## Land/Site Analysis—Part 6 by David R. Lewis, ASA, SR/WA

Site/land analysis essentially has two primary components. The first component is the subject property itself (site specific) and includes the legal considerations and the physical attributes of the site/land. Size, shape, soil conditions and public/private restrictions are several considerations in the analysis process. The second component is external to the site and consists of location attributes such as environmental, social and economic considerations.

The purpose of this and future articles is to assist the appraiser in analyzing the physical characteristics of the larger community where the subject property is located. It should be kept in mind that appraisers are simply observers of the neighborhood and community. Collecting relevant facts about social, economic, political and environmental conditions should be done in an objective process. The collection of facts that leads to the opinions of the subject property and neighborhood/community conditions should support the opinion of value.

Developing an opinion of value requires the appraiser to employ the scientific approach to value considering site-specific and external attributes. It is generally accepted that the scientific approach includes a five-step process. The steps are: (1) identify/define the problem, (2) collect relevant data, (3) analyze the data, (4) develop a hypothesis (develop and test the tentative decision) and (5) arrive at a final decision/opinion. The analysis process should collect the facts in sufficient detail for the appraiser to form an opinion of the subject property, neighborhood conditions and other relevant factors that influence an opinion of value.

Appraisers should apply appraisal principles in a cognitive or automatic process. Such principles should be automatically applied in how the property is analyzed. For example, the principle of increasing or decreasing returns is a consideration in analyzing the size of the site/land. Comparisons are made to other properties in the market and the needs of the market participants. The principle of contribution may be considered when assessing the contributory value of any improvement located on the site/land. Appraisal principles are also applied to external considerations. The principle of supply and demand is a location, economic and social consideration. As with site/land-specific considerations, principles aid in the analysis process. Appraisal principles are a necessary consideration in the scientific approach because principles provide a means of reference and understanding of market forces.

Just as appraisal principles assist the appraiser, the techniques developed by Kevin Lynch to analyze human activity on a neighborhood/community/city scale can aid the appraiser in analyzing external physical features. In the scientific approach, the tools suggested by Lynch assist in identifying relevant physical data.

Whether created by nature or by human effort, the environment presents an identity/structure. The pattern of use can be analyzed in terms of how it meets human

needs. Locational attributes will emerge and economic activities will evolve. Lynch states that, "The contents of the city images...can conveniently be classified into five types of elements: paths, edges, districts, nodes and landmarks." Just as appraisal principles guide the appraisal process, the physical elements guide the analysis of the physical environment.

For the purposes of this article, paths (access) will be briefly discussed. Paths are the channels along which the observer customarily, occasionally or potentially moves. They may be streets, walkways, transit lines, canals or railroads. For many people, these are the predominant elements in their image. People observe the city while moving through it, and along these paths the other environmental elements are arranged and related.

The ease of access and the quality of the environment will help form the locational qualities of the subject land/site. Convenience, clarity and familiarity all play in how the subject fits into the neighborhood and larger community. Paths can provide the subject property a comparative advantage. The capacity of land/site can be a function of the access.

Say you are retained as an expert witness in a litigation case. It may be necessary to describe the quality of the paths that serve the subject property in relation to the comparable sales. Defining the quality/condition of the access helps frame the subject in relation to the larger community and adds credibility.