

## Chapter 4

### UNDERWRITING/ENVIRONMENTAL FACTORS

This Chapter addresses a group of important factors which contribute to the overall quality of a housing project. The extent to which any deficiencies contribute to an impact on the human environment depends largely on the nature of the project; that is the age, household composition and income level of the projected residents? Projects with low income elderly residents need grocery stores within walking distance or convenient public transportation while residents of middle income suburban subdivisions can be expected to drive to a supermarket. The importance of public recreation facilities depends partly upon the income of the project residents, the number of employed mothers, and the availability of private play space through the provision of large yards or common recreation area within the project.

In reviewing the project, the concern is more with "deficiencies" in the services to be provided to the project. Deficiencies in services are assessed in terms of their adequacy and location in reference to the project. In general if there are no problems with either the setting or the services, then there are "no deficiencies." If there are problems but they are easily remedied or the services will still be acceptable though reduced in quality, then there are "minor deficiencies." If the services will not be available or will be unacceptable in terms of quantity or quality, or if the problems with project setting can not be remedied, then there are "major deficiencies."

For convenience, all the basic community services (i.e. fire, police, education etc.) are grouped together with a general overview and discussion. Specific information on data sources, assessment questions, analysis methods, summary evaluation and mitigation measures is, however, provided for each individual factor.

4-1

---

Intentionally left blank

4-2

---

#### UNDERWRITING/ENVIRONMENTAL FACTOR 1: COMPATIBILITY WITH SURROUNDING DEVELOPMENT, VISUAL QUALITY

##### 1. Overview

Compatibility with surrounding development is an important consideration. This means avoiding the harmful effects of industry and commercial operations such as heavy traffic, noise, air pollution and other hazards in residential areas. Desirable conditions would be suitable access, the presence of parks, schools, churches, recreational facilities, libraries, pleasant views, permanent open space as well as existing residential development which is properly maintained and not overcrowded. It is not necessary that density or housing types be uniform if the land planning is done with care.

Visual impact can be defined as the impact of the project on the visual quality of its surroundings. The visual quality of an area is made up of the way elements of the natural and built environment relate to each other to create a sense of harmony.

Elements that comprise the natural environment include the natural contours of the land, bodies of water, and trees and plants indigenous to the area. These elements together provide contrast to the built environment and create visual interest to the viewer. Elements of the built environment include the surrounding buildings and streets. The different styles and types of buildings and their materials, colors, shapes, sizes, facades, details and density all add to the character of the area.

## 2. Related Laws and Regulations

Local zoning ordinances and maps delineating the various land use districts offer some protection from the introduction of incompatible land uses. In many cases the segregation of land uses has been too rigid, producing mile after mile of single family detached housing to the point of monotony. More recently the planned unit development has offered some variety of housing type and better disposition of open space.

The major Federal legislation which would be involved in visual quality is the National Historic Preservation Act,, 16 U.S.C. 407(f), Section 106. While many historic buildings and places are treasured for aesthetic reasons, the critical element is the association of what is being preserved with events, epochs, or persons deemed to be of such importance that the nation should not be deprived of the values they represent. Therefore, it is quite possible that ungainly structures would be eligible.

## 3. Assessment Questions

- a. What are the existing land uses adjacent to the proposed project and will the proposed project be compatible with the existing development?
- b. Will the project introduce elements or induce development which is out of character or scale with existing physical environment?

4-3

---

U/EF 1: Compatibility with Surrounding  
Development, Visual Quality

- c. Will the project location, appearance, construction or activities which it will generate, detract from the aesthetic appeal of its natural or man-made surroundings?
- d. Is the project protected from incompatible uses by proper zoning?
- e. Are the approaches to the project convenient, adequate, safe, and

attractive?

#### 4. Analysis Methods

##### Initial Impact Screening

###### ALWAYS USE

FIELD/EXPERIENCE: A site visit should be conducted to observe existing conditions. Notes should be taken of salient features of the surrounding landscape and neighborhood. Photographs taken will preserve information which might otherwise soon be forgotten or which is difficult to convey to others by written or oral description. A copy of the project plan should be studied before the field trip and taken along for orientation purposes. The General plan of the community together with detailed neighborhood plans, land use maps and zoning ordinances should be reviewed to see what proposals exist for the area.

###### SOMETIMES USE

- a. PRINTED: Aerial photographs are a good resource and they have the advantage of recording many features which might not have been recorded in other surveys. Sanborn Maps or other similar maps prepared for fire insurance are useful since they show the outlines of most city buildings and the number of stories in height.
- b. CONTACT: The planning director of the city of the county can provide additional information.

#### 5. Evaluation of Impacts

For new developments (particularly subdivisions) overall compatibility will usually be addressed in the local review and approval process. Where existing commercial/industrial or institutional properties are being converted to residential use, compatibility and visual quality may be the major issue. Where the proposals are in incompatible surroundings and remedial actions are not proposed which would remove unacceptable conditions, the project should be rated as having "major" deficiencies.

#### 6. Mitigation Measures

In most cases the measures available consist only of altering of the project itself, such as:

4-4

---

##### U/EF 1: Compatibility with Surrounding Development, Visual Quality

- a. Redesign site to separate or screen objectional neighborhood features
- b. Use of berms, barriers and screens to reduce impacts of unsightly neighborhood features

7. Information Resources

a. Publications

Maps, reports, plans prepared and adopted by the local Planning Department or Commission.

Aerial photographs

b. Resource Persons

Local planning director, architect, HUD site planner

Local chapters of professional organizations such as American Institute of Architects (AIA); American Society and Landscape Architects (ASLA); American Planning Association (APA); American Society of Civil Engineers (ASCE)

4-5

---

Intentionally left blank

4-6

---

UNDERWRITING/ENVIRONMENTAL FACTOR 2: SITE ACCESSIBILITY

1. Overview

The success of a residential development depends upon its location, the position of major thoroughfares and the project's access to them. A project which would increase traffic on public roads and highways servicing the development, may cause traffic to rise to congestion levels and generate demands for new or improved streets and highways. With higher density development, expanded access may be required. Projects ranging upward from garden apartment densities generate significant amounts of traffic and require an array of support services; therefore, locations adjacent to collector streets and highways are commonly proposed for higher density uses.

2. Related Laws and Regulations

There is no Federal legislation which sets criteria or standards for transportation services to proposed residential developments. Criteria and standards are usually contained in local comprehensive plans, street plans and ordinances. Federal programs relating to accessibility generally deal with transportation planning; the major efforts include comprehensive transportation planning procedures established under Section 134 of the Federal Highway Act of 1964 and the transportation planning requirements under Section 174 of the Clean Air Act.

3. Assessment Questions

- a. Is the site location readily accessible to employment, shopping and service areas?
- b. Is access to the site free from impediments such as railroad crossings at grade, steep hills, prone to flash floods, etc.
- c. Does the site plan make arrangements for necessary street and road improvements to serve the residents, and to decrease the possible hazards to pedestrians in the area?
- d. Is the project an addition to already existing development or will it be completely new? Will the project be isolated from all services and have to provide its own access roads and streets?

#### 4. Analysis Methods

Initial Impact Screening

ALWAYS USE

FIELD/EXPERIENCE: Field observation and the reviewers knowledge of the area may be sufficient for a determination on this factor.

4-7

---

#### U/EF 2: Site Accessibility

SOMETIMES USE

CONTACT: Highway engineer, and the local planner or public works department can provide information on planned improvements or changes to the transportation system.

#### 5. Evaluation of Impacts

The evaluation of a proposed site for access depends upon the availability of suitable roads and streets to serve the project. Accessibility means more than egress and ingress. It means all-weather construction, with adequate capacity to serve the project and its residents.

A project designed to furnish accessibility to all areas of the development including safe streets and roads which provide passage for service vehicles and safety equipment, would be rated "no deficiencies." Where the passageways are clearly inadequate, the project can be evaluated as having "minor" or "major" deficiencies depending on severity of problem. In cases where mitigation is attainable and will be accomplished, a finding of "no deficiencies" can be made.

#### 6. Mitigation Measures

Mitigation measures involve the proper construction of adequate streets and roads within the development. Providing for access to adjacent

streets may be accomplished by changes in the project layout. The residential environment should be protected from traffic, noise, and pedestrian hazards through mitigation wherever it is needed. Major changes to street patterns and capacities for streets serving the project are the responsibility of State and local government and deficiencies should be called to their attention when local approvals are being considered.

7. Information Resources

a. Publications

HUD Minimum Property Standards

Project architectural plans and street layout, county and local master plans, highway plans and maintenance schedules.

b. Resource Persons

State and local highway engineers, county and municipal planning staff, project planner or architect

4-8

---

UNDERWRITING/ENVIRONMENTAL FACTOR 3: DEMOGRAPHIC/NEIGHBORHOOD CHARACTER

1. Overview

The concept of the neighborhood is complex and "neighborhood" is a descriptor usually used to define specific geographic areas within a city. The physical characteristics include the quality and type of housing units, commercial, public and social services, its size, location and boundaries. The social dimension or demographic character of a neighborhood is determined by household and population size, density, age, ethnic and minority composition, as well as income, education, and employment profiles. Finally, there is the psychological and social interaction. This refers to the residents' sense of neighborhood, their perceived relationship with their surroundings and others within the neighborhood boundaries, and the strength of their various organizational ties and support systems (formal and informal).

Determining neighborhood boundaries is also complex. The boundaries can be natural or built. Natural boundaries might include one of more of the following, topography, streams or open space; whereas built boundaries can be railroads, freeways or major streets (thoroughfares). Demography, such as the type of housing, may also be a factor in defining the neighborhood.

2. Related Laws and Regulations

There are no Federal legislation or standards for measuring deficiency or impact for this factor.

### 3. Assessment Questions

When considering the project's impact on demography and neighborhood character, the focus of inquiry is on the following questions:

- a. What is/are the identifiable neighborhoods within the sphere of likely impact of the proposed project? What are the factors which contribute to the character of the neighborhoods?
- b. Will the proposed project significantly alter the demographic characteristics of the neighborhood?
- c. Will the proposed project result in physical barriers or reduced access which will isolate a particular neighborhood or population group, making access to local services, facilities and institutions or other parts of the city more difficult or extremely inconvenient?
- d. Will the proposed project substantially alter residential, commercial or industrial land uses?

4-9

---

U/EF 3: Demographic/Neighborhood Character

### 4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. FIELD/EXPERIENCE: In most cases, the reviewer's observation, previous experience and knowledge of community will be sufficient. Once the physical, social and psychological boundaries of the neighborhood have been defined, significant changes resulting from the proposed project should be easier to determine.
- b. PRINTED: Use recent local demographic data and planning or development plans (comprehensive, district or neighborhood plans)

SOMETIMES USE

- a. CONTACT: City planners, social agencies, police and fire departments and community organizations
- b. PRINTED: City comprehensive plans, Housing Assistance Plans or economic development plans, all may be helpful.

### 5. Evaluation of Impacts

The proposed project may change the income, racial, ethnic, or age distribution of the neighborhood. These "changes" should be noted and weighed as to the impact they will have on the demographic and neighborhood character. If the changes are perceived by the reviewer's judgment and the affected community as altering the physical boundaries

and subsequently altering the delivery of goods and services, and social interaction then this factor should be determined as "minor" or "major" deficiencies depending on the severity of the change.

6. Mitigation Measures

There are no required mitigation measures.

7. Information Resources

(See reference in 4. above)

4-10

---

COMMUNITY AND NEIGHBORHOOD SERVICES

For this group of factors the Overview discussion and the discussion of related laws and regulations are broad enough to encompass all of the following community services:

- U/EF 4: Schools
- U/EF 5: Parks and Recreation
- U/EF 6: Social Services
- U/EF 7: Emergency Health Care
- U/EF 8: Public Safety - Fire
- U/EF 9: Public Safety - Police
- U/EF 10: Commercial/Retail
- U/EF 11: Transportation

For each of the above sub-elements, the Assessment Questions, Analysis Methods, Evaluation of Impacts, Mitigation Measures and Information Resources are presented separately as they apply to the specific community and neighborhood service.

1. Overview

The development of community services by private and public agencies has been a necessary component of urban development. The basic factors which influence the demand for community services are human necessity, economic level, demography of the population, and availability of services. Each of these factors relates to the level and quality of the various services indicated above.

**Human Necessity.** In any neighborhood or community setting, certain services and facilities are necessary to permit community development to occur and continue without hazard to public health, safety and security. Police, fire, and health services are examples.

**Economic Level.** The demand for certain kinds of services will reflect the income characteristics of a particular neighborhood.

**Demography.** Areas with a large percentage of children have greater need for educational and recreational facilities, and such social services as day-care centers, than do other areas. A large number of elderly and retired persons generates a greater demand for accessible

or reasonably convenient public transportation, health and welfare services, and cultural facilities.

## 2. Availability of Services

If the community services are located at unreasonable distances from a neighborhood, they will be of little benefit to residents. Scattered centers for services, such as health care and education, increase the availability of services but do not necessarily improve the quality of service. The various community services are similar in that they provide

4-11

---

### Community and Neighborhood Services

services necessary to the health, education, safety, and well-being of the population. Each of the factors considered is discussed briefly in general terms below:

- U/EF 4 Schools includes the traditional elementary and high school systems and may include centers of higher education and adult education. Need for educational facilities is related to the age structure of the population, and may be influenced by the economic structure of the community.
- U/EF 5 Parks and Recreation include active sports and passive areas, parks and gardens, trails and facilities for spectator and participatory sports.
- U/EF 6 Social Services include transportation for handicapped and elderly, alcoholism and drug programs, and halfway houses. The need for such services will be a function of the age, income and educational level of potential project residents.
- U/EF 7 Emergency Health Care consists of those emergency medical care and ambulance services. The latter are usually provided by local fire departments and area hospitals.
- U/EF 8 Public Safety - Adequate access for fire equipment and vehicles to the project area is critical, as is the consideration of water supply, water flow and the placement of fire hydrants for assuring good fire protection. Insurance industry standards often dictate the organization and location of facilities and equipment.
- U/EF 9 Public Safety - Like fire protection services, access and response time are important planning considerations for assuring adequate policy protection. Organization and staff may vary widely among communities.
- U/EF 10 Commercial/retail facilities, such as neighborhood shops, community shopping districts and regional shopping centers provide a source of goods and personal services to maintain the population. These facilities are established privately

and the number and quality of these facilities therefore depends upon the economic conditions and demand of the serviced population.

U/EF 11 Transportation should incorporate private and public transportation. It is recognized that some minimal number of users is required to make public transportation feasible, and without this, prospective residents will have to provide for their own transportation. In outlying areas, particularly with subdivisions, personally owned vehicles (POV) is the standard transportation mode.

4-12

---

## Community and Neighborhood Services

### 3. Related Laws and Regulations

Generally, there is no legislation that addresses community services. The desired levels of community services may be identified by local governments in their general plan. For some community services there are various professional, technical or governmental organizations which have established minimum standards for some of the varied services and facilities. In addition, State laws or municipalities may mandate certain public services and facilities. These can be helpful in determining adequate levels of service.

#### Assessment Questions

1. Will an increase in population strain the capacity of existing services and facilities?
2. Are the existing community services and facilities located an inaccessible and/or "unreasonable" distance from the project site?
3. Will the project include particular groups, such as the low income families or elderly, requiring special services or facilities?
4. Where services and facilities must be extended to the project, does the community have the capacity to extend them in time to meet the need?
5. Are there actions which the developer could take to assist the provision of needed services?

### 4. Evaluation of Impacts

The match between the existing facilities and services and the projected population is likely not to be as important as the affected community's ability to respond to the increased demand. If a community has a good "track record" for responding to increased demands for facilities and services the deficiencies or impacts may not be of major proportions.

The availability of most services has to do largely with tax funds

available to support these functions and the degree to which building and growth are coordinated with the provision of the services. In areas where growth occurs rapidly, services frequently fall behind demand.

The services should be within reasonable access, that is capable of being delivered, received, or reached within a reasonable time limit and have adequate capacity for the projected population.

6. Mitigation Measures (Planning and Development Considerations)

Mitigation measures are limited to ameliorating those situations where a proposed development will have impacts on the community services available. More often, there are "planning" considerations and negotiations

4-13

---

Community and Neighborhood Services

which the developer can undertake to assure the overall success of a housing project. Invariably the planning considerations for most of the various community services involve; (a) improving the accessibility of the proposed residents to services or the delivery of services to the residents; (b) the capacity of the local government to provide the necessary services or expand at a future date so that the services which will be needed for an increased population will be available. The solutions to impacts must result from negotiations and planning alternatives between the local government and developer involved.

7. Information Resources

Publications

Burchell, Robert W. and David Listokin, *The Fiscal Impact Handbook*. New Brunswick, New Jersey: The Center for Urban Policy Research, 1978.

Gallion, Arthur and Simon Eisner, *The Urban Pattern: City Planning and Design*, New York: Van Nostrand, 1975.

Schaenman, Philip. *Using an Impact Measurement System to Evaluate Land Development*. Washington, DC Urban Land Institute, 1976.

*Economic/Demographic Assessment Manual - Current Practices, Procedural Recommendations, and a Test Case*. J.A. Chalmers and E.J. Anderson, Mountain West Research, Inc., Tempe, Arizona, 1977, 300 pp.

*How Effective Are Your Community Services? Procedures for Monitoring the Effectiveness of Municipal Services*. Harry P. Hatry, Louis H. Clair, Donald M. Fish, John M. Greiner, John R. Hall, Jr., and Philip S. Schaenman. The Urban Institute and the International City Management Association, Washington, DC, 1977, 320 pp.

*The Costs of Sprawl*, Council on Environmental Quality, HUD and EPA, Washington, DC, USGPO 1974 (Stock No. 041-011-00021-1).

Neighborhood Planning Primer, U.S. Department of Housing and Urban Development, HUD-NVACP-612, GPO, October 1980 (Stock No. 023-000-00644-8).

Neighborhood Space. Randolph Hester. Dowden Hutchinson & Ross, 1978.

Manual of Housing, Planning and Design Criteria. DeChiara, Koppelman, Prentice Hall, 1975.

Bourne, Larry S. Internal Structure of the City. Toronto University Press, Toronto, Ontario, 1971.

Muller, T. Economic Impacts of Land Development, Washington, DC, 1976.

The Urban Planning Guide, William Clair (editor), American Society of Civil Engineers, New York, 1969.

4-14

---

UNDERWRITING/ENVIRONMENTAL FACTOR 4: SCHOOLS

1. Overview - (See Introduction to Community and Neighborhood Services)
2. Related Laws and Regulations (See Introduction to Community and Neighborhood Services)
3. Assessment Questions

Schools are a difficult underwriting/environmental factor to assess. Generally, schools are built in response to need and not in anticipation of need. Capacity is influenced by changing household characteristics, shifting service area boundaries, curriculum revisions changing educational concepts, and busing strategies. Nevertheless, capacity and accessibility are the fundamental issues to address, and the following questions are the most pertinent:

- a. Will the additional school age children in the proposed development exceed the capacity of the school?
  - b. Do the potentially affected schools have adequate existing facilities (i.e., classroom space, buses) for the projected population increase?
  - c. Will additional or alternative facilities have to be provided to ensure adequate programs?
  - d. What measures will be taken by the school agency or governing body to resolve potential problems?
4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. PRINTED: A school district plan and school maps will be helpful for analyzing capacity issues and determining the impact of potentially increased enrollment and for identifying distance and safety issues. (Use "approved" plans, e.g., those for which funding has been appropriated).
- b. CONTACT: School Superintendent or Administrator

SOMETIMES USE

PRINTED: General development or comprehensive plans. However, proposals contained in these documents may be without funding even though they may have formal approval.

U/EF 4: Schools

5. Evaluation of Impacts

- a. If school children will be required to walk or to ride longer than the following suggested distances, or more than the prevailing local standards, there are "minor" deficiencies.

	Walking	Bus Ride
Elementary	1/3 mile	1/2 hour
Junior High	1/2 mile	3/4 hour
Senior High	1 mile	3/4 hour

- b. If it is determined that existing facilities are not adequate to accommodate school children and there are no plans to remedy the situation or if it is determined that safety to school children will be jeopardized, then there are "major" deficiencies.

6. Mitigation Measures (Planning and Development Considerations)

While inadequacies in the school system can not be corrected by a project sponsor, there are actions that can be taken to ameliorate adverse conditions, such as careful site planning to reduce hazards and improve accessibility, use of overpasses, sidewalks and, in some cases, by making sites available for future school construction.

7. Information Resources

a. Publications

School maps for identifying distances and safety issues, school district plans for analyzing capacity issues and determining the impact of potentially increased enrollment.

Burchell, Robert W. and David Listokin, The Fiscal Impact Handbook. New Brunswick, New Jersey: The Center for Urban Policy Research, 1978, pp. 276-288. (Useful for identifying the costs of increased/

decreased enrollment.)

b. Resource Persons

School administrator, planning and traffic personnel

4-16

---

UNDERWRITING/ENVIRONMENTAL FACTOR 5: PARKS AND RECREATION

1. Overview - (See Introduction to Community Services and Neighborhood Services)
2. Related Laws and Regulations (See Introduction to Community and Neighborhood Services)
3. Assessment Questions
  - a. Are open space, recreational and cultural facilities within reasonable walking distance to the project area? Or is adequate public transportation available from the project to these facilities?
  - b. Will the proposed project overload existing facilities?
  - c. If the project includes special groups such as small children, or the elderly and handicapped, are there convenient facilities to meet their particular needs? For example, are there tot lots for very small children, playgrounds for elementary school children, drop-in centers for senior citizens and ball fields for teenagers?

(Note that privately owned vacant land cannot be considered to be park or playground space.)

4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. PRINTED: Maps identifying the available open space, recreation and cultural facilities and the site of the proposed project. Determine how many of these sites are within walking distance and are geared to project residents/users. Determine if public transportation is available if needed.
  - b. FIELD/EXPERIENCE: In some cases a site visit or the reviewer's knowledge of local conditions may be sufficient.
5. Evaluation of Impacts

If there are not adequate facilities within a reasonable distance of the proposed project, or the project will overload existing facilities without providing additional resources, then the project will affect recreation resources. If preschool and elementary aged children do not

have play space near their homes, rate these factors as having "major deficiencies." If facilities for any age group are limited or access difficult, rate that factor "minor deficiencies."

4-17

---

U/EF 5: Parks and Recreation

6. Mitigation Measures (Planning and Development Considerations).

The developer in conjunction with local government may consider:

- a. Expanding existing facilities to reduce the burden caused by new users
- b. Reviewing design to mitigate project impacts on open space and cultural resources in the vicinity
- c. Developing recreational resources for specific population groups, such as tot lots, playgrounds, and passive park areas
- d. Making provisions for transportation services to various recreation facilities, if it is needed
- e. Developing facilities or providing space on-site, especially for elderly

7. Information Resources

a. Publications

Information prepared by Urban Park and Recreation Recovery Program and/or

Land and Water Conservation Funded Heritage Conservation and Recreation Service Regional Offices

b. Resource Persons

Planner at local parks and recreation department, administrator of social services agencies, administrators of private non-private agencies, such as the YMCA or YWCA.

4-18

---

UNDERWRITING/ENVIRONMENTAL FACTOR 6: SOCIAL SERVICES

1. Overview: (See Introduction to Community and Neighborhood Services)
2. Related Laws and Regulations: See Introduction to Community and Neighborhood Services)
3. Assessment Questions

When considering the adequacy and accessibility of social services, the focus of inquiry is on the following questions:

- a. Will residents have specific social service needs?
  - b. If so, are social services currently located within a "convenient" and a "reasonable" distance of residents?
  - c. Are the social services available "matched" to the potential users?
4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. FIELD/EXPERIENCE: Determine the location of existing social services and their distances from the proposed development. Determine whether public transportation is available between needed services and the project site.
- b. CONTACT: Discuss with local social service offices, public welfare office, local youth services office, and agency on aging whether existing services will be adequate to meet the new and increased demand.

SOMETIME USE:

PRINTED: Examine relevant demographic data regarding the social service needs of the new users. Determine any specific types of services that will be required for any special user groups.

5. Evaluation of Impacts

If the appropriate and necessary services and facilities are not conveniently located for the new users, rate this factor as having "minor deficiencies." If the additional population will burden existing services or if there are no social services or prospects of services becoming available, rate this factor "major deficiencies."

4-19

---

U/EF 6: Social Services

6. Mitigation Measures (Planning and Development Considerations)

If social service centers are not located within reasonable proximity to the proposed development or cannot accommodate new users in the project, the developer with the help of the local government may consider:

- a. Providing special transportation services -- especially for elderly and children

- b. Providing space for social service offices as part of a project -- elderly drop-in center, nutrition or youth center
- c. Request local government to consider locating satellite offices in the project area

7. Information Resources

a. Publications

Local Social or Human Services Department (City or County) -- can provide information on local demand for social/human services and their availability/adequacy.

Area Agency on Aging -- can provide information on the special social and human service needs of the elderly population.

Local Health and Welfare Council or the United Fund -- may have data on social and human service needs.

b. Resource Persons

Local planners; administrators of the following agencies -- Social Services Department, Public Welfare Office, Area Agency on Aging, Social Security Office, Half-way House(s) in area, Drop-in Center(s) in area, Child Care or Day Care Center, Local Council on Voluntary Human Service Agencies.

4-20

---

UNDERWRITING/ENVIRONMENTAL FACTOR 7: EMERGENCY HEALTH CARE

- 1. Overview: (See Introduction to Community and Neighborhood Services)
- 2. Related Laws and Regulations: (See Introduction to Community and Neighborhood Services)
- 3. Assessment Questions
  - a. Are emergency health care providers located within reasonable proximity to the proposed project?
  - b. Can ambulance trips to a hospital or other health care center be made within a reasonable time?
  - c. Will project residents/users require special medical services or skills such as geriatric or pediatric clinics that will require very specialized skills and services? Cardiac pulmonary resuscitation (CPR), which is especially important for elderly is one example of an emergency medical skill which may be needed.
- 4. Analysis Methods
  - Initial impact Screening

ALWAYS USE

- a. CONTACT: Local police and fire department and local hospitals can provide information on the ability of their emergency equipment and personnel to serve the project.
- b. PRINTED: Review project street and traffic plans with local authorities to ascertain if site access is adequate and can accommodate emergency health care vehicles easily.

SOMETIMES USE

FIELD/EXPERIENCE: Reviewers knowledge of local conditions may be sufficient if there are no special user groups whose needs have to be considered.

5. Evaluation of Impacts

The factors related to emergency health care services are emergency equipment, emergency service personnel, response time, and access. If the emergency care vehicle response time is excessive or the increased population cannot be serviced adequately by available facilities, rate this factor "major deficiencies." If emergency vehicular access will be inhibited, also rate this factor as having "major deficiencies."

4-21

---

U/EF 7: Emergency Health Care

6. Mitigation Measures (Planning and Development Considerations)

Depending on the specific problems and local resources, the developer and local government may consider the following:

- a. An increase in staff and vehicles to assure adequate service
- b. Special shuttle and emergency transportation to medical services
- c. Incorporate a small clinic or emergency medical service area into the project, keyed to the special needs of the resident population
- d. Redesign streets and roadways and building arrangement, if necessary, to improve access

7. Information Resources

a. Publications

(See general references in Introduction)

b. Resource Persons

Administrators of the following agencies -- Area Health Systems Agency, Local Public Health Department, Local Red Cross

---

UNDERWRITING/ENVIRONMENTAL FACTOR 8: PUBLIC SAFETY - FIRE

1. Overview: (See Introduction to Community and Neighborhood Services)
2. Related Laws and Regulations: (See Introduction to Community and Neighborhood Services)
3. Assessment Questions
  - a. Does the project location provide adequate access for fire vehicles? Does the project design provide easy and unrestricted access for fire emergency vehicles and individuals? Are there existing obstacles to access to the project such as one-way roads, narrow bridges, waterways, expressways, railroads which would limit access in an emergency situation? Will the project create such obstacles?
  - b. Will the project create a burden on existing facilities in terms of manpower and/or equipment?
  - c. If so, can services be expanded?
  - d. Is the water supply and water pressure adequate for fighting fires?

4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. PRINTED: Fire-Service District Maps: Obtained from the local fire department, these show the distance to the nearest fire station (and usually police station), which can be used to estimate response time.
  - b. CONTACT: When the local fire department is provided the location and the size of the project, they can determine whether they will be able to serve the project adequately.
  - c. FIELD/EXPERIENCE: A site visit by reviewer will determine the location of the nearest fire station, fire hydrants, etc.
5. Evaluation of Impacts

The factors critical to proper emergency fire protection are access, response time, equipment, personnel, and water supply and pressure. If the project will overburden or strain existing fire service and there are no provisions to increase that service, or if fire equipment access will be difficult, or if the water supply and pressure needed for fire protection are determined inadequate, rate this factor "major deficiencies."

---

U/EF 8: Public Safety - Fire

6. Mitigation Measures (Planning and Development Considerations)

The developer and local government may jointly or independently discuss and consider:

- a. Changing population density and land use of the project to keep "demand" or "need" of existing fire services consistent with existing capacity
- b. Redesigning streets, roadways and structures to assure proper access
- c. Coordinating project planning and site design with input from the local fire department
- d. Negotiating with locality and local fire department to establish a voluntary firefighters unit which would augment the regular fire department
- e. Increasing fire department personnel and equipment to assure adequate service

7. Information Resources

a. Publications

The National Board of Fire Underwriters monitors the fire insurance risks and fire fighting capabilities of most cities in the U.S. and rates sections of cities for the purpose of establishing insurance rates and premiums, and if these are unsatisfactory will advise what improvements are needed to gain a better rating.

U.S. Fire Administration's Home and Public Building Safety Division, National Fire Data Center, P.O. Box 19518, Washington, DC 20036. Telephone 202/634-7195. They have several publications:  
(1) A Basic Guide for Fire Prevention and Control Master Planning;  
(2) An Urban Guide for Fire Prevention and Control Master Planning.

Fire-service maps: obtained from the local fire department.  
(These show the distance to the nearest fire station (and usually police station) which can be used to estimate response time.)

"Fire Department Standards - Distribution of Companies and Response to Alarms" in National Board of Fire Underwriters, Special Interest Bulletin, No. 315, N.Y. American Insurance Association, 1963.  
(This book provides standards approved by insurance companies with respect to response time in various urban settings.)

b. Resource Persons

Chief of local fire department

---

UNDERWRITING/ENVIRONMENTAL FACTOR 9: PUBLIC SAFETY - POLICE

1. Overview: (See Introduction to Community and Neighborhood Services)
2. Related Laws and Regulations: (See Introduction to Community and Neighborhood Services)
3. Assessment Questions
  - a. Does the project location provide adequate access to police services? Does the project design provide easy access for emergency vehicles and individuals? Are there existing obstacles to project access such as one-way roads, narrow bridges, waterways, expressways, railroads which would prohibit access in an emergency situation? Does the design of the project create such obstacles or isolated areas?
  - b. Are police protection services available to the project adequate to meet project needs?
  - c. Does the area have a particularly high crime rate? Are there special plans for a security system which have been approved by the police department? Can the development be patrolled easily by the police from the street?
  - d. Will the project create a burden on existing facilities in terms of personnel and/or equipment? Can services either be expanded or be provided by the project, such as an in-house security force?

4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. CONTACT: Local Police Department: If provided with the location and size of the project, the police department can determine whether they will be able to service the project adequately without increasing their staffs. They can also help to estimate response time to the site.
  - b. PRINTED: Review project site design plans to determine the size of the building and the number and type of users/residents, in order to estimate the need for protection services; and access routes for accessibility for emergency vehicles.
  - c. FIELD/EXPERIENCE: Coordinate field observations and site visits with discussions with local police department officials.
5. Evaluation of Impacts

If physical access by both emergency personnel and their equipment to the project site is limited, thereby increasing emergency response

time, rate

4-25

---

U/EF 9: Public Safety - Police

this factor "minor deficiencies." If police services are presently strained or operating at capacity and there are not plans to increase service, rate this factor "major deficiencies."

6. Mitigation Measures (Planning and Development Considerations)

The developer may want to consider:

- a. Encouraging locality to hire more police and purchase equipment
- b. Including security features in the project (e.g., fences, lighting) to decrease potential for crime
- c. Hiring private guards to decrease potential for crime and response time
- d. Changing density or land use mix of the project to charge need for services
- e. Design project in a manner to encourage surveillance by neighbors

7. Information Resources

a. Publications

Oscar Newman. Design Guidelines for Creating Defensible Space. National Institute of Law Enforcement and Criminal Justice. 1976.

Richard Gardiner. Design for Safe Neighborhoods. Law Enforcement Assistance Administration (LEEA), HUD, USGPO No. 027-000-00751-1.

The Costs of Sprawl, Council on Environmental Quality, HUD and EPA, USGPO (Stock No. 041-011-00021-1). (Pages 116 through 120 contain data on community cost analysis of police and fire services. This publication provides an excellent analysis of the economic factors involved in providing emergency services.

b. Resource Persons:

Chief of local police department

4-26

---

UNDERWRITING/ENVIRONMENTAL FACTOR 10: COMMERCIAL/RETAIL

1. Overview (See Introduction to Community and Neighborhood Services)
2. Related Laws and Relations (See Introduction to Community and

neighborhood Services)

### 3. Assessment Questions

- a. Is there adequate and convenient access to retail services? In the case of the elderly, this means that shopping for such essential items as food and medicine and services such as banks and other convenience shopping should be within walking distance.
- b. Do local retail services meet the needs of project occupants/users?
- c. Will existing retail and commercial services be adversely impacted or displaced by the proposed project?

### 4. Analysis Methods

Initial Impact Screening

ALWAYS USE

- a. FIELD/EXPERIENCE: Past experience is often sufficient to make judgments concerning the quality of commercial services available, i.e., range of services available.
- b. CONTACT: Check the local planning agency to see what shopping services are planned for the area.

SOMETIMES USE

PRINTED: Consult project plans to determine the nature of the project, its size, location and the socioeconomic characteristics of probable users or occupants and determine the relationship between the project and existing commercial facilities.

### 5. Evaluation of Impacts

If existing commercial facilities are inconvenient to meet the needs of the project users and/or residents, rate this factor "minor deficiencies." If however, the project users/residents are elderly and/or handicapped, special consideration needs to be given to transportation services and shopping areas which are accessible to the handicapped. If no such transportation services are available or will be made available, rate this factor "major deficiencies."

4-27

---

U/EF 10: Commercial/Retail

### 6. Mitigation Measures (Planning and Development Considerations)

When a development is poorly situated in relation to commercial/retail facilities and project users (particularly elderly or handicapped), the developer working with local government may be able to arrange transportation services or provide some convenience retail facilities on site.

7. Information Resources

a. Publications

(See Introduction)

b. Resource Persons

Staff from the local chamber of commerce, commercial development agency, or local planning agency

4-28

---

UNDERWRITING/ENVIRONMENTAL FACTOR 11: TRANSPORTATION

1. Overview (See Introduction to Community and Neighborhood Services)

2. Related Laws and Regulations

The Federal Highway Administration and many State transportation agencies have specific capacity and level of service standards for primary and secondary roadways that must be met in order to qualify for Federal funds.

3. Assessment Questions

When considering transportation the inquiry should focus on these four elements:

- a. Access - To be considered to have good access to services, shopping, jobs, etc. -- the user must be able to reach a destination within reasonable limits of time, cost and convenience.
- b. Balance - A balanced transportation system is one which provides reasonable options for travel by private automobile or public transit or a combination of both.
- c. Safety - System design plays a strong role in safety, particularly elements such as traffic signals, turning lanes, and railroad grade crossings.
- d. Level of Service - This term measures a number of operational factors including speed, travel delay, freedom to maneuver, safety and frequency.

Access

- a. Will transportation facilities and services be adequate to meet the needs of the project's users? Is off-street parking available and adequate? Is adequate public transportation available?
- b. Are there special transportation needs (programs for the elderly and handicapped, bridge clearances for trucks, emergency vehicle access) which have not been adequately provided for?

c. Will the project serve to reduce the mobility of any group?

Balance

Will the project encourage additional private vehicle trips?

Safety

Will the project create any safety hazards? For example, have curbs been designed with wheelchair ramps, have pedestrian activated signal lights or

4-29

---

U/EF 11: Transportation

pedestrian overpasses been included in plans where needed? Is traffic light timing adequate for elderly pedestrians?

Level of Service

Will the project be provided with an adequate level of transportation service? Will it overload existing or proposed transportation services or conversely, create a situation whereby facilities are seriously underused?

4. Analysis Methods

Initial Impact Screening Techniques

ALWAYS USE

- a. FIELD/EXPERIENCE: In some cases the reviewer's knowledge of local conditions may be sufficient.
- b. PRINTED: Project plans should be reviewed to determine the location of the site with respect to transit services. Project data should be consulted to determine the type of transportation services that will be required. If the project will service an elderly population, their special transportation needs will require special consideration.

SOMETIMES USE

PRINTED: Review transit maps, schedules and time tables, available from the local Transit Authority; transportation improvement plans, available from local transportation planning agency (the metropolitan planning organization; and street maps and highway improvement plans, available from the State or local highway department or transportation planning agency.

5. Evaluation of Impacts

If a project is within one-quarter mile of a bus route and if headways are 15 minutes or less daily transit access is considered adequate.

However, if public transportation is warranted and if there is no public service to the project site (this may be especially true in a subdivision development), rate this factor "minor deficiencies." If there is no service and there are no plans to provide transportation services to a project site for users, e.g., elderly or handicapped, rate this factor "major deficiencies."

6. Mitigation Measures (Planning and Development Considerations)

The developer may consider:

- a. Working with local transit authority to add and/or reroute buses to serve the new project or if necessary add services for the handicapped or elderly.

4-30

---

U/EF 11: Transportation

- b. Redesigning project entry and exit to reduce or relocate traffic impacts on adjacent streets
- c. Consider changing the mix of project uses and thus alter traffic generation patterns
- d. Providing reserved parking spaces close to the housing for the exclusive use of the handicapped
- e. Including curb cuts and sidewalk designs suitable for wheelchairs. (In some areas this is required by local code.)
- f. Including pedestrian activated traffic light with timing intervals suitable for the elderly

7. Information Resources

a. Publications

Booz-Allen and Hamilton, Inc. Transportation Facility Proximity Impact Assessment. Prepared for California Department of Transportation. Philadelphia, Pennsylvania 1976.  
NTIS #PB-264 160.

b. Resource Persons

Planners at the regional transportation agency, regional transportation authority, or State highway department

4-31