present.

TEXT – BASED ASSIGNMENTS

I. Choose English equivalents:

- | | | | |
|------------------|------------------|----------------|----------------|
| 1. вирішувати | a) to solve | b) to stand | c) to meet |
| 2. удосконалення | a) development | b) improvement | c) decision |
| 3. підхід | a) attack | b) effort | c) approach |
| 4. спроба | a) attempt | b) impact | c) assist |
| 5. необхідність | a) nobility | b) mobility | c) necessity |
| 6. доступ | a) ability | b) access | c) attain |
| 7. доставка | a) delivery | b) destiny | c) destruction |
| 8. пішохід | a) vehicle | b) pedestrian | c) passenger |
| 9. обов'язок | a) determination | b) right | c) obligation |
| 10. влада | a) authority | b) author | c) autonomy |

II. Translate into Ukrainian:

to improve, congestion, to facilitate, to regard, politician, a wide range, efforts, existing areas, car access, parking restrictions, traffic limits, track, to need, administrative level, public initiatives, obligation, regional, co-operation.

III. Give

a) **synonyms of the following words:** to regard, jam, hard, , to simplify, safe, to settle.

b) **antonyms of the following words:** low, to avoid, bad, safe, modern.

IV. Match words from columns A and B to make word combinations:

- | A | B |
|------------------|-----------------|
| 1. to solve | a) areas |
| 2. to make | b) limits |
| 3. to gather | c) priority |
| 4. high-capacity | d) paths |
| 5. car | e) restrictions |
| 6. speed | f) problems |
| 7. parking | g) roads |
| 8. to give | h) attempts |
| 9. separate | i) access |
| 10. pedestrian | j) results |

V. Complete the following sentences:

1. The problems of congestion are solved by.... 2. The approach in which land use planning is regarded as 3. Nearly all the countries state a wide range of action both in.... 4. In other countries the planners are working hard to 5. In western European countries the first attempts 6. The main efforts are.... 7. The efforts should be made in.... 8. National, regional and local authorities should 9. Each of them should

VI. Decide whether the statements are true or not. Correct the wrong ones:

1. The problems of congestion are not being solved in the most countries.
2. The land use planning is regarded as means to influence on travel demand.
3. In some countries the first attempts have been made.
4. One of the main efforts is locating of new developments out of the existing urban areas.
5. In some countries the planners are working hard to make public aware of the problems.
6. The car access to sensitive areas is one of the actions of transport planning.
7. Nearly all the countries state a wide range of action both in urban planning and transport planning.
8. The priority should be given to private cars.
9. The efforts should be made at every administrative level.
10. Only local authorities should take part in the process of the congestion problem's solving.

VII. Answer the following question:

1. How are the problems of congestion solved in the most countries?
2. How is the land use planning regarded?
3. What attempts have been made in many countries?
4. What are the planners working hard at?
5. What is the most important action among those given in the text?
6. What are the two ways of improving the economic efficiency of public transport?
7. What efforts can be used within Donetsk urban area in present situation?

VIII. Translate into English:

1. Проблема транспортних пробок у більшості країн вирішується шляхом поліпшення транспортної системи. 2. У багатьох країнах вже зроблені перші спроби вирішення проблем, пов'язаних з транспортом. 3. Майже усі країни

вживають заходів щодо планування міста. 4. Введення швидкісних обмежень – серед зусиль щодо вирішення проблем пробок у місті.

IX. Speak about:

- problems of congestion
- the main efforts of congestion problems' solving

X. Make up a plan of the text; prepare a short report on the text.

3.2. Legislation on urban and transport planning

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1.	partial		частковий
2.	foggy		туманний
3.	investigation		дослідження
4.	guide		провідний принцип
5.	serious		важливий
6.	alternative		альтернативний
7.	bypass		обхідна дорога
8.	toll		мито
9.	quantity		кількість
10.	media		засоби інформації

II. Word combinations to remember:

- traffic accidents investigation – дослідження аварій
- foggy weather – туманна погода
- road construction – шляхове будівництво
- protection of green areas – захист природи
- alternative transport modes – альтернативні транспортні засоби
- urban toll – міське мито
- to reduce the influence on the environment – зменшувати вплив на довкілля
- quantity of parking facilities – кількість засобів паркування

use of bicycles – вживання велосипедів

to attract media and public attention – притягувати увагу засобів масової інформації та громадськості

III. Translate the following international words: standard, national, smog, plan, focus, problem, aspect, system, media, local, radio.

IV. Translate words with the same root:

to construct – constructive – construction

to operate – operation – operational

to develop – developer – development

LEGISLATION ON URBAN AND TRANSPORT PLANNING

There are a great number of laws and standards in the developed countries on urban planning and the development of transportation. Among them there are national town and country planning programmes, regional master plans, local land-use plans. Concerning the laws on the transport planning there are laws governing:

- public transport;
- parking policy;
- partial restriction of traffic (foggy weather, smog conditions) ;
- traffic plans;
- traffic accidents investigations

Besides some standards and laws regulate technical guide on road construction, construction of buildings and also there are laws relating to the environment (noise, water, air pollution, protection of green areas and historic sites) as effects on the environment are considered seriously in areas where population density is high. In some countries the law on the protection of agricultural land has the priority above other laws.

Usually local plans of transport development focus mainly on such aspects as:

- concentrating urban development to restrict the need to travel;
- improving the use of alternative transport modes to the car;
- development of a good road network and a good public transport system;
- solving of the transportation of goods in towns;
- increasing the construction of bypasses;
- introducing urban tolls;
- establishing a parking policy;
- reducing the influence on the environment.

Future urban development seems to be concentrated around the problems of a restriction on the need to travel, an increase in the quality of the public transport and the quality of parking facilities and also on the increased use of bicycles.

All these issues tend to attract great media and public attention. Thus, in most countries land use planning is a matter for local government.

TEXT – BASED ASSIGNMENTS

I. Choose English equivalents:

1. відноситися	a) concern	b) concept	c) content
2. обмеження	a) reduction	b) restriction	c) reconstruction
3. дослідження	a) investigation	b) institution	c) instruction
4. будівництво	a) consolidation	b) consultation	c) construction
5. забруднення	a) waste	b) pollution	c) population
6. захист	a) protection	b) destruction	c) revolution
7. обхід	a) bicycle	b) bypass	c) bypath
8. зменшувати	a) recycle	b) restart	c) reduce
9. кількість	a) quantity	b) quality	c) volume
10. політика	a) police	b) policy	c) position

II. Translate into Ukrainian:

developed countries, local plan, smog conditions, traffic accident, guide, relate, noise, historic sites, agricultural land, need to travel, road network, transportation of goods, quality, quantity, parking facilities, issue, tend, attention.

III. Give

a) **synonyms of the following words:** standard, restriction, investigation, construction, protection, influence, use.

b) **antonyms of the following words:** low, urban, bad, many, modern.

IV. Match words from columns A and B to make word combinations:

A

1. master
2. parking
3. foggy
4. traffic
5. air
6. agricultural
7. urban
8. to attract
9. road
10. to give

B

- a) network
- b) tolls
- c) priority
- d) attention
- e) policy
- f) accidents
- g) plan
- h) pollution
- i) weather
- j) land

V. Complete the following sentences:

1. There are a great many laws and standards on....
2. Concerning the laws on the transport planning there are....
3. There are laws relating to....
4. Usually local plans of transport development focus on....
5. Future urban development seems to be
6. All these issues tend to....
7. In some countries the law on the protection of agricultural land has....
8. Among them there are
9. Besides some standards and laws regulate
10. Thus in most countries land use planning is....

VI. Decide whether the statements are true or not. Correct the wrong ones:

1. There are no laws and standards in the developed countries on urban planning.
2. There are national town and country planning programmes, regional master plans, local land-use plans.
3. Besides some laws regulate technical guide on road construction.
4. There are no laws relating to the environment.
5. Effects on the environment are considered seriously in areas where the population density is low.
6. In some countries the law on the protection of agricultural land has the priority above other laws.
7. Local plans of transport development focus on improving the use of alternative transport modes to the car.
8. Local plans of transport development focus on increasing the influence on the environment.
9. Future urban development seems to be concentrated around the problems of a restriction on the need to travel.
10. All these issues do not tend to attract great media and public attention.

VII. Answer the following question:

1. What laws are there in the developed countries?
2. What laws are there concerning the transport planning?
3. What do some laws and standards regulate?
4. Where are effects on the environment considered seriously?
5. Where has the law on the protection of agricultural land priority?
6. What aspects do local plans of transport development focus mainly on?
7. What do these issues tend to attract?

VIII. Translate into English:

1. У розвинених країнах є багато законів з міського планування й розвитку перевезень. 2. Крім того закони регулюють будівництво доріг і будинків. 3. Також є закони, що відносяться до захисту довкілля. 4. У деяких країнах перевагу має закон з захисту сільськогосподарських земель. 5. Всі ці питання привертають увагу громадськості й засобів масової інформації.

IX. Speak about:

- the laws on the transport planning
- local plans of transport development

X. Make up a plan of the text; prepare a short report on the text.

UNIT 4. TRANSPORTATION PROBLEMS

4.1. General problems of transportation

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1. deteriorate	погіршувати
2. recreation	відпочинок
3. circulation	обіг
4. consumption	споживання
5. entire	цілий
6. profitable	прибутковий
7. equality	рівність
8. preservation	збереження
9. allocation	розміщення
10. reasonable	прийнятний

II. Word combinations to remember:

living conditions – умови життя
to solve conflict – вирішувати суперечність
recreation area – зона відпочинку
to maintain mobility – зберігати мобільність
to limit noise – обмежувати шум
energy consumption – споживання енергії
to be economically profitable – бути економічно прибутковим
reasonable costs – помірні витрати
to promote links – сприяти зв'язкам
improvement of safety – поліпшення безпеки
preservation of historic city center – збереження історичного центру міста
to ensure development of the region – забезпечувати розвиток регіону
social equality of all residents – соціальна рівність усіх мешканців
accessibility to goods and services – доступність товарів та послуг
to facilitate the economic activity – сприяти економічній діяльності

III. State the part of speech of the following words: agree, between, when, environment, living, urban, with, entire, same, link, first, profitable.

IV. While reading and translating the text keep in mind meanings of the following words:

recreation– 1. відновлення сил 2. відпочинок 3. перерва
issue – 1. вихід 2. результат 3. проблема 4. випуск, номер
effect – 1. вплив 2. наслідок 3. здійснення 4. ефект

GENERAL PROBLEMS OF TRANSPORTATION

It is generally agreed that private cars play a major role in the deteriorating of living conditions in the city. The conflicts between traffic needs and the needs of residential, employment and recreation areas still have to be solved. There is a good reason to continue to ensure the accessibility of the city and at the same time reduce the negative effects on the living environment. In this respect all modes of transport have to be considered. Two main problems can be formulated:

- to maintain mobility (traffic circulation and accessibility);
- to maintain living conditions and urban functions.

So a division of issues has been made between objects related to mobility and those related to land use and urban functions. Issues related to the first problem are the following:

1. Guarantee of basic accessibility.
2. Protection of environmental values (limiting noise, pollution)
3. Improvement of the entire transport system, especially public transport.
4. Efficient movement of passengers and services.
5. Ensure that transport is economically profitable.
6. Promotion of links between center and outskirts and outskirts to outskirts.
7. Improvement of safety.

Issues related to the second problem:

1. Conservation of urban functions.
2. Preservation of historic city centers.
3. Better commercial operation of the urban area.
4. Control of the massive shift of population from the center to the outskirts.
5. Ensure the urban, social, industrial and commercial development of the region.
6. Social equality of all residents with regard to accessibility to goods and services.
7. Facilitate the economic activity of the tourist industry.

The complete list of issues is of course much longer. Among them is an issue that could not be included into the above groups: better coordination between institutional bodies.

TEXT – BASED ASSIGNMENTS

I. Translate into Ukrainian: private car, major role, traffic needs, accessibility, negative effects, to maintain living conditions, pollution, reasonable cost, outskirts, improvement, safety, social equality, resident, economic activity, to facilitate, coordination.

II. Give English equivalents: погіршувати, наймання, привід, доступність, гарантувати, розподіл, захист, споживання енергії, рух, вигідний, розміщення, безпека, поліпшення, переміщення, розвиток, рівність, товари та послуги, економічна діяльність.

III. Match Ukrainian and English equivalents:

A

1. agree
2. conditions
3. need
4. to solve
5. to reduce
6. mode
7. object
8. value
9. efficient
10. preservation

B

- a) цінність
- b) зменшувати
- c) збереження
- d) об'єкт
- e) ефективний
- f) умови
- g) вирішувати
- h) потреба
- i) вид
- j) згоджуватися

IV. Find out synonyms of the given words among those in brackets:

1. recreation 2. to ensure 3. to allocate 4. profit 5. to define 6. to save 7. target
(a) aim (b) determine (c) rest (d) economize (e) benefit (f) guarantee (g) distribute)

V. Make the word combinations using the words in both columns:

A

1. major
2. living
3. recreation
4. negative
5. to maintain
6. energy
7. reasonable
8. to promote
9. social
10. economic

B

- a) equality
- b) cost
- c) activity
- d) links
- e) role
- f) area
- g) mobility
- h) conditions
- i) effects
- j) consumption

VI. Complete the following sentences:

1. It is generally agreed that.... 2. There is a good reason to continue to.... 3. In this respect.... 4. A division of issues has been made between.... 5. Protection of environmental values.... 6. Two main problems can be formulated.... 7. The conflicts between.... 8. The complete list of issues is 9. Among them was.... 10. Better coordination between....

VII. Answer the following questions:

1. What plays a major role in the deteriorating of living conditions? 2. What conflicts have to be solved? 3. What two problems can be formulated? 4. What are the issues related to the first problem? 5. What are the issues related to the second problem? 6. How has a division of issues been made? 7. How can transport be economically profitable?

VIII. Find an appropriate word for each blank space using the following words:

institutional bodies	accessibility	a major role	the negative effects
	traffic needs	of issues	land use

1. Private cars play... in the deteriorating of living conditions in the city.
2. The conflicts between... and the needs of residential, employment and recreation areas have to be solved.
3. There is a good reason to continue to ensure... of the city.
4. There is a good reason to reduce... on the living environment.
5. A division of issues has been made between objects related to mobility and those related to....
6. The complete list... is much longer.
7. Among them is better coordination between

IX. Speak about:

- how to maintain mobility
- how to maintain living conditions and urban functions

X. Make up a plan of the text; prepare a short report on the text.

4.2. Regional accents of transportation problems

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

- | | |
|--------------------|---------------------|
| 1. circumstance | обставина |
| 2. compromise | компроміс |
| 3. explosion | вибух |
| 4. ramification | розгалуження |
| 5. extension | поширення |
| 6. satisfy | задовольняти |
| 7. competitiveness | конкурентоздатність |
| 8. require | потребувати |
| 9. ensure | гарантувати |
| 10. supply | попит |

II. Word combinations to remember:

general problems – загальні проблеми

size of investments – розмір інвестицій

to depend on the particular circumstances – залежати від специфічних обставин

to find a compromise – знаходити компроміс

the main objective – головна ціль

to encourage public transport – заохочувати громадський транспорт

to maintain the competitiveness – підтримувати конкурентоздатність

demand and supply – пропозиція та попит

ramification of the road network – розгалуження мережі доріг

countries in transition – країна з перехідною економікою

to satisfy the considerable increase – задовольняти значному росту

to meet the needs – задовольняти потребам

to favour public transport – підтримувати громадський транспорт

to require great investments – потребувати великих інвестицій

III. Translate the following international words: problem, type, control, system, compromise, structure, sector, transport, role.

IV. In each set of words find out the word that does not have a similar meaning with others:

1. Highway, road, role, motorway, traffic.
2. Principal, main, basic, effective, major.
3. Obtain, receive, acquire, attain, issue.
4. Target, explosion, objective, aim, goal.
5. Important, particular, significant, vital, grave.
6. Provide, supply, ensure, service, secure.
7. Fundamental, key, functional, cardinal, essential.
8. Perform, preserve, maintain, keep, retain.

REGIONAL ACCENTS OF TRANSPORTATION PROBLEMS

The relative importance of the various general problems such as environment, accessibility, quality of life, urbanization control, and size of investments depends on the particular circumstances. Most problems indicate the need to find a compromise between a city's structure and its transport needs. The approach depends on the type of the country. Again three different types of countries are considered.

1. Developed countries with dense urban areas try to change the modal split (depending on distance, motive, etc.) to encourage public transport and reduce of private cars. The main objective of the planning policy is to control the spread of urbanization (to maintain the competitiveness of public transport and preserve non-urbanized areas). The main attention here is both on demand and supply measures especially for the public transport sector.
2. In developed countries with more recent urban traditions and of land available (such as Australia and Canada), the explosion based on the ramification of the road network has caused a considerable increase in traffic and has led to major congestion problems. The possibilities of either constructing new road or of increasing role of public transport are limited. The main attention here lies on demand management measures and on practice to ensure construction of necessary extensions to the road network.
3. In some countries in transition the present transport system cannot satisfy the considerable increase in mobility: the problem seems to be to provide better public transport and meets the needs of growing numbers of users of private cars while also preserving a modal split that greatly favours public transport. The problem of improving the transport system which requires great investments is also presented in developing countries. The main attention in these countries is to ensure the competitiveness of the public transport sector.

TEXT – BASED ASSIGNMENTS

I. Translate into Ukrainian: relative importance, control of urbanization, indicate, transport needs, approach, dense areas, motive, spread, measure, recent traditions, congestion, extension, users of private cars, provide, transition, satisfy, network, modal split, favour, ensure, competitiveness, preserve.

II. Choose English equivalents:

1. відносний	a) relative	b) reluctant	c) reliable
2. розмір	a) side	b) size	c) strike
3. знаходити	a) to found	b) to find	c) to fulfill
4. підхід	a) abroad	b) approach	c) appointer
5. змінювати	a) change	b) challenge	c) exchange
6. попит	a) demand	b) need	c) supply
7. вибух	a) extension	b) explosion	c) exercise
8. обмежувати	a) line	b) lay	c) limit
9. міра	a) measure	b) pleasure	c) amount
10. сприяти	a) ensure	b) favour	c) increase

III. Match words from columns A and B to make word combinations:

A	B
1. relative	a) investments
2. general	b) increase
3. particular	c) competitiveness
4. modal	d) needs
5. road	e) problems
6. transport	f) split
7. considerable	g) importance
8. to meet	h) circumstances
9. great	i) network
10. to ensure	j) system

IV. Decide whether the statements are true or not. Correct the wrong ones:

1. The relative importance of the various general problems depends on the particular circumstances.
2. Most problems indicate the need to find a compromise between a city's structure and its transport needs.
3. The approach does not depend on the type of the country.
4. Four different countries are considered.
5. Developed countries with dense urban areas try to change the modal split.
6. The main objective of the planning policy is to control the spread of urbanization.
7. In developed countries with more recent urban traditions the ramification of the road network has not caused a considerable increase in traffic.
8. In some countries in transition the present transport system can satisfy the considerable increase in mobility.

V. Choose the most appropriate answer to complete the sentence:

1. The relative importance of the various general problems depends on the particular:
 - a) demands;
 - b) circumstances;
 - c) needs.
2. Most problems indicate the need to find a:
 - a) compromise;
 - b) key;
 - c) answer.
3. The main objective of the planning policy is to control the spread of:
 - a) competitiveness;
 - b) transport;
 - c) urbanization.
4. The problem of improving the transport system which requires great investments is also presented in:
 - a) developing countries;
 - b) developed countries with dense urban areas;
 - c) developed countries with more recent urban traditions.

VI. Answer the following questions:

1. What are the general problems of transport development?
2. What compromise do most problems need?
3. Why must developed countries control the spread of urbanization?
4. What countries with more recent urban traditions do you know?
5. What are the countries where the present transport systems cannot satisfy the great increase in mobility?
6. What does the problem of improving the transport system in developing countries require?
7. What is the main attention in these countries to ensure?

VII. Translate into English:

1. Відносна важливість різних проблем залежить від специфічних обставин.
2. Підхід до проблеми залежить від типу країни.
3. Головна мета політики

планування – це контроль розповсюдження урбанізації. 4. У деяких країнах з перехідною економікою існуюча транспортна система не задовольняє значному росту мобільності.

VIII. Identify types of countries:

1. In these countries the government should ensure the competitiveness of the public transport modes.
2. These countries apply measures to change the modal split to promote public transport.
3. In these countries the explosion of urbanization has led to great problems with traffic jams.
4. The main objective in these countries is to provide the competitiveness of the public transport sector.
5. The authorities in these countries should control demand and supply for the transport sector.
6. The possibilities of constructing new roads or increasing the role of public transport are restricted.

IX. Speak about:

- developed countries with dense urban areas;
- developed countries with more recent urban traditions;
- countries in transition.

X. Make up a plan of the text; prepare a short report on the text.

4.3. Transportation problems in Eastern European countries

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1. arise	з'являтися
2. complexity	складність
3. exchange	обмін
4. transfer	передавати
5. experience	досвід
6. summarize	підсумовувати
7. specific	особливий
8. remark	позначка
9. force	сила
10. ring	кільце

II. Word combinations to remember:

to happen under special conditions – відбуватися в особливих умовах

to consider factors – розглядати чинники

to make sense – мати смисл

to take effect – мати ефект

to be useful – бути корисним

international exchange – міжнародний обмін

to transfer experience – передавати досвід

urban space – міський простір

to come into force – вступати в силу

reduction of traffic – скорочення руху

ring roads – кільцева дорога

in time and space – у часі та просторі

to be implemented – бути виконаним

in an integrated manner – інтегрованим методом

III. Translate the following international words: passenger, type, effect, system, private, local, national, transport, balance.

IV. Translate words with the same root:

to construct – constructive – construction

to operate – operation – operational

to develop – developer – development

EASTERN EUROPEAN COUNTRIES: TRANSPORTATION PROBLEMS

As the transportation system develops, so new problems will arise. It is useful to learn what has happened under special conditions in other countries and cities. In deciding the course of action in any one location, all special factors must be considered. It makes sense to look at the different national reports to learn what is happening elsewhere.

The possibilities for future research into urban transportation depends upon the stage of development and the complexity of the transportation system since most measures take 10-15 years to take effect, it would be useful to increase the international exchange between planners to transfer knowledge and experience in transportation planning and management. In this respect the initiatives taken in the Car Free Cities Club and the METMET network should be noticed.

It is worth summarizing some specific remarks by the countries in Eastern Europe:

- New laws relating to local communities interests, urban documentations have come into force. Planning will focus upon environment factors.
- It is necessary to maintain the high modal share of public transport in the modal split; to develop the use of the bicycle; to limit the traffic in centers and near housing in urban areas.
- Traffic limiting in some town centers has already been achieved and resulted in the reduction of traffic, but at the same time traffic volumes have increased on the ring roads. Traffic limiting should be handled as a system measure, to balance the needs of all transport modes in time and space.
- The problems of new transport policies are to allow stable development of the transport system enabling car traffic to be contained within the environmental capacity of each zone.

It is apparent that transportation problems in urban areas can be eased using technical, financial and organizational measures. The best results usually come from a combination of measures, planned and implemented in an integrated manner.

TEXT – BASED ASSIGNMENTS

I. Translate into Ukrainian: special conditions, location, report, possibility, research work, knowledge, worth, specific remarks, local community, regulation,

environment factors, modal share, traffic limiting, in time and space, policy, handle, ring roads, housing, stable development, enable, capacity, zone.

II. Choose English equivalents:

- | | | | |
|------------------|---------------|----------------|-----------------|
| 1. розміщення | a) location | b) arrangement | c) organization |
| 2. розглядати | a) present | b) consider | c) consume |
| 3. дослідження | a) research | b) search | c) examine |
| 4. передавати | a) transit | b) transport | c) transfer |
| 5. відношення | a) trust | b) respect | c) attitude |
| 6. позначка | a) remark | b) mark | c) point |
| 7. правило | a) regulation | b) attention | c) right |
| 8. досягати | a) attain | b) enable | c) achieve |
| 9. кільце | a) ring | b) king | c) loop |
| 10. безсумнівний | a) evident | b) apparent | c) essential |

III. Match words from columns A and B to make word combinations:

- | A | B |
|------------------|---------------|
| 1. to make | a) split |
| 2. to take | b) traffic |
| 3. international | c) regulation |
| 4. research | d) measures |
| 5. to transfer | e) sense |
| 6. specific | f) work |
| 7. to limit | g) effect |
| 8. financial | h) experience |
| 9. modal | i) exchange |
| 10. building | j) remarks |

IV. Decide whether the statements are true or not. Correct the wrong ones:

1. As the transportation system develops so new problems will arise.
2. It is useful to learn what has happened under special conditions in other countries.
3. It makes no sense to look at the different national reports to learn what is happening elsewhere.
4. The possibilities for future research into urban transportation do not depend upon the stage of development and the complexity of the transportation system.
5. Planning will focus upon environment factors.

6. It is not necessary to develop the use of bicycle.
7. It is necessary to maintain the high modal share of public transport.
8. Traffic limiting in some town centers has not been achieved yet.
9. Traffic limiting should be handled as a system measure.
10. It is apparent that transportation problems can be eased using technical, financial and organizational measures.

V. Choose the most appropriate answer to complete the sentence:

1. As the transportation system develops so new problems will:
 - a) arise;
 - b) increase;
 - c) emerge.
2. In deciding the course of action in any one location all special factors must be:
 - a) given;
 - b) considered;
 - c) presented.
3. It is necessary to develop the use of:
 - a) car;
 - b) bus;
 - c) bicycle.
4. Traffic limiting should be handled as a system measure to balance the needs of all transport modes in:
 - a) air;
 - b) time and space;
 - c) water.

VI. Answer the following questions:

1. When will new problems arise?
2. What is useful to learn?
3. What are the organizations which concern with the problems of transportation?
4. What are the initiatives taken in these bodies?
5. What will planning focus upon?
6. What measures can ease the transportation problems?
7. How can the best results achieved?

VII. Translate into English:

1. При розвитку транспортної системи з'являються нові проблеми.
2. Було б дуже корисним зростання обсягів міжнародного співробітництва з передачі

знань і досвіду у сфері транспортного планування. 3. Необхідно підтримувати велику частку громадського транспорту у розподілі за видами транспорту. 4. Необхідно розвивати користування велосипедами.

VIII. Translate the specific remarks relating to the countries of Eastern Europe in written form.

IX. Speak about the specific remarks relating to the countries of Eastern Europe.

X. Make up a plan of the text; prepare a short report on the text.

UNIT 5. URBAN MOBILITY

5.1. Urban mobility

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

- | | |
|-----------------|----------------------|
| 1. matter | питання |
| 2. lifestyle | стиль життя |
| 3. pattern | модель |
| 4. household | домашнє господарство |
| 5. ambiguous | невизначений |
| 6. scarcity | недостача |
| 7. exacerbate | загострювати |
| 8. confuse | змішувати |
| 9. attribute | ознака |
| 10. opportunity | можливість |

II. Word combinations to remember:

economic considerations – економічні підстави

to compare patterns – порівнювати моделі
to measure mobility – вимірювати мобільність
to have similar characteristics – мати схожі властивості
to be applicable – бути придатним
scarcity of available data – дефіцит доступних характеристик
to collect and analyze information – збирати та аналізувати інформацію
to be inadequate – бути неадекватним
vice-versa – навпаки
to be interchangeable – бути взаємозамінним
to be interrelated – бути взаємозв'язаним

III. Translate words with the same root:

to inform – informer – information
to consider – considered – consideration
to differ – difficult - difficulty

IV. While reading and translating the text keep in mind meanings of the following words:

matter - 1. питання 2. речовина 3. матеріал
impact – 1. удар 2. сутичка 3. вплив
perspective – 1. перспектива 2. вид 3. плани на майбутнє

URBAN MOBILITY

Urban mobility is an extremely complex matter. Indeed, many elements, such as lifestyle, economic considerations, level of public transport service, land development patterns, social, cultural and political factors influence on the mobility to such extent that measuring mobility and comparing patterns between cities and countries is a difficult task. However, research results show that households throughout the world have similar mobility characteristics which have led the members of the Committee to try and better understand mobility.

Measuring mobility in clear, unambiguous terms is a difficult task. Part of the problem is how to define mobility and how to express it in quantitative terms applicable to most countries. Another difficulty lies in the scarcity of available data and in differing methods of collecting and analyzing information. What's more, when trying to compare mobility in developed and developing countries, these problems are exacerbated. A definition of criteria acceptable here, may be totally inadequate there.

Most often in general terms, mobility is associated with distances traveled in a given period of time. This definition, however, does not take into account either the quality of the trip or the relativity of the distance factor. If one person needs to cover one km to find a certain type of a hospital or a bakery and another twice as much, how can this be compared in terms of “mobility”?

The terms mobility and accessibility are often confused. But they are as distinct in the fashion

Mobility- an attribute of people

Accessibility – an attribute of places

That is people are mobile, buildings are accessible. There are arguments advanced that because transportation and land use are so intertwined that these attributes are at least interrelated if not interchangeable.

In either case, the concepts of mobility and accessibility are intertwined with distances and travel times between people and land uses and are therefore ultimately concerned with mode choice, costs, speeds and opportunities.

TEXT – BASED ASSIGNMENTS

I. Choose English equivalents:

- | | | | |
|----------------|------------------|------------------|----------------|
| 1. підстава | a) consideration | b) determination | c) development |
| 2. міра | a) escape | b) extent | c) expand |
| 3. приводити | a) to move | b) to lay | c) to lead |
| 4. вплив | a) impact | b) intent | c) trend |
| 5. ясний | a) cool | b) bright | c) clear |
| 6. нестача | a) lack | b) scarcity | c) science |
| 7. порівнювати | a) compare | b) consider | c) contract |
| 8. змішувати | a) contain | b) confuse | c) mix |
| 9. охоплювати | a) conclude | b) consist | c) cover |
| 10. можливість | a) opportunity | b) necessity | c) probability |

II. Translate into Ukrainian: to compare, matter, lifestyle, service, political factors, pattern, a difficult task, research results, household, similar characteristics, perspective, behavioural factor, to measure, unambiguous, express, scarcity, available data, exacerbate, vice-versa, to associate, definition, to take into account, quality of the trip, accessibility.

III. Find out synonyms:

A

1. urban
2. to influence
3. characteristic
4. clear
5. scarcity
6. accessible
7. to define
8. period
9. to cover
10. opportunity

B

- a) to embrace
- b) to determine
- c) chance
- d) term
- e) municipal
- f) property
- g) to affect
- h) distinct
- i) available
- j) lack

IV. Match words from columns A and B to make word combinations:

A

1. economic
2. difficult
3. similar
4. to measure
5. quantitative
6. available
7. to analyze
8. developing
9. complex
10. research

B

- a) matter
- b) information
- c) results
- d) countries
- e) considerations
- f) mobility
- g) task
- h) characteristics
- i) data
- j) terms

V. Find an appropriate word for each blank space:

1. Research results show that households throughout the ... have similar ... characteristics.
2. Measuring mobility in clear, ... terms is a task.
3. Another difficulty lies in the ... of available data and in differing methods of ... and ... information.
4. Mobility is associated with ... traveled in a given ... of time.
5. There are arguments advanced that because ... and ... are so intertwined that these ... are at least interrelated if not

VI. Decide whether the statements are true or not. Correct the wrong ones:

1. Urban mobility is a simple matter.
2. Research results show that households have different characteristics.
3. Measuring mobility in clear terms is a difficult task.
4. There is a large quantity of available data and methods of collecting information.
5. A definition of criteria acceptable here may be totally inadequate.
6. Mobility is an attribute of places and accessibility is an attribute of population.
7. The concepts of mobility and accessibility are intertwined with distances and travel times between people and opportunities.

VII. Answer the following questions:

1. What are the factors influencing mobility?
2. Why is it useful to understand mobility and all the factors influencing it?
3. When are the mobility problems exacerbated?
4. In what countries are there changes in mobility patterns?
5. How can we distinguish the terms “mobility” and “accessibility”?
6. What are these terms concerned with?

VIII. Translate into English:

1. Багато елементів впливають на мобільність настільки, що її вимірювання здається важким завданням.
2. Інша перешкода полягає в нестачі доступної інформації.
3. Мобільність пов'язана з відстанню, що пройдена за певний відрізок часу.
4. Терміни мобільності та доступності часто плутають.

IX. Speak about:

- mobility;
- accessibility

X. Make up a plan of the text; prepare a short report on the text.

UNIT 6. PRIORITY OF PUBLIC TRANSPORT

6.1. Priority of public transport on urban roads

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1	separate	окремий
2	purpose	мета
3	fiscal	фінансовий
4	technique	метод
5	carriageway	проїжджа частина дороги
6	segregate	відокремлювати
7	gate	ворота
8	share	розподіляти
9	peripheral	окружний
10	detection	виявлення

II. Word combinations to remember:

to apply techniques – застосовувати методи

to manage traffic – управляти транспортом

fiscal measures – фінансові міри

road pricing – плата за проїзд

to have limited application – мати обмежене застосування

congested areas – переповнений район

paint marking – позначка фарбою

to travel against the traffic flow – їхати проти потоку руху

arterial road – магістраль

segregated bus ways – окрема дорога для автобусу

to have extensive tram systems – мати обширні трамвайні системи

to make turn – робити поворот

to be prohibited – бути забороненим

to prevent access to the vehicles – перешкоджати доступу до засобів пересування

to use a peripheral ring road - застосовувати окрему кільцеву дорогу

III. Translate the following international words:

control, effective, problem, policy, limit, component, physical, centre, system, service, tradition, computer, motor, transport, peripheral.

PRIORITY OF PUBLIC TRANSPORT ON URBAN ROADS

A wide range of policies and techniques are now being applied to control and manage traffic in urban areas. A separate report deals with the parking policies for this purpose. Fiscal measures such as road pricing have so far had only limited application, but are being considered in more than one country. The development of public transport and cycle facilities, town planning measures and traffic calming have been applied widely. The most effective applications of these techniques have been where several are applied in combination.

Developing public transport is an essential component of plans to improve the transport systems of urban areas. In most urban areas, most public transport journeys are made by bus or tram. To improve bus and tram services, it is essential to develop measures to give them priority over other vehicles in congested areas.

Techniques for public transport priorities

A variety of techniques are used to give public transport vehicles priority on urban streets:

- The traditional bus lane, with-flow or contra-flow, usually separated from the rest or the carriageway by paint markings but sometimes by kerbing or other physical barrier. Most large urban areas have many with-flow bus lanes. Contra-flow lanes usually take the form of short lengths of kerbside lane allowing buses to travel against the traffic flow.
- Segregated bus ways with exclusive right-of-way for buses are less common in Europe and North America; examples exist in Amsterdam, Helsinki, and Ottawa. In some developing countries, however, and particular in South America segregated bus ways have been used extensively and successfully.
- Tram lanes are implemented in many cities which have extensive tram systems: Helsinki has some 55 km of tram lanes in addition to 40 km of bus lanes on ordinary urban streets in Bratislava, 75% of tram lines on reserved track. Warsaw has over 100 km.

Traffic engineering measures as:

- permitting trams and buses to make turns or other movements prohibited to other traffic;
- “gates” allowing public transport vehicles access to certain neighbourhoods or motorways while physically preventing access to other vehicles;
- “cell” systems such as those in Goteborg, Bremen and elsewhere allowing public transport to pass directly from one neighbourhood to another on a direct route through the center, while requiring cars to use a peripheral ring road;

- Bus priority at traffic signals through various detection devices or centrally controlled by computer systems.

TEXT – BASED ASSIGNMENTS

I. Give English equivalents: метод, застосовувати, управляти, мета, фінансовий, важливий, переповнений, проїжджа частина дороги, магістраль, окремих, обширний, дозволяти, забороняти, доступ, засіб пересування, кільцева, виявлення.

II. Form nouns of the verbs by means of the following suffixes: - tion, - ion, - ment, - ation: to decide, to develop, to apply, to consider, to improve, to operate, to combine, to separate, to segregate, to transport.

III. Match Ukrainian and English equivalents:

- A**
1. range
 2. cycle
 3. to consider
 4. journey
 5. variety
 6. lane
 7. substantial
 8. to implement
 9. ordinary
 10. device

- B**
- a) прилад
 - b) виконувати
 - c) звичайний
 - d) коло
 - e) розглядати
 - f) цикл
 - g) поїздка
 - h) різноманітність
 - i) істотний
 - j) вузька дорога

IV. Match words from columns A and B to make word combinations:

- A**
1. to control
 2. to apply
 3. fiscal
 4. road
 5. limited
 6. essential
 7. to give
 8. congested

- B**
- a) lane
 - b) priority
 - c) track
 - d) area
 - e) traffic
 - f) measures
 - g) policy
 - h) pricing

- 9. bus
- 10.reserved

- i) component
- j) application

V. Complete the following sentences:

1. A wide range of policies and techniques are now being applied to....2. Fiscal measures such as road pricing have.... 3. Developing public transport is.... 4. In most urban areas most public transport journeys are.... 5. To improve bus and tram services it is essential.... 6. A variety of techniques are used to.... 7. Most large urban areas have.... 8. Segregated bus ways with exclusive right-of-way for buses are 9. Tram lanes are 10. In some developing countries segregated bus ways have

VI. Decide whether the statements are true or not. Correct the wrong ones:

- 1. The development of public transport services, town planning measures and traffic calming have been applied widely.
- 2. Fiscal measures such as road pricing are applied widely.
- 3. Developing public transport is an essential component of plans to improve the transport system of urban areas.
- 4. In most urban areas most public transport journeys are made by car.
- 5. To improve bus and tram services it is essential to develop measures to give them priority.
- 6 Most large urban areas have many with-flow bus lanes.
- 7. Tram lanes are not implemented in many cities.

VII. Answer the following questions:

- 1. Why is it essential to develop measures for public transport priorities in congested areas?
- 2. What is the purpose of the Committee on Urban areas activity?
- 3. How do you understand the terms “with-flow” and “contra-flow” bus lanes?
- 4. What is a segregated bus way?
- 5. Where do segregated bus ways exist?
- 6. What is the role of tram lines in urban areas today?
- 7. What are the main traffic engineering measures?

VIII. Translate into English:

1. Велика кількість способів та методів застосовується зараз для управління транспортом. 2. Фінансові міри поки мають обмежене застосування, хоча і розглядаються в деяких країнах. 3. Розвиток громадського транспорту – це головна умова для поліпшення транспортної системи в цілому. 4. Традиційні

автобусні лінії відокремлюються від решти за допомогою фарбованих позначок.

IX. Write down the main idea of the text and key words.

X. Make up a plan of the text; prepare a short report on the text.

UNIT 7. OPERATIONAL AND ECONOMIC ASPECTS

7.1. Operational and economic aspects

PRE -TEXT EXERCISES

I. Mind the pronunciation of the following words:

1	duration	тривалість
2	emergency	аварійний
3	load	вантажити
4	assessment	оцінка
5	encourage	заохочувати
6	delay	затримка
7	penalty	штраф
8	prevail	переважати
9	perceive	розуміти
10	proposal	пропозиція

II. Word combinations to remember:

emergency vehicles – аварійні автомобілі

to operate at peak periods – працювати у години пік

to encourage the use of public transport – заохочувати використання громадського транспорту

to estimate the savings – підраховувати заощадження

capital cost – первісні капітальні витрати

enforcement of bus lanes – посилення автобусних ліній

to collect penalties – збирати штраф
prevailing culture – культура, що переважає
the loss of parking places – втрата місць паркування
to affect business – впливати на бізнес
to carry more weight – мати більш вагомий вплив
social status – соціальне становище

III. Translate the following international words:

economic, type, problem, taxi, peak, period, individual, centre, system, service, culture, park, limit, transport.

OPERATIONAL AND ECONOMIC ASPECTS

Duration: in most cities bus priority measures apply at all times or at least throughout the working day. In some places (UK, Montreal, Melbourne) bus lanes operate only during peak periods and allow access to buildings at other times.

Vehicles: in most cities some other types of vehicles are allowed to use bus lanes: e.g. emergency vehicles (usually), taxi (often), bicycles (sometimes).

Loading and unloading is a problem when operating bus lanes. When they operate at peak periods only, loading can take place outside these hours. For most cities, however, where bus lanes operate all day, loading must be carried out on the pavement or in loading bays.

Assessment: in most cities the decision to introduce bus lanes is based upon a politically adopted objective of encouraging the use of public transport. Decisions about individual bus lanes may then be decided on operational grounds such as delays to buses, and taking into account delays to other traffic. In the UK a systematic attempt is usually made to estimate the savings to buses, less any delays to other traffic and to set this against the capital cost.

Enforcement of bus lanes and other priority measures is essential. This is usually the responsibility of the police with penalties going to general funds in London a new system has been introduced. Private contractors collect penalties which are then used to fund the enforcement effort. So far this applies only off main roads.

Public reaction to proposals for bus priority measures varies according to the prevailing culture. In some cities, where the public transport culture is strong, such measures are readily accepted, except perhaps by those who are personally affected. In countries, where the car culture is stronger, shopkeepers may

object, fearing that the loss of parking places will affect their business. It is often the case that the opinions of car drivers carry more weight than those of bus passengers and pedestrians because of the perceived link between car ownership and social status.

TEXT – BASED ASSIGNMENTS

I. Give English equivalents: тривалість, автобусна лінія, аварійний, тротуар, заохочувати, затримка, підраховувати, заощадження, посилення, відповідальність, штраф, пропозиція, реакція, заперечувати, думка, пішохід, соціальне становище.

II. Form nouns of the verbs by means of the following suffixes: - tion, - ion, - ment, - ation: to decide, to develop, to operate, to assess, to move, to object, to estimate, to produce, to enforce, to introduce.

III. Match Ukrainian and English equivalents:

- A
1. bicycle
 2. loading
 3. to introduce
 4. objective
 5. to estimate
 6. contractor
 7. to fund
 8. decision
 9. proposal
 10. to vary

- B
- a) пропозиція
 - b) рішення
 - c) змінюватися
 - d) фінансувати
 - e) велосипед
 - f) впроваджувати
 - g) вантаження
 - h) мета
 - i) підрядчик
 - j) підраховувати

IV. Match words from columns A and B to make word combinations:

- A
1. bus
 2. working
 3. peak

- B
- a) link
 - b) penalties
 - c) status

4. emergency
5. to estimate
6. capital
7. to collect
8. prevailing
9. perceived
10. social

- d) culture
- e) priority
- f) period
- g) day
- h) vehicle
- i) cost
- j) savings

V. Complete the following sentences:

1. In some places bus lanes operate only....
2. In most cities some other types of vehicles are allowed to....
3. Loading and unloading is a problem when....
4. For most cities loading must be....
5. Decisions about individual bus lanes may....
6. Private contractors collect penalties which....
7. Public reaction to proposals for bus priority measures varies....
8. In some cities where the public transport culture is
9. Enforcement of bus lanes is
10. It is often the case that....

VI. Decide whether the statements are true or not. Correct the wrong ones:

1. In most cities bus priority measures apply at all times.
2. In most cities other types of vehicles are not allowed to use bus lanes.
3. In some places bus lanes operate only during peak periods.
4. Loading and unloading is not a problem when operating bus lanes.
5. For most cities where bus lanes operate all day, loading must be carried out on the pavement.
6. Enforcement of bus lanes is essential.
7. Public reaction to proposals for bus priority measures is positive.

VII. Answer the following questions:

1. How do bus lanes operate in the United Kingdom?
2. What other types of vehicles are allowed to use bus lanes?
3. When must loading and unloading be carried?
4. What system of penalties has been introduced in London?
5. How does public reaction vary?
6. Whose opinions carry more weight?
7. Why is enforcement of bus lanes essential?

VIII. Translate into English:

1. В багатьох країнах міри з переважних прав автобусів застосовуються весь час.
2. У деяких містах автобусні лінії працюють тільки у години пік.
3. В Лондоні була запроваджена система штрафів.
4. Громадська думка щодо пропозицій з переважних прав автобусів дуже різна.

IX. Write down the main idea of the text and key words.

X. Make up a plan of the text; prepare a short report on the text.