

### Chapter 1

# Understanding Real Estate Market Analysis

**R**eal estate market analysis provides guidance for the many decision makers—both private and public sector—involved in real estate development. It is an ongoing process that provides information during the predevelopment, acquisition, development, marketing, and disposition of property. Large fortunes have been made and lost in real estate development, and the goal of market analysis is to minimize the risks and maximize opportunity to developers and investors by providing analysis that is as timely and accurate as possible.

Private sector real estate developers have a public sector partner in every deal. Government, particularly at the local level, regulates the development process and has a vested interest in the product. The public sector's goals are to ensure that new developments are appropriate for the community and that they meet the needs of the public. Market analysis can provide some of the tools to help meet those goals. Often, however, public officials become involved with issues of density, design, and traffic, and fail to consider whether a proposed development has the market potential to succeed.

Equally important, the developer can use a market study to determine what project types will gain the support of public participants. The market analyst should investigate both regulatory requirements and the attitudes of neighbors and public officials. Market research not only indicates ways for the developer to win public approvals and entitlements, but also it guides the project's size and design.

Beyond convincing lenders and investors that a project is feasible, market research is useful in planning and designing a project. When the target

market for the proposed project has been accurately identified, the development can be shaped to meet the needs of that market. Location, design, quality, pricing, and marketing strategy can all be programmed in accordance with the market's demands.

## What Is Real Estate Market Analysis?

Regardless of the type of development being examined, every market study addresses three basic questions:

1. Will there be users to rent or buy the proposed project?
2. How quickly, and at what rent or price, will the proposed project be absorbed in the market?
3. How might the project be planned or marketed to make it more competitive in its market?

Real estate market analysis is the identification and study of demand and supply, usually for a particular product. On the demand side are the users: the buyers or renters of real estate. The supply side is made up of competitors: both existing properties and those that are expected to enter the market before or during the same period as the subject project. Market analysis is the synthesis of supply and demand analyses as they relate to the decision-making process. A critical flaw of many market analyses is that they present data without analysis.

Because real estate exists at a fixed location, supply and demand are location specific, most often in



Successful retail development depends on finding the appropriate tenant mix to serve the market area demographics.

an area surrounding the subject property. The "market area" is the geographical region from which the majority of demand comes and in which the majority of competitors are located. In some cases, the two are similar or even identical, but many exceptions exist.

The word "market" can be used in a variety of ways. Business people usually use the word to refer

to different ways of grouping customers, including geographic location (the Pacific Northwest, the Midwest), demographic profiles (urban professionals, empty nesters), and product types (family restaurants, high-fashion apparel). Economists refer to both buyers and sellers when describing markets in terms of supply and demand, whereas marketing profes-

sionals (the people who try to convince us to buy a Buick instead of a Lexus) consider the sellers as the industry and the buyers as the market.

In real estate, product refers to property type (e.g., apartment buildings, offices, or warehouses), which is further distinguished by size or configuration, quality, and services. "Quality" relates to the project's architecture, construction, layout, and finishes. "Services" represent the developer's commitment to ongoing property management, such as providing security and janitorial services, or, in the case of residential development, it might mean a master-planned community with maintenance services and planned activities.

Real estate markets are categorized by property types: office, retail, residential, hotel, and industrial, among others. Each property type can be further segmented into smaller markets based on categories within each type, locational factors, and price ranges. Market segmentation is the process of identifying and analyzing submarkets of a larger group of property markets. For example, hotels can be subdivided into luxury resort properties, downtown conference hotels, roadside motels, and so on. Retail markets can include regional malls, strip centers, outlets, and urban street retail. Residential can be segmented into single family, attached, and multifamily as well as for-sale or rental properties. Narrowly defining the market segment helps to fine-tune the analysis.

Most real estate market analyses examine both the market potential and the marketability, or competitiveness, of the proposed project. The market potential analysis examines aggregate demand and supply data, which assist the developer in understanding the effective demand for and supply of space by user group. Demand is, by far, the more difficult half of the equation. Projecting how much demand exists, where it comes from, and how to satisfy it requires a mix of research, experience, and intuition. Demand analysis considers the following data:

- Population, households, and demographic characteristics;
- Income, affordability, and purchasing power;
- Employment, by industry or occupation;
- Migration and commuting patterns;
- Other factors, depending on the type of real estate development being studied.

Analysis of the supply of competing projects takes into consideration the following factors:

- Inventory of existing space or units;
- Vacancy rates and characteristics of vacant stock;

- Recent absorption of space, including types of tenants or buyers;
- Projects under construction and proposed;
- Market rents or sale prices and how they differ across locations and by quality of product;
- Features, functions, and advantages of existing and proposed projects;
- Lease or sale terms and concessions (free rent, bonus features, tenant improvement allowances, etc.).

The marketability portion of the analysis usually assesses the property's demand attributes. Thus, the developer can adapt the real estate product, price, and merchandising appeal to better fit the market and to attract a group of users with particular preferences. Marketability analysis usually includes profiles of the user to be served by the development; the product's features, amenities, and services; and the pricing strategy.

The marketability analysis usually goes beyond establishing the demand for the type of product being considered and determines whether the proposed project will be able to capture the desired share of the market. Will it be competitive within its market in terms of value and quality? The analysis may study whether the proposed development responds to demand for a particular type of product that existing facilities in the area have failed to meet. In a retail market, for example, demand unsatisfied by local facilities either leaks or flows to retailers located outside the immediate market, remains pent up, or is diverted to other purposes. Or the analysis may indicate that the project under consideration is not responding to market demand because local demand is already being met or will be met by projects in the pipeline, or because the proposed project is not properly targeted to meet the specific needs of the local market.

Market analysis forms the basis for decisions regarding location and site, size, design and quality, features, target audience, pricing strategies, and so on. The most detailed type of market analysis is usually performed as part of an overall feasibility study. The price and absorption data that result from real estate market analysis form the basis for the cash flow portion of the feasibility analysis, which can answer many of the following questions: How many square feet should be built? For what rents can it be leased? How many houses can be sold over what period of time? How can an office building be repositioned to become more competitive? What is a viable selling price for a parcel of raw land? What cities should be included in a chain store's expansion?

Although the market analysis examines statistical trends and projections of sales, rents, vacancies, and absorption in the market area, nonquantitative analysis is becoming increasingly important. Qualitative characteristics, such as how certain market segments perceive a themed retail center, or what design features appeal to homebuyers in certain communities, are increasingly being examined through surveys, psychographic research, focus groups, and cluster-group analysis. As real estate markets become more and more segmented and specialized, traditional statistical models and formulas, which rely on large data pools, do not work; therefore, it becomes necessary to rely on more qualitative analysis.

When developers enter a new market where they have little or no experience, they obviously assume added risk. To limit risk, developers must pay special attention to assessing their position in the marketplace as well as to the realism of their goals and objectives. Solid market analysis helps the developer illuminate the unknowns of a new market and identify a project's potential for success.

A strong overall market does not necessarily equate with a good opportunity for development. Neither does a weak market mean that a good idea cannot be implemented. In-depth market analysis can reveal opportunities that may not be readily apparent. Understanding the market is a necessary prerequisite to generating ideas. Poor implementation can undermine the most promising opportunities in any market, but flawless implementation cannot redeem a bad idea.

### Generation of Ideas

To keep abreast of short- and long-term aspects of the market, real estate professionals must keep up with national and regional market trends and forecasts and talk to people familiar with the national and local economies. The further into the future an analyst must project, the less reliable the projections and the greater the probability of error because of changing macroeconomics. Because real estate development is a relatively slow process, market analysis must continue throughout the entire process, monitoring changes as they occur.

Knowledge about both supply and demand is necessary background for the generation of ideas, which is the initial stage of the development process. Knowledge should begin with a broad, national picture, because financing is national (and increasingly international), some tenants are national, and some developers are national. Knowledge should also include a regional, a local, and, depending on the

nature of the project, a neighborhood picture of current conditions. At the local level, developers need to know how comparable properties are performing and what trends are emerging. In most instances, local market and economic conditions are a more important part of the market analysis than macro trends.

### Different from Toothpaste

Classic marketing theory helps bring greater structure and discipline to real estate development. The real estate product, however, differs substantially from standard mass-produced and nationally advertised products. Four major differences predominate.

- The real estate product is highly differentiated. It serves several needs of different space users and is produced in more variable styles and price ranges than most common household products. Above all, the real estate product is distinguished by the importance of location. Unlike all other products, people cannot take real estate home. Instead, the customer must move to the product, which offers a location that is unique to the specific product.
- Constraints on supply are far more variable. Unlike mass manufacturing, the local vagaries of site availability and political entitlements often control the volume of competing supply and direct the developer's opportunities. Supply is further constrained by the sheer time and expense involved in its production.
- Market data are much less certain in the case of real estate. Developers lack the finely structured data banks of corporate America, although recent years have seen significant improvements in data sources. Nevertheless, the uniqueness of different locations and market niches, combined with the volatility of local economies and construction cycles, implies that developers must work hard to know their markets.
- Most projects must be custom tailored and cannot be mass produced or mass marketed. Without the economies of scale of a Procter & Gamble or a Ford Motor Company, developers cannot create their products as efficiently as corporate giants.

### Who Uses Market Analysis?

Developers can no longer rely on instinct to decide what to build or to assure prospective lenders that the project will be successful. A rigorous market study early in the process stimulates development ideas,

improves initial concepts, and serves to control risk. Reexamining the market in greater depth helps to refine concepts as the development plan begins to take shape. Developers are not the only players who benefit from market analysis. Research may be undertaken for the benefit of the investor, the lender, or the community whose well-being will be affected by the proposed project.

- **Developers and builders:** Market analysis is used by the developer of a project to determine whether a location is suitable for development and what product best meets the demands of the market. The market analysis is usually part of the package submitted to the lender(s) to provide documentation that the project is financially feasible. A developer might also use market analysis later in the process to fine-tune the product or to find out what went wrong—why the product is not selling or leasing as expected.
- **Investors and lenders:** Funding sources rely on market analysis to assess the project's financial viability, ensuring a sound basis for a loan or investment. Federally backed lenders require that a market study be performed as part of due diligence.
- **Designers:** Architects, planners, interior designers, and others involved in design must understand the target market for a development so that the project's styling, amenities, features, unit sizes, and so on, will be suitable for that market. For example, an office building designed to appeal to startup high-tech firms might look entirely different from one designed for large, well-established law firms.
- **Marketing managers:** Like designers, marketers must formulate their sales strategies, advertising campaigns, interior merchandising, public relations, and other promotional efforts to reach the target market.
- **Local governments:** A market analysis might help determine whether a proposed project will be accepted by the public and will serve the public's needs. In jurisdictions where fiscal impact analysis (a method that determines how much financial benefit or deficit a development will bring to the jurisdiction) is conducted, the market analysis provides key information for the analysis. Such information might also help to determine development impact fees that are sometimes assessed.
- **Tenants and occupants:** The companies that lease or purchase retail, office, or other commercial space might have a type of market analysis prepared as part of their site-selection process. The analysis might be at the macro level, to determine

which cities the tenant should consider, or at the micro level, to examine suitability of specific properties for leasing.

- **Sellers, purchasers, and landowners:** Generally, transactions are backed by an appraisal, but sometimes a market analysis report is completed either as part of the appraisal or instead of one. Market research can identify an appropriate selling price for a completed project or a parcel of land. The value of raw land is determined by constructing a market analysis of a likely completed project, then extrapolating the value of the land based on the value of the completed project.
- **Property managers:** Managers use market analysis to gain the necessary insights and information for repositioning an existing property. Repositioning might involve a complete renovation or minor upgrades, depending in part on what the market dictates.

## How Does Market Analysis Fit into the Development Process?

Market analysis is a crucial part of the initial feasibility study for a real estate project, but it does not end there. Market research continues to play an important role in shaping the project throughout its development and management phases. Market analysts are commonly consulted for repositioning strategies after a project is up and running and the developer realizes that absorption does not meet projections. As many types of market analysis exist as variations in development projects, stages of development, and interests being served.

At the earliest stages of development, an analyst might be asked to study one or several metropolitan areas for development potential (sometimes called "market screening"). Then the analyst will focus in on a submarket and finally seek out a site that is most appropriate for the proposed development concept. But given the limited availability of developable land today, it is more common for a developer to have a specific site in mind and to ask that the site be studied.

If the site proves viable, the market analyst might provide a basis for determining the value of the site so that a purchase price can be negotiated. Or this valuation might be performed by an appraiser. Sometimes the analyst investigates the development climate of the jurisdiction. That is, will the proposed project likely meet with public acceptance and gain the necessary approvals in a timely manner? Are utilities readily available? Might other difficulties slow

Figure 1-1

## Market Studies: Clients and Their Objectives

Purpose or Objective	Developer	Equity Investor/ Partner	Buyer	Seller	Lender	Redevelopment Agency	Housing Finance or Economic Development Authority	Tenant/Owner	Realtor/Broker
Market overview for use in brochures and publications	X					X	X		X
Input for corporate location/relocation/expansion decisions								X	
Devising/revising real estate investment strategies	X	X							
Product planning, design, pricing, phasing	X								
Obtaining zoning or other government approvals	X					X			X
Input/assumptions for cash flow analysis	X	X	X		X				
Loan application support	X				X				
As part of a sales offering package				X		X			X
Acquisition due diligence			X					X	
Lender due diligence					X	X	X		
In ongoing asset management		X						X	

or hinder the development process? Some market analysts prefer not to get involved in such nonmarket research, leaving it to planners, engineers, or others.

Further refining of the analyses would reveal specifics about potential users (tenants or buyers) and their demands in terms of product niche and pricing. After the project is developed, a market analyst might be asked to assess the project's sales or rental performance. Is retail space renting as quickly as the market allows? Are the office rents in line with the market? Should the homebuilder add a higher-priced product type? Why is a nearby competitor selling faster, or for higher prices, than the subject project?

Savvy developers not only beat the bushes for new customers to stimulate demand, but also manage demand—its level, timing, and composition—to achieve a company's objectives. The market analyst needs to stay abreast of emerging land planning and design trends to recommend the most competitive and appropriate product type.

For example, sometimes developers can effectively create a market for a new product type. The reality is that they are not creating a new market, but exploiting an existing one that has not been satisfied in other ways. Dissatisfaction with existing space occurs whenever new needs are discovered or, more simply, whenever standards are raised. The most typical example occurs when the design of a more prestigious development—with all the latest features and finishing details—is unveiled. The notion of what constitutes the most desirable office space, shopping center, or housing can change overnight, forcing owners and managers of existing projects to upgrade their own buildings or lower their price points. For example, a Class A office building that does not meet the most current standards will fall to Class B, which means less-prestigious tenants and lower rents.

In the 1970s, shopping centers had low ceilings and dark, earth-tone finishes. By the 1980s, that look had given way to light, airy atriums. As a result, older cen-

ters either lost status and prestige retailers or had to be renovated to compete with newer standards. Residential development cycles through trends at a faster pace than other types of development. A new style or feature can quickly render existing units obsolete in the minds of homebuyers or renters, thus creating an instant market for new, more stylish units.

Market research provides the input for analyzing marketing opportunities and selecting target markets. Ideally, the development team never stops gathering market intelligence, continually using new information to reposition the project as change occurs.

## The Feasibility Study

The results of the market analysis lead to the core assumptions used in the financial feasibility analysis for a real estate project. A developer must be able to defend cash flow projections with a rational system of analysis and data inputs to legitimize the project's feasibility, demonstrating that there will be tenants or buyers, that rental rates or sale prices will return a sufficient cash flow, and that the type of product proposed is what the market desires.

The feasibility study is the formal demonstration that a proposed project is viable. A typical feasibility study includes an executive summary, a market analysis, preliminary drawings, cost estimates, information about terms and sources of financing, government considerations, environmental assessments, and a determination of the financial feasibility of the project.

The key components of the feasibility study follow. Together they provide the documentation for determining whether the project is financially feasible.

- Concept and target market for the project, from the big picture down to an absorption schedule for the particular market niche—progressing from region to city to neighborhood to site;
- A careful enumeration of the target market—number of people, their preferences, their income—tied to the specific idea;
- Identification of appropriate comparable properties (the competition) along with the major features, functions, and advantages of each;
- The economic performance of comparables;
- The foregoing information tied into a discounted cash flow model;
- A sensitivity analysis to move from feasible to optimal, with an individual evaluation of each component of the plan;

- A review of risks in the realistic configuration, with appropriate risk-control techniques;
- Confirmation that the project is feasible for each participant.

Depending on the size and complexity of the development, the feasibility study can vary dramatically in length, scope, and cost. At one extreme, if the project is a small neighborhood shopping center in an established area and is to use architectural drawings from a previously built project using the same contractor and lender, then the feasibility analysis is a simple activity that involves applying the market information for the new submarket to a proven course of action. In other words, new market data are used to project rent and absorption, with most other factors refined from previous developments. In such a simple case, developers often choose to perform the feasibility study with in-house staff at limited cost.

This simple case contrasts sharply with a 5,000-acre planned community that includes a full array of housing types, retail town centers, and an office park. Such a community requires extensive infrastructure as well as aboveground construction. Because the project is likely to take many years to complete, and upfront costs are considerable, the risks are considerably higher and the recognition of long-term trends is more important than for a simple project—even for designing the first stage of the project.

A concept for a complex, expensive, long-term project often results in a complex, expensive feasibility study that involves a team of outside professionals, such as architects, land planners, soils engineers, hazardous-waste experts, public relations consultants, marketers, and so on. The developer must coordinate all the professionals and ensure that they are all talking about precisely the same project so that collectively they can determine its feasibility. Likewise, the market analysis for such a project is more complex. Multiple land uses and types of occupants must be considered, a longer time frame must be projected, and a wider array of product types, with synergies and spillovers of demand, come into play.

The market study is a crucial item in a feasibility analysis. It analyzes all the economic trends that were initially identified during refinement of the idea. These trends are now formally brought to bear on the existing local situation as the analyst projects an absorption schedule for the project, with which the market study usually concludes. How many units at what price over what time period will the target market be likely to absorb? It is necessary to segment the market carefully by defining all the features, func-



tions, and benefits of comparable projects to be able to predict the overall absorption rate for the market segment. The developer can then attach value to the distinctive features of the subject property and compare it with the market to estimate the proposed development's capture rate and expected rents. The data culled from the market analysis provide the assumptions for the cash flow analysis.

Because various state and federal regulatory agencies oversee the lenders who bear a portion of the risk in major developments, financial institutions usually require feasibility studies when they underwrite a loan. An outside feasibility study prepared by a well-respected firm meets this requirement. Some lenders prefer to prepare their own analysis, either as backup, or instead of an outside study.

Although the government hoped to end by regulation the unsubstantiated assertions of financial feasibility and property values that led to many financial disasters during the 1980s, lenders now bear much of the burden in evaluating the accuracy of feasibility reports. Regulators no longer spell out what lenders must demand of appraisers and market analysts. Rather, lenders are required to demand whatever analyses are necessary in a particular situation, shifting the burden of proof to the lender. If they do not require thorough research by an independent party and a loan subsequently goes into default, then the government regulators will fault the lender for not performing sufficiently detailed due diligence.

## The New Demographics and the Need for Qualitative Research

Not so long ago, it was commonly assumed that market segments could be defined by age and income brackets and that, within those brackets, everyone was fairly homogeneous. It was assumed that people looked and acted the same and were attracted to the same product types. Middle-income shoppers always shopped at suburban malls, seniors always moved to Sunbelt golf resort communities, and law firms always leased Class A downtown office space. Of course these assumptions were never true, but today they are less true than ever. So segmented is today's demographic pie, that extensive research is required to fully understand who the market is and what it wants. Consumers are increasingly sophisticated and demanding; they will not settle for what they do not want.

According to U.S. Census Bureau projections, the American population is aging and becoming increasingly multicultural. For years, the baby boom has had

a profound effect on every kind of market, including real estate. This influence will continue as the baby boom ages into retirement and beyond. In 2000, those aged 65 and older accounted for 13 percent of the population. In 2030, they will increase to 20 percent of the population. At the same time, those aged 18 to 64 will have declined from 62 percent to 56 percent of the population. (See Table 1-1.)

Along with aging, a concurrent trend is the increasing cultural diversity of the population. (See Table 1-2.) In 2000, the non-Hispanic white population accounted for 71 percent of Americans. In 2030, that group will decline to 60 percent and, by 2050, to 53 percent of the population. Hispanic Americans in 2000 were 12 percent of the population, and that percentage is expected to grow to 19 percent by 2030 and to 24 percent by 2050. Because of increasing diversity, the 2000 census reported on an expanded number of categories of race and ethnicity. For the first time, respondents were allowed to check more than one race to indicate their racial identity, for a total of 63 possible combinations. In addition to ethnic diversity, the household unit is changing. No longer is the stereotypical family with two parents and two children the norm. In 1970, the largest household segment was such fami-

Table 1-1

### The Aging of America (Percentage of Population)

Age	2000	2030	2050
Under 18	26	24	24
18-64	62	56	56
65 and Over	13	20	20

Source: U.S. Census Bureau.

Table 1-2

### America's Increasing Diversity (Percentage of Population)

Race	2000	2030	2050
Non-Hispanic White	71	60	53
African American	13	14	15
Hispanic	12	19	24
Asian/Pacific Islander	4	7	9

Source: U.S. Census Bureau.



lies, constituting about 45 percent of households. By 2010, this segment will shrink to about 29 percent, while people living alone will make up an equal share of households—28 percent, up from about 18 percent in 1970.<sup>1</sup> (See Table 1-3.)

Population shifts will be geographic as well. The western states will gain a larger share of population, whereas the population living in the Northeast and Midwest will decline. These significant shifts all need to be considered and understood by those who provide homes and places of work, play, and commerce.

### Psychographics: The Search for Segmentation

Developers seek to identify market segments—whether defined socially, spatially, or behaviorally. Historically, real estate development has been a spatially segmented industry: most developers worked in only a few locations and constructed only one or two product types. Since the 1950s, however, developers' geographic scope and product mix have increased with the size of their companies. The proliferation of REITs in the 1990s further broadened the scope of both developers and their real estate portfolios. Now, in addition to serving a variety of geographically and functionally segmented markets, developers search for important socioeconomic and behavioral distinctions among potential customers. Research into these different factors identifies target market segments that usually consist of a distinctive combination of people, lifestyles, purchasing power, and place. Identifying new markets or niches within established markets is a crucial application of marketing research to real estate development.

Sometimes called "psychographics," this branch of market research studies lifestyles and other psychological characteristics of demographic cohorts.

Table 1-3

### Household Types in 2010

30%	married couples without children
29%	with children under 18 (8% single parents)
28%	singles living alone
7%	other family types
5%	roommates

Source: U.S. Census Bureau.

Understanding psychographics allows for fine-tuning of product niches to meet narrow and specialized market segments. Chapter 2 explains focus groups and surveys as ways to understand psychographics.

### Political Homework: Marketing for Entitlements

Understanding the market for a real estate product takes time and careful analysis. But satisfying the market carries the developer only so far. It is useless to determine the demand for a product if the developer cannot gain approval for such a product from the surrounding residents and the local government. A market analyst should understand the development climate in a jurisdiction. Developers must satisfy at least some of the needs of neighbors and regulators and should consider government their partner. A community will ultimately alter the development approval rules to the detriment of the project owner if a project does not serve the community well. However, few developers want such information included in the analyst's report because they do not want community issues to be identified in writing.

Developers need to make certain that their projects respond to government's overall plans for the community, including plans developed by numerous community, county, regional, and state agencies. The most relevant plans are land use plans and zoning ordinances, but others that may be equally important in particular development situations include transportation, economic development, and environmental plans and policies. Local political approval is generally binding, although plans issued by higher-level agencies can be influential and should not be disregarded.

How well does the proposed project support the intent, if not the letter, of the community's general plan or of regional comprehensive plans? It is important to recognize that the plans developed by various agencies often conflict with one another and express a variety of opposing objectives. For example, local land use plans may not accommodate the economic goal of creating jobs, or the land use map may not have been updated to reflect new transportation corridors, or environmental protection may be served better by the proposed project than by alternatives in other locations. In addition, skilled developers know that the members of decision-making

bodies are often not of a single mind and that even individual decision makers subscribe to a variety of goals and objectives that are at times internally inconsistent.

Recognizing that the entitlement authorities represent customers to be sold on a project, experienced developers have learned that it is useful to address local authorities' needs and desires from the beginning of project design. A series of negotiations often transpires as developers seek to tailor their projects to regulators' expectations. Public relations experts recommend that developers organize their project's marketing along the lines of a political campaign to ensure neighbors' and officials' acceptance of the project. Careful research into public opinion is essential in the effort to gain such acceptance.<sup>2</sup> It is far better to identify and address community concerns early during the project's approval process than to face an angry audience in a public hearing before the responsible authorities. Elected officials are much more comfortable issuing approvals when the electorate supports a project.

### Why Hasn't Anyone Else Thought of This?

Successful development responds to the needs of space users and, to a lesser extent, to the requirements of government and citizens or neighbors. Products, places, people, and capital add up to many areas of inquiry.

When the developers believe that they have arrived at a good choice for a proposed project, they must still ask one nagging question: Why has no other developer stumbled across this fine opportunity? Is something wrong with the idea? Why do we see the opportunity more clearly than others? Asking such a skeptical question brings added discipline to the process of market analysis. The question is especially important for developers working in a new locale; they may be less knowledgeable about local politics and local market trends even if they are more sophisticated about development in general.

As part of their research, developers must identify and recognize the competition so they can position their own product competitively to reach the target market. Better price, quality, and location are obvious attributes of competing real estate products. Only slightly less important are reputation, expertise, and financial depth.

Simply discovering a development opportunity is not enough. For the development firm to prevail, it

may also need to secure the best site, to come up with the best design, to arrange the earliest loan commitment, to obtain needed entitlements, to secure the key anchor tenant, to develop the best marketing plan before other developers come up with the same idea. Most often, the successful developer integrates several key advantages and builds all decisions around a total marketing concept. When a developer follows a systematic marketing approach, an objective evaluation will likely reveal if the developer has a competitive edge and is thus well advised to proceed.

### Summary

Market analysis is the investigation into needs and wants (demand) and into products that compete to satisfy those needs and wants (supply) and the synthesis and understanding of the two. Although usually thought of as formal, focused, and systematic, market analysis for generating development ideas involves a large informal component made up of experience, observation, reading, conversation, and interdisciplinary analysis. The discipline has incorporated many technological advances, but nothing takes the place of old-fashioned shoe leather fieldwork for understanding the project and its competitors. Analysts must integrate objective data and instinct born of experience. Successful developers are able to unite the rational with the intuitive. Formal knowledge of marketing principles and market research enhances the use of both faculties.

The importance of market analysis in the real estate development process, particularly in unfamiliar or highly competitive markets, cannot be overemphasized. Market analysis begins at the project's inception, when an idea first emerges to acquire a property or to develop a site, and continues through the development and eventual disposition of the project. All development projects should start with the demands of customers and satisfy those demands competitively.

### Book Outline

This chapter has defined market analysis and discussed its uses and users. It has shown how market analysis fits into the development process as a way to improve decision making at each stage. Useful research can be both broad (including global, national, and regional economies and product

trends) and highly focused (for example, fine-tuning the features to be included in kitchens of an apartment complex).

Subsequent chapters explain how to perform market analysis. Chapter 2 lays out the broad concepts, including delineating a market area, studying demand and supply, assessing marketability, collecting reliable data, and understanding qualitative research. Chapters 3 through 7 describe how to tailor the process to each specific product type, including how market areas differ for the various product types, what methods of analyzing supply and demand are unique to specific product types, and what kinds of data are most useful for each product type. Each of these chapters includes condensed case studies that illustrate the concepts explained in the chapter. An appendix identifies some of the public agencies and

private companies that provide data for real estate market analysts.

## Notes

<sup>1</sup>National Projection Program, Population Division, U.S. Census Bureau; Washington, D.C., [www.census.gov/population/www/projections](http://www.census.gov/population/www/projections).

<sup>2</sup>See Debra Stein, "Taking the Guesswork out of Winning Community Support," *Urban Land*, vol. 50, no. 10 (October 1991): pp. 2-5; Debra Stein, *Winning Community Support for Land Use Projects* (Washington, D.C.: ULI-the Urban Land Institute, 1992); Debra Stein, *Making Community Meetings Work* (Washington, D.C.: ULI-the Urban Land Institute, 1996); and David Godschalk et al., *Pulling Together: A Planning and Development Consensus-Building Manual* (Washington, D.C.: ULI-the Urban Land Institute, 1994).

## Chapter 2

# Basic Approach to Real Estate Market Studies

**T**his chapter outlines a general approach to real estate market analysis, setting forth the basic tasks to be done and identifying the types of information needed to reach supportable conclusions. Details for analyzing specific property types are presented in Chapters 3 through 7, and data sources are cited in the appendix.

### Defining the Market Area

One of the initial challenges facing the market analyst is to define the boundaries of the property's market area (also referred to as the "trade area"). In reality, residential and retail properties often have two market areas: one from which the majority of potential tenants or buyers will be drawn, and another in which the key competitors are located.

Trade areas for residential and retail properties are usually defined as a combination of census tracts, zip codes, transportation corridors, municipalities, or counties from which the vast majority of customers (homebuyers, apartment renters, shoppers) will be drawn. The analyst should recognize that census tracts and zip codes often do not conform to municipal boundaries, nor do they necessarily reflect neighborhood residents' sense of turf.

Preliminary studies may define the trade area based on municipal or county boundaries or may use three-, five-, or ten-mile rings to determine if the population meets a minimum threshold size. (The ring includes the area within the stated number of miles from the subject site, without taking access or natural barriers into consideration.) With demographic data

for user-specified areas readily available from private vendors (described subsequently), analysts can easily, and inexpensively, obtain information for rings. Such simple trade area definitions are useful for initial review of a market's population size or expenditure potential, but they will not accurately portray a site's likely trade area and should not be used as the market area for more in-depth studies.

The most precise trade area definition will not be a uniform size or shape, nor will it extend equally in all directions. Yet, the analyst needs to take data availability and the cost of information collection into account when drawing a study area. Also, devising an accurate market area definition will usually require visiting the site of a proposed development or acquisition.

Although analysts have traditionally been forced to approximate market areas by using census tracts, zip codes, or county boundaries because of data limitations, emerging geographic information systems (GIS) technology, or electronic mapping, is liberating real estate decision makers from relying on arbitrary boundaries. GIS is a combination of data, software, and geographic analysis that allows the creation of maps and sophisticated analysis; it has tremendous potential for real estate. Examples of GIS data include county property assessment files, geodemographic information, traffic volume counts, and projections of absorption rates. Property assessment files include all of a property's characteristics used by property tax assessors to arrive at assessed values, as well as latitude and longitude coordinates of the property. Geodemographic information includes hundreds of census-year demographic

measurements, such as income, education, race, and family composition, as well as projections for present and future years.

Traffic volume count is a key data input for making judgments about commercial real estate. The most important data available are U.S. road networks in digital format. First digitized in 1990, TIGER/Line data is available from the U.S. Census Bureau. TIGER/Line data, when combined with appropriate software, allow the assignment of latitude and longitude coordinates based on a property's address. GIS software has often been referred to as a "spatial spreadsheet." Today's commercial software is user-friendly, available from a variety of sources, and relatively inexpensive.

Whether analysts are armed with elementary analysis tools or sophisticated electronic-mapping technologies, their knowledge of the market's vehicular and mass-transit patterns, natural barriers, competitive projects, and economic and demographic profiles is of critical importance in defining market areas. Key factors affecting the size and shape of the market area include the following:

- **Natural features:** In some cases, lakes, rivers, or mountains cannot be easily traversed. Roads might be narrow or winding, or bridges might be few and far between. Traffic congestion may be a factor. In other cases, natural features act as psychological or social barriers. ("Nobody from around here would drive halfway around the lake just to go to the supermarket.")
- **Constructed barriers, such as interstate highways or railroad tracks:** Infrastructure that restricts access to the site from nearby neighborhoods will limit the size of the trade area. At the same time, these improvements can expand the catchment area if they improve accessibility or shorten commutes.
- **Population density:** A shopping center proposed for a densely developed city neighborhood will have a much smaller market area than one proposed for a small town in a rural county.
- **Political boundaries between cities and suburbs, or between school districts:** Properties located in communities with low crime rates and good schools will (all other things being equal) draw from a larger trade area. This factor is more important in residential market analysis than for retail or commercial properties. However, political boundaries also determine real estate tax rates for all types of development. Tax rates can vary dramatically among municipalities in the same general area.

- **Neighborhood boundaries and demographics:** Household income, family composition, racial mix, and ethnicity all play a role in defining market areas for both residential and commercial properties. Community identity and insularity influence where people are willing to live, shop, or commute from.
- **Type and scope of development:** A large regional shopping mall or a large master-planned community draws from larger market areas than a neighborhood shopping center or a small infill residential subdivision.
- **Location of competitive projects:** Sometimes a market area is realigned to include certain competitive projects.

For office buildings or industrial properties, the local market area depends less on the geographic location of potential tenants than on the location of competitive buildings. Industrial and office tenants frequently move from outside the immediate community or the metropolitan area. Hotel, resort, and second-home properties also target consumers who live well beyond a metropolitan area. Demand is more dependent on transportation access (easy interstate highway or air connections) and conditions in the general economy (growth in tourism; participation in sports such as golf, tennis, or boating; increasing affluence) than on local demographics.

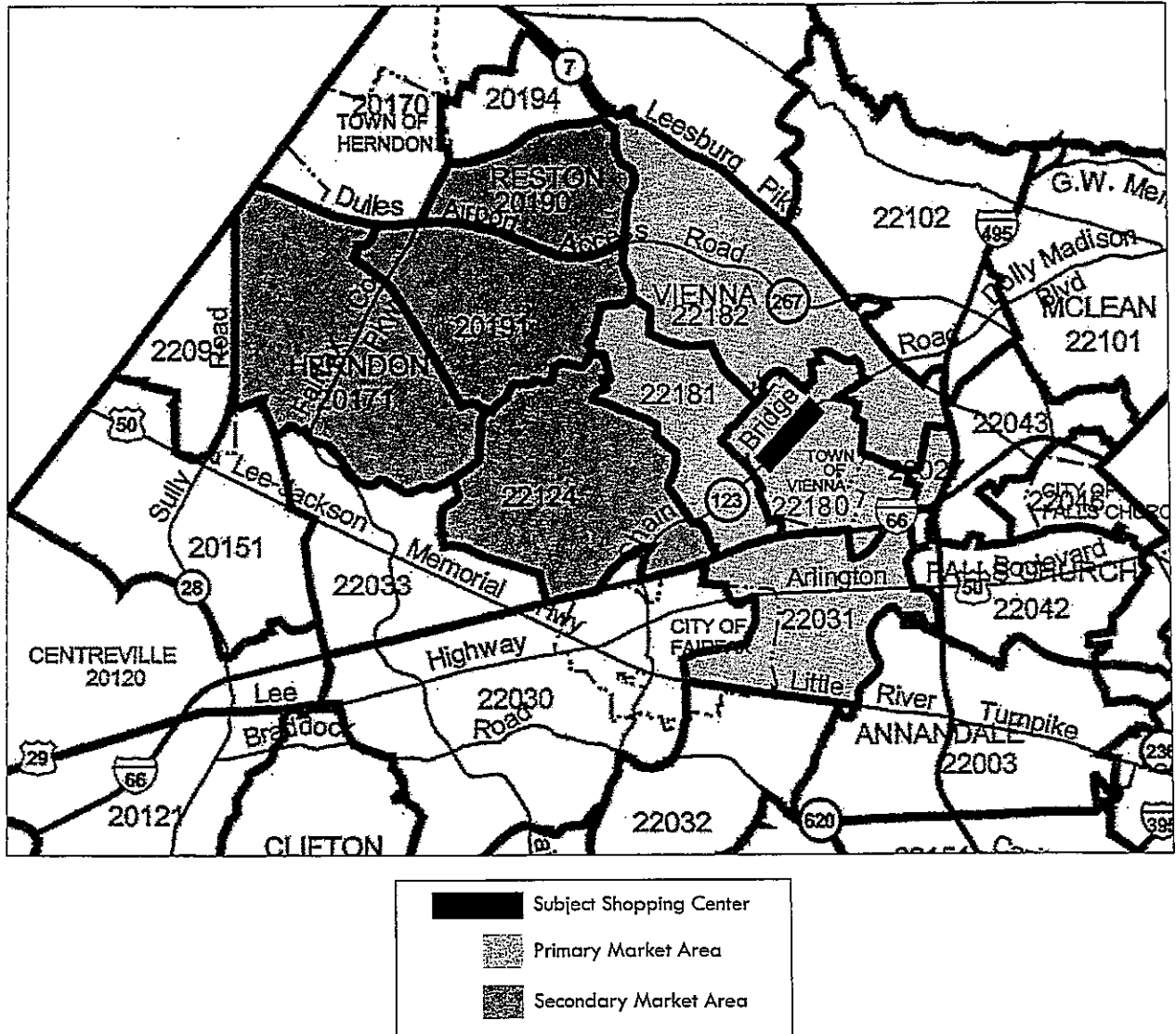
### Primary and Secondary Trade Areas

More sophisticated residential and retail market studies define both a "primary market area" (from which 60 to 80 percent of residential or retail patronage will be captured) and "secondary market areas" that will generate the balance of demand. (In emerging markets at the fringe of development or beyond, the reverse is true.) A portion of demand will also be allocated to "inflow"—retail purchases made by tourists and other visitors who do not reside in either the primary or secondary market. This methodology is most common for regional shopping center or outlet malls, but it is also used for retirement housing.

The market study report should include a map that defines the boundaries of the primary and secondary trade areas, showing the location of the subject site, nearby interstate highways, and key arterials. (See Figure 2-1.) If the trade area includes multiple political jurisdictions, they should also be noted. Many computer mapping programs are now available that allow the user to specify boundaries, place-names, roads, and natural features.

Figure 2-1

## Shopping Center Trade Areas



Source: Fairfax County GIS and Mapping Services.

### Competitive Clusters

Office and industrial land uses tend to cluster along transportation routes, at highway interchanges, or around activity centers such as airports, universities, or regional malls. For building tenants, access—to labor force, clients, customers, and suppliers—is paramount. Availability and cost of land and utilities,

along with zoning and supportive local government policies, are also important factors in attracting new development. The precise number of nearby residents and their household characteristics are less important for hotel, office, and industrial projects than whether the community is stable or growing and has a good reputation in the real estate community.

Metropolitan areas have multiple office clusters, both in the central business district and at key suburban nodes. Industrial and warehouse buildings can also congregate in multiple locations—near a port or an airport, along freight rail lines, or at the junction of two interstate highways. The marketability of a proposed new office or industrial development (or the economic potential of an existing property being considered for acquisition) is examined in light of both the regional economic conditions and the performance of similar properties within the cluster or submarket. Comparative analysis of the clusters is also relevant for positioning and capture analysis across a region.

## Analyzing Demand

National, regional, and local economic conditions all affect property demand, but the most important factors are local, and the study of local economics and demographics should be the major focus of the market study. Macroeconomic conditions (interest rates, inflation, job security, industrial productivity, and stability in the stock market) shape consumer confidence and business investment activity. The strength of the national economy influences whether businesses expand their space, retailers seek more store locations, families move up the housing ladder, and travelers book more hotel room nights. Even if the written report does not include detailed charts and tables, the analyst should be aware of current and future macroeconomic factors when drawing conclusions about the advisability of starting a new project or investing in an existing building.

Local economic conditions may not precisely mirror national trends. Not every metropolitan area benefits from strong growth in population and employment during an economic boom. And some communities will survive a national recession relatively unscathed. As a result, real estate market studies usually give greater weight to regional and local economic indicators than to nationwide statistics. For example, employment growth at trade area businesses that use office space (banking, insurance, legal services, business services, consulting) will be the key demand determinant for new Class A office space. The need for additional hotel rooms will, to a large extent, depend on continued growth in local tourist, convention, and business visitation.

Local market dynamics are the most important factors used for identifying sources of housing demand. Consumer demographics (population growth, household formation, age and family char-

acteristics, income, and myriad lifestyle choices) are all critical in determining how much to build, which product types will sell or rent quickly, what unit sizes to build, and which asking prices or rents are appropriate. In turn, demand for retail space is highly dependent on the location of new residential construction because households prefer to buy food and other day-to-day necessities without traveling far from home. As suburban sprawl turns farmland into subdivisions, real demand for new retail stores is generated in these newly developing areas, even if the overall metropolitan area has little or no population growth. At the same time, the need for store space declines in neighborhoods experiencing net population losses.

## Economic Indicators

A review of the local economy should highlight indicators most relevant to the particular land use or property type being studied. Real estate developers and their financial partners need to understand the drivers of economic growth—the mix of industries, the area's largest employers, and the nature of new and expanding businesses. Investors must have confidence in the market's continued economic vibrancy, so they look for evidence of a growing labor force and new job creation. They will want to see an economy that can generate work for a growing labor force without increasing the unemployment rate.

A region's "location quotient" can show which employment sectors are most significant. The location quotient is derived by calculating the percentages of the workforce employed in each major industry locally and dividing them by the percentages of the workforce employed in the industry groups nationally. If the value of the location quotient is greater than 1.0, the industry is considered to be one that drives the local economy.

Market analysts must consider whether the local economy is diverse or focused on a small number of industries. An area that is dependent on a few large employers or a single industry (such as automobile manufacturing and parts) will be more vulnerable to recession. This factor will affect absorption of new space and continued strong occupancy in existing buildings.

Also, the mix of industries found in the metro area will determine the strength of demand for different types of properties, as in the following examples:

- A community dominated by large, corporate-owned manufacturing facilities will need fewer multitenant office buildings than one dominated



by small, high-tech business services or financial services firms.

- Tourist destinations (such as Honolulu, New Orleans, or Orlando) will need far more hotel rooms than their resident populations would suggest.
- A city located at the confluence of three interstate highways is often a center for warehousing and distribution uses. Deepwater ports, major rail switching yards, and international air cargo terminals also create above-average demand for warehouse space.

### Using Employment Statistics

Real estate investors are interested in both the composition of the job base and how it has changed over time. Market studies should include current statistics on a metropolitan area's total employment by industry, using one- or two-digit standard industrial classification (SIC) codes, as shown in Table 2-1. Comparisons with state and national norms will be helpful in highlighting those industries that are underrepresented or overrepresented in the metropolitan job mix. The U.S. Census Bureau is replacing the existing SIC system with the North American Industry Classification System (NAICS). NAICS makes substantial structural improvements and identifies more than 350 new industries. In many respects, NAICS reporting categories will more closely reflect the number of business establishments that use different types of real estate. The transition from SIC to NAICS began in 1997 for national and state data; however, substate data will not be available for a number of years and there will

be limited conversion of historic data, making trends difficult to discern and historical comparisons difficult to perform.

For office and industrial market studies, analyzing employment at the two-digit SIC level zeros in more precisely on job growth at potential tenant businesses. A closer examination of the diverse types of businesses constituting the service sector tells why. Demand for multitenant office space is generated by job growth in business and legal services (SICs 73 and 81) but not in repair shops (SICs 75 and 76), movie theaters and video rentals (SIC 78), or amusements and recreation (SIC 79).

The economic overview should include data on total job growth over the last five to ten years, and on the distribution by industry of these jobs. In large metropolitan areas, at-place employment data may be presented for both the metropolitan area (CMSA, PMSA, or MSA as designated by the Census Bureau or by a state's department of labor) and submarkets (such as individual counties or large cities). Employment growth rates for the local market area should be compared with state and federal statistics by SIC or sector. Annual averages can be used when available. If monthly data series are used, the analyst should use the same month for every year shown.<sup>1</sup>

State labor departments (and their Web sites) are the best sources of monthly employment data. Annual averages for metropolitan areas can be found in the January issue of the U.S. Bureau of Labor Statistics' publication *Employment and Earnings*.

### Key Employers and New Industries

Noting the top ten- or 20-largest employers is also helpful in portraying the area's economic base. Not surprisingly, supermarket chains, discount department stores, universities, countywide school districts, and teaching hospitals are typically found in the top 20. Federal, state, and county government may also be important to the economic base, especially in state capitals or areas with military installations.

It is useful to focus extra attention on the area's largest private sector businesses, noting if their payrolls have grown over the last five years, or if they are outsourcing work to smaller local firms. Conversations with local economic development officials (from the chamber of commerce, power companies, or public agencies) can help clarify which segments of the economy are generating direct demand for space, bringing in new workers, and so on. If well-known Fortune 500 companies are expanding or relocating into the area, their plans should be noted. Similarly, if a key employer is contracting its opera-

Table 2-1

### Standard Industrial Classifications

Codes	Industry
01-02, 08-09	Agriculture, Forestry, and Fisheries
10-14	Mining
15-17	Construction
20-39	Manufacturing
40-42, 44-49	Transportation, Communications, and Utilities
50-51	Wholesale Trade
52-59	Retail Trade
60-65, 67	Finance, Insurance, and Real Estate
07, 70-87, 89, 90	Services
No SIC	Government

tions and layoffs are anticipated, this fact should also be noted.

Local chambers of commerce, economic development agencies, and business magazines or newspapers are the best sources of information on major employers and their future plans. Printed materials, telephone or in-person interviews, and agency Web sites can provide statistics to use in the market study report.

### **Labor-Force Profile**

Labor-force availability and skills are important to employers and are carefully considered when businesses make location decisions. At a minimum, market studies should provide information on growth in the resident labor force and the local unemployment rate during each of the last five years. The market analyst should then provide a brief interpretation of the data and their implications, if any, for the subject property.

An economically healthy county will be able to maintain or reduce its unemployment rate even as the number of potential workers grows. In most situations, low unemployment is a positive indicator for real estate: it boosts demand for homes and household services, and sustains retail sales. However, if the supply of available workers is too small, labor costs increase and businesses may look elsewhere for space as they expand.

If potential tenants will need highly trained or well-educated workers, the market analysis report should also provide background information on local area resources (such as education attainment of the resident population, community college training programs, and university enrollment).

State labor departments compile monthly labor-force estimates and unemployment rate statistics for metropolitan areas, counties, and larger cities. Metrowide statistics are also available each month in press releases available from the U.S. Bureau of Labor Statistics. Unlike at-place employment data from the U.S. Census Bureau's Employment and Wages Reports, which are based on filings for unemployment insurance, labor force and unemployment rates are sample-derived information. Such changes in methodologies can have a dramatic effect on the presentation of labor-force data. Thus, analysts must be careful that patterns in time series of labor-force statistics are based on economic changes rather than on methodological changes.

### **Visitor Profiles and Tourism Trends**

Visitor statistics are important in determining potential demand not only for hotels and resorts but also

for entertainment, amusement, and cultural facilities that derive a significant source of patronage from out-of-towners. These data are obtained through a variety of methods, including consumer surveys, and are not necessarily consistent from city to city.

Tourist information (usually collected by hotel associations, convention and visitors bureaus, or government tourism promotion agencies) can include the following statistics:

- Estimates of total visitation (based on data collected at airports, train and bus stations, museums, or other attractions);
- Breakdowns of visitors by type (convention attendees, business travelers, and pleasure visitors);
- Trends in occupied hotel room nights and average daily room rates.

Agencies responsible for tourism promotion also collect data on local spending by tourists at restaurants, stores, and entertainment venues. In locations where tourists constitute a significant share of store patronage, these data should be included in the market study if they are available.

### **Consumer Demographics**

Housing and retail market studies require considerable detail on trade area demographics. At a minimum, the market study should include the most recent U.S. census counts and any reliable current estimates (from a local government or economic development agency) of the population and number of households, median or average household income, and household income distribution for the trade area. Information on age characteristics, household size, and housing tenure will also shape the analyst's conclusions and recommendations for any proposed project that is targeting specific population subgroups (such as senior citizens, homeowners, or families with young children). Projections are important, especially for larger projects that will be built and marketed over a period of years.

With the growing importance of niche marketing, sophisticated clients often demand more detailed population profiles that offer insight into lifestyle choices, racial and ethnic characteristics, educational attainment, and occupation and employment patterns. Aside from conducting in-depth surveys or focus groups, an analyst can turn to one of the data vendors that provide lifestyle cluster analysis. (See appendix.)

Clearly formatted tables help the reader understand the characteristics of the population, and how

they have changed over time. Comparisons with growth rates and population profiles statewide, in the metropolitan area, or in the county where the property is located demonstrate how the trade area differs from the larger community. Key indicators should be highlighted in text discussion, with any unusual patterns or trends explained. The type of project being studied and the characteristics of the trade area will dictate that some demographic indicators receive greater attention than others in the written report.

Depending on the amount of time and money available for market research, the analyst can prepare his or her own estimates of short-term future space needs, obtain forecasts from local or state planning agencies, or purchase projections prepared by economic or real estate consulting firms. It is important to remember that judgment based on local knowledge and experience can be as important as sophisticated modeling in generating an accurate forecast of future demand.

### **Population Trends**

Demand demographics begin with the number of people in the primary and secondary trade areas from the most recent census and often the one before that as well. The most recent year for which reliable estimates are available should also be included. In some cases, adding data from an even earlier census may also be helpful—especially in older city neighborhoods where population levels have fluctuated over time.

Many state and regional planning agencies prepare population projections for counties and larger municipalities. (See Figure 2-2.) The forecast period can be five, ten, or even 20 years into the future. Reports can often be obtained free of charge, either in printed form or through a government agency's Internet site. Population projections for small areas (such as combinations of zip codes or census tracts) must typically be purchased from private data vendors such as Claritas or CACI. When locally generated estimates are available, they can be more accurate than others because they usually reflect local knowledge regarding zonings and building trends that influence where and how much growth will be accommodated.

Population growth indicates that the trade area is attracting new residents and shoppers, generating demand for additional housing or store space. Such growth is usually, but not always, associated with new housing construction or conversion of nonresidential properties to apartments or condominiums (typically found in urban neighborhoods where older factories or warehouses are converted to loft apartments).

However, it is possible for a trade area to show population growth without any homebuilding. Older residents may be moving out, only to be replaced by young households with children. Or the neighborhood could be attracting recent immigrants or new ethnic groups with larger-than-average family sizes. Conversations with knowledgeable local sources, such as real estate agents or community planners, or school district growth estimates can provide insights that help explain unusual population growth patterns.

### **Households and Their Characteristics**

A trade area with little or no population growth may nevertheless need additional housing units. Neighborhoods that once served larger families with children who have since moved away could register a drop in population, but they could still be attractive for empty nesters or seniors' households with evolving shelter needs. Similarly, demand from singles or young couples could be growing, even if the total number of residents has dropped.

Current estimates of the total number of households and average household size are often available from private data vendors, as cited previously. However, market analysts must rely on the decennial Census for local information on other household characteristics, such as marital status and presence of children.<sup>2</sup>

### **Age Characteristics**

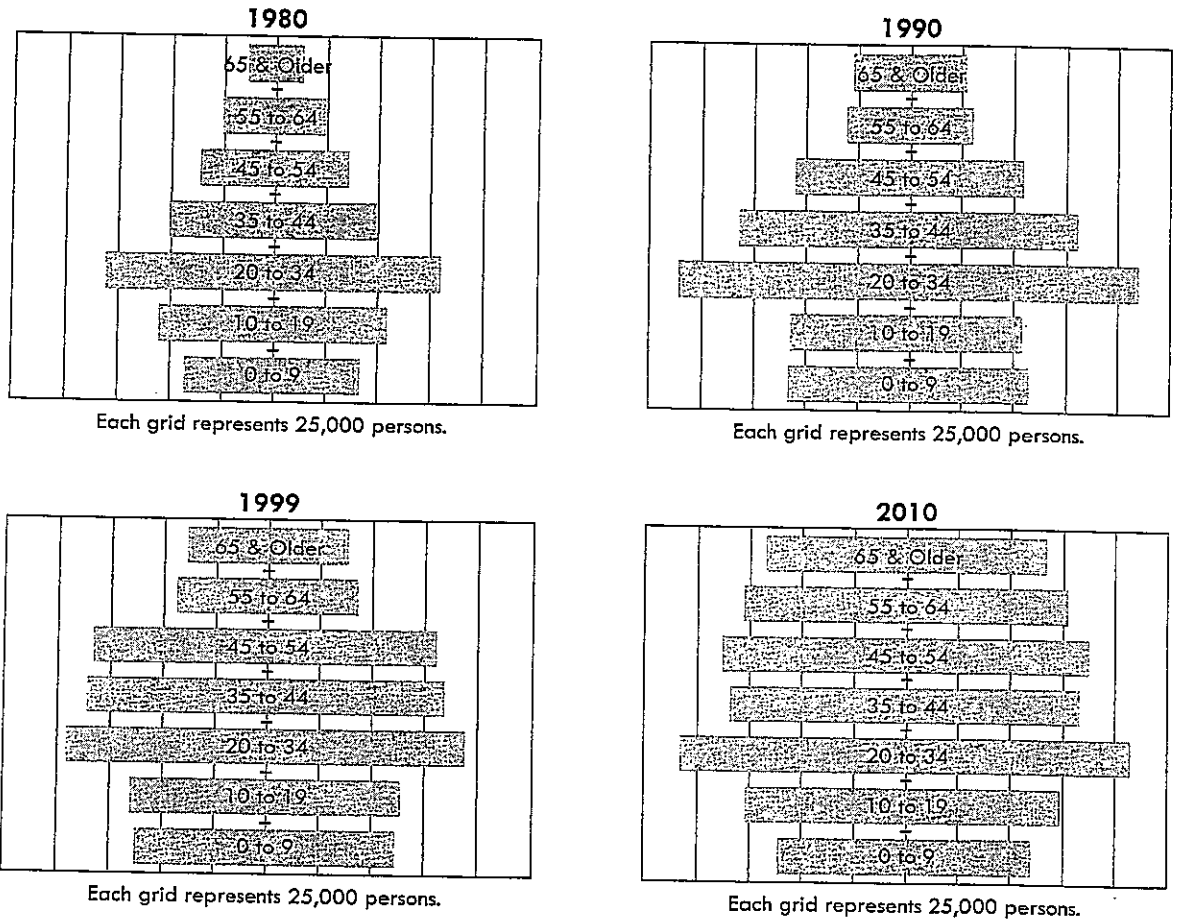
Private data vendors and some local planning offices estimate the number of households by age of householder and provide population estimates by five-year age cohorts. A trade area's age profile will influence both housing and retail markets. An area with a high percentage of young adults will be attractive to developers of rental apartments and condominiums. Opportunities for building seniors' housing and assisted living facilities may also become evident after a review of trade area demographic trends. Shopping center developers look for communities with a high incidence of preteens and teenagers because so many successful chain stores cater to those age groups.

### **Race and Ethnicity**

Overall population growth and household income are more important predictors of housing demand and retail expenditure potential than race or ethnicity. Nevertheless, developers and investors may want to know about the racial and ethnic composition of a trade area. Government agencies often require such information as part of the market studies for low- and moderate-income housing. If data from the decennial

Figure 2-2

## Historical, Estimated, and Forecasted Population Distribution by Age, Fairfax County, Virginia



Sources: 1980 and 1990 U.S. Decennial Censuses; Department of Systems Management for Human Services, Fairfax County, Virginia.

census or other sources suggest dramatic shifts, the market analyst should consult local sources about the reasons for such change.

### Household Income

Demonstrating that trade area residents have sufficient income to buy or rent in a proposed new housing development is very important in deciding whether to build and what type of product should be offered. Retail market studies use aggregate household income estimates for the trade area to calculate

expenditure potential for a proposed shopping center or a particular store type.

A market report should provide a breakdown of the estimated number of households by income bracket. It will also indicate the median and average household income in the area.<sup>3</sup> Household income statistics include single people living alone and unrelated people living together. Average and median household incomes tend to be lower than for families (which consist of two or more related people living together). In some reports, the analyst will provide similar

estimates and projections of family income. Measuring family income may be useful for residential subdivisions because family households tend to make the majority of purchases. This pattern does not always hold true, however.

U.S. Census Bureau income statistics are based on sample surveys of money income. The census relies on the willingness of respondents to fully and accurately report what they earn. Not all households are fully forthcoming. Moreover, census income surveys do not include noncash payments (such as housing subsidies or food stamps), nor do they consider investment income. Consequently, census numbers provide an understated estimate of households' ability to pay for housing, or their retail expenditure potential. This understatement is especially problematic in low-income neighborhoods where government transfer payments and subsidies are a key source of purchasing power, as are unreported and "underground" income sources.

Understanding household assets is also important when analyzing the marketability of move-up housing and especially seniors' housing. Money income of senior citizens tends to be below the overall average, but many retirees have substantial savings and investment assets, with little debt. Counting a portion of assets (especially equity in owner-occupied housing) is important in determining whether trade area seniors can afford monthly payments for new housing.

Information on household wealth in particular communities or zip codes is far more difficult to obtain than income data. The U.S. Census Bureau does not measure wealth. Some private data vendors provide their own estimates of household wealth (assets minus liabilities), but methodologies vary and accuracy can be questionable, even for larger areas.

### **Housing Tenure**

Tenure describes whether a household owns or rents its home. Although not a population indicator per se, the extent to which trade area households own or rent their homes is important not only for housing market studies but also for retailers. Home-improvement centers; lawn and garden shops; home decor, flooring, and furniture stores prefer to be located in areas with a high degree of homeownership. In contrast, mini-warehouses tend to be located in areas with a high percentage of apartment dwellers because renters often need additional storage space and are more transient. Precise tenure estimates are difficult to obtain in noncensus years. Building permits can be helpful indicators of the types of units constructed since the

last census, but the analyst must recognize that multifamily permits cover condominium units as well as rental apartments.

### **Demographic Data Sources**

As indicated previously, the U.S. Census Bureau's decennial counts form the basis for most demographic estimates and projections. Because conditions can change dramatically between census years, market analysts must use more current demographic estimates. To fill the gap between decennial censuses, the Census Bureau is implementing the American Community Survey. Beginning in 2003, the annual survey will be implemented in every county, and will collect demographic, housing, social, and economic data that was formerly collected only in the one in six sample of the decennial census.

The U.S. Census Bureau prepares state and county population estimates every year. Estimates for metropolitan areas and large cities are issued bi-annually. Annual breakdowns by age, sex, and race or ethnicity for states and counties can also be obtained from the U.S. Census Bureau's Web site. However, the bureau prepares population projections only for the nation as a whole and for states. They are updated every two years, but are of little value (except in comparisons) when studying a local market.

Not surprisingly, private data vendors have stepped in to fill the void. Firms selling demographic estimates and projections include the following:

- Economic consultants, which use proprietary models to describe national, regional, and local economic conditions, and then estimate and project population, households, income, and, in some cases, housing demand. Some of these firms provide customized research and consulting services in addition to selling standardized economic analyses and projections. Clients can subscribe to reports for the nation as a whole, for regions, or for one or more metropolitan areas. Regular updates are available in print, on tape, disk or CD-ROM, or online, either by subscription or as a one-time purchase. A list of such firms is included in the appendix at the end of this book. Such sources are useful for market analyses for commercial and industrial properties because they can provide detailed employment projections by industry.
- Demographic data vendors that focus on consumer demographics rather than economic modeling. These firms provide more detail on population and household characteristics. They also provide

estimates and projections of retail expenditure potential by type of store or by type of merchandise. As a result, they are widely used in housing and retail market studies. These vendors usually provide clients with local trade area estimates based on distance from a particular site, for a combination of zip codes or census tracts, or for specific latitude and longitude coordinates. They also offer five-year forecasts of key demographic indicators. Their data are available by subscription or on a per report basis.

Woods & Poole Economics and NPA Data Services sell historic trend data, current estimates, and long-range (25-year) projections, but only for states, counties, and metropolitan areas. Some vendors, such as Demographics USA, provide current estimates and color mapping for key demographic indicators but do not offer future projections. Still other firms specialize in consumer information needed for product marketing, advertising, or store location planning.

### Psychographics: Portraying Household Lifestyles

Information on age, income, ethnicity, and housing tenure may not fully portray important differences in trade area populations. Education, occupation, the presence or absence of young children, hobbies, recreational pursuits, and community involvement can vary widely among residents in a given age or income bracket, thereby influencing their shopping habits and housing preferences. As a result, today's market studies often include information on trade area psychographics. Analysts can purchase trade area lifestyle profiles from private data vendors in much the same way they obtain current population and household counts or income estimates and projections.

Psychographic data providers use information from a variety of sources—television and radio ratings services, newspaper and magazine circulation bureaus, store frequent-buyer programs, and so on—to assign trade area households to one of numerous lifestyle clusters. Residents of most local trade areas (consisting of a combination of communities, census tracts, or zip codes) will be divided into at least two clusters. A large area will contain households in multiple lifestyle groups. Data vendors assign colorful names to each socioeconomic cluster: for example, "Blueblood Estates," "Bohemian Mix," and "Pools and Patios" are three of 62 clusters used by

Claritas. Case study 5.3 includes an example of lifestyle cluster data.

Lifestyle cluster analysis helps retail developers determine the types of stores that would be best suited for a new shopping center. They are widely used by retail chains to see if the trade area surrounding a proposed location fits the profile of the existing customer base, as in the following examples:

- A bookstore chain would seek locations with high concentrations of well-educated, upscale patrons.
- A supermarket specializing in prepared gourmet foods will target a trade area with young singles or two-worker families.
- Toy stores need to see large numbers of households with children under age ten.
- Consumer preferences for home lot sizes, interior amenities, community rooms, exercise facilities, privacy, and open space become more obvious when residential developers use lifestyle data.

### Using Consumer Surveys

Survey research can play a vital role in real estate market analysis. It provides the developer, property owner, or investor with direct information on customers' perspectives. In the real estate industry, "customer" can refer to either consumers or business-to-business targets, depending on the type of property. For instance, a shopping center developer may be interested in the perceptions of current or prospective retail tenants, or in what shoppers think.

Using surveys, focus groups, or both improves the accuracy of real estate market studies. Researching the customer's perspective allows the market analyst and the client to explore existing or prospective customers' perceptions of a variety of issues. Survey research can

- Identify the strengths and weaknesses of individual project features or of the entire property;
- Help determine how a property is positioned in the marketplace and what its advantages or disadvantages are when compared to its competition;
- Gauge customer interest in new concepts or features not previously seen in the market;
- Reveal which factors (location, price or rent, amenities) are most important in customer decision making;
- Suggest how much tenants or buyers will be willing to pay for space in a proposed project;
- Tell ownership how tenants feel about property management and maintenance.

It is not uncommon for marketers to ignore the need for research or consciously to decide against conducting customer research, either for budgetary or timing reasons. Real estate developers know their products well; they are very familiar with their competition, their market, and their industry, so they are tempted to assume that they know their customers' needs and preferences. This misconception is common, but potentially serious.

The most obvious time for conducting research is before developing or building a new project. This timing provides the best opportunity for using the research results to influence design, amenities, and pricing. Investors can also use survey research before purchasing an existing property or starting renovations or expansion. Owners of existing shopping centers, office buildings, or hotels benefit from surveying their tenants or patrons when new competition enters the market. They need to stay informed regarding customer satisfaction.

Two primary types of customer research exist: quantitative and qualitative. Quantitative research is statistically projectable, meaning it allows the marketer to learn that a specific percentage of customers have particular demographic characteristics or will behave in a certain way. Qualitative research is not statistically projectable, but it allows for more detailed exploration into customer perceptions of the product, the competition, the market, the industry, their shopping habits, their housing preferences, and so on.

Consumer surveying, though it employs scientific methods, is not an exact science and has limitations. Changing market conditions, such as the economy and competition, cause research results to be very time-sensitive and require that studies be updated periodically. For example, large shopping centers usually survey shoppers every year or two to learn which stores they are patronizing, what they are buying, and where they live. Research results provide an educated guide for developing a property and its marketing program and for keeping it competitive. However, survey research cannot guarantee success. Rather, it minimizes the risk of making wrong decisions and maximizes the possibility for success.

Regardless of which type of research will be conducted, the first thing that must be done is to identify the characteristics of the people who should be asked to participate in the study. These characteristics can be either demographic or psychographic. They are used to select the area from which survey respondents will be drawn and to screen survey participants, as in the following examples:

- A developer of retirement housing may want to focus his or her survey on persons aged 60 and older living within ten miles of the proposed site.
- An office developer will want to focus on tenants in the trade area whose leases will be expiring within the next 36 months.
- People who visited a shopping center at least once in the previous month could be the focus of a study used to evaluate the center's expansion plans.
- A hotel will ask its frequent guests if it should add a spa.
- Trade area manufacturers and retail stores will be asked about their need for additional warehouse space and their interest in a proposed multitenant facility.

## Using Quantitative Research

Quantitative research is conducted when it is necessary to be able to predict the target group's behavior with statistical accuracy. An example of what can be learned is the potential percentage of people who are likely to shop at a certain store or shopping center or who react positively to a proposed apartment development. Quantitative research (statistically valid and projectable) usually requires a relatively large sample size. Frequently, 150 or more completed surveys will be needed; requirements could be higher if the client needs to know about the characteristics and perceptions of particular subgroups.

Quantitative surveys can be performed by mail (using a printed questionnaire with a postage-paid return envelope), on the telephone, through the Internet, or in person. In all cases, the survey instrument must be designed for easy computer data entry and analysis. Questions must be simply worded and easy to answer. Each survey method has its own strengths and weaknesses. Consistent administration, cost, and timing are the most important considerations. Market researchers must select the methodology that most appropriately fits their needs and budget.

### Mail Surveys

Mail surveys are fairly inexpensive to administer. After the target respondents have been identified, a list of potential recipients is obtained and a sample selected for mailing. Sources include current customer or tenant lists, address directories, membership rosters, or commercially available lists purchased from reputable marketing companies. The mailing is then prepared and sent out, often with a nominal incentive to encourage participation (such as a dollar bill or a card that enters the respondent in a drawing).





Denver Pavilions is an entertainment retail complex in downtown Denver, Colorado.

When the completed responses are returned, they are tabulated and the results are analyzed.

Response rates for mail surveys are usually low (1 to 2 percent is typical for a random list, 10 to 20 percent for a qualified list). A short survey may draw more responses than a lengthy questionnaire. A key drawback with mail surveys is that respondents may not be representative of the population at large. Older respondents are more likely to participate than young adults. Those with strong opinions (pro or con) will send back their questionnaires; those who are uninformed or apathetic will not. Another concern may be length of time needed to obtain the required number of responses. Follow-up postcards may be necessary.

#### **Telephone Surveys**

Telephone surveys are more expensive to administer than mail questionnaires because qualified interviewers must be hired. Response rates are usually higher than in mail surveys, but responses are still relatively low. Potential respondents can be reached using ran-

dom-digit dialing within particular exchanges or by purchasing phone lists. Although telephone surveys can be completed more quickly than waiting for mail-ins, the process will still take a few weeks. Survey staff may have to phone respondents multiple times before the interview is completed, and noncompliance rates are high. Some of the sampled phone numbers will not be usable. And in multiethnic trade areas, bilingual interviewers will need to be hired to ensure that a representative group of households is reached. Despite their high cost, telephone surveys are often preferable to mail surveys because they generate more valid, representative results.

#### **Internet Surveys**

Internet surveys are relatively inexpensive and fast to administer and can easily be revised and readministered, but the audience is limited to customers who are online. The survey can be put onto an appropriate Web site where respondents will see it and have the opportunity to respond or, as in the case of written and telephone surveys, after the target respondents

have been identified, specific groups can receive the questionnaire by E-mail. Although it is easy to put out a consumer survey on the Internet, the results suffer from the same limitations as mail questionnaires—responses may not be representative of the target market as a whole.

### **Intercept Surveys**

In-person intercept surveys are conducted at high-traffic locations, such as shopping malls. Surveyors stop potential respondents at a shopping mall or on the street and ask a series of questions, or they have shoppers fill out a printed survey form.

Intercepts are inexpensive but more costly than mail or Internet surveys. They are relatively easy to administer, but less reliable than telephone studies because it is almost impossible to ensure that each respondent meets specific demographic or psychographic characteristics. Also, intercept surveys must be shorter than a questionnaire completed at home or on the telephone. Despite their limitations, intercepts can provide a reasonable portrait of shopping center patrons and their purchasing habits. The key is to structure the survey properly.

### **Qualitative Research**

Qualitative research is usually conducted with a small number of respondents. Although not statistically projectable, this type of research allows perceptions to be probed in depth. Some examples of qualitative research methods include focus groups, one-on-one interviews, and intercept interviews. As with quantitative issues, the client's objectives and the available budget will determine the method used.

As with quantitative methods, it is first necessary to identify target respondents by their geographic, demographic, and/or psychographic characteristics. Then, a topic outline must be developed for the interviewer or moderator to follow.

The focus group is the most common type of qualitative research because it provides a good balance between accuracy and cost. Respondents are prescreened to meet specific demographic and psychographic criteria. Groups are usually made up of ten to 12 participants. Multiple focus groups can be used to see variation in the perceptions or reactions of different targets. A professionally trained facilitator is usually hired to conduct the discussion. A facilitator with specific real estate experience is preferred.

Clients can be present or they can listen to audio and video tapes of the proceedings. After all the focus group sessions have been conducted, the moderator

reviews the tapes or transcripts and provides a written analysis.

One-on-one interviews are the most expensive type of qualitative research to conduct because they are very time consuming to administer. However, personal interviews allow control over respondent targeting and provide the most time to probe issues in depth. After potential respondents have been identified by demographic and psychographic criteria, a professional firm should be hired to recruit the respondents. A moderator conducts each interview. After all the interviews are completed, the responses must be analyzed. Case study 3.4 illustrates the use of focus groups when quantitative studies do not provide adequate information.

Intercept interviews, which, like intercept surveys, are conducted at high-traffic locations, such as shopping malls, are the least expensive form of qualitative research. However, as with intercept surveys, they allow little control over targeting and selecting respondents, and they must be shorter than focus groups. Interviewers stop potential respondents at a shopping mall or on the street and ask them to sit down for an informal discussion using the topic outline. To speed up the process, more than one interviewer might be hired, which presents a risk of inconsistency because the method of questioning is conversational in nature.

Some examples of how qualitative research can be applied to specific real estate projects follow:

- A residential builder can conduct focus groups with consumers who are potential buyers or renters.
- A retail developer can conduct intercept interviews with consumers (shoppers) and one-on-one interviews with potential tenants (retailers).
- An office and industrial leasing firm might use focus groups with potential tenants.
- A hotel or motel can use focus groups with both business and pleasure travelers and then conduct one-on-one interviews with business travel managers regarding corporate accounts.
- A developer of a master-planned community can make use of focus groups with both retail and office tenants, one-on-one interviews with builders, and intercept interviews with consumers as they leave the sales center.

It is important to remember that any survey research, whether quantitative or qualitative, is a single component of a comprehensive market study and cannot replace the vital information that is gathered through the other market analysis techniques.

## Analyzing Supply

Market analysts must devote considerable attention to supply factors that affect development feasibility. Typically, supply-side analysis considers (1) macro-market conditions (measuring metrowide or county-wide absorption, vacancy trends, and rent or price growth); (2) local trade area market indicators and construction activity; and (3) characteristics and performance of competitive buildings, both existing and proposed. Brokers, economic consultants, real estate market analysis firms, and appraisers are the usual sources of information on metrowide and submarket conditions, both current and historical. Understanding the physical character, tenancy, and performance of key competitors requires field visits and personal or telephone interviews with building owners or managers.

### Supply Overview

Key indicators are the size of the current inventory (number of housing units, or square feet of commercial or industrial space), its growth over time, and anticipated near-term new construction. Also important are current vacancy rates and sales prices or rent levels over time.

### Historic Trends and Current Conditions

Supply analysis begins with a profile of the current inventory by property class. For homes and apartments, data tables should indicate the total number of housing units by tenure, current vacancy rates, and the age of units (by year built). Apartment market studies will also provide information by property class (A, B, or C)<sup>4</sup> if data are available. For office and industrial buildings, statistics are usually grouped by type of property (single tenant versus multitenant; manufacturing, warehouse, laboratory or research and development, or flex) as well as by class.

Current rents and prices are also part of the market overview.

- Apartment rents should be portrayed as the average rent (total and per square foot), on either a monthly or an annual basis depending on local custom. In some markets these data are available by unit configuration (studio, one, two, or three bedroom) or unit size (square feet of living space).
- Average and median sales price for both new and existing homes sold during the previous year should be provided. Prices for condominiums and townhouses should be displayed separately from

those for single-family homes. Note whether new-home prices include the value of buyer upgrades as well as base price per square foot. In most cases the emphasis is on new-home sales, which are more competitive with a proposed development. But existing home prices are useful for analyzing the character of the neighborhood and for determining whether current residents have the equity to afford the proposed new housing. Also, in assessing the market for a low- or moderate-income project, existing home prices indicate whether the proposed prices will compete favorably with existing market-rate housing.

- Commercial and industrial rents are expressed in dollars per square foot of leasable area, either annually or monthly depending on local custom. Measurable space varies by type of property. Office rents are typically calculated based on net rentable area, whereas shopping centers report gross leasable area.

Historic trends in the size of the inventory, average rents, and average vacancy rates should also be presented. The narrative should discuss the changes in rents and vacancies over time, average annual additions to the inventory, leasing activity (number of units or space leased each year), and annual net absorption (change in number of occupied units or amount of leased commercial space).

To the extent possible, trends in the trade area should be contrasted with the larger citywide or metropolitan market. Steady absorption, rising rents, and lower vacancies can occur in a hot submarket (a cluster, neighborhood, or sector within the region) even when areawide indicators are negative. The opposite can also be true. An underperforming market could be the victim of localized overbuilding, or it may be affected by the relocation of one or more important tenants. The analyst must explain the reasons for any significant deviation from areawide norms.

### Using Apartment Directories, Inventories, and Vacancy Surveys

Apartment directories (published by local housing advocacy groups, chambers of commerce, and advertising companies) are designed to assist prospective tenants in locating available rentals, but they can also be useful to the market analyst. These sources list the name, phone number, and location of apartment complexes, and they may provide information on the types of units offered, featured amenities, and even rents. Directories can identify competitive projects prior to

field visits. Advertisements in the real estate section of local newspapers can serve the same purpose.

Consulting firms frequently sell more detailed project-by-project inventories, providing rental rates, square footage, unit mix, and occupancy rates, as well as listing project amenities. Reports may also contain metrowide and submarket occupancy and rent averages, along with commentary on market trends.

### **Office, Industrial, and Retail Surveys**

Local real estate brokerages, consultants, and appraisal firms are the traditional sources of commercial property inventory, vacancy, and rent data. These firms are very familiar with individual properties as well as marketwide conditions. However, relying solely on local firms poses problems for those market analysts who must prepare reports for properties located in numerous metropolitan areas. Property class definitions are often inconsistent among sources and across markets. Some sources count single-tenant office and warehouse buildings in their inventories if they are not owner-occupied. Others count only multitenant buildings or focus on structures larger than a certain minimum size. As a result, they may undercount the supply.

National firms have stepped in to provide a measure of consistency across markets. Market and submarket overviews (with both data and commentary) are often available from local affiliates of larger commercial real estate brokerages. Some firms provide free copies of their quarterly or annual market reports; others sell them for a fee.

Also, many national real estate research and consulting firms sell detailed trend information and projections for a fee. These consultants cover the largest office markets in the United States (usually no more than 75 metro areas), providing historic background and projections. Increasingly, such sources are able to provide information on individual competitive buildings. The data are updated semi-annually or quarterly, depending on the source, and are provided in print, online, or on CD-ROM.

Subscribing to individual market reports can be costly and may be justified only when the researcher completes more than one report in a given market area each year. In smaller markets, local business magazines, newspapers, or commercial real estate brokerages often prepare building inventories or summary statistics.

It is important to note whether quoted commercial rents are gross or net. Gross rents include some or all utilities, real estate taxes, and other operating expenses. Most newer commercial space leases use

triple net rents—utilities and taxes are billed separately, based on either metered usage or a pro rata share of total building expenses. Tenants in enclosed malls typically pay a common area maintenance (CAM) charge, and often must pay a percentage of their sales in addition to their base rent.

### **The Importance of Fieldwork**

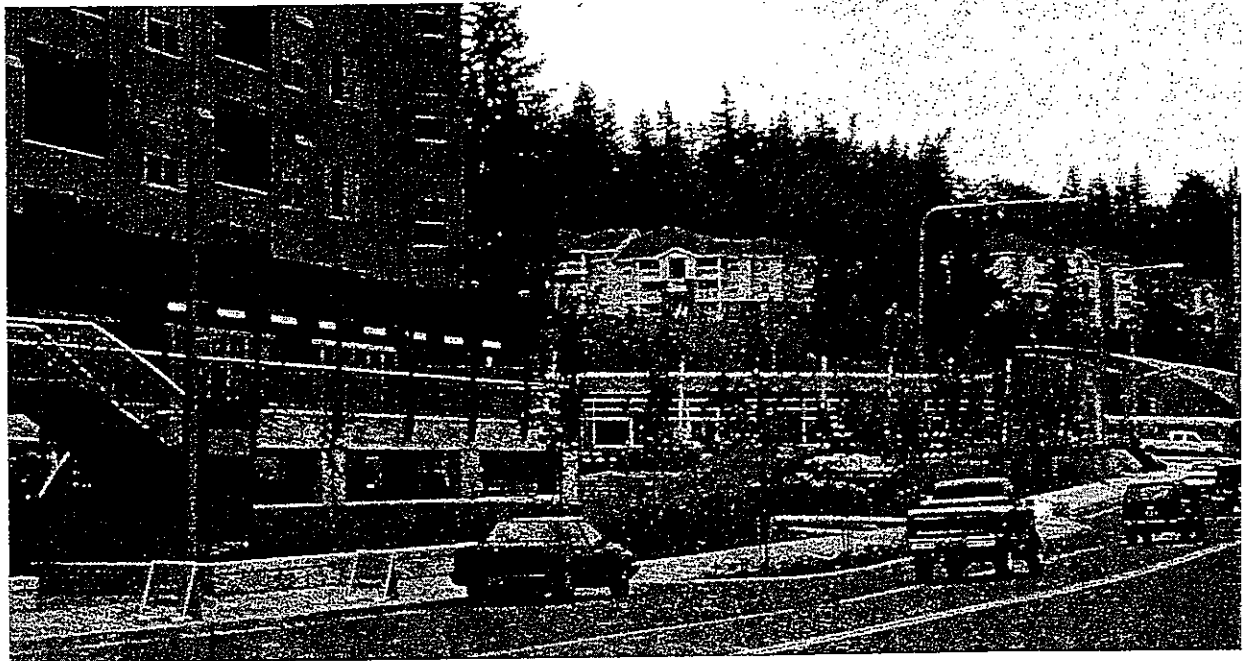
Although the quantity and quality of statistical information on competitive supply improves each year, even the best inventory reports and consultants' projections cannot substitute for field observations. Seeing the subject site (or building) and its competition results in a more precise definition of the trade area. Preparing a thorough market analysis also requires "kicking the bricks"—determining how a competitor's location, image, design, amenities, and operations compare with the subject property.

A competitor's "curb appeal"—architecture, building materials, landscaping, exterior signage and surrounding uses—draws potential tenants into the leasing office. Lobby appearance, interior signage, lighting, elevator systems, security, and other design elements also influence whether an older building can effectively compete with a new project. Whenever possible, the analyst should visit model apartments or vacant commercial spaces to observe room layouts, natural light, quality of built-ins, and storage space. Older competitors may not have floor plans or measurements readily available. Looking at the bedrooms in an older apartment complex tells the analyst if prospective tenants will be able to fit their furniture or find enough electric outlets. In a shopping center, frontage visibility from the street, parking lot, or internal corridors is an important consideration.

The market analyst should look at the tenant directory in an office building, shopping center, or business park to determine whether the property is leased by a few large space users or by numerous small businesses. The directory provides insight into occupancy in those situations where data are unavailable. Note the types of tenants present—are they national chain retailers or Fortune 500 businesses, or is the space occupied by individual entrepreneurs? Where questions persist, follow-up telephone calls to key buildings should be considered.

### **Interviewing Building Managers and Leasing Agents**

Interviews with building managers or leasing staff can be very helpful in understanding market dynamics, especially in areas where published data are too



Fieldwork is essential to gain a full understanding of the subject site, surrounding areas, and competitive projects.

expensive or unavailable. These conversations yield insight into what types of households are attracted to an apartment complex (young singles and couples versus empty nesters and seniors, or a mix of both), whether children are present, and what attracts tenants to the complex. Such knowledge helps in accurately determining a reasonable capture rate for a new apartment community.<sup>5</sup>

Similarly, commercial real estate agents and building managers know about the types of tenants that are looking for office or industrial space and their space preferences, technical requirements, and parking needs. Analysts will not be able to interview every building manager in the field. Time and budget constraints may intervene, and building staff will not always cooperate. Some building owners refuse to permit their personnel to divulge project-specific information to market analysts, especially if they represent potential competitors. Vacancy rate and lease expiration information is especially sensitive, although asking rents will usually be shared. Sometimes an offer to share survey results brings cooperation.

#### **Documenting Historic and Future Construction Activity**

Accurately gauging demand and supply balance requires careful consideration of the future construction pipeline and how it will differ from the recent past.

For housing market reports, the average annual number of single-family and multifamily building permits issued over at least the last five to ten years should be tabulated. Discuss any dramatic shifts in construction levels or the mix of unit types. In most instances, these shifts will result from national economic cycles and changing consumer preferences. However, local zoning, land availability, and price or rent trends can all influence the type of housing being built. The local trade area's capture of county or metrowide housing development activity should be highlighted.

Commercial and industrial properties already under construction will be among the most important competitors for a proposed development that has yet to line up financing and break ground. In areas with many visible construction projects, it is important to determine the size of these competitors at full build-out, and how much of the space has been preleased or presold. Asking rents for space still to be leased should also be included in the supply analysis.

Some local governments periodically update lists of projects that have received planning approvals but have not yet been started. Where no such reports exist, conversations with planning officials are needed to clarify the size of the development pipeline and when planned projects will begin construction. When a trade area covers more than one municipality, planning officials for all jurisdictions should be contacted.

For both residential and commercial projects, the analyst should consider the amount of well-located, properly zoned, but as yet undeveloped land that could be competitive with the subject development in the future. A new project located in a built-up community with little or no vacant land will face less competitive pressure than one surrounded by sites where similar or identical buildings might be constructed within two or three years. Redevelopment of underused or obsolete properties should also be considered as potential competition.

### Building Permits and Construction Reports

Local government agencies and the U.S. Commerce Department publish monthly and annual reports covering residential building permit issuance, providing data on both the number of units permitted by size of building and the estimated value of the construction.<sup>6</sup> Builders take out permits shortly before construction begins. However, permits provide no indication of when construction will be completed.

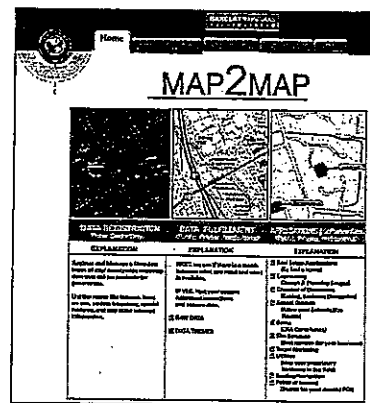
Local permit-issuing agencies are less reliable sources of data for tracking commercial and industrial construction. Nonresidential building permits provide little detail regarding the type of development or its timing. Real estate magazines, newspaper supplements, and economic development agencies often track construction announcements and feature new building or project openings. Data can also be purchased from the F. W. Dodge Company, which monitors construction activity in jurisdictions across the United States. These data include projects of all sizes, both single user and multitenant. Dodge reports are usually more costly than data published by local brokers or consulting firms.

### Mapping the Competition

Market studies are more easily understood when accompanied by a map that shows the location of the subject property and its key competitors. The map should include buildings under construction and proposed as well as those already completed, keyed to tables or text with detailed information on project characteristics. Such maps can be compiled by hand or by using GIS mapping software.

### Marketability Analysis

Market analysis is as much an art as a science; it requires judgment and vision as well as facts. After the analyst has completed fieldwork, collected data,



### MAP2MAP

A privately sponsored Internet GIS clearinghouse referred to as MAP2MAP enables users to query online [www.map2map.net](http://www.map2map.net) for available digital map data by state, county or city, and local government data type. Participants can preview the data online by layer, review the price, request immediate delivery by media, project, and software platform. Fully geographic information systems (GIS)—ready spatial data themes, made up of combinations of feature types (layers), cover parcels linked to assessor records, land use, zoning, general plans, environmental issues, school/service districts, and street centerlines.

A number of cities and counties currently participate in MAP2MAP's public domain spatial data (PDS) distribution program. Under a public/private agreement, Hayward, California-based Barclay Mapworks, a map publishing company, publicizes, markets, fulfills, and supports the use of mapping data, freeing up local governments to develop, maintain, and improve public databases, including GIS. This combined effort enables participants to use PDS to help lower the cost and improve the quality of planning, design, and investment.

Roughly 85 percent of all counties with a population of more than 450,000 are maintaining jurisdiction-wide, GIS-ready parcel maps, as well as many other completed map overlays. Affiliate jurisdictions can register and update descriptions of their available data at MAP2MAP's registration center. Each custom fulfillment request is processed, a fee is collected, and the revenue is shared with local governments. More sales mean more revenue for government to improve data quality. And improved data can mean a spiraling cycle of wider use, greater revenue, better quality, and lower price.

Source: Dennis Klein, "Map2Map," *Urban Land*, vol. 59, no. 5 (May 2000): p. 27.



and prepared maps and tables, he or she must then synthesize the findings and reach conclusions regarding a proposed project's marketability or the future performance of an existing property. A summary should be presented at the front of the market report, along with a brief statement covering the scope of work, sources consulted, when fieldwork was completed, and any limitations or caveats.

### Assessing the Site's Advantages and Disadvantages

If the subject site is unimproved, the report should discuss its size, shape, visibility, dimensions, access, and proximity to services. Topography and vegetation should be noted briefly, along with the presence of streams, ponds, or wetlands. The analyst should mention both positive and negative aspects of the property and its location. Site advantages might include location in a historic district, attractive views of the downtown skyline, or mature trees that will remain after construction. Incompatible neighboring uses, deteriorating nearby buildings, or noise from highways, rail lines, or airports are examples of negative factors—especially for proposed residential development. Any problems with access or visibility should be noted, and the analyst should indicate if these disadvantages could hamper marketability. If any changes are planned (a new commuter rail station, highway construction, road widening, intersection improvements, traffic signalization), their timing should be indicated.

Certain site attributes can be viewed either positively or negatively, depending on the land use being studied. Proximity to a major airport would benefit absorption of hotel rooms or warehouse space, but it would be less than ideal for an upscale residential subdivision. High traffic counts will not draw seniors to a retirement community but are welcomed by shopping center developers and their tenants.

The property's zoning and permitted uses should be discussed, noting if rezoning is necessary prior to development. Beyond the site and its immediate environs, the analyst must also consider factors such as community character and reputation. Crime rates as well as proximity to shopping, libraries, places of worship, and health care could also be important. For residential projects targeted to young families, the reputation and performance of the local school district, the availability of nearby daycare, and community parks and recreation programs should be mentioned. Residential real estate brokers and apartment community managers will be useful sources of information and insights.

### Comparing the Subject with Its Competition

The analyst should highlight how the subject property compares with its competition in terms of the following factors:

- Location and linkage (access, convenience, visibility, prestige);
- Rent or purchase price, condominium or homeowner association fees;
- Unit sizes and mix by number of bedrooms and baths or by lot sizes for single-family homes;
- Occupancy costs (estimated monthly cost of utilities, property taxes, common area charges for shopping centers);
- Parking ratios and availability of garage spaces versus open lots;
- Building or project amenities such as exercise facilities, on-site daycare, concierge services, clubhouses, pool;
- Ability to support current and future technologies;
- Security;
- Maintenance of building and grounds.

Not all of these factors will be equally important for every property type. Building and grounds maintenance take a back seat to visibility and occupancy costs for retail space. Community prestige is very important for residential developers. Parking availability and electrical or mechanical capacities are critical to office tenants, and warehouses need to be close to major highways.

Of course, competitive rents or prices are critical to all land uses. When the analyst looks at new construction, it is important that he or she compare asking rents in current dollars, even though a new building could take two or more years to complete.

Some clients will ask the market analyst to recommend changes to the building or site development plans that would improve its competitive position. This function is one of the most valuable that a market analysis can perform. Such recommendations might include the following:

- Shifting the mix of units in a proposed apartment project to include more (or fewer) two-bedroom units;
- Offering an amenity or service for tenants that was not originally envisioned (such as a drop-off dry cleaning service);
- Reducing rents or sales prices to be more in line with what the competition is offering—or raising rents or prices if data indicate such a move to be prudent;
- Modifying the mix of large and small shop space in a proposed shopping center.



## Will Demand Be Sufficiently Strong?

Developers and investors in residential and retail space look for population growth, new household formation, or both. Housing developers may also want to see growth in particular types of households (families with children, seniors, young singles), depending on the product they are marketing. A discount department store will want to see working households with middle incomes; it will not be drawn to an area where consumers are not budget conscious.

Housing market analysts will factor in demand for replacement of deteriorated or abandoned units. Similarly, commercial market studies will not count Class C buildings as truly competitive if their locations or physical characteristics are unsuitable for expanding businesses.

If demand analysis is based on employment growth, "space per worker" estimates will be used to translate jobs into supportable space. These ratios vary dramatically by industry. Law firms use more space per worker than data processing firms do. Private sector offices are usually more spacious than government buildings. Moreover, space standards change periodically, as warehouses become more automated, executive offices are downsized, or more space is required for high-tech equipment. Real estate journals, trade associations, and design professionals are good sources of information on how to translate job growth into space demand.

In some cases, real demand exists that cannot be demonstrated on the basis of household growth or income gains. An underserved city neighborhood—long neglected by retailers, entertainment venues, or restaurants—may already have sufficient purchasing power to support a proposed development, even though its household count is static. The same neighborhood may have what is called pent-up demand—that is, an ability to support new construction based on improvements that have occurred to the existing housing stock or retail inventory.

Supportable demand for shopping center space can exist even in trade areas that appear to be saturated. For example:

- A trade area has a number of grocery stores with sufficient total space to serve the market, but the stores are undersized, poorly capitalized, or competitively weak. A new chain could successfully enter the market and challenge the existing competitors.

- A strong anchor tenant, new to the market, commits to a significant share of a proposed center's space, thereby creating demand from smaller tenants that will benefit from proximity to the anchor.

Under such circumstances, the market analyst may find sufficient support for the new development, even though older properties may suffer as a result.

## Capture Rates

Growth in target market groups needs to be sufficiently strong so that a new project will not swamp the market. As a result, market analysts look at "capture rates," or "penetration rates," which reflect the share of projected demand growth a project must attract in order to fill its rentable space or to sell its lots or homes.<sup>7</sup>

Determining whether a projected capture rate is reasonable or excessive requires judgment based on experience. There are no hard and fast rules. A well-conceived project in a dynamic market (with a growing number of income-qualified households or a surge in high-tech jobs) might succeed even with a high capture rate. Just how high depends on the amount of competitive space coming on line at the same time. In contrast, a niche product serving a select group of potential customers will, under the best of circumstances, attract only a small share of demand, and should be assigned a lower capture rate. Consider the following examples:

- If a proposed seniors' housing development has to capture one-third of all the age- and income-eligible households in the trade area in order to fill its units, development will be risky and absorption will be slow. This project probably is too big for the local trade area. Relatively few seniors move in any given year; some will move outside the area, and many are simply not attracted to age-segregated living. Ownership would have to spend heavily on advertising outside the trade area in order to attract tenants.
- A developer is considering construction of an 800,000-square-foot downtown office building that will take three years to complete. Employment in office-prone industries rose strongly over the last five years, vacancy rates dropped, rents escalated, and two other new multitenant structures have been started in response to positive market conditions. With the economy slowing, much of the space already under construction has yet to be leased. Because the other new competitors will

not be completed for 18 months, the proposed building should not be expected to capture all of the projected demand. Vacant space may remain available long after the building is completed.

### Determining Supply/Demand Balance

Analysts should be on the lookout for the following warning signs of an imbalanced or overbuilt market:

- Construction activity levels that dramatically exceed new demand, as indicated by household or employment projections. Note, however, that some excess is tolerable (and even desirable). A market with very low vacancy levels will experience rent increases that will eventually force out price-sensitive tenants. Also, obsolete or abandoned buildings must be replaced.
- Escalating vacancy rates that cannot be readily explained by the movement of a single large tenant.
- Negative net absorption, with more space being vacated than new leases signed.
- Declining real (inflation-adjusted) rents.

### Absorption Rates

Developers and investors will look for the analyst's estimated absorption rate—the pace at which the proposed project will be able to lease or sell space. Depending on the property type, the absorption rate could be expressed in the following ways:

- The number of apartments that will be leased or the number of homes sold each month;
- The length of time it will take to sell off building sites in an industrial park;
- The number of months until an office building or shopping center is fully leased.

Absorption rates are important inputs in financial feasibility models, determining how long investors will have to carry the property before it starts generating positive cash flow. Many analysts express absorption rates as a range, 12 to 16 apartment units leased per month or 20,000 to 30,000 square feet of retail space leased per quarter. Preleasing (space rented before construction is completed) must also be factored into the absorption rate.

To a large extent, the analyst will rely on the absorption experience of recently completed competitive projects, especially those that are still actively

being marketed. He or she will consider the competitive strengths and weaknesses of the subject relative to these competitors, as well as changes in economic conditions and the property market generally, when estimating absorption.

Calculating how fast a project will lease up or sell out is much more difficult in a location where no similar new construction has occurred in years. If demand trends are positive and the project is appropriately priced, a new apartment complex should absorb 20 to 30 units per month initially, but the pace will slow as the most desirable unit types or floors are fully leased. The same is true of shopping center space. A 200,000-square-foot center might have 50 percent of its gross leasable area (GLA) committed to two anchor tenants before construction starts, and another 20 percent of the total GLA leased by the time the center opens. Less desirable storefronts (with odd configurations or reduced visibility) will take much longer to lease; the center might not be 95 percent committed until a year after opening.

This chapter has described the general process for conducting real estate market analysis. The methods and data sources vary somewhat depending on the product type. Chapters 3 through 7 give more specific instruction and information on how to conduct market analysis for various product types and include case studies that illustrate the methods described.

### Notes

<sup>1</sup>Monthly employment data are available with and without seasonal adjustments. Adjusted data present a more accurate picture of economic growth. Annual averages take seasonal variations into account and do not require adjustments.

<sup>2</sup>In areas with neighborhood school attendance areas, the analyst could supplement demographic information with local school enrollment statistics covering the previous five years. Such data would not be useful, however, in trade areas where a high percentage of children go to school outside the neighborhood or attend private or parochial schools.

<sup>3</sup>Average income is the total reported income from all sources for the entire trade area divided by the number of households. Median income is the point at which half the households are earning less and half are earning more.

<sup>4</sup>Class A apartments typically are less than ten years old or, if older, built to luxury standards and periodically renovated. They have modern kitchens, expansive closet space, efficient HVAC systems, ample parking, and security features. Class B projects are older but well maintained; the units may be smaller and lack certain unit or project amenities. Class C apartments tend to be more than 30 years old, including small walkup buildings that lack air conditioning and off-street parking.

<sup>5</sup>Analysts should be aware that fair housing laws limit how much information apartment leasing staff or home sales agents will share about residents. Visual observations (toys, bicycles, playground use) will indicate the presence of children.

<sup>6</sup>Construction value information is not useful to the market analyst because it does not reflect the market value of the

property in question. Rather, it is the cost of construction exclusively.

<sup>7</sup>As a practical matter, capture rate calculations assume that a portion of space (usually 5 to 7 percent) will remain vacant, and that some share of demand will come from outside the trade area (new firms relocating from other regions, corporate transferees buying or renting housing, etc.).

## Chapter 3

# Residential Development

**A**nalyzing the residential development market requires an understanding of location preferences, community types, building styles and materials, floor plans, amenities, and pricing trends. The housing market encompasses a wide range of product types and communities, including the following:

- Single-family detached houses, townhouses, multi-family units;
- For-sale and rental properties;
- Fee simple, condominium, and cooperative ownership;
- Stick-built, modular, and manufactured (factory-built) construction;
- Mobile homes;
- Year-round residences and seasonal or second homes;
- Master-planned communities, new towns, infill subdivisions, age-restricted communities, and seniors' communities.

Each of these housing types can be found in a variety of sizes, floor plans, elevations, and price or rent ranges. Despite the wide array of housing types, the vast majority of units are single-family detached houses and mostly owner-occupied. From 1990 through 1999, about 78 percent of all housing completed was single-family detached units. This percentage represents an increase over the 1970s and 1980s, when about 65 percent of all new units were single family. Trends appear to be reversing. For example, during 1999 and 2000, the share of homes that were single family once again averaged about 65 percent.<sup>1</sup>

## Development Types

In many parts of the United States, master-planned communities are a popular development type. Such communities usually include a range of housing types along with recreational amenities, supporting retail, and other commercial development. Some master-planned communities may encompass several thousand acres and may include schools, libraries, and other public facilities, as well as a substantial amount of office and retail development—enough that they eventually become recognized as cities in their own right. Irvine, California, and Reston, Virginia, are two such examples.

A development type that is growing in popularity is the new urbanist community, which is modeled after the cities and towns developed prior to World War II. New urbanist communities are pedestrian oriented, rather than dominated by automobiles. Tree-shaded sidewalks connect all parts of the development. Streets are usually narrow and arranged in grids with short blocks containing a mix of housing types and supporting commercial uses in street-facing buildings.

Increasingly, as prime developable land has become scarce, developers are turning to infill sites for new developments. These sites have a number of market advantages, including fewer competitors, existing transportation and other community services and facilities, and a preexisting market—the residents of the surrounding community. Infill sites are typically much smaller than suburban greenfields, and developers are often challenged by one or more constraints on development, such as steep slopes,

environmental hazards, or the expense of removing existing structures. Nevertheless, many developers are finding that the rewards outweigh the difficulties.

People's lifestyles are changing and so must the communities in which they live. So-called nontraditional households now form a larger portion of households than do married couples with children. Women have entered the workforce in vast numbers, and increasing numbers of people work out of their homes. These trends are just a few that will affect the kinds of neighborhoods people will choose in the coming decades. For example, people who work at home will most likely require the kinds of amenities and services—copy centers, meeting space, coffee bars—that are usually available to those working in offices. At the same time, child-focused amenities like playgrounds and ballfields may decline in value in some communities.

## Characteristics of Single-Family Homes

Building styles and materials tend to reflect regional preferences. In the Northeast and the Midwest, vinyl siding dominates: more than 60 percent of new

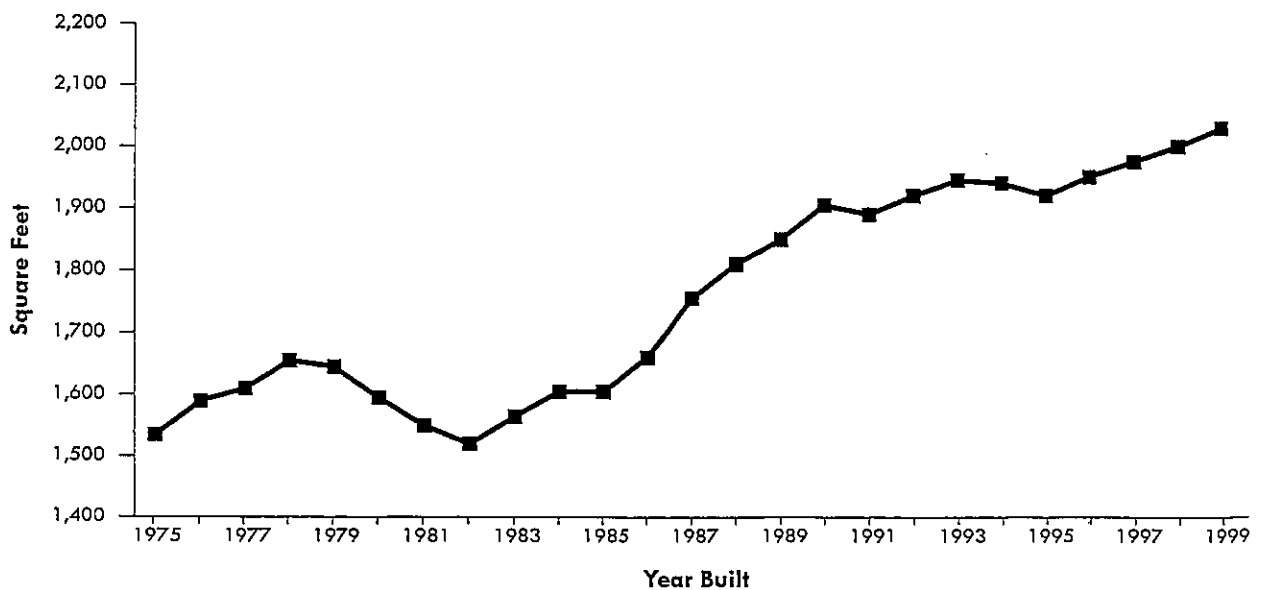
homes use it. But in the South, brick is slightly more popular than siding. In the West, stucco is used on 54 percent of new homes, a reflection of the popularity of southwestern architectural styles. Basements (full or partial) are very common in new homes built in the Northeast (86 percent) and the Midwest (76 percent). They provide insulation from cold winter temperatures and valuable floor space for homes built on small lots. Basements are rare in the South, where 82 percent of units are built on a slab or crawl space.

Home size is one of the major determinants of price. When comparing competitive projects, the market analyst examines not only the base sales price (plus extra charges for upgrades and options) but also the price per square foot. Homes have been getting bigger. Figure 3-1 shows trends in the median size of new single-family homes built since 1975.

While homes are getting larger, lot sizes are getting smaller. According to the U.S. Census Bureau, the median lot size for homes completed in 1999 was 8,750 square feet, down from 10,000 square feet in 1990.<sup>2</sup> The high cost of land in desirable locations is the key factor. Keeping homes affordable means reducing lot sizes when possible. At the same time, however, many fast-growing communities use their

Figure 3-1

### Median Size of New Single-Family Homes



Source: U.S. Census Bureau.

zoning ordinances to limit residential development by requiring larger lots.

Amenities once considered the preserve of upscale or custom homes (central air conditioning, two-car garages, a minimum of 2.5 baths) are now found in a majority of new single-family homes built by developers (Table 3-1). More than 60 percent of new homes have fireplaces. In the Northeast, nearly

80 percent of all new homes have two or more stories; in other parts of the country, the mix is more evenly split between single-story ranch styles and multistory construction. The split-level home, very popular in the 1960s, accounts for just 3 percent of units built today.

### Characteristics of Multifamily Homes

Multifamily homes have increased in size. The median new multifamily unit completed in 1999 had 1,105 square feet of space, up from 882 square feet in 1985. (See Figure 3-2.) Note that census statistics include an allocation for common areas such as hallways and lobbies whereas apartment developers and leasing staff typically base their calculations only on in-unit living space. Typical sizes for new suburban garden units for rent are 600 to 800 square feet for one-bedroom, one-bath apartments and 875 to 1,100 square feet for two-bedroom, two-bath units. For several years, high-rise multifamily buildings were not considered a viable product, but that has changed. Urban lifestyles have

Table 3-1

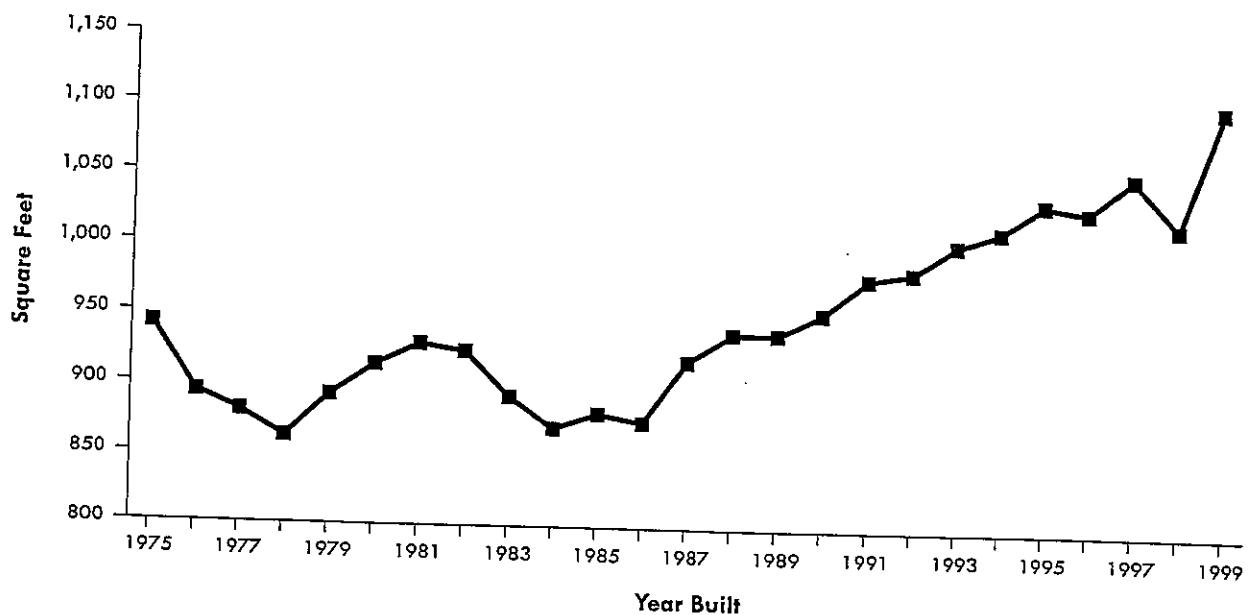
### Characteristics of New Single-Family Homes

	1975	1980	1985	1990	1998
	(Percent)				
Central Air Conditioning	46	63	70	76	83
Fireplace	52	56	59	66	61
4+ Bedrooms	21	20	18	29	33
2+ Car Garage	53	56	55	72	80
2.5 Baths+	20	25	29	45	52
2,400+ Square Feet	11	15	17	29	30

Source: U.S. Census Bureau.

Figure 3-2

### Median Size of New Multifamily Units Built



Source: U.S. Census Bureau.

gained in popularity since the late 1990s and along with that trend has come a resurgence in high-rise apartment and condominium building. Many high rises are built as luxury housing and include a wealth of building amenities and unit features.

Today's suburban garden-apartment complex typically consists of six or more two-story walkup buildings (some may be three stories), each with at least 12 to 16 units.<sup>3</sup> More than 80 percent of new multifamily units have air conditioning. The mix of unit types consists of 50 percent two bedrooms and 35 percent one bedrooms, with the remaining units primarily having three or more bedrooms. Efficiency apartments (also known as studios) account for only 2 percent of new units built during the late 1990s; they are much more common in high-rent downtown markets than in the suburbs.

An outdoor swimming pool and a clubhouse (often including an exercise room, a library, a party room) are typical of the newest suburban rental complexes. In more upscale apartment communities, covered parking (single-car garages tucked under the units or freestanding) or carports are frequently provided at an additional cost to the tenant. Additional cars are parked in unreserved outdoor spaces, usually free of charge. An overall parking ratio of 1.5 to two spaces per unit is desirable in a typical suburban setting, whereas a ratio of one space per unit—or less—may be acceptable for more urban settings.

Traditional suburban garden apartments still account for a majority of new multifamily development. However, luxury mid-rise and high-rise buildings constructed on infill sites in downtowns and older suburbs are increasingly popular.

In urban areas, where denser development is the norm, mid-rise and high-rise apartment and condominium buildings are common. Some buildings

include commercial space on the lower floors. Parking may be in separate structures or underground garages. In very dense cities like New York, no parking at all may be provided, even in very high-end buildings. Amenities may include a gym, a rooftop or indoor pool, concierge services, and business and conference facilities. Views can be a primary consideration in pricing and planning the units. An outstanding view can add large premiums to the rents or sale prices of units.

Table 3-3

### Innovative Features Found in New Multifamily Communities

#### Community Amenities

- On-site daycare and activities for latchkey children
- Community gardens
- Indoor basketball courts, sand volleyball
- Media rooms
- Billiard rooms
- Business centers, conference facilities
- Car wash and car-detailing facilities
- Concierge services, including plant watering, dog walking, dry cleaning pickup and delivery, and grocery shopping

#### Technology Amenities

- In-unit alarm systems with closed-circuit TV monitoring
- In-wall speaker systems with theater-quality sound
- Units prewired for multiple telephone lines
- Units wired for integrated telephone, cable, and Internet service
- Computer workstations with high-speed Internet service
- Video libraries and video-on-demand service
- Coinless laundry rooms, vending machines, and business centers using smart-card systems

#### Unit Features

- Private entries
- Direct-entry garage parking
- Nine-foot ceilings with crown moldings
- Bay windows and skylights
- Double-sided gas fireplaces
- Better soundproofing
- Two-level units in multifamily buildings
- Gourmet kitchens and deluxe master baths
- Full-sized laundry facilities, larger water heaters
- Keyless entry systems

Source: National Multi Housing Council.

Table 3-2

### Characteristics of New Multifamily Units

	1985	1990 (Percent)	1999
< 600 Square Feet	11	5	4
1,200+ Square Feet	14	20	28
With 2+ Bathrooms	37	44	54
With 3+ Bedrooms	7	11	19

Source: U.S. Census Bureau.



## Residential Market Analysis

Analysis of residential demand includes demographic and economic characteristics of households in the determined market area. Analysis of supply examines trends in prices and absorption and—perhaps most important—surveys of competitive projects currently being marketed and those likely to be marketed during the same time as the subject property. A residential market analysis should seek answers to several questions, including the following:

- Who is the target market?
- What is the appropriate price or rent range for the target market?
- What types and sizes of homes are suitable for the target market?
- What amenities and features should be provided to appeal to this market?
- What are absorption or lease-up and market capture rates?

Much of the analysis for residential development must rely on a qualitative understanding of the market and its dynamics. Both the product and the consumer must be understood in terms of choices people make, evolving lifestyles, personal tastes, and many other considerations that cannot be quantified. Focus groups, buyer surveys, and other qualitative techniques augment the hard data of the market study. Understanding the lifestyles and other qualitative characteristics of consumers can help to appropriately define a residential product. The analysis for rental apartments is different than for single-family for-sale houses. In fact, some analysts specialize only in one or the other. Single-family residential market analysis usually places more emphasis on the non-quantitative factors and focuses on what individual homebuyers want.

In multifamily development all design decisions must be made up front, 12 to 24 months prior to the time when actual marketing to residents is initiated. By comparison, builders and developers in other property segments can often refine their product offering as market response dictates. Single-family homebuilders have the opportunity to adjust their product based on which models are selling best and which features or amenity upgrades are purchased most often.

### Identifying the Market Area

As with other real estate product types, a residential market study generally begins with an examination of

the regional setting where the proposed development will occur, including population and household trends, recent or anticipated changes in the economic base, and employment patterns. The focus then narrows to the county or municipality for more specific information. Analysts collect data about population, households, employment, housing needs and development activity, regulatory issues, transportation patterns, local schools, and other services.

Most residential development draws a good portion of its market from the existing local community. A rule of thumb is that between 50 and 75 percent of the buyers or renters in a new development come from the local community, but there are many exceptions to that rule. A project in a rapidly growing metropolitan area might draw a much higher portion of its residents from outside the region. An infill project that offers move-up housing might attract nearly all of its residents from the immediate neighborhood. A second-home community draws most of its residents from outside the local area.

The market area for a primary-home residential project usually centers on a major employment node, a transportation corridor, or a desirable locational amenity. Physical barriers, either natural or constructed, or political considerations, such as a county line or school district, usually determine the borders. Employed consumers often focus their housing search on the basis of commuting times and distances.

The size of the market area varies, depending on the project proposed and the community. For example, in a densely populated large city, a market area for a typical medium-priced high-rise condominium project might encompass only a single neighborhood. In a sparsely populated, semirural community with few competitive projects, the market area could comprise the entire county or even several adjacent counties. The market area for a large master-planned community on the outskirts of a rapidly expanding metropolitan area might encompass the entire metro area and even out-of-state areas. Further, a distinctive project with little or no competition will draw from a larger market area than a more standard project that has a large pool of similar competitive projects. Relatively standard projects of moderate size usually have a market area of no more than a four- or five-mile radius.

In many cases, the market areas for supply and demand are identical, although competitive projects can exist outside the target market area. In some instances, the two market areas are regions apart, as in the case of second-home resort developments. Most

market areas for primary shelter, however, are within a reasonable commute of major employment centers or other key destinations. Some factors to consider in delineating the market area include the following:

- **Travel time from major employment centers.** By identifying major employment centers and making assumptions regarding acceptable commuting time, market analysts can define a target market area. A new wrinkle in weighting this factor is the growing number of telecommuters and other home-based workers, creating new opportunities for housing those who can live anywhere.
- **Mass-transportation facilities and highway links.** Commuting patterns and times are based largely on ease of access; thus, the target market's geographic size is influenced by the availability of mass transit, the location of transportation corridors, and the speed at which they operate during peak travel times.
- **Existing and anticipated patterns of development.** Most urban settings contain areas of both growth and decline. Growth areas might be distinguished by certain desirable attributes, such as proximity to employment, housing affordability, physical attractiveness, and outstanding community facilities. A large master-planned community with attractive amenities can create its own desirability.
- **Socioeconomic composition.** An area's income, age, household characteristics, and other demographic characteristics influence housing choice and location and thus target market areas (but note that it is illegal in the United States to target housing-market segments based on race, religion, or ethnicity).
- **Political subdivisions.** Municipal boundaries can be especially important when adjoining jurisdictions differ markedly in political climate, tax policies, or status, or when different attitudes about growth exist. School-district boundaries can be critical if households with school-age children represent a major market segment.

Competitive analyses of for-sale products usually include only new developments and proposed projects that are expected to be selling during the marketing period because such projects are the most comparable to new development and the most suitable for assessing absorption trends. For rental projects only the newest projects in the market should be included, generally not more than ten years old. Projects that have undergone recent renovations are also included.

Competitive projects should be of similar product type(s) to those proposed for the subject project. Ideally, the market area consists of sufficient competitive projects to allow the survey to exclude any others. If the proposed project is a high-rise rental apartment building, only other elevator rental buildings should be included in the inventory. Similarly, an amenitized master-planned community relies only on that type of project for its competitive survey. Small subdivisions without similar features would not be competitive. On the other hand, in a market area with few competitive projects, the prospective consumer has limited choices and so does the market analyst. In such an area, it might be necessary to widen the definition of "competitive," possibly including all projects within a certain price range. Or it might be necessary to widen the geographic net, enlarging the market area to include more zip codes, more jurisdictions, or a larger radius.

### **Demand Factors**

Demographic trends and projections form the basis for determining the demand for housing. Several demographic factors are of primary importance in analyzing the market potential for a project: employment, population and households, and household income.

- **Employment usually drives population and household growth.** If an area has an increasing employment base, new workers will likely take up residence in the local area.
- **People form households.** Households are the unit of measure most relevant for assessing the housing market because it is households that buy or rent a unit of housing.
- **Household income is key to determining the pricing structure for the proposed development.** Some analysts rely on standards such as the rule of thumb used by mortgage lenders that housing should not cost more than 30 percent of the borrower's income. Although these rules may be useful to keep in mind, they usually do not translate directly into affordability or marketability of housing.
- **Other demographic statistics may be relevant for evaluating the project's potential,** such as household size, ages of householders, family versus nonfamily or single-person households.

### **Employment**

Demographers use projections of employment growth as one of the bases for determining population

growth. Some analysts—especially those studying multifamily housing—prefer to base demand scenarios on employment rather than household projections because in most metropolitan areas, demand for new housing is closely tied to workers moving into an area. (See Case Study 3.1, Multifamily: Colinas Gateway.)

Housing competes for customers within the context of a regional market. In general, the growth of a regional economy determines how many new households are seeking shelter at a given time because job availability and the opportunity for career advancement are the magnets that draw newcomers, both transferees and young job-seekers just entering the market. The total housing pie is then divided, as existing residents and new arrivals alike decide whether to buy homes or to rent. Thus, a model that can forecast both total housing demand and the share of demand likely to be captured by rental apartments is critical to understanding aggregate housing demand at the metro level.

Because employment throughout a region determines population growth, metrowide employment statistics should be gathered. Some of the data to examine include historical growth trends, total employment projections, and comparisons of local unemployment figures with metropolitan, state, and national unemployment rates. These figures give some indication of the area's general economic health. A survey of major employers in the area, including expansion plans, reductions in force, relocations, and any new employers entering the region should be part of the information presented. A major new industry moving into an area will most likely affect housing demand. Other factors, such as the breakdown of employment by industry and occupational classifications, are sometimes included as part of a more comprehensive market study.

### **Population and Households**

Population and household projections provide the number and characteristics of current and future households and thus the forecast of demand for new housing in the market area. An analysis of in-migration and out-migration also offers insight into present and future demand for housing in the market area.

A population trends analysis should begin with the population count from at least the last decennial census. Next, the analyst looks at the population for the current year, or sometimes the midpoint between the last census and the next, depending on the availability of data. For a large project, the more important, but unfortunately more elusive, data are the population projections for the next ten to 20 years.

Of greater significance in determining housing demand and market potential are the number and type of households that contain a given population. Growing populations signal a corresponding, but not proportional, increase in the number of households. In many areas of the country increases in the number of households are more a function of decreasing household size (fewer children, more singles) and immigration than of natural population growth.

Over the last few decades, national trends have pointed to smaller households. In 1950, the average household contained 3.37 persons. By 1970, it had declined to 3.14 persons, and in 1990, the average household contained only 2.63 persons.<sup>4</sup> Household size appears to have leveled off at around that number. In the mid-twentieth century, households consisted mainly of a married couple and their children. This type of household is now a minority and its share continues to shrink. Today's household mix includes a broad array of nontraditional family and nonfamily household formations: unmarried couples, single or divorced parents, childless couples, singles at all stages of life, unrelated roommates, and others. Each household type has specific housing needs, providing opportunities in a variety of market niches. Studying local trends in household size and type can help determine the concept and design of the community and housing units. However, it would be incorrect to conclude that smaller households typically prefer smaller housing. In fact, as household size has declined, home size has increased.

### **Income**

An analysis of household incomes in the target market area indicates the region's economic vitality and provides valuable insight into the scope and magnitude of available purchasing power (not counting a household's equity and appreciation). This part of the analysis involves tracking historic changes and projections in median or average household income for the target market area, secondary market area, and region, including the rate at which incomes rise and the number of households in each income bracket. Such information is invaluable in determining price ranges that a significant portion of the population can afford. Income alone, however, cannot be used as an exact indicator of housing affordability. Because the affordability of housing is tied to a household's wealth (that is, the household's assets less its liabilities) not just its income, it is not possible to construct precise predictors of affordability. Broad correlations can be drawn between recent sales

Table 3-4

## Different Generations, Different Tastes

How generational characteristics translate into homeowner priorities.

1 = not important      2 = important      3 = extremely important

Age	Characteristics	Technology	Security	Housing Implications				
				Privacy	Equity	Community	Prestige	Health
<24	"Echo Boom." Will benefit from present-day insistence on quality education and cleaning up the budgetary crunch.	3	1	1	1	2	1	3
24-35	Generation X. Takes pride in pragmatic approach. Savers, adult children living at home. Future burden of being caregivers.	3	2	1	3	2	1	2
36-55	Baby Boomers. Take enormous pride in generational distinctions. Drive the market. Politically active.	2	3	2	1	2	3	3
56-69	Empty-nesters. Ambivalent response to societal confrontation. "Sandwich generation," strong work orientation.	2	3	3	2	1	2	3
70 +	Retirees. Depression-era roots and values. Firm belief in public harmony and cooperative social discipline.	1	2	1	3	3	1	3

Except for retirees, all consumer groups want their homes to be equipped for the technological age. Also important across nearly all groups are health and community.

Source: The Concord Group.

prices and income levels. Conversations with sales agents and mortgage brokers are also useful for gauging home prices.

### Market Segmentation

In today's competitive environment, understanding the local market and targeting specific segments can help set a development apart from the competition. After defining the market segment, the analyst must be careful not to overgeneralize with regard to the target customers' needs. Not all young families want a suburban backyard, and not all retirees want to play golf. Within age or income cohorts, markets can be quite diverse, and to reach potential consumers, their preferences must be understood. Techniques for learning about preferences include focus groups, surveys of local residents, and surveys of current shoppers for homes. Market research can yield a wealth of information on the potential residents of a new project. But market research can also be flawed if the wrong questions are posed or the data are not

interpreted correctly. It is important to be aware of the potential for incorrect assumptions.

### Supply Factors

The current and projected housing stock in the competitive market area forms the supply side of the market analysis equation. Supply factors include the total number of housing units by unit type, price range, and absorption. These factors enable analysts to translate data about employment, population, households, and income into estimates of potential demand for a specific new development. The present housing stock is determined through an extensive survey of comparable, currently selling developments in the competitive market area. The future housing market must be estimated by an analysis of the proposed projects, which can be identified through preliminary and final plan approvals and relevant rezonings. The market analyst may need to contact planning departments of multiple jurisdictions to obtain the necessary information.

Counting the entire housing inventory of a market area allows the analyst to consider household growth trends. This scale of analysis can use the number of units as published in the most recent census, with additions from building permit data.

### **Analyzing the Competition**

In most housing market studies, the analysis of existing competitive projects is the most detailed part of the report. The existing project inventory provides a wealth of information about successful and not-so-successful projects being marketed at the current time in the specific market area. The competitive inventory analysis usually includes the number of units sold or leased and the number still on the market, prices or rents, square footage, and tabulations of price per square foot. Tables might also summarize standard features, available options, project amenities, and buyer/renter profiles.

To identify competitive projects, there is no substitute for getting out and visiting each project in the competitive area and talking with a sales manager or other representative from each project. It is the only way to determine whether a project is truly competitive with the planned development. Discussions with staff at projects underway are the most effective way to learn who constitutes the market, where buyers come from, what they like (or don't like) about current offerings, and what the most desirable products are for this specific group of consumers. Products and consumers are constantly evolving and it is important to discern any trends.

Market area averages and totals indicate how specific projects compare with the average and show overall leasing pace, absorption, units remaining on the market, average prices, and average square footage. Data also show which projects are selling better than the market average and allow analysis in terms of size and price per square foot. The market area's average price and absorption rate can help gauge how quickly competitive products are selling. Arranging the data in a spreadsheet or plotting a simple regression reveals the gaps in the market that offer development opportunities and shows where the market is saturated. Case studies 3.1 and 3.2 include an example of projects plotted on a regression diagram.

The simplest way to allow for variances in price and unit size in a project is by computing the average price per square foot for all units in the project, even though consumers do not think in such terms. Communities with the lowest average prices or the lowest average prices per square foot should report the highest absorption rates, assuming all other factors are equal.

If the analyst finds that consumers are not responding consistently to value, then all things are *not* equal and other, less tangible, factors must be examined. For example, features that are standard in one project may be upgrades in another. Locations can have small differences that matter a great deal to buyers. A particular builder's reputation may add perceived value. No two projects are totally comparable in every way.

For rental projects, vacancy rates in a market area give an indication of its strength. A high overall vacancy rate should be seen as a sign of limited potential in this market. A 5 percent or lower vacancy rate can indicate a strong market for this type of product. It is important to view vacancy rates qualitatively. Older rental projects that lack modern amenities may skew the market's vacancy rate upward and not accurately represent demand for a new project. Moreover, projects in the initial lease-up phase should be separated before tabulating the vacancy rate for the market area, because they have an artificially high percentage of vacancies. These projects do need to be counted in the absorption analysis. It is important to quantify the total leasing activity in the market.

The analyst also evaluates nonquantifiable characteristics of competitive projects. Factors such as location, design, and image must be considered. The quality of management, recreational amenities, or site advantages sometimes makes the difference between a top performer and a less successful project. These intangibles can often be ascertained only through discussions with sales agents or surveys of home shoppers. Of course, the analyst's own judgment is crucial in these evaluations.

Projects in the development pipeline must be identified, and relevant data, similar to that for existing projects, should be provided: the project name, the developer and/or builders, location, timing, number of units planned, and, if known, the type of units planned, estimates of price ranges, and expected opening dates. Some data may be unavailable for projects in the early planning stages. Occasionally, a developer may be unwilling to reveal plans for a proposed development. Some planned projects may never actually get off the ground. Although the inventory of proposed projects usually fails to identify some developments and includes others that never become reality, it does provide a good overall indication of future plans for local building activity.

### **Identifying Product Types and Niche Market Opportunities**

Location, site, and market potential are the factors that determine the appropriate product to be devel-

oped. An urban locale demands a different type of residential development from a suburban one. The typically higher price of urban land requires higher densities. The identified market segment should suggest a special type of development. If the target market is young, first-time buyers, a moderately priced townhouse development with few amenities and maximum unit space for the dollar might fit the bill. If the research detects strong demand from young families with small children, then the project should be planned with this market segment in mind and the greatest percentage of homes should be of the size and type that appeal to such households in the local area. A growing elderly population might suggest a need for an active-adult or retirement community and elder-care facilities. Amenities, features, design, and unit size should reflect residents' needs and should be determined through market consumer research.

Although it is easy to continue developing and marketing products that have sold well in the past, it can be rewarding, both financially and in terms of serving a public need, to develop a new type of product. Comparable residential projects might not currently exist in the immediate market area, but if the demand analysis shows a need, the analyst should explore the possibilities. In an overbuilt market, thinking in terms of less typical types of development may lead to better opportunities but will require looking beyond the immediate market area for examples of analogous projects that were successful in other locations.

#### Calculating Capture and Absorption Rates

Housing demand includes newly formed households, households moving into the market, and households moving within the market. In high-value real estate markets, a factor for demolition of older, functionally obsolete units may be required. In low-income neighborhoods, dilapidated units are also lost to demolition or fire.

Analysts must estimate shares of total demand that major housing types will attract—single family versus multifamily and for-sale units versus rental units. These allocations should be based on historic trends in the local market and projected on the basis of economic and demographic changes. For example, as an area becomes more urbanized, a larger percentage of its households tend to reside in higher-density housing types. Census data provide breakdowns of households by unit type, unit size (number of bedrooms), and tenure (renter versus owner).

After these data are refined, analysts can identify all components of the basic equation for demand

(total demand minus total absorption by competitive products equals residual demand). Total absorption is projected based on the absorption performance of existing communities as well as projections of the expected performance of proposed communities that will be competitive during the marketing period of the subject project. The residual demand yields the number of units that can be absorbed by additional projects, including the subject property.

After residual demand is known, the analyst must determine what share of that demand the subject project is likely to capture. Determining this capture rate is highly subjective and must take into account all the project's advantages and disadvantages in relation to all others that will be on the market. Factors to consider include location, site, features, amenities, design appeal, and value. The capture rate should not be overestimated. Projects currently being marketed provide a reasonable model for the potential capture rate of the subject development. Capture rates vary based on trade area size, the number of competing units, the supply of land, desirability of the project, and many other factors.

Although a market study is one of the first elements in the development process, market research and analysis does not end with a project's completion: it often continues after the project begins selling, to fine-tune prices and even to change designs, features, and options. In a rental project, such research is part of an ongoing effort during leasing and management to keep tabs on competitors' vacancies, rents, and incentive programs.

#### Sources of Data

Numerous reference sources are available to assist the market analyst in learning about housing product, amenities, sales, and pricing. The U.S. Census Bureau tabulates data, both nationally and regionally, on residential construction activity through each key stage in the building process: permits, starts, completions, sales (for homes and condominiums), and absorption (for apartments). Data on selected structural elements, physical characteristics, amenities, and prices or rents are collected as well. Some information is tabulated monthly, while other items are available in annual statistical series. The National Association of Home Builders (NAHB) is an excellent source of background and trend information on single-family homes; the Manufactured Housing Institute covers mobile homes. Trade publications (*Bulder, Professional Builder*) and organizations such as the National Multi



Housing Council and the American Seniors Housing Association are also helpful.

Although these sources are useful in helping to understand broad market and product trends, they are of little help to the market analyst looking at a specific property or development proposal in a local market.

- The Census Bureau's building permit tabulations<sup>5</sup> are the only uniform nationwide source of construction pipeline information for individual counties or municipalities. They offer data on the number of units permitted (broken out by number of units per building). However, the Census Bureau's building permit statistics do not indicate whether multifamily units are intended for sale or for rent. No information on unit mix, size, or pricing is provided.
- The Census Bureau also tabulates housing starts and unit completions but not at the municipal or county level. Numbers for the larger metropolitan areas are published quarterly and annually. National and regional data are useful, however, in estimating the share of permitted units that are actually completed. Reports on apartment completions distinguish between rental and condominiums or cooperative units and provide benchmarks for gauging absorption rates in new buildings.
- Annual vacancy rate estimates for the nation's largest metropolitan areas are also available from the Census Bureau, but they do not provide detail on occupancy in individual counties, municipalities, or submarkets.
- In certain major markets, data on comparables are published by private firms. The appendix lists some of these data providers.

Some local governments maintain databases of rental apartments. Trade groups (such as local affiliates of the NAHB), local apartment building owners' associations, and private consultants compile information on new projects planned, under construction, or in initial marketing. Fees are often charged for these reports, but they can save time. Larger metropolitan areas often have apartment guides that provide basic information and contacts for both new and existing complexes. The Sunday real estate sections of local newspapers contain both advertising and features on new homes. Even the *Yellow Pages* can be a starting point. However, use of secondary sources cannot substitute for field visits and conversations with sales and leasing managers regarding the types of product being marketed. Contacts

with municipal planning and building staffs will also be needed to determine the number of units that are planned and approved for future development.

## Special Niches

Some types of housing fall outside the standard methods of market analysis. Very high end custom-home communities cater to such small, well-defined markets that general demographic trends are of limited use. Analysis of the potential for these developments requires a clear understanding of target households and their preferences. Determining the market's size can be difficult because census and other demographic data do not provide the fine detail required. Low-income housing generally has more demand than can be met and market studies must address issues dictated by government funding sources. Second-home markets depend on discretionary buyers. Markets can be national or even international in scope. Identifying the sources of demand for second homes, as well as the comparables, can be a daunting task.

## Low- and Moderate-Income Housing

The demand for affordable rental housing using low-income housing tax credits is very strong in most regions, especially for housing suitable for families. The market analysis is often conducted for the housing finance agency as a way to determine the most viable and worthy projects to be funded. Recent federal legislation mandates market studies that are conducted by disinterested third parties for all tax-credit projects.

Subsidized housing programs have income limits that vary by household size, but each program has its own specific requirements. State housing finance agencies have rigid requirements for funding projects. They are particularly concerned with oversaturation of neighborhoods and smaller towns with too much low-income housing, which would negatively affect the stability of the neighborhood. They might also be concerned with oversaturating the housing supply for a narrow income band while not meeting the need in others. Another consideration for the market analyst is whether the existing nonsubsidized housing in a community might already satisfy some or all demand for affordable housing as well as a proposed subsidized project would. This situation occurs sometimes in smaller cities or towns, particularly in the Midwest, where housing values are low.



## Independent Living Seniors' Rental Housing

Made popular by the availability of low-income housing tax credits, affordable rental communities for independent seniors target healthier seniors. These communities offer units and optional services. Units generally offer one or two bedrooms and full kitchens; buildings include lounges, libraries, activity rooms, and sometimes a room for visiting doctors to use on an occasional basis. Services range from transportation, social, and recreational activities to wellness programs and sometimes meals. However, monthly payment covers rent, and possibly utilities, exclusively. Any other services offered would be optional on a separate fee basis. This product has traditionally focused on moderate-income households of seniors with incomes at 60 percent of median income or less. However, mixed-income or market-rate rental communities for independent seniors are now being developed, offering the same building and optional service package at rates addressing more affluent households.

## Seniors' Housing

Market studies for housing targeted to active adults and retirees require an understanding of the hierarchy of housing types for these households. Many of the generalizations about where seniors live and how they live are not true. The vast majority of seniors—especially “younger” seniors—do not relocate to age-targeted housing, but remain in place. Only 4 to 5 percent of seniors move each year, compared to 16 percent of the general population. Demand projections based solely on age and income cohorts will result in overbuilding. Not all seniors who can afford to relocate to an age-restricted community will want to spend their dollars on shelter, and some simply do not want that kind of lifestyle.

Projects designed for and marketed to retirees are a growing share of multifamily construction activity. Some facilities require upfront entrance fees (or endowments) as well as monthly service charges; others are strictly rental.

Independent living/congregate housing complexes can include detached homes as well as apartments. The typical project has 70 to 250 units with kitchens; the residents furnish their own apartments. Amenities include a dining room serving at least one meal per day, lounge, library, activity rooms, and beauty salon/barber shop. Some projects also have convenience stores. Scheduled transportation, social and recreational activities, on-call medical professionals,

and wellness programs make these projects attractive to retirees. Rentals are most typical, but condominium or cooperative tenure (with monthly service fees) is also possible. Services such as meals, linens, laundry, and housekeeping can be included in the rent or service charge, or billed separately. The typical resident of congregate housing is a single female, over the age of 80, who is generally in good health and able to live independently.

Assisted living residences are smaller buildings (typically fewer than 100 units), offering 24-hour supervision and assistance for frailer seniors who need help with bathing, dressing, medication administration, mobility, or other activities of daily living. Single-occupancy or shared rooms may come furnished or unfurnished. Most rooms are rented on a daily or monthly basis, with charges based on the extent of personal assistance needed by the resident. Three meals daily are usually included, along with housekeeping services and activities. Assisted living is proving to be an acceptable alternative to nursing homes for seniors who do not need skilled nursing. Increasingly, assisted living facilities offer specialized floors or wings for persons with Alzheimer's disease or similar illnesses.

Continuing care retirement communities (CCRCs) offer a range of living arrangements and services that support seniors at various stages in their lives, allowing them to age in place. Independent living, assisted living, and skilled nursing are available in a campus setting. CCRCs usually require payment of an entrance fee or endowment, as well as monthly charges. Some facilities provide “life care” commitments; others provide only a guarantee of admission to buildings or units offering more intensive care as the need arises. Today, most entrance fees are partially or fully refundable based on length of residence. CCRCs appeal to both couples and singles who are still in good health, but who are concerned about their future needs. Retirement facilities may or may not be affiliated with local hospitals and nursing facilities. Churches or not-for-profit fraternal organizations are frequent sponsors.

The American Seniors Housing Association (ASHA) found 320 market-rate senior housing properties comprising more than 35,000 units under construction in 2000. Of these, 51 percent were assisted living communities.<sup>5</sup> California, Texas, New Jersey, Pennsylvania, and New York led the country in the number of new seniors' housing construction activity in 2000.

Absorption periods for retirement housing tend to be longer than for conventional new apartment complexes. The seniors' market serves a much narrower

### **The Hierarchy of Seniors' Housing**

Five distinct types of housing fall under the term seniors' housing. Generally speaking, seniors' housing refers to housing that is restricted to those aged 55 and older; the different types of housing are distinguished by the increasing levels of service and care provided to the residents. The five types include

- *Active adult*—houses or apartments are targeted to people 55 years and older and may formally prohibit rentals to younger people. The communities offer residents complete independence, and few, if any, services are aimed specifically to residents' age or health. Homes may include such universal design features as grab bars and doorways that allow wheelchair access. These communities often have a recreational focus, such as golf, and services are typically offered on a pay-per-use basis. Active adult communities tend to attract seniors at the younger end of the spectrum. Very little special regulation applies to this category, and the size of projects varies widely, from 20 to more than 1,000 units.
- *Congregate care, or independent living housing*—is targeted to residents in their late 70s and older. In addition to housing, such projects usually provide limited additional amenities such as transportation, assistance with or provision of meals, and assistance with household tasks. Units are normally rented on a monthly basis with additional fees for specific services used. These types of development are not heavily regulated. The average size of a project is 70 to 250 units.
- *Assisted living*—housing is directed at the more frail elderly and is often mixed with congregate care housing. Assisted living projects offer higher levels of service, such as daily assistance with personal and household tasks. Typical residents are older than 80 years and are usually women. Some recent projects focus on the needs of residents with Alzheimer's disease or other forms of dementia. Residents are usually provided with three meals daily. Skilled nursing facilities may be available in limited cases. These types of projects are subject to increasing licensing and regulation and may also be eligible for financial assistance from government sources. Average projects range from 50 to 75 units.
- *Nursing homes*—offer a distinctly different environment from the projects in the previous categories because they provide full-time nursing care for residents, many of whom have serious medical problems. Nursing homes are subject to the heaviest regulation. They have increased dramatically in number, partly because of a trend toward shorter hospital stays. Nursing homes that provide skilled nursing care should be thought of as more like a medical or institutional facility; they are mentioned here only to provide readers with a complete picture of the range of housing available for seniors. Skilled nursing facilities may be combined with other types of seniors' housing.
- *Continuing care retirement communities (CCRCs)*—also occupy a special category of seniors' housing. They typically offer two or more of the housing types listed above in the same project. The guiding concept behind CCRCs is that they attempt to provide a variety of housing units and services to meet residents' changing needs and preferences over time so that residents are not forced to relocate as they age. These projects average more than 200 units and can be found in a wide variety of configurations and densities, depending on the project's location. They offer amenities comparable to other kinds of housing along with services and features designed to facilitate "aging in place." In CCRCs, residents pay an entrance fee and monthly service charges, or they rent units on a monthly basis.

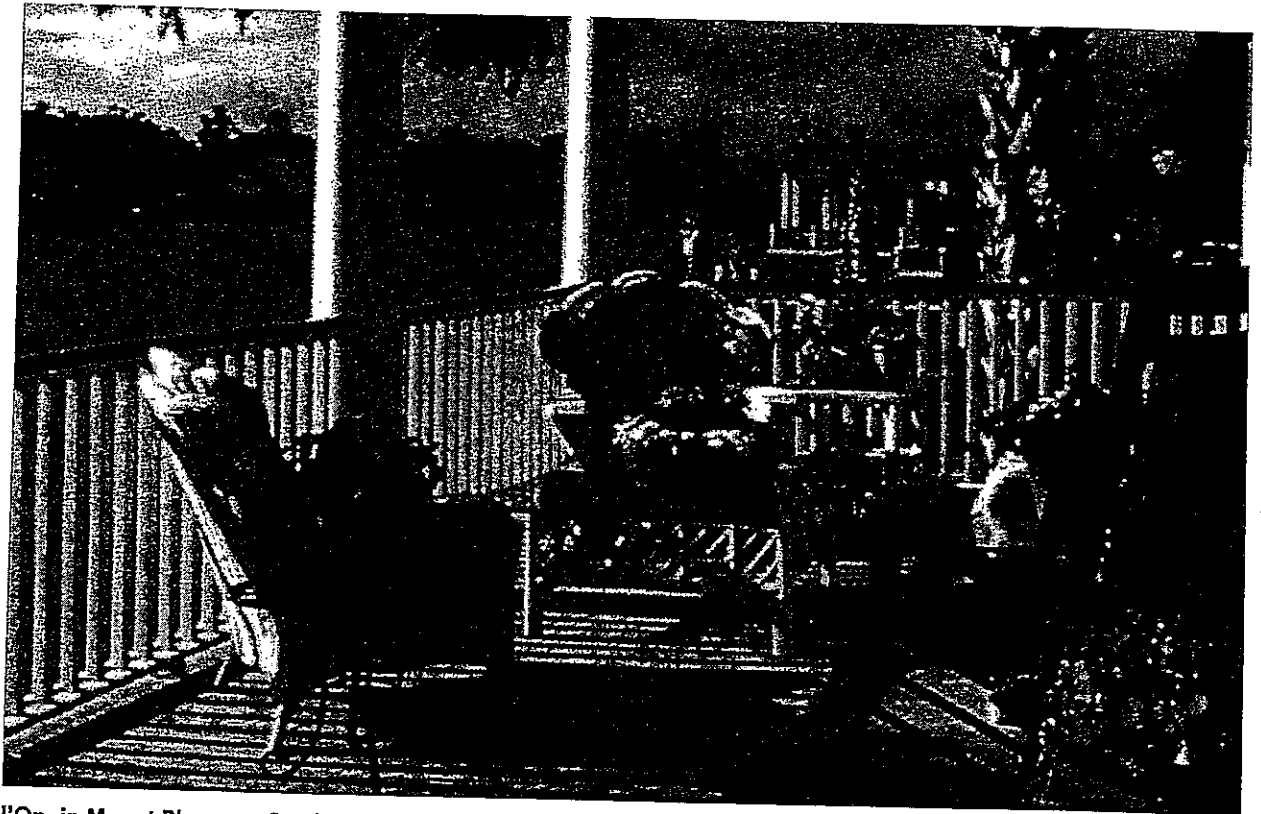
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Sources: Douglas R. Porter et al., *Housing for Seniors: Developing Successful Projects* (Washington, D.C.: ULI—the Urban Land Institute, 1995); and Bonnie Solomon et al., "Retirement Communities: Designing for the Aging Rental Market," presentation at the 1998 Multi Housing World Info Expo, April 17, 1998.

age range. For younger seniors in good health, moving to a retirement community is a lifestyle choice, not a necessity, and often is a difficult decision. Although some seniors cannot afford market-rate housing without assistance from relatives, others who can are simply unwilling to move until they have to. Studies

have shown that seniors make far more visits to retirement buildings before making a decision to rent or buy than does a typical apartment tenant or condominium buyer.

Determining effective demand for seniors' housing requires looking not only at the number of seniors in



**P'On, in Mount Pleasant, South Carolina, consists of 762 residential units, 30,000 square feet of commercial space, and six civic sites for churches or community centers.**



**Stone Manor Apartments, in Dallas, Texas.**

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the market area and their current incomes, but also at their assets and the value of the homes they would sell before moving. Most important, their health and need for assistance determine whether they will move and what level of housing and care they will need. The diversity of products, services provided, and pricing plans also poses challenges when examining the strengths and weaknesses of competitive properties in a given area. For example, per square foot rents must be adjusted to account for variations in meal plans; some facilities include maid service in the rent and others do not.

### **Second-Home Markets**

Market analysis for a residential development in a metropolitan area oriented to primary-home residences involves a fairly straightforward market analysis process. Demand is driven by local employment, population, household income, and other key variables. For a resort community, however, several different components of housing demand might exist, including second-home investment and second-, preretirement-, retirement-, and primary-home use, each of which is explained below.

Although second homes can be found in nearly every state in the United States, the top states, in order of preference, are Florida, California, Colorado, North Carolina, Texas, and Arizona. Beach property, followed by lake settings and the mountains are the most common locations for second homes. Other locales—such as the tropics, golf course areas, attraction areas, ski areas, and the desert—are significantly less common.<sup>7</sup>

Although appropriate market research is important in planning any real estate project, it is particularly important for second-home developments because of both demand-timing issues (the decision to take a vacation or purchase a second home is discretionary and can be postponed or accelerated) and location issues (vacationers and second-home buyers can choose any area across the country or around the world).

Given that second homes are not necessities, estimating demand does not rely solely on population or household growth, but requires a closer examination of the quality of potential demand. The analyst must determine from where demand is likely to emanate: from the immediate state, a multistate area, completely different sections of the country, or international locations. The task can be very difficult, requiring interviews with realtors and others who have experience in the subject area and who know where buyers have traditionally come from.

Projections should reflect the feeder market's economy. For example, California is a primary feeder market for resorts in Hawaii, Baja Mexico, the desert Southwest, and the Pacific Northwest. Therefore, the demand for resort properties in those locations is in part a function of the strength of California's economy.

Most resort communities compete over a much wider geographic area than traditional primary-home residential communities. Resorts in Hawaii draw from the entire United States as well as from Japan, Europe, and South America—essentially the entire globe. Even regional resorts may draw from a relatively broad geographic market. The second-home market is typically made up of households whose heads are in their 40s and early 50s with incomes in the top 10 percent of all households. Typically, they are drawn from large metropolitan areas where the stress of everyday life is an additional motivation to own property in a completely different environment. Of those people who meet these criteria, only a small portion actually do buy second homes.

Although the type of product preferred differs among communities, the market generally favors condominiums or small cabins or cottages, with exterior maintenance managed by a condominium regime or homeowners' association. In general, units that rent best to transient guests are in greatest demand because of their investment potential. For example, in areas dominated by conference guests, a one-bedroom condominium may rent well and therefore have strong buyer appeal; in areas dominated by family vacationers, two- and three-bedroom cottages may be the preferred product.

### **Second-Home Users**

Second-home users or owners are differentiated from second-home investors principally by their financial independence. Because second-home buyers by definition do not rent their property to others and instead maintain their units for personal and business use, access to the property is a major influencing factor. At the high end of the market, access by air and even the proximity to small airports serving private planes are important considerations. For most of the market, however, driving time from the owner's primary residence is a pivotal consideration.

Although some second-home buyers choose a multifamily product, most prefer a detached cottage or cabin. In addition, a portion of this market buys a lot in anticipation of building a second home sometime in the future. Some lot buyers are attracted by the quality of a golf course and associated club facil-

ities or other amenities in a private community and purchase property primarily to secure access to private club facilities. Many of these buyers never build.

### **Preretirement- and Retirement-Home Buyers**

The preretiree purchases property with the intent of eventually using it as a retirement home. Typically, the buyer is five to seven years away from retirement. The preretiree may use the property as a second home until retirement, thus making it difficult to distinguish the preretiree purchaser from the second-home purchaser. Even after retirement, many buyers think of their property as a second home if they continue to maintain a home in their place of origin. The mindset of a preretiree, however, differs significantly from that of other market segments.

Preretirees are attracted by a community's recreational amenities but are also concerned about its social fabric. Privacy and security issues assume greater importance in view of the likelihood of buyers' establishing permanent residence in the community. As a result, preretirees are more likely than other segments to buy property in a private community. In addition, while preretirees are more likely to buy in a less established community, they are still interested in climate, the quality of the area's medical facilities, convenience shopping and services, cultural opportunities, the cost of living, and learning opportunities. Some recreational communities position themselves as adult communities and partially target to the preretirement market.

Retiree households are looking for a place for immediate occupancy. Although they may buy a lot and build a custom home, they are typically concerned about the ultimate cost of the home and are drawn to built-for-sale single-family detached homes, model-home products, and resale single-family homes.

### **Primary-Home Buyers**

Primary-home buyers are distinguished from other market segments in that they are either currently employed in the area or planning a move to the area. Most of these households include school-age children and therefore prefer to buy single-family detached homes. Primary-home buyers often make up a large percentage of the buyers in communities targeted to second-home buyers.

Although resort-home markets generally track closely with the economic cycle, their swings are often more severe, creating significant hazards for the resort homebuilder. Careful consumer research is required. Particularly on the demand side, a market

study for a resort or retirement development differs significantly from a traditional market study.

## **Overview of Case Studies**

Four case studies are presented, representing a variety of residential development types and using a variety of methods to analyze the potential markets.

Case study 3.1 is for a multifamily rental project. It illustrates a somewhat different approach to market analysis. The market penetration factor (MPF) method examines the share of demand captured by the local submarket in recent years and applies a factor to projected growth. Unlike other methods, it relies on employment rather than population projections. The overall increase of population, important in some sectors, can be an inaccurate predictor of housing demand—particularly for the multifamily sector, in which most households are childless. Net migration is the component of population growth more important to household formation, and net migration follows patterns in employment growth for all but a handful of cities (mostly resorts or retirement havens).

Case study 3.2, a suburban subdivision, illustrates the simplest type of analysis. In this case, the analysis is used to narrow down a product type and recommend a price range for development of a specific site.

Case study 3.3 illustrates the market analysis for a large master-planned community that includes an age-restricted component. It analyzes each product type separately and explores synergies among the various components. Key factors are identified, including commuting patterns, local taxes, the aging of the targeted population, and the quality of the public schools.

Case study 3.4, a pioneering downtown condominium project, demonstrates the value of focus groups and surveys when no new projects or buyer profiles exist. Around the United States, in major cities and smaller towns, planners and developers have been promoting downtown residential living as a way to bring vitality to urban areas. Some housing markets would appear perfect for new downtown housing, and almost all community leaders think it is a good idea in principle. Indeed, success stories exist. However, in many cities, on-the-ground experience for this product type is nonexistent, creating the classic problem of perceived risk for a pioneering project until proven otherwise.

In such circumstances, market analysis is a critical tool for demonstrating that an innovative concept can

actually work and be profitable. Yet, if the product is pioneering, there are no comparables or tenant/buyer profiles to analyze. Market analysis for in-town pioneering projects must go beyond traditional methods to test consumer acceptance; primary research, such as surveys and focus groups, becomes a critical component of these market studies.

## Notes

<sup>1</sup>U.S. Census Bureau, "New Privately Owned Housing Units Completed, 1968-1999," annual data prepared by the Census Bureau (Washington, D.C., 2000).

<sup>2</sup>NAHB data on lot sizes are for homes constructed on builder-owned lots. Such data do not include custom homes built on lots previously purchased by the homeowner, which tend to be larger than average. Over the previous 20 years,

median builder lot sizes have been as small as 8,200 square feet and as large as 10,125 square feet.

<sup>3</sup>The National Multi Housing Council (NMHC) reports that 22 percent of the nation's existing apartments are found in complexes with 200 or more units.

<sup>4</sup>U.S. Census Bureau, Historical Time Series HH6, Average Population per Household and Family: 1940 to Present (Washington, D.C., December 1998).

<sup>5</sup>U.S. Census Bureau, Construction Reports Series C40, published monthly (Washington, D.C.). The December issue contains year-to-date statistics.

<sup>6</sup>American Seniors Housing Association, *The Seniors Housing Construction Report, 2000* (Washington, D.C.: ASHA, 2000).

<sup>7</sup>Ragatz Associates, Inc., *The American Recreational Property Survey: 1995* (Washington, D.C.: International Timeshare Foundation, 1995).