

AN ADVISORY SERVICES PANEL REPORT

Thornton Colorado



**Urban Land
Institute**

Thornton Colorado

Strategies for the Development of the North Washington Subarea

June 25–July 1, 2005
An Advisory Services Panel Report

ULI—the Urban Land Institute
1025 Thomas Jefferson Street, N.W.
Suite 500 West
Washington, D.C. 20007-5201

About ULI—the Urban Land Institute

ULI—the Urban Land Institute is a non-profit research and education organization that promotes responsible leadership in the use of land in order to enhance the total environment.

The Institute maintains a membership representing a broad spectrum of interests and sponsors a wide variety of educational programs and forums to encourage an open exchange of ideas and sharing of experience. ULI initiates research that anticipates emerging land use trends and issues and proposes creative solutions based on that research; provides advisory services; and publishes a wide variety of materials to disseminate information on land use and development.

Established in 1936, the Institute today has more than 26,000 members and associates from 80 countries, representing the entire spectrum of the land use and development disciplines. Professionals rep-

resented include developers, builders, property owners, investors, architects, public officials, planners, real estate brokers, appraisers, attorneys, engineers, financiers, academics, students, and librarians. ULI relies heavily on the experience of its members. It is through member involvement and information resources that ULI has been able to set standards of excellence in development practice. The Institute has long been recognized as one of America's most respected and widely quoted sources of objective information on urban planning, growth, and development.

This Advisory Services panel report is intended to further the objectives of the Institute and to make authoritative information generally available to those seeking knowledge in the field of urban land use.

Richard M. Rosan
President

©2005 by ULI—the Urban Land Institute
1025 Thomas Jefferson Street, N.W.
Suite 500 West
Washington, D.C. 20007-5201

All rights reserved. Reproduction or use of the whole or any part of the contents without written permission of the copyright holder is prohibited.

About ULI Advisory Services

The goal of ULI's Advisory Services Program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 400 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfields redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's Advisory Services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and screened to ensure their objectivity. ULI panel teams are interdisciplinary and typically include several developers, a landscape architect, a planner, a market analyst, a finance expert, and others with the niche expertise needed to address a given project. ULI teams provide a holistic look at development problems. Each panel is chaired by a respected ULI member with previous panel experience.

The agenda for a five-day panel assignment is intensive. It includes an in-depth briefing day composed of a tour of the site and meetings with sponsor representatives; a day of hour-long interviews of typically 50 to 75 key community representatives; and two days of formulating recommendations. Many long nights of discussion precede the panel's conclusions. On the final day on site, the panel makes an oral presentation of its findings and conclusions to the sponsor. A written report is prepared and published.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, partic-

ipants in ULI's five-day panel assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academicians, representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this Advisory Services panel report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

ULI Program Staff

Rachelle L. Levitt
Executive Vice President, Policy and Practice

Mary Beth Corrigan
Vice President, Advisory Services and Policy Programs

Nicholas Gabel
Associate, Advisory Services

Carmen McCormick
Panel Coordinator, Advisory Services

Yvonne Stanton
Administrative Assistant

Nancy H. Stewart
Director, Book Program

Julie D. Stern
JDS Communications
Manuscript Editor

Betsy Van Buskirk
Art Director

Martha Loomis
Desktop Publishing Specialist/Graphics

Kim Rusch
Graphics

Craig Chapman
Director, Publishing Operations

Acknowledgments

On behalf of the Urban Land Institute, the panel would like to thank the city of Thornton for inviting it to assist in the planning and development efforts for the North Washington Subarea. Special thanks are extended to Jack Ethredge, city manager; Jeff Coder, deputy city manager of city development, Susan Connors, planning director, and the entire staff of the Thornton Planning Sector in the City Development Department. Their countless hours preparing for and assisting the panel were very much appreciated. Their hard work and dedication are a true asset to the city of Thornton.

The panel also would like to thank Mayor Noel Busck and all the political leaders who graciously welcomed the panel into their city: Mayor Pro Tem Jo Thorne and council members Carol Beck-

ler, Rebecca Cavanaugh-Miller, Sheila Fushimi, Ron Kuehn, Steve Lebsock, and Martin Wisniewski. Their commitment and leadership are what make Thornton a truly great city.

The panel also thanks the more than 40 community members—including government officials, residents, business leaders, and property owners—who volunteered their time, thoughts, and experiences during the interview process. Their insights provided valuable information that was critical to the completion of the panel's recommendations.

Contents

ULI Panel and Project Staff	6
Foreword: The Panel’s Assignment and Summary of Recommendations	7
Market Potential	11
Planning and Design	21
Development and Implementation Strategies	29
Conclusion	43
About the Panel	44

ULI Panel and Project Staff

Panel Chair

Richard W. (Dick) Reynolds
President
The Reynolds Group
Needham, Massachusetts

Panel Members

John Hixenbaugh
Zoning Official
City of St. Petersburg
St. Petersburg, Florida

Satyendra S. Huja
President
Community Planning Associates
Charlottesville, Virginia

Glenn Kellogg
Principal
Urban Advisors, Ltd.
Washington, D.C.

Hermann J. Kirchner
Kirchner Research Associates, Ltd.
Toronto, Ontario
Canada

Gary Okerlund
Principal
Okerlund Associates
Charlottesville, Virginia

Jennifer Senick
Principal
J. Senick & Associates
Titusville, New Jersey

ULI Project Director

Nicholas Gabel
Associate
Advisory Services

ULI On-Site Coordinator

Kristen Cochran
Program Coordinator
Meetings and Events

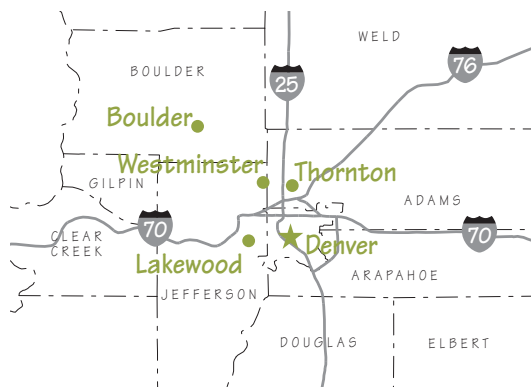
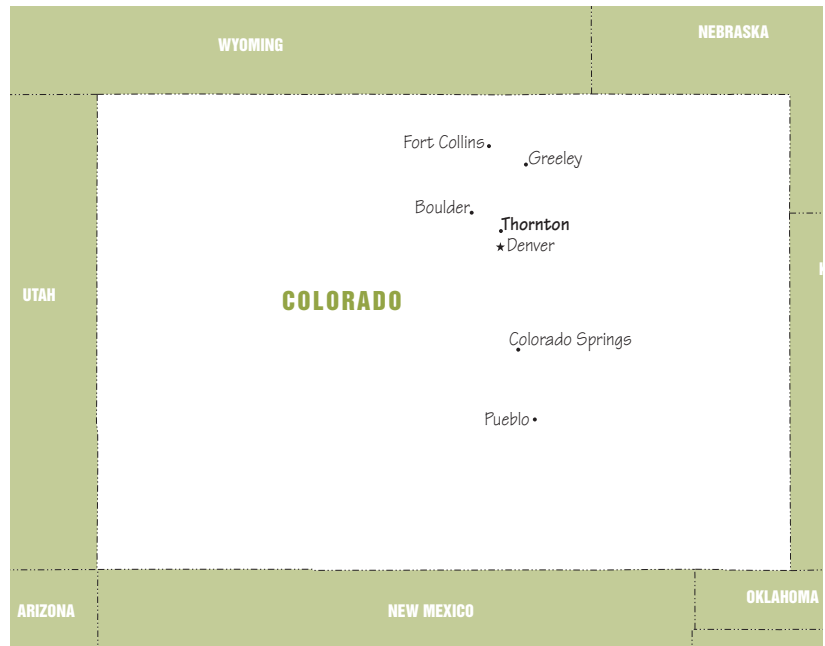
Foreword: The Panel's Assignment and Summary of Recommendations

Thornton is a suburban city located 10 miles north of downtown Denver. With the current population of 111,000 residents expected to grow to more than 250,000 in the next ten years, Thornton is looking to transform itself from a bedroom community to a standalone city. The municipality recently underwent a major public planning process for the approximately 3,800-acre North Washington Subarea, which is located in northwest Thornton. The subarea is envisioned to be the dominant economic generator for growth in the city with a mix of retail, employment, and residential uses.

The Study Area

The North Washington Subarea consists of approximately six square miles located in the northwest quadrant of Thornton. Just less than half of the land currently is within the city limits of Thornton; the rest is in unincorporated Adams County. The site's boundaries are Interstate 25 (I-25) to the west, 128th Avenue to the south, 168th Avenue to the north, and a combination of Washington Street, the Big Dry Creek, and the Union Pacific railroad tracks to the east. The land is primarily vacant or used for agricultural purposes. A limited number of residences are found within the subarea, most in unincorporated Adams County.

The study area has excellent access to major transportation corridors, with I-25 to the west and the E-470 toll road to the north. The new I-25 and 136th Avenue interchange and the proposed interchange at 144th Avenue will significantly improve access to this area. In addition, Thornton expects commuter rail to be extended just to the east of the subarea in the next decade because of the passage of Measure 4A, the FasTrack regional public transportation initiative. This commuter rail line will offer direct access to downtown Denver and the rest of the metropolitan area and also will provide



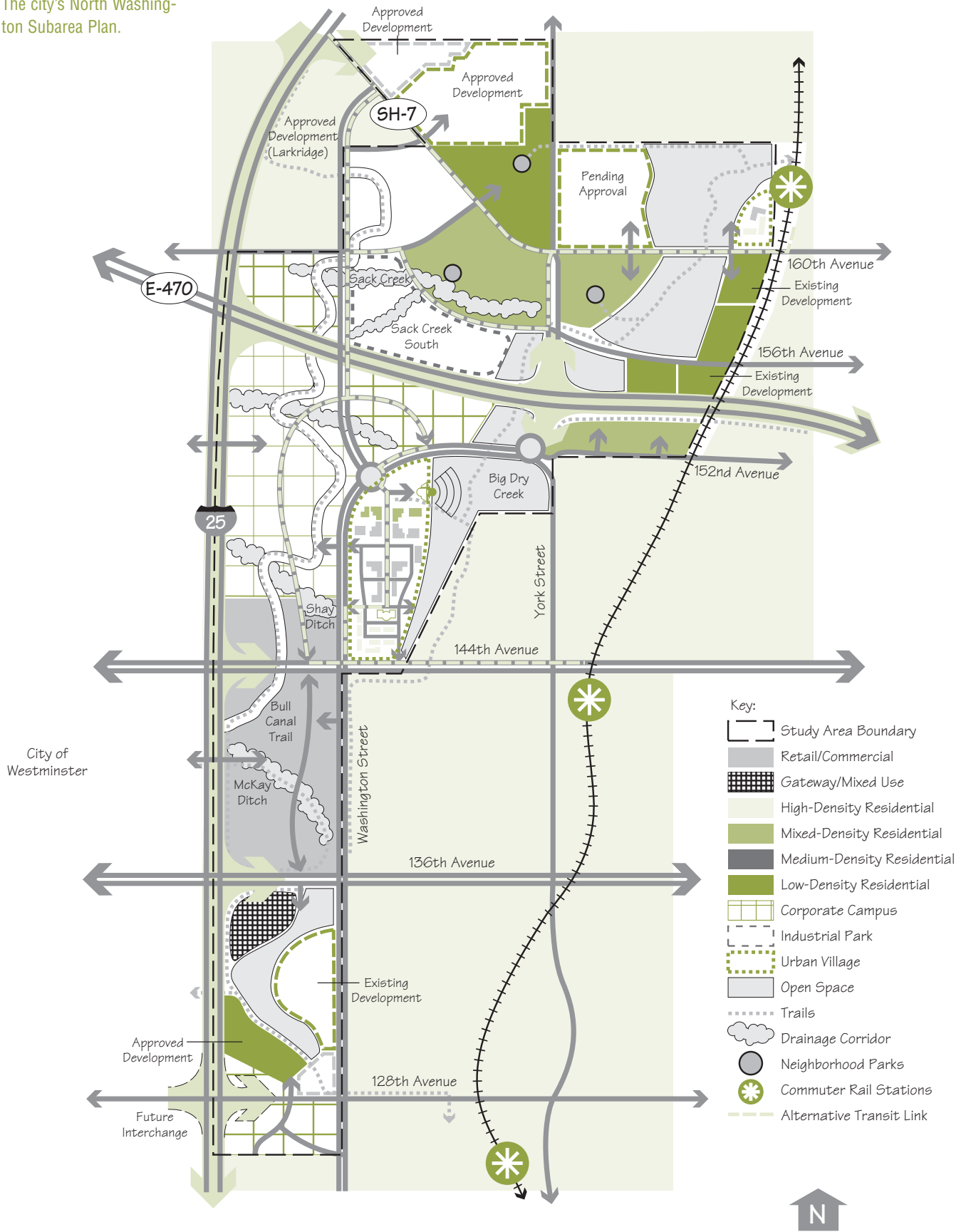
Above: Location map.
Left: Regional map.

an opportunity for transit-oriented development around the three stations slated for Thornton.

The Panel's Assignment

At the invitation of the city of Thornton, a ULI Advisory Services panel convened to evaluate development opportunities for the North Washington Subarea and to ensure that the North Wash-

The city's North Washington Subarea Plan.



ington corridor is positioned with appropriate tools and strategies to realize the vision set out in the existing subarea plan. To help the panel evaluate the plan and make recommendations to strengthen the subarea's position within the market, the city asked the panel a series of questions from four main categories: market potential, planning and design, development strategies, and implementation.

To address market issues, the panel was asked to consider what effect regional economic trends will have on the study area, how the approved land uses will compete in the marketplace, and how the city can create an advantage in the market. It also was asked to suggest refinements to the plan that will increase its marketability.

To address planning and design issues, the panel was asked to provide techniques that can create a sense of place and maintain a sense of attractiveness. The panel also was asked to determine how to preserve the Big Dry Creek, as well as how much and what kind of housing should be incorporated into the study area.

Regarding development strategies, the panel was asked to suggest tools for land assembly, provide techniques to keep infrastructure current within the development area and to guide preferred development rather than let the market dictate it, and provide information on incentives the city can offer to kick-start development.

To address implementation issues, the panel was asked how to entice developers to develop specific products within the subarea. It also was asked to address interim uses within the subarea that do not pose long-term difficulties for the city and the plan, to recommend specific tools that will help guide the realization of the plan, and to help determine whether flexibility within the plan will inhibit its overall vision.

Overview of Recommendations

The city has stated its desire to transform itself from a bedroom community to a standalone city, one in many ways like the "Edge City" described by Joel Garreau in the book of the same name: a place that provides its citizens with the appropriate structure, both financial and physical, to

accommodate long-range growth to 250,000 to 300,000 residents. The North Washington Subarea is a key element in accomplishing that goal, and it must be viewed in light of how its development contributes to the overall city goal and benefits its residents.

In order to respond to the city's request, the panel has organized this report in three primary sections: the market and its influence on the vision; the plan design itself, with suggestions for modifications that the panel believes will enhance the likelihood of success; and development and implementation strategies that the city should put into place to effect the plan.

Any plan of this nature inherently has two major parts: a philosophical concept that forms the basis of the plan and the physical concept that brings the vision to reality. The philosophical concept—becoming a standalone, diverse city—is the "core" that must be kept inviolate. Whatever happens in this area during the many years until buildout must be consistent with the city's vision of maturing into a diverse, standalone city.

Because of the long-term nature of the subarea's buildout process, however, flexibility must exist in how that vision is put into effect, in order to accommodate the market changes that surely will occur during years of economic cycles. Flexibility will be required in terms of retail uses and locations: big-box versus neighborhood centers versus urban village shops versus whatever new idea becomes the economic driver in the future.

In order to help the city shape a framework for this flexibility, the panel suggests that the plan and, more importantly, the mindset that goes with it, redefine corporate campus and industrial uses as "employment centers" and retail uses as "sales tax generators." This will enable planners and others to escape the inevitable perceptions that accompany the current identifiers. "Industrial" and "corporate campus," for example, imply specific differences in what types of businesses they will bring to the city and what the real estate used by those businesses will look like, thus impairing the city's ability to be flexible. What the core vision really seeks in the corporate campus and industrial locations are jobs in the city; those jobs

The new Larkridge retail center will anchor the northern section of the North Washington Subarea by attracting visitors from all over the region to Thornton.



may come from institutional users as well as corporate users. This is discussed in greater detail later in the report.

Addressing the physical concept of the plan—essentially land use allocation and thoroughfares—the panel suggests several modifications based on three organizing ideas: a network of gateways, centers, and corridors. These modifications do not alter the principles of the plan, but rather suggest a different way of viewing its directional orientation, modify the amount of various uses to better conform to the market, establish a significance priority to plan elements, and create an implementation schedule.

For example, the panel suggests that the amount of land devoted to retail uses be modified because it believes that the current plan designates too much land within the subarea for such uses. Without flexibility, much of this land will lie vacant for years, waiting for retail demand to grow. While the panel recognizes the need for sales tax revenue, it believes that holding unmarketable land would be damaging to the city’s reputation, and that the city would lose the opportunity to gain other revenues from uses that will be in demand sooner—such as multifamily residential—which themselves will lead to increased demand for retail.

The history of the past several economic cycles has clearly confirmed that no one can “move the market.” What a city or a developer *can* do is position itself to take advantage of the market through two primary activities. First, in order to be ready to address demand when it occurs, the city/developer should have land assembled, infrastructure in

place, and regulations and approval processes established. This, in turn, satisfies the highest priority of the potential user/developer: certainty of process and timing. A location that can assure the potential user that it can occupy its real estate on a certain date has a huge leg up on the competition. The panel fully understands that financial and political constraints will limit the ability to “be ready” through these activities, but it encourages the city to do whatever it can to do so.

Secondly, and perhaps more importantly, a location needs to be perceived as being ready to accept new development. The establishment of the North Washington Subarea Plan was a great first step in creating the perception that the city of Thornton is ready for development. Based on its discussions and interviews with numerous community members, however, the panel suggests that the city needs to improve the reputation of its approval process. While some of that improvement can be accomplished only by demonstrating through actual projects that the process has improved (word gets around fast), the city also must put into place regulations that will ensure that the process has been streamlined. The panel is not suggesting that the city give up the control that it should maintain to assure high-quality development, but suggests that there are many examples around the country of regulatory processes that serve both sides.

In the Development and Implementation Strategies section, the panel suggests a variety of tasks and methodologies that will help ensure the realization of the plan. One overarching theme, as mentioned above, is to seek out successful examples of development projects, regulatory processes, and marketing efforts and then apply those elements that are appropriate to Thornton. There is no need to reinvent the wheel, with the accompanying costs in time and the chance of not getting it right. The city should use techniques that already have been proven to work.

Market Potential

Planning in the city of Thornton is significantly influenced by the need to generate retail sales tax revenue, which is applicable to all nonautomotive retail sales. Thus market and other location issues, relevant for retailers, are of lesser significance in the city's planning process.

Most large-scale national retailers use sophisticated research programs to identify markets and locations of sufficient size and character for their stores. In readily accessible geographic areas where cities are located close to each other, retailers will choose the sites offering the greatest economic and implementation advantages. These factors include relative land cost, various types of financial subsidies, and a "user-friendly" planning and permitting process. Certainty of performance is of great significance, as are clarity of rules and requirements. A retailer invests significant resources in identifying a location, and any unexpected change during the application process can have long-term negative consequences for a city in terms of indicating that it is "open for business."

Retail expenditures—the purchase of goods and services—on which retail sales taxes apply are directly related to the number of people located in a trade area and their income levels. Other relevant factors influencing the distribution of sales by store type, rather than total expenditures, may include age levels as well as ethnic groups. Building new retail facilities does not increase the retail expenditure level of the trade area population. However, it can influence where such expenditures are made. In other words, building a "better mouse-trap" will capture retail dollars that previously may have been spent elsewhere. Specific stores also will influence geographic expenditure distributions, because sales performance—in terms of sales per square foot—varies widely among stores, ranging from \$100 to more than \$1,000 per square foot. Hence, a 100,000-square-foot store producing sales of \$100 per square foot generates \$10 million

in sales annually, whereas a similar-size store producing sales of \$1,000 per square foot records sales of \$100 million. The sales tax implications are obvious, and should be recognized in the city's marketing efforts.

Retail Markets

While retail is classified as a single category of real estate, it includes a wide variety of different businesses with different requirements and different users. Retail runs the range from satisfying everyday needs—like grocery stores—to providing specialty products. What makes these uses similar is their use of space to make sales to retail consumers.

Some very basic questions occur when assessing retail markets: how many people need what is being sold, how often do they need it, and how far do they have to go to get it? People need to buy groceries often, while they only need to shop for appliances once in a while. Stores like supermarkets with goods that require many visits annually are called high-frequency uses; others, such as appliance stores, are visited less often and thus are considered low-frequency uses. As frequency declines, there typically are fewer shops. In other words, a given market generally will have more grocery stores than appliance stores.

Another basic question in assessing retail markets is how to get people to come to the business, also known as market capture. One answer is value versus time. The store with the highest perceived value given for the amount of time spent getting it will outcompete other stores. This phenomenon is manifested in two ways in retail location. First, a site that is easily accessed by the greatest number of people will be preferred to a site with poorer access. For very high-frequency shopping trips, this means the store that is closest or most convenient to the consumer is likely to gain sales. This is the

retail strategy of convenience markets, in which the price of goods is a secondary consideration.

Second, the site that offers the highest number of benefits to the consumer on each trip will be preferred to sites that offer fewer benefits. In other words, if a consumer can satisfy many needs with one trip—even if the trip takes longer—he or she will make the trip because the “utility” of the experience is perceived to be higher. This is the strategy pursued by a regional mall that includes a wide variety of shops as well as food and entertainment. By doing so, it increases the perceived benefit to the consumer for the cost of the trip. Another example of this utility is when the quality, type of goods, or pricing simply is unavailable elsewhere, thus making the perceived value of the goods or experience more important than the cost of getting there. An example of this is a high-quality restaurant that may be located in an out-of-the-way place but still attracts customers from miles away.

A Changing Retail Industry

Retail consolidation has produced a sameness that has resulted in investors searching for new formats. To capture shoppers, retailers are turning to formats that create unique places integral to their communities. Investors and real estate investment trusts (REITs) now are actively pursuing “main street” and lifestyle centers because each one is unique, but all have a predictable formula for success. The addition of community amenities has become an integral strategy in new retail development. New developments that create a destination with community-oriented amenities accessible to the public increase the amount of time people spend on site. These amenities include pedestrian orientation, plazas, outdoor seating at cafés, and main street design with highly inviting storefronts.

The major national retail trends over the last two decades have been a consolidation of retail businesses into large national chains that dominate their market niches and the emerging dominance of discount retailers. In 2001, discounters captured a 26 percent share of general merchandise, apparel, and furniture (GAF) sales nationally. These stores

include niche outlets found in malls, such as the Gap, and general merchandise outlets—so-called big-box retailers—such as Wal-Mart. The consolidations and the dominance of discounters have had a profound effect on sales in other shopping formats. As fewer stores exercise increasing sales dominance, developers and investors face greater challenges and competition in striking new deals with leading retailers, and centers anchored by weaker firms face increasing challenges to maintain asset value. The dominance of the major firms makes it difficult for large numbers of smaller operators to take root and thrive.

As a result, retailers are looking to new formulas for attracting customers. Investors are shifting to value retail properties whose locations are so special that they can support a diversity of tenants. Among these are mixed-use projects, particularly main streets and destination centers incorporating entertainment and other evening uses. The goal for these new formats is to create a sense of place that people are encouraged to enjoy as they would a public amenity.

Entertainment/lifestyle centers have been emerging as one way for traditional retailers to compete with automobile-oriented big-box retailing, by providing local residents with an attractive pedestrian environment and more easily accessible services. These centers act as destinations rather than as outlets, and contain amenities such as cafés and public space that encourage patrons to linger. Typically, these centers rely on a multiscreen cinema as one of their anchor tenants, along with other evening uses. Because of the varied requirements for retail success, however, insisting on a uniform retail mix for mixed-use projects can result in unsuccessful projects or can raise developer risk so high that projects will not be undertaken. A mixed-use strategy that recognizes these limitations will result in stronger projects as well as better retail facilities and services for residents.

The implications for retail development are several. First, scattered, low-amenity retail sites will have an increasingly difficult time competing. Second, creating more concentrated sites with amenities will require infill development in low-density locations and the provision of sufficient public amenities to make the trip and the location worth-

while, as well as more pleasant than other competing centers.

The Retail Structure

The retail industry is very diverse and is known for constant change and evolution. The following are definitions of the various retail formats applicable to the city of Thornton, as well as the panel's views and recommendations on their viability in the North Washington Subarea.

Regional Retail, Traditional Format

Enclosed regional malls—usually anchored by several department stores—were the favored built form for regional retail facilities between 1960 and 1995. They typically ranged between 500,000 and 2 million square feet in size. In recent years, however, such developments have become rare. Today, the development of enclosed regional malls essentially has ceased, with rare exceptions. One of the exceptions is a type of project developed by the Mills Corporation, which combines elements of different types of shopping centers—including mid-sized big boxes, factory outlets, and fashion malls—with a large entertainment component. Often referred to as “shoppertainment,” these developments require a very large market area, approximately 1 million people. One of these malls, Colorado Mills, is currently located in the Denver market.

The other major constraint on the continuing development of enclosed malls is the shrinking number of department stores—their traditional anchors—resulting from retail industry mergers. For these reasons, it is unlikely that an enclosed regional mall can be attracted to the city of Thornton within the planning period for the North Washington Subarea.

Regional Retail, New Format

New-format regional retail consists of the development of power centers and freestanding big-box stores. Some of the reasons for the rapid growth of this retail format are the absence of traditional mall development, their relatively lower development cost structure, the preference of major retailers to own their own real estate—which facilitates changes in merchandise assortment, something that is controlled or restricted in traditional malls—and changing customer preferences. The growth of retail formats into megastores with a very large as-



Planning director Susan Connors explains the significance of the Larkridge retail center to panelist Satyendra S. Huja.

sortment of merchandise invites one-stop shopping, which is made even more attractive by abundant nearby parking.

In the city of Thornton, one such new-format power center, Larkridge, has been approved and is now being developed. It is expected to include up to 2 million square feet, in two major phases of 1 million square feet each. The initial development of the first phase, currently under construction, totals just over 500,000 square feet. It will include the city's second Home Depot and a Sears Grand, a new-format Sears store combining many of Sears's merchandise offerings under one roof. The Sears Grand format is being selectively test marketed in half a dozen markets across the United States. The fact that Thornton was chosen as one of these test markets speaks to the available and growing retail market area that can be served from the Larkridge location.

Regional power centers usually are anchored by at least two big-box stores of more than 100,000 square feet each. There is a limited number of such retailers, although new ones appear from time to time and old ones occasionally cease operation. Thornton's proximity to several other cities, particularly Westminster and Broomfield, means that big-box stores located in one of these cities can serve all three, as well as rural areas to the north and west. Most of these retailers can serve these markets with two or three stores. A cursory review of the location of stores such as Home Depot, Wal-Mart, Target, Lowe's, and so forth suggests that most of the market is or will be well served with such big-box stores in the near future. This observation—and the fact that Larkridge

Figure 1
Comparable Retail Development in the Region

Project	Location	Acres	Square Feet
1 Alberta Project	168th Avenue and I-25	120	1,000,000+
2 Aurora City Place	I-225 and Alameda Avenue	70	550,000
3 Aurora Mall	I-225 and Alameda Avenue	110	1,100,000
4 Flatiron Crossing	Highway 36 and Flatiron Circle	140	1,400,000
5 Flatiron Marketplace	Highway 36 and 96th Avenue	70	432,000
6 Larkridge	I-25 and Highway 7	130	1,200,000
7 Northfield at Stapleton	Highway 270 and Quebec Street	120	1,200,000
8 Northglenn Marketplace	I-25 and 104th Avenue	70	660,000
9 Orchard at Westminster	I-25 and 144th Avenue	107	1,200,000
10 Shops at Centerra	I-25 and Highway 34	80	700,000
11 Shops at Walnut Creek	Highway 36 and Church Ranch Road	68	500,000
12 Thorncreek Crossing	120th Avenue and Washington Street	43	392,100
13 Thornton Town Center	I-25 and 104th Avenue	70	600,000
14 Westfield Shopping Center	92nd and Sheridan Boulevard	52	375,000
15 Westminster City Center Marketplace	92nd and Sheridan Boulevard	65	350,000

still can accommodate an additional 1.5 million square feet of power center space—leads to a preliminary conclusion that the development of another regional power center in Thornton is unlikely within the planning horizon for the North Washington Subarea.

A few large-scale retailers such as Costco, Ikea, and Bass Pro Shops—as well as some movie theatre chains—are not currently present in Thornton or adjacent cities. Some of these operate in power centers as well as on freestanding sites. The panel understands that Costco presently is negotiating with several developers and may soon select a location in the area. The city of Thornton may be able to influence Costco’s location choice by extending the welcome mat to entice the company to locate there. The city should do this, because a Costco in Thornton will generate \$100 million in regional retail sales. Other market-unique retailers would have to be pursued with diligence and relevant market background information, as they likely are being courted by several other cities near Thornton. Such retailers may be suitable for some of the designated retail areas within the subarea that feature superior regional accessibility. Each would require between five and 30 acres.

Some 15 major existing and/or planned retail developments can be found in the market area that includes the city of Thornton. Figure 1 lists each of these developments and their major tenants, while their locations are identified on the map on page 16.

Regional Retail, Mixed Use/Entertainment

Several other regional retail/commercial activities should be considered in addition to traditional malls, power centers, and freestanding big-box stores. The city of Thornton has no modern entertainment/activity center and few restaurant destinations. For example, the city has no ice-skating rink or modern movie theatre. A standard planning ratio for movie theatres is one screen per 10,000 people. On that basis, and recognizing the time lag between the completion of such a facility and the rapidly growing population base, the panel considers a 12- to 16-screen movie theatre a realistic goal for Thornton. The location of the existing and proposed multiscreen AMC Theatres near the city boundary with Westminster obviously should be considered. Furthermore, radius restrictions that regulate the number of first-run movies playing in theatres in close proximity

Anchors	Status
None yet signed	In development
Target, Barnes & Noble, PetSmart, Linens 'n Things, Pier 1, Ross, Sportsman's Warehouse	Open
Foley's, JCPenney, Sears	Open
Dillard's, Nordstrom, Foley's, Dick's Sporting Goods	Open
Best Buy, Linens 'n Things, Nordstrom Rack, Office Depot, Pier 1	Open
Sears Grand, Home Depot, Pier 1, Bed Bath & Beyond, Daveco	Under construction
Bass Pro Shops, Target, Foley's, Harkins 18 Screen Cineplex	Under construction
Lowe's, Ross, Office Depot, Mervyn's, Old Navy, Gart Sports, Borders	Open
JCPenney, Foley's, AMC 12 Cineplex, Target	In development
Barnes & Noble, Best Buy, Dick's Sporting Goods, Foley's	Under construction
Target, restaurants	Open
Target, OfficeMax, Barnes & Noble, Pier 1, Cost Plus World Market, Michaels	Open
Wal-Mart, Home Depot, Gander Mountain, Gordmans, Regal 6 Cineplex	Open
Best Buy, Gart Sports, Office Depot, PetSmart, Wal-Mart, Wild Oats	Open
Barnes & Noble, Circuit City, DSW, Gordmans, Michaels	Open

also may play a role in such a theatre's location in the city.

Much can be learned from similar projects that have existed for some period of time. One nearby example is the Promenade in Westminster, which includes, among other uses, a privately financed development of about 230,000 square feet comprising an AMC 24 Theatre as its major tenant, a Dave and Buster's restaurant/entertainment establishment, numerous other restaurants, and a bowling alley. An adjacent ice arena with three rinks, owned by the city of Westminster, as well as an adjacent 264-room Westin Hotel with 50,000 square feet of meeting/convention facilities that also are owned by the city, complements the overall development. The Promenade's amenities include a water feature, sculptures, and extensive landscaping as well as ample free parking.

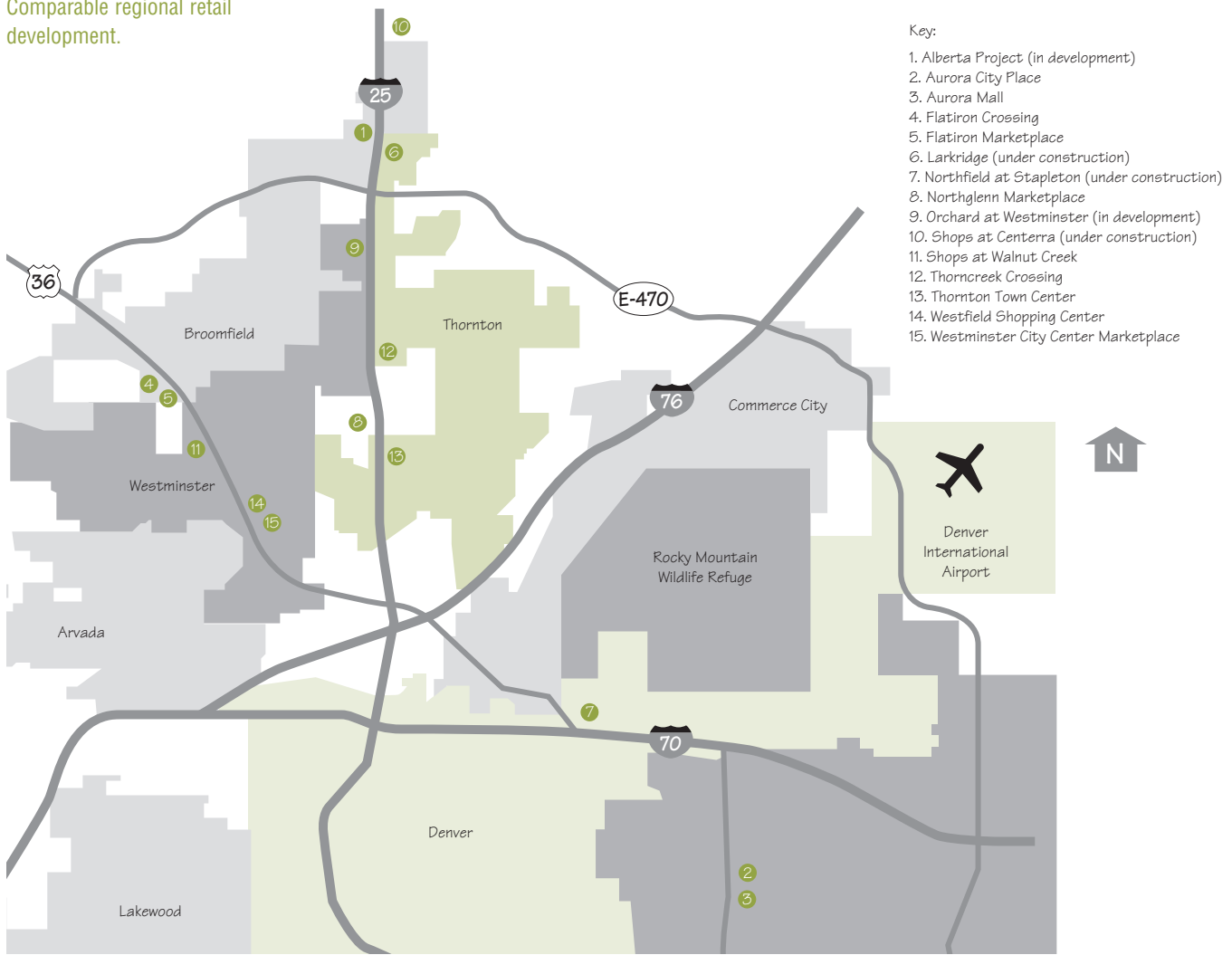
High-quality regional retail, in the form of specialty retail stores and services, also is appropriate for the subarea's proposed urban villages, particularly if such stores are developed in lifestyle centers. The retail component of a typical lifestyle center consists of high-quality retailers such as Pottery Barn, Crate and Barrel, Ann Taylor, and

others. Entertainment and dining options include movie theatres and restaurants such as Wolfgang Puck, the Cheesecake Factory, and PF Chang's China Bistro. Lifestyle centers are by definition open-air, pedestrian-friendly places. Their typical market is upper-income customers, a market segment that appears to be growing in the northern section of Thornton. Lifestyle centers may be multilevel and can include office space and/or residential units. On-street parking is encouraged, but most parking is located on the periphery of the center, occasionally in structures. Lifestyle centers also require superior architectural treatment and extensive landscaping.

Community Commercial

Community commercial development tends to be centered around supermarkets, drugstores, financial services, personal services, and convenience stores. Such projects are totally dependent on the nearby population base—people who live within a one- to three-mile radius—and tend to range in size between 100,000 and 150,000 square feet. Several of these centers will be established in the proposed residential areas approved in the northern portion of the North Washington Subarea. A typical guide for the scale of these facilities is the su-

Comparable regional retail development.



permarket service ratio of 3.0 square feet per capita. Thus, a 30,000-square-foot supermarket will serve a population base of about 10,000 people. Overlapping trade areas will benefit the local population by fostering supermarket competition. Since the new population areas are well known, community commercial designations can easily be predetermined to avoid duplication and inefficient operations.

Convenience Commercial

Convenience commercial developments consist of a variety of small retailers and services, including convenience stores, banks, and restaurants/fast-food outlets. These facilities can fit into almost any type of development as complementary uses. There should be few locational restrictions on such uses, but their total size should be restricted.

Streets and Retail Typology

Street configuration plays a role in determining the feasibility of uses by supporting or limiting the

type of retail that will succeed in a given location. All retail requires high traffic volumes, visibility, and easy access. Accommodating these business requirements while providing amenity-rich environments involves interactions between the street design and the buildings that adjoin the street. If Thornton is going to be successful in creating retail centers that differ from typical highway commercial strip and big-box centers, the city must establish an appropriate hierarchy of streets that will support higher-intensity uses.

Development Orientation

There is a clear relationship between the speed of traffic along a street and the nature of development on that street. While determining which of these is the causative element is a bit like the question of the chicken and the egg, the relationship is quite evident. Fast traffic is found on streets with large building setbacks and large separations between buildings, while traffic is calmer on streets where buildings are close to each other and to the street. In fact, building-to-building dis-

tance and street width are more significant than street width alone in reducing traffic speed. Obviously, high-speed traffic and widely spaced buildings create an environment that is less attractive to pedestrians than slower traffic and buildings that are closer together. Incidentally, a pedestrian-friendly environment is not necessarily at odds with efficient traffic flow, since higher traffic speeds do not guarantee greater throughput. Studies have shown that the most efficient speed for traffic throughput is about 30 miles per hour, which happens to be a speed conducive to lifestyle or main-street retail uses. Different street configurations favor different retail typologies.

Big-Box and Highway Commercial

High-volume, high-speed traffic favors widely spaced businesses that rely on the capture of passing traffic. Since sight times are short, signs must be large and visually prominent to compete for driver attention. Large frontages and setbacks are needed to give drivers time to see and access these businesses. Such big-box development configurations require standalone destinations that increase the economic utility of visits by offering a wide selection of goods under one roof.

Main Streets and Lifestyle Centers (Urban Villages)

High-volume, moderate-speed main streets with on-street parking allow businesses to aggregate to create and capture pedestrian traffic. Slower traffic speeds allow smaller facade signage since sight times are longer and drivers have time to see and access businesses with shorter, pedestrian-oriented frontages. The aggregation of a wide variety of businesses in a short, six- to 12-block distance of 1,200 to 2,400 linear feet produces a diverse and economically viable business environment by creating a retail or commercial destination. One strategy to create a unique regional attraction at Thornton's urban village centers is to provide appropriate street designs that will support an amenity-rich environment.

Main streets tend to draw customers from an entire region rather than a limited trade area. They are authentically public, active places where people can enjoy watching other people because they

are not in cars. They are visually interesting, with attractive, diverse facades and places to sit. As a result, main streets have the highest rents in the market and tenants are glad to pay these high rents. According to the Urban Land Institute ("Raising the Bar," *Urban Land*, February 2003) U.S. regional shopping centers averaged sales of \$220 to \$230 per square foot in 2002, while high-end retailers in new town centers consistently earned more than \$350 per square foot.

Expensive paving, trees, benches, street furniture, and overly wide sidewalks are not necessary to provide a lively and rich environment. The most important elements for businesses and pedestrians are on-street parking; an economically viable mix of businesses; high-quality, well-maintained, 25-to 30-foot-wide shopfronts; and moderate traffic speeds with easy street crossings and minimal building setbacks. Traffic counts should be between 9,000 and 20,000 trips per day to support retail uses.

As the urban villages are designed in further detail, Thornton should remember that most successful pedestrian-oriented retail streets have the same characteristics, including the following:

- Strong market support from the primary trade area;
- "Double-sided" retail with buildings that meet the sidewalk;
- Automobile speeds of no more than 25 to 30 miles per hour;
- Continuous street frontage without curb cuts along the block;
- A center of activity between three and six blocks long;
- Short, articulated shopfronts (20 to 30 feet long) that allow window shopping;
- Walkable street widths of no more than four lanes, with parking along sidewalks; and
- Arterial intersections in which a parking lane ends to allow for a turn lane.

Leveraging Opportunities

Real estate developers are not the enemy, but rather are an ally in reaching common goals and an important agent for change. To this end, Thornton must develop a working relationship with the local real estate industry and determine where the government must participate to create development opportunities. To make property marketable, the city may need to intervene by assembling parcels into sites large enough to develop, clearing sites, improving land, and remediating environmental issues. Public participation in the planning process can generate a mandate to implement development visions.

Retail

The panel considers the function of the northern portion of Washington Street to act more as a connector among various planned land uses than as a corridor. The panel's modified land use plan, particularly for proposed future regional retail facilities, is organized on an east/west alignment, dependent on interchanges at 136th and 144th avenues with I-25. These interchanges provide regional accessibility. Viewed in this context, the parcels of land immediately to the north and south of 136th and 144th avenues, between Washington Street and I-25, become prime new future regional retail locations.

The amount of land currently designated for future retail development in this general area, comprising some 341 acres, is substantially more than any future demand that can be identified. Some of these areas—outside those adjacent to 136th and 144th avenues—should be considered for other uses for which future demand can be determined. A comprehensive, empirically based retail demand study relying on extensive consumer research should be undertaken in order to quantify the real future regional retail space demand—that which will generate net increases in retail sales tax rather than transfers of sales.

Residential

The area continues to have a strong housing market, and developers are interested in the opportunity to build higher-density residential units. Allowing a mix of residential and retail uses will provide desirable amenities for residents who, in

turn, will become a primary market for new retail. While the demand for retail is limited, it is important to allow additional residential uses to further support and increase the local spending power.

Employment Center

In parts of the region where commercial space currently is experiencing high vacancy rates, the market for new office and flex space is particularly curtailed. Thornton is not well positioned to capture general office uses in the short term, since established clusters already exist on the U.S. 36 corridor. Space near the I-25/I-70 interchange is particularly desirable for warehousing and distribution uses because of the highway access and growing demand for manufacturing and distribution uses in the county.

While much of this use category may be inappropriate for the city's vision, many light industrial uses could be surprisingly acceptable. In other regions, the nature of industrial space users is changing and light industry is becoming increasingly compatible as a transitional use between highway commercial and neighborhood retail and residential uses, since business practices are less of a nuisance and may be incorporated into more urban, pedestrian-friendly neighborhoods. By regulating the design standards of acceptable buildings rather than the employment category permitted, the city may be able to capitalize on the market for these employment uses while preserving the envisioned neighborhood character.

The city also has an opportunity to build on its existing cluster of medical uses. Health-related and medical industries are on the rise throughout the country, and Thornton has become the center of this activity in the north Denver region. The city should research the network of associated industries, which may include assisted-living, medical research, biotechnology, and educational institutions. Like other businesses, these users will be attracted by high-quality residential products and amenities.

Hotel

In addition to retail and commercial, other non-residential land uses will form part of the North Washington Subarea development. Some of these facilities can serve not only the city of Thornton,

but also the entire region. As such, they also will attract additional retail expenditures. Nevertheless, the main purpose of these developments should be to facilitate the city of Thornton's maturation from a bedroom community to a multifunctional city.

Premier national hotel chains only pursue locations in cities with more than 3 million square feet of occupied office space. To support each hotel room requires 3,000 square feet of occupied, Class A office space. Many regions may meet the requirements to support a hotel, but may not acquire one because the office space is distributed regionally. Hotels also will locate at tourist destinations or in areas associated with regional hospitals. If Thornton succeeds in attracting a new regional medical district, another hotel may be feasible.

Demand may exist for a business hotel at the interchange of I-25 with 136th or 144th avenue. This hotel likely should have between 200 and 300 rooms, depending on the operator's market view, and conform to a mid-level rather than a luxury room-rate structure. To support its function as a business hotel, it should provide 20,000 to 50,000 square feet of meeting room/convention facilities. These preliminary recommendations need to be supported by more specific market research and discussions with potential operators and investors. Many major hotels are financed by investors but operated by well-known brands.

There also may be an opportunity to develop a boutique hotel as a component of one of the proposed urban villages. Such a hotel may be smaller in scale—with only 50 to 100 rooms—and geared to demand from the local urban village and nearby residential and small-scale commercial activity. Its amenities and overall offerings will depend largely on the type of village concept that is implemented.

Educational Facilities

As the North Washington Subarea develops, demand will arise for different types of high schools and junior high schools. The size and location of these will be chosen by the school districts and, to some extent, will depend on the residential population, the number of school-age children, and local requirements.



As the city continues its rapid growth—and certainly by the time its population reaches 150,000 people—demand will arise for additional higher institutes of learning. These could include technical colleges, a local university, or a branch campus of a major university. The type of higher education offered by such facilities may support the attraction of new businesses to the proposed employment center.

The availability of an additional specialized college or university campus could play a significant role in attracting new employers to Thornton. The city therefore should consider taking a proactive approach to seeking such a facility. Depending on the courses and degree choices offered, an educational facility could well attract people from outside Thornton, who undoubtedly would contribute to local retail sales as well. Placing such an educational facility within the employment center could benefit both students and employers.

Institutional Establishments

The most suitable institutions for the subarea would be those related to hospitals and medical care facilities, as the region's and the Denver metropolitan area's growing numbers of older residents will require a large number of additional services in future years. In order to differentiate such institutions from those currently available in the city of Thornton—or those existing and proposed in adjacent cities—research is

The neotraditional homes at the Bradburn development in Westminster set a precedent for higher-density residential development in Thornton.

required to identify the specialties that Thornton is most likely to attract. The panel recommends an emphasis on specialist rather than general medical facilities, in order to differentiate Thornton's facilities from those available elsewhere. This emphasis also should result in well-paid jobs. Depending on the type of medical facility chosen, this institution could influence the new educational facilities discussed above.

Unique Regional Attractors

No developed regional attractions differentiate the city of Thornton from neighboring suburban cities. Some prospects exist to develop the Big Dry Creek into a regional attractor beyond a local park or green space. Doing so will require some original thinking, and the city should consider holding a design competition for the central portion of the Big Dry Creek to bring attention to the area and explore a number of ideas.

A regional attraction not only could change the perception and reputation of Thornton; it also could be beneficial in terms of attracting residents

and visitors, all of whom would spend money in retail establishments, money that would not be available otherwise. The list of regional attractions worth further investigation includes the following: museums focusing on themes such as history, agriculture/farming, Native Americans, children, and railroads; cultural facilities such as art galleries, live music venues, and spaces for plays and other performing arts; and sports venues such as an ice arena, skateboard parks, basketball and tennis courts, a velodrome, and soccer, football, and baseball fields.

There clearly is no shortage of regional attraction options for the North Washington Subarea. All are worthy of further investigation to determine if a market exists for their realization. Many require extensive land areas, of which there is no shortage in the subarea. The overall purpose of creating a regional attractor is to put the city of Thornton on the map.

Planning and Design

Planning and design are important elements in the development of the North Washington Subarea. This section covers in detail the land use plan and suggested modifications; a suggested network of centers, corridors, connectors, and gateways; land use and zoning issues; and a variety of land use and design recommendations, including design guidelines and quality control, ways to communicate the city's vision, identity and image, and green development.

The city of Thornton is to be commended for having established an appropriate and realistic vision for the regional center planned for the North Washington Subarea. For the long-term sustainability of Thornton as a self-sufficient, full-service city, the area must be developed with a mix of major employment, retail, high-density residential, and mixed-use lifestyle uses. Without a commitment to secure these types of developments within this part of the city, Thornton will continue to rely on neighboring communities to provide what could be its share of jobs, retail options, and activities. Furthermore, since the size of the city and its growth area are limited, failure to achieve the desired goals within this planning area may result in the inability to recapture the opportunities it presents at any point in the future.

The Study Area

The North Washington Subarea covers 3,830 acres and is equivalent to 20 percent of the city of Thornton's total land area. Seventeen hundred acres of the subarea are in the city of Thornton; 2,130 acres are in unincorporated Adams County. The area contains 1,288 parcels ranging in size from 0.16 to 290 acres. The subarea's current estimated population is 1,639. These people reside in 579 dwelling units, most of which are located in the Rolling Hills subdivision in the subarea's southwestern corner.

Currently, the subarea consists primarily of vacant land, with some low-density development, oil and gas wells, farmland, and a major environmental asset in the Big Dry Creek. A large big-box shopping center, Larkridge, already is under construction in the subarea, which has excellent highway access and can be reached from I-25, State Highway 7 (SH-7), and E-470.

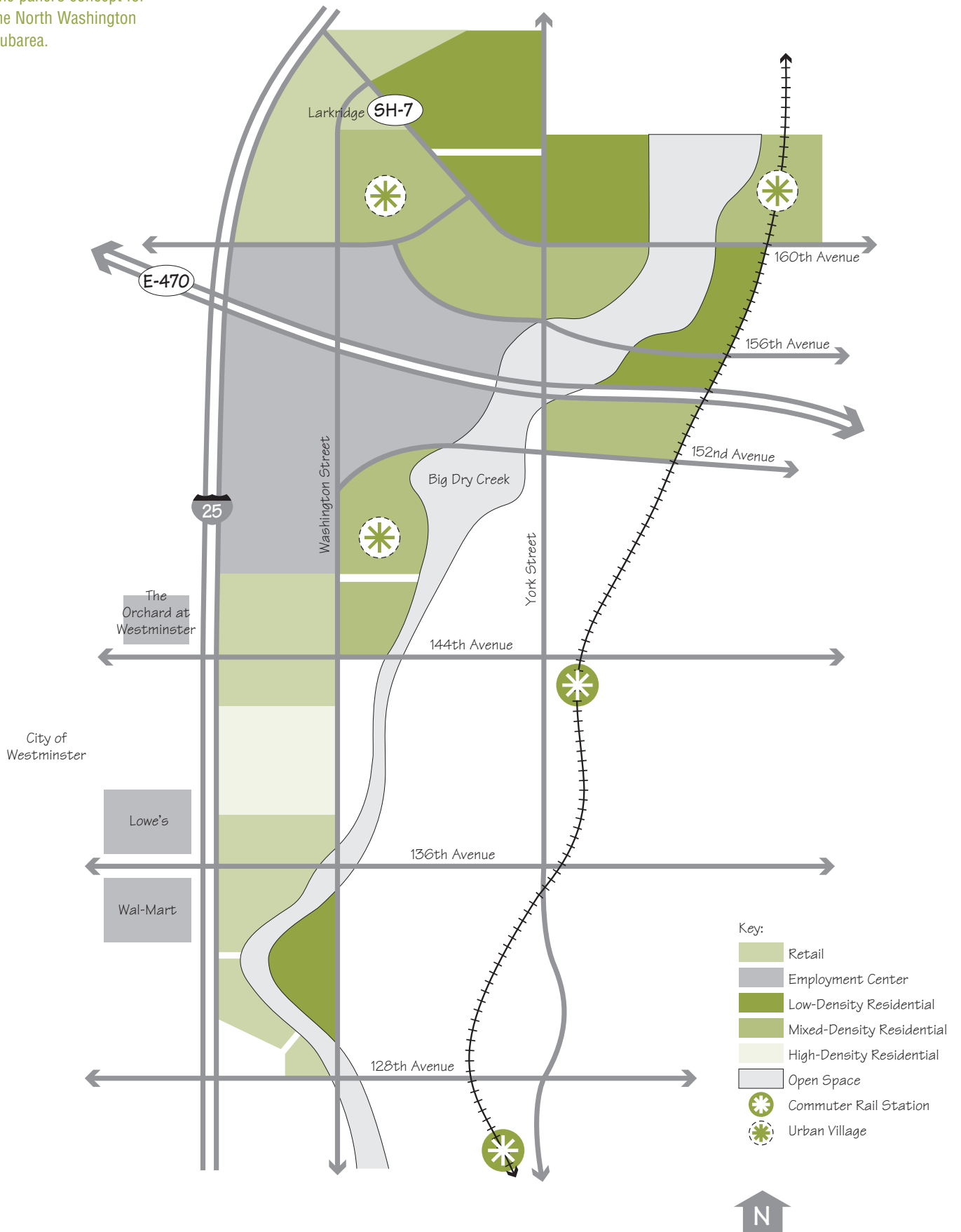
Land Use Plan: Suggested Modifications

The land use plan for the North Washington Subarea provides a strong, publicly supported foundation for the subarea's development. It has all the appropriate land use categories needed to make this a diverse and economically viable area. In light of market analysis, however, it is evident that the proposed plan calls for too much retail development and not enough high-density housing. The panel therefore recommends the following land use modifications for the city's consideration. These changes will further strengthen the land use plan and increase the likelihood of its successful implementation.

The North Washington Subarea currently consists of mostly vacant agricultural land.



The panel's concept for the North Washington Subarea.



Northwest Quadrant: From Retail to Mixed-Use Urban Village

The plan allocates 124 acres adjacent to the Larkridge development for retail and high-density housing. This is a critical transitional use of land. The land uses in this part of the subarea need to be supportive of the Larkridge development. The panel believes that a mixed-use urban village concept should be explored for this site. This land use designation would allow a variety of higher-density housing types and retail supportive of Larkridge. The development of this part of the subarea also will build on already approved residential development sites in adjacent areas.

Southwest Parcel: From Retail to High-Density Residential and Retail

The city's land use plan designates the 235-acre parcel of land between 144th and 136th avenues, adjacent to I-25, for retail use. It is highly unlikely that sufficient demand for so much retail will arise in the foreseeable future. At the same time, significant demand does exist for high-density housing, which will support retail and commercial development in the area. Thus the panel recommends that a significant portion of the middle of this block be designated for high-density residential uses, which will allow market forces to proceed in an orderly manner. It also recommends that higher-density areas allow at least 40 units per acre and that retail areas allow a floor/area ratio (FAR) of at least 2.0. This change will focus on the retail development fronting 144th and 136th avenues, which are logical locations for retail on the east side of I-25 and a logical extension of retail to the west of it.

Expanded Employment and Institutional Center

The city's plan designated the parcels located immediately north and south of E-470, east of I-25, as an industrial and corporate campus. These parcels comprise approximately 689 acres and are highly visible from I-25 and E-470. They provide a significant opportunity for employment in the city of Thornton. Market analysis shows that the demand for offices is very limited, although some demand will exist for industrial uses in the future. The city of Thornton needs employment opportunities for its citizens. The panel believes that the city must be flexible in order to successfully pro-



vide these opportunities. For this reason, it recommends that this whole area be redesignated as an “employment center” that could include a variety of job-creating entities, including institutional as well as corporate offices. This type of development will require aggressive marketing, as well as incentives for developers. The city will need to take the lead in land assembly and may have to make infrastructure improvements to make these properties attractive to developers.

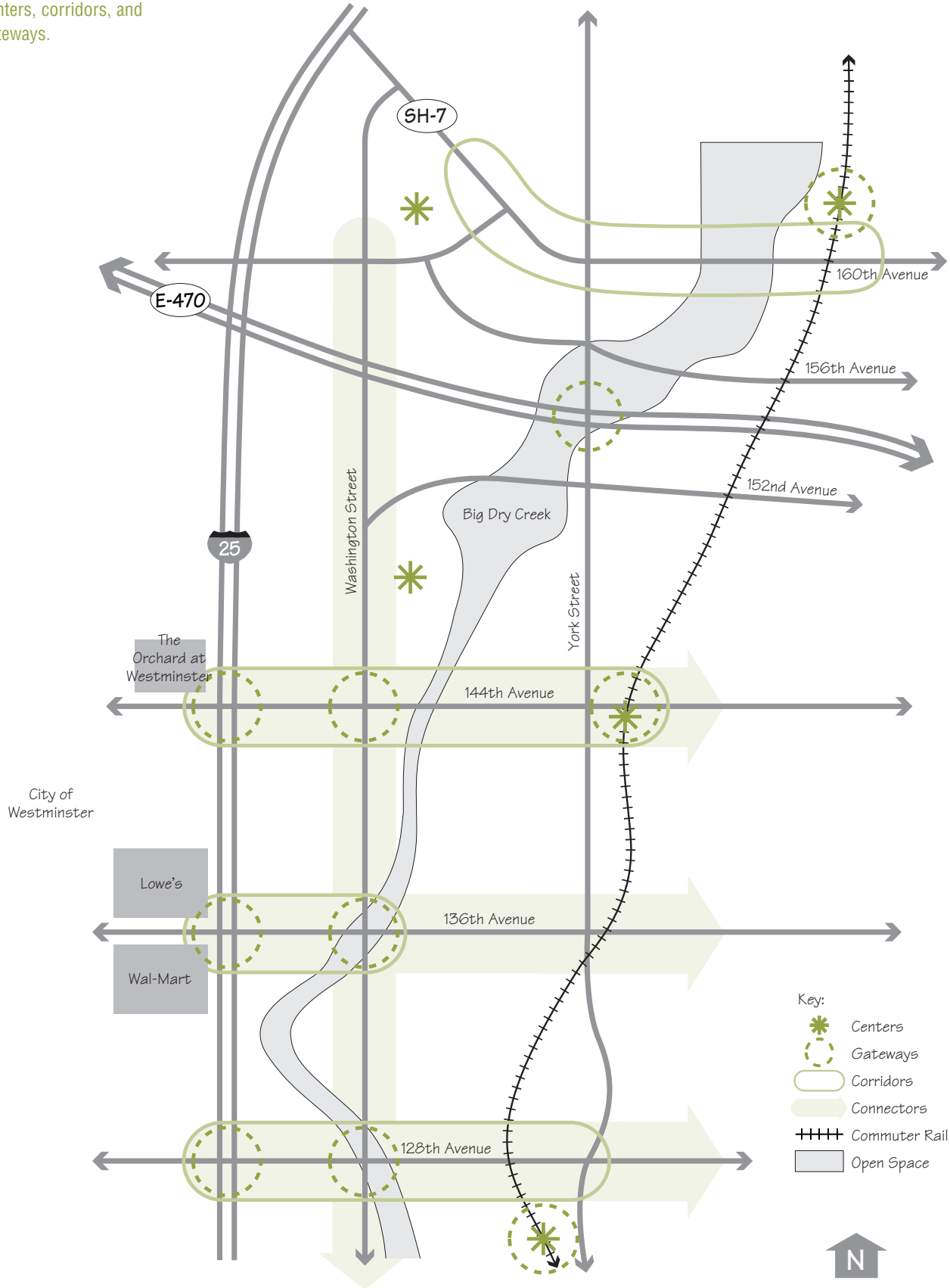
Centers, Corridors, and Gateways

While it is important to determine the location and range of uses projected for individual plan areas and their interrelationships, a large part of a community's image and identity is influenced by its network of centers, corridors, and gateways, which also help people orient themselves within the community. Centers—as distinctive places—provide focal points and serve as activity magnets for the community. These centers can be linked by corridors, which provide activity and character as well as a means of vehicular and pedestrian circulation. Gateways—as entrances to the community—often are components of corridors. They announce one's arrival into the community and set a visitor's initial impressions of it. The stronger and clearer this network is, the more positive the image that is projected.

The panel suggests that the orientation of the plan and, more importantly, the mindset of those work-

The current North Washington Subarea Plan designates too much land for retail uses. Thornton will have a difficult time attracting retailers to the area because construction of projects such as the new Lowe's already has begun in a number of locations within the I-25 corridor.

Suggested network of centers, corridors, and gateways.



ing with it, be in an east/west direction rather than a north/south one. Thus, 128th, 136th, 144th, and 160th avenues and SH-7 become the subarea's key corridors and the crossings over I-25 become gateways. In this orientation, Washington and York streets become connectors for these development corridors and centers. A primary reason for this reorientation is that the land along the avenues will be developed first because of its easy freeway access and its connection to Westminster.

In the North Washington Subarea, this network should include the following, as shown on the suggested network of centers, corridors, and gateways plan on the facing page.

Important Centers

The panel has identified the following areas as important centers within the subarea:

North Urban Village. This urban village should serve as a focus for an evolving retail and higher-density residential area.

Central Urban Village. This center will be a highly visible activity area near the 144th Avenue gateway, adjoining the Big Dry Creek.

Transit-Oriented Urban Village. This urban village will contain both access to transit—with the advent of commuter rail—and a link to SH-7.

128th and 144th Avenue Transit Stops. These transit stops will provide locations for additional potential transit-oriented development with the advent of commuter rail.

Important Corridors

The panel has identified the following streets as important corridors within the subarea:

State Highway 7 Corridor. This corridor will link the North Urban Village and the Transit-Oriented Urban Village, including a connection with York Street.

Washington Street Corridor. This corridor, which is Thornton's main street, will connect the North Urban Village to the gateways at 128th, 135th, and 144th avenues to the south.



Top: The attractive streetscape on 136th Avenue provides a welcoming entrance into Thornton. Above: With the development of the Central Urban Village, Washington Street will need to be significantly improved to accommodate more traffic and promote a pedestrian-friendly environment. Left: The expansion of the Fast-Track system into Thornton will be an asset for current and future economic development.

The North Washington Subarea of the future will no longer resemble its current rural typology.



128th Avenue Entrance Corridor. This corridor will connect gateways at I-25 and Washington Street with the 128th Avenue transit stop.

136th Avenue Entrance Corridor. This corridor will connect gateways at I-25 and Washington Street with major retail development to the west.

144th Avenue Entrance Corridor. This corridor will connect gateways at I-25 and Washington Street with the 144th Avenue transit stop.

Important Gateways

The following areas have been identified as important gateways into the subarea:

128th, 136th, and 144th Avenue Gateways. These are major entrances to Thornton from I-25 and the west.

E-470 and York Street Interchange. This major gateway from E-470 provides access to the Big Dry Creek.

The City's Comprehensive Plan

While the panel commends the city for its vision, the panel also finds that the plan could be revised to secure greater development opportunities than may have been thought possible. After considering the Denver metropolitan area real estate mar-

ket, the opportunities presented by the area, and the substantial public input provided by the North Washington Subarea planning process, the panel believes that the city should consider making some changes to the land uses, allowable floor/area ratios (FARs), and densities prescribed by the North Washington Subarea Plan. These changes have been described earlier in this document and are further outlined in the regulatory changes proposed below.

The city of Thornton will need to amend its comprehensive plan, future land use map, zoning ordinance, and other associated land development regulations to implement the panel's recommendations for the subarea plan. The proposed changes are intended to create a type of regional center for Thornton that is not possible under the city's current rules and regulations.

In concert with regulatory changes, Thornton also will need to consider revisions to its current processes for plan review and development approval. When combined, changes to regulations and processes will provide a sophisticated, creative, and flexible development environment that should foster the type of intense, creative, and signature development desired in the regional center.

Land Use and Zoning

The city will need to create new land use classifications, map designations, and goals, policies, and objectives to fulfill the panel's recommendations for the North Washington Subarea. Reinforcing the purpose and intent of the regional center should help to maintain a consistent vision for the area, regardless of changes in the development and political climates.

Land Use Classifications/Map Designations

The entire North Washington Subarea—aside from those areas specified for single-family development and open space—should be designated as a *primary activity center overlay*, with intensities and densities that allow for increases in the base FARs and densities of the underlying zoning districts. The purpose and intent of the activity center designation should be to promote the type of regional employment, retail, transit-oriented, and mixed-use lifestyle center that the city desires for this area.

New land use classifications will be required for the planning area, and such designations will need to be assigned on the comprehensive plan's future land use map. These classifications should include the following:

Employment Center. This nonresidential land use is intended to serve as a primary location for nonretail employment, including such uses as offices, manufacturing and educational facilities, and medical centers/hospitals. Incidental accessory and supporting uses—such as restaurants, hotels, child care centers, mixed-use urban villages without housing, and small-scale retail—also should be permitted, concurrent with or subsequent to the development of a permitted principal use. The maximum allowable FAR should be 4.0, with bonuses as permitted by the underlying zoning district.

Mixed-Use Urban Village. This mixed-use traditional or urban form of development typically is characterized by retail, office, restaurant, educational, civic, and entertainment uses on the street level, with residential uses on upper floors. Parking generally is located in parking structures or to the rear of buildings. Pedestrian activity is of the



highest priority, so buildings are located close to the street and sidewalks are wide and feature street furnishings, lighting, and other amenities. Streets are narrow, with no more than two lanes and some on-street parking. The maximum FAR should be 4.0, with bonuses as permitted by the underlying zoning district. Density should not be prescribed, but should result from the allowable floor area.

High-Density Residential. This residential use should require 20 to 40 units per acre, with bonuses as permitted by the underlying zoning district.

Goals, Policies, and Objectives

The land use element of the city's comprehensive plan must incorporate goals, policies, and objectives, to establish benchmarks by which future development proposals will be tested. Many of these goals have been adopted as part of the subarea plan and should be further codified in the comprehensive plan with the establishment of the North Washington Subarea as a primary activity center. Further codification of the goals, policies, and objectives should help insulate the planning area from economic and political changes that will occur during the projected planning window.

The planned urban villages in the North Washington Subarea should include multifamily housing similar to that found in the Bradburn development in neighboring Westminster.

Significant Land Use and Design Recommendations

In addition to its recommended changes to the city's comprehensive plan and the North Washington Subarea Plan, the panel offers the following recommendations to enhance land use and design in the city of Thornton.

Design Guidelines: Quality Control

Interviewees expressed the belief that higher-quality design and development will be needed to enhance Thornton's transition from a bedroom community to a multiuse, mature city. Design guidelines and a review process should address a full range of design issues, including building form, landscaping, street orientation, openings, roof forms, materials, and so forth. These guidelines should apply to the entire subarea. The panel understands that this type of effort is being considered. Numerous approaches to this are discussed in the Development and Implementation Strategies section.

Communicating the Vision: Presentation and Education

While stakeholders often mention the importance of a commonly held vision and image for the area, this vision is not always clearly depicted or even agreed upon by stakeholders, because abstract plans and diagrams do not always make it clear what the vision "looks like." A broader range of techniques, including illustrative plans, perspectives, and other graphic techniques could dramatically enhance such a vision. Computer graphic simulations can be particularly effective tools. The panel recommends that the city identify and employ a set of tools to help all stakeholders visualize the plans for the subarea.

Identity and Image

The city of Thornton currently does not have a specific identity, other than as a bedroom community. The city and the subarea need an identity, one with a positive and exciting image. The panel

suggests that a significant feature or landmark along I-25 may help create an image and an identity for the community. Many possibilities exist for this feature; for example, water-jet fountains could be installed at gateways along I-25 or major sculptures could be placed at other gateways.

Green Development

In implementing the North Washington Subarea Plan, the city of Thornton has an opportunity to champion environmentally responsible building techniques while at the same time adding to the appeal of the development. The panel recommends that the city embrace the following concepts and encourage developers to build to such green standards. The Denver area hosts the largest green building program in the nation—Built Green Colorado—which has more than 100 builder members across the state. This program, which was introduced in 1995, was created through the joint efforts of the Home Builders Association of Metro Denver (HBA), the Governor's Office of Energy Management and Conservation (OEMC), Xcel Energy, and E-Star Colorado.

A voluntary program, Built Green Colorado's purpose is to encourage homebuilders to use technologies, products, and practices that do the following:

- Provide greater energy efficiency and reduce pollution;
- Provide healthier indoor air;
- Reduce water usage;
- Preserve natural resources; and
- Improve durability and reduce maintenance.

More information is available from Built Green Colorado and the U.S. Green Building Council.

Development and Implementation Strategies

This section identifies the strategies, tools, and means required to successfully realize the revised North Washington Subarea Plan and to establish the subarea as a location for regional employment, shopping, and mixed-use lifestyle activities. In the absence of such implementation, the future of this area may continue to be one of static interest and disconnected activity. Whether the subarea continues on its current course or begins a dynamic and exciting transformation depends, in part, on the city of Thornton's ability to embrace new development strategies and flexible, sophisticated development regulations.

The panel finds that a number of the planning tools needed to create a foundation for the coordinated effort already exist within the city of Thornton framework. Furthermore, state redevelopment regulations allow the advancement of the vision sought by Thornton. The following sections identify existing issues and the activities required to implement the plan. The panel wishes to emphasize that implementation is, by definition, an ongoing process. As future public investment and policies attract private capital, conditions may change in ways that are not presently foreseeable. All plans require a response to changing conditions, markets, and demands. These conditions inevitably will require adjustments to the strategies set forth below.

Expanding Upon the Plan

As noted previously, the panel confirms the findings of the city that the North Washington Subarea should be developed with more regional uses than are found elsewhere in Thornton. The panel suggests that the subarea can be developed as a regional center with a mix of major employment, shopping, residential, and lifestyle uses.

North Urban Village

As noted in the Planning and Design section, the establishment of an urban village adjacent to the Larkridge development seems to offer an immediate development opportunity for Thornton. Developing such a project will be relatively easy because it will be an expansion of the success of the Larkridge development.

Employment Center

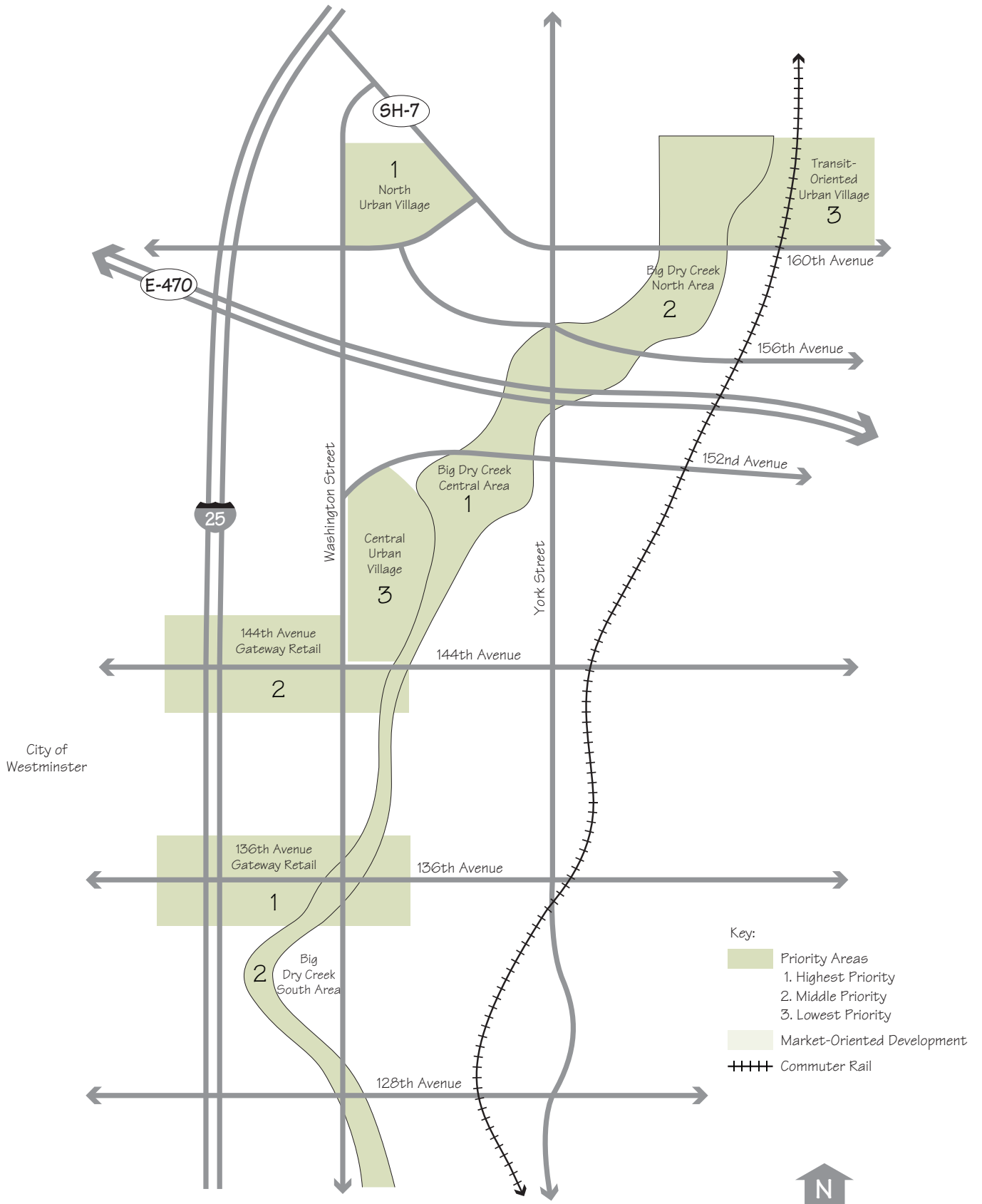
Areas shown on the adopted land use plan as corporate campus and industrial uses should be assigned land use and zoning classifications that allow an expanded variety of uses that will bring valuable jobs to the city. These uses are described later in this report.

The panel suggests that the city proactively prepare the area designated as an employment center for development rather than waiting for a developer to approach the city and then having that developer assume responsibility for all of the required public improvements. To be competitive in the metropolitan Denver market, Thornton needs development sites that are ready to go: sites with all of the required infrastructure—such as utilities, stormwater drainage systems, Wireless Fi-

The property adjacent to the commuter rail terminus and the proposed North Urban Village presents an excellent opportunity for transit-oriented development.



Development priorities.



delity (Wi-Fi) or fiber optic systems, and roads—in place. The city already has committed capital improvement funds to the employment component of the subarea. This commitment must continue, and revenue sources must be devoted to prepare land for development. With infrastructure in place, Thornton will be in an enviable position to compete for new opportunities that present themselves within the metro area, including both relocations and new development. The construction of required infrastructure will demonstrate the city's commitment to realize its vision for the area. This commitment will strengthen business confidence to invest in a Thornton address.

The last part of the employment center puzzle is land assembly. The city will need to partner with landowners to further land assembly opportunities. The panel's land assembly recommendations are discussed later in this section.

Transit-Oriented Development

A number of planned transit stops on the Regional Transportation District (RTD) FasTrack commuter rail line are within or near the eastern edge of the subarea. Opportunities for the development of urban villages around these transit stops may occur, and it may be possible to connect these villages via corridors to the centers proposed within the subarea. The substantial increases in floor/area ratio and density recommended by the panel should result in greater ridership. The city should see the increases in development potential as an improved assurance that the RTD will place multiple stops along the commuter rail line in Thornton.

Strategic Priorities and Market-Oriented Development

The areas described above present the city of Thornton with many strategic opportunities, which it should pursue aggressively. In these strategic areas, it is important for the city to stick to the adopted plan so that it can achieve its long-range vision. On the other hand, large parts of the North Washington Subarea exist in which the city can remain flexible to respond to market opportunities.

The land use plan can only be implemented successfully if the community decides on its priorities for the subarea. Some of these priorities will be

based upon timely interests, while others will be determined by their potential impact, even though they may be more difficult to achieve. Limited resources and the large scope of the plan will require the city to focus its efforts on a few specific areas. The panel therefore recommends the following priorities for the North Washington Subarea.

Priority I Projects

The panel recommends that the city of Thornton make the following projects its first priority.

North Urban Village. This strategically located development area adjacent to Larkridge will provide the catalyst for development in the northwest sector of this neighborhood. The North Urban Village also will support already approved adjacent uses to the east, west, and north with retail offerings not found in Larkridge.

Big Dry Creek Central Area. Between E-470 and 144th Avenue, the Big Dry Creek is a major natural feature and asset. It needs to be protected and enhanced. The panel strongly suggests that the city develop some active recreational uses within this area in addition to passive uses and open-space preservation.

136th Avenue Gateway Retail. Both the north and south sides of 136th Avenue, adjacent and to the west of I-25, are logical locations for the extension of retail and commercial development, which now includes Lowe's and Wal-Mart. The retail area to the south of 136th Avenue is adjacent to an existing residential development and golf course and is difficult to access. Special attention should be paid to the nature of retail to fit the site and be compatible with the existing residential area to the south. The panel's suggestions include entertainment uses that will work synergistically with the golf course.

Priority II Projects

The panel recommends that the following projects be considered second-priority ones that should be realized after the projects described above are well underway.

Retail on the North and South Sides of 144th Avenue. This strategically located retail area is adjacent to I-25 on the east/west corridor. It is



The site of the future Central Urban Village.

highly visible from I-25 and will connect with the Orchard at Westminster development.

Big Dry Creek North of E-470. As resources permit, the city should make every effort to protect this area from intrusion. The city's efforts could include zoning ordinance changes and the acquisition of land or easements.

Big Dry Creek South of 144th Avenue. Part of this area is outside the city limits, and protecting it will require the cooperation of property owners and Adams County. The area should be protected and enhanced with both active and passive uses.

Priority III Projects

The panel suggests the following projects as long-term priorities that should be explored once the market develops and the North Washington Subarea has been established.

Central Urban Village. This could become an attractive, pedestrian-friendly residential, commercial, and mixed-use area. The site is adjacent to the Big Dry Creek and can benefit from this major amenity. Its development should begin only after significant development in the employment center is underway.

Transit-Oriented Urban Village. This area should be developed in conjunction with the FasTrack commuter rail station at 160th Street, which is expected to be completed in 2015. The development should take advantage and be supportive of the

transit station and transit-oriented development (TOD) projects on the east side of the rail line.

Market-Oriented Development

The panel has identified a number of parts of the subarea where it believes the city should be more flexible and opportunistic. The plan should give the market the ability to dictate land uses, as long these uses fit into the context of the surrounding area. Such flexibility is appropriate in the following areas.

Employment Center Parcel between Washington Street and I-25. This very well-located, highly visible, and important 378-acre parcel of land has long-range potential for development. Its development will require the city's assistance in land assembly, infrastructure, and marketing.

Employment Center Parcel East of Washington Street. This 311-acre area will provide opportunities for a variety of jobs and institutional facilities.

Mixed-Density Residential Parcel South of 160th Avenue. This 133-acre parcel provides opportunities for diverse residential uses in conjunction with the previously recommended North Urban Village.

High-Density Housing Parcel at the Northeast Corner of Washington Street and 144th Avenue. Market-rate, high-density residential development should be encouraged on this parcel, which will become a part of the Central Urban Village. A density as high as 40 units per acre should be allowed.

Mixed-Density Residential Parcel between 152nd Avenue and E-470. This 54-acre parcel provides opportunities for diverse housing types and supportive uses such as small parks and community retail.

Strategies for Business Development/Incentives

In addition to the conventional regulatory tools related to zoning and development regulations, Thornton has a number of other tools that it can use to further the desired intent of the subarea plan. This section outlines some of the opportunities available to the city that will help it take a proactive role to create a regional center.

Land Assembly

In order to realize the desired uses for the North Washington Subarea, it will become necessary, in some cases, to assemble large parcels of land currently held by diverse landowners. Several development techniques can be employed to this end. These include private acquisition; public acquisition; joint ventures among several landowners, with either the city or a private developer as the general managing partner; eminent domain by a public entity; and several market-based trading techniques, such as transfer of development rights (TDRs) and development credits. In some cases, the use of existing easements or rights-of-way, or the attainment of these from private property owners, may be sufficient to accomplish a specific purpose such as the creation of a pedestrian linkage through adjoining lots.

Given the land use objectives of the North Washington Subarea Plan, the panel suggests that the city of Thornton use the following specific land assembly strategies.

Public Purchase/Open Space Acquisition of the Big Dry Creek. The city of Thornton, perhaps in cooperation with surrounding municipalities and counties, could acquire the land comprising the Big Dry Creek floodplain. The city could use its parks and open space tax for this purpose. To the extent that the Big Dry Creek is to be developed into a regional recreational and cultural facility, it may well make sense for this to be done by a regional coalition of governments.

TDRs, Joint Ventures, and Eminent Domain for the Employment Center and Gateway Commercial Areas. The panel recommends that the city assemble land within the planned employment center. This should be accomplished—as much as possible—through TDRs. In this manner, the city can reserve capital outlays for other aspects of the subarea plan while offering existing landowners equivalent property elsewhere. As described earlier, the panel's recommendation for the development of gateway commercial areas leverages existing market activity and ownership. In particular, key commercial nodes in the gateway areas indicated by the intersections of I-25 and 144th and 136th avenues already have single owners, either developers or landowners who have indicated a willingness to sell. Never-



theless, TDRs could be employed in these areas as well. In addition to TDRs, the city could use eminent domain to assemble parcels for the employment center and/or gateway commercial areas. Both the proposed employment center and a portion of the commercial land uses are contained within the existing urban renewal area (URA), which conveys the power of eminent domain to the city.

Private Acquisition for the Urban Village/High-Density Residential and Transit-Oriented Development. The panel believes that market forces, in combination with clear and consistent zoning, should enable developers to assemble land for these projected uses. Moreover, as these projects may not be developed for several years, the city can be proactive in working, over time, with private landowners to encourage and facilitate the desired land uses. If, however, an otherwise attractive project were to be held up by a private property owner unwilling to sell to the presumptive developer, the city could utilize any of the land assembly tools discussed above.

In the following section, the panel recommends extending the URA across the entire subarea. Doing so would convey to the city the power of eminent domain and a concurrent tax increment financing (TIF) capability for this area. The panel also recommends the creation of an autonomous development agency. Such an agency would have bonding capabilities and, thus, would introduce into the mix an additional financial resource through which the city could acquire and assemble land.

Numerous oil and natural gas wells scattered throughout the North Washington Subarea will require special consideration as the land is developed.

This is described in greater detail in the Implementation section.

As with many of the panel's suggestions regarding development strategies and implementation, it is important that the parties responsible for overseeing the development and implementation of the North Washington Subarea Plan remain sufficiently flexible in their land assembly approaches so as to respond to opportunities as they present themselves. The recommendations above have been proposed to optimize the city's resources and in accordance with development priorities and existing market conditions.

Public/Private Partnerships

Public/private partnerships are a key tool in realizing many economically significant land development plans. The city of Thornton clearly has succeeded in forging public/private partnerships with very positive results. The Larkridge development is an excellent example of this, and countless other examples of the city's strategic partnership acumen undoubtedly exist.

With respect to the ongoing development of the subarea, the panel emphasizes the following public/private partnership development opportunities.

Gateway Commercial Areas. The city should partner or work with existing landowners and developers who have indicated interest in these areas to pursue the recommendations of the plan. In the course of the panel's interviews, it learned that several key parcels in the east/west corridors of 136th and 144th avenues and at Larkridge are under single ownership, and that the landowners may be amenable to pursuing development in the relatively near term. On both the north and south sides of 136th Avenue between I-25 and Washington Street, parcels are available that could be developed with uses that are consistent both with the plan and with the uses on the west side of I-25.

Similarly, the north side of 144th Avenue, both between I-25 and Washington Street and east of Washington at the lower end of the parcel recommended for the Central Urban Village, is controlled by landowners who have expressed interest in developing uses consistent with the plan. The south side of 144th Avenue, which currently

serves as the school district bus yard, also presumably can be brought to the table. Adjacent to Larkridge, the panel understands that the large parcel recommended for the North Urban Village is owned by only a few entities. This might well present an opportunity for a joint venture form of assembly to initiate the urban village development.

Employment Center. The city should make a concerted effort to find a first tenant for the employment center. This need not be a private sector corporation, but could be an institutional entity such as a medical facility/hospital or a public or private university. If this entity does not want to serve as the developer, a developer could be sought or the city could consider acting as the developer, preferably through the mechanism of an autonomous development agency. The establishment of a business incubator, perhaps with the benefit of state and/or federal funds that may be available to support this activity, would be a nice addition to the employment center.

In any case, while this area may have a longer horizon for absorption, it is important for the city to take a proactive stance regarding the employment center. In addition to pursuing a land assembly strategy, as described above, the city should consider making public infrastructure improvements to this area. If the city receives a specific development proposal, it could work with the private or public partner to bond for TIF funds to make the necessary improvements. In the absence of a specific development proposal, the city could make allocations for improvements from its capital funds or from excess funds—if any exist—from other URA/TIF activities within the subarea. The city also could prepare all permitting associated with the designated land use in advance, to ensure a streamlined development process when a proposal does appear.

Transit-Oriented Development. Transit-oriented developments (TODs) have been developed by public/private partnerships in many parts of the country. In New Jersey, for example, NJ TRANSIT (the state's public transportation corporation) and the New Jersey Department of Transportation (NJDOT), have jointly spearheaded a Transit Village Initiative that also is supported by nine other state agency partners, including the New Jersey

Properties along the west side of Washington Street offer excellent visibility and access from I-25.



Department of Commerce, the Council on the Arts, the Office of Smart Growth, and others. This initiative provides public funds and technical assistance for the creation of TODs. A municipality that is interested in securing this assistance applies to the initiative through a competitive process. The criteria used to determine if a municipality is ready to be designated as a transit village include a commitment to growth in jobs, housing, and population.

The panel suggests that the city of Thornton offer to serve as a pilot community and seek to create such a program in Colorado. The proposed passenger rail stop at 160th Avenue and Colorado Boulevard might be a logical place to start.

Although some may feel that transit-oriented development in Thornton is quite a few years in the future, some people probably also were skeptical of the city's decision to procure water rights north of the city well in advance of when they would be needed. Just as water will continue to grow scarcer relative to population increases and accompanying

development, the number of cars on the road will continue to increase. The day will come when people in Thornton will prefer to commute to their destinations by rail—and other forms of mass transit—rather than sit in traffic.

Intergovernmental Partnerships

Intergovernmental partnerships are yet another tool available to the city of Thornton to accomplish subarea plan objectives. The panel commends the city for its entrepreneurial intergovernmental agreement (IGA) with the city of Westminster, through which Thornton will receive one-third of the sales tax revenues associated with the Orchard at Westminster and Wal-Mart/Lowe's projects. Such arrangements create a win-win solution for both municipalities, and should be replicated wherever possible. They ensure that both adjoining municipalities gain from new developments servicing both communities and prevent a no-win situation wherein a prospective developer is able to play one municipality off another in an attempt to secure a disproportionate incentive package.

Urban Growth Boundary

Under Colorado law and as a home rule community, Thornton is in the enviable position of being able to establish land use and zoning designations and regulations independent of input from neighboring communities, the county, and the region. Zoning regulations are not limited in terms of density, intensity, or use. Regulations are simply the result of local input and local government adoption.

The only exception to this autonomy is growth permitted by the Denver Regional Council of Governments (DRCOG), which determines the acreage by which communities within the region are permitted to grow. Growth is limited only by acreage, not by density, intensity, or use. Currently, the city has sufficient allocation of land for growth within its corporate limits. However, to realize the full potential recommended by this plan for areas to be annexed and planned in the future, the city will need to pursue increased growth allocations for its urban growth boundary from DRCOG.

Annexation Agreements

Thornton has a history of using annexation agreements as a means to spell out the commitments between the city and a landowner seeking to annex into the city. Annexation agreements have been used to address matters of anticipated land use and zoning, utility agreements, and site development issues.

In the subarea, annexation agreements will become increasingly valuable as a means to assuage any doubts property owners may have about the city's commitments during the annexation process. Implementation of the North Washington Subarea Plan depends upon the voluntary annexation of properties that currently lie outside of the city. The panel therefore assumes that such agreements will continue to be an important tool for the city.

Marketing/Promotion

Interviews with civic leaders and the panel's observations suggest that Thornton needs to improve its self-promotion as a community. Because of the irregular shape of its corporate limits and the multitude of various municipalities in the north metro area, it is difficult to determine where Thornton begins and ends.

This is particularly true for the North Washington Subarea, which is located far north of the original city of Thornton. As noted later in this report, the city needs to retain the services of a marketing firm to program the subarea so that the creation of a unique identity can begin immediately. The panel recommends the use of the city of Thornton's name in every development name, street sign, logo, and gateway feature, to reinforce the fact that this area is part of the city. This identification also should be incorporated into the marketing package to be used by the city's economic development staff.

Small Business Focus

The current focus of development in the North Washington Subarea is the solicitation of large retailers and businesses. Many cities have greater success attracting and fostering small businesses; that is, companies with fewer than 100 employees. This often is a more successful strategy, since 80 percent of new jobs are in small businesses. To accomplish this, it is important to understand the networks of industry clusters and market to affiliated businesses that would benefit from the area's existing businesses and labor pool.

A recent study found that \$73 out of every \$100 spent by residents with local firms stayed within the community, while only \$43 spent in chain stores remained there. In the sample community—a suburb of Chicago—locally owned retail sales averaged \$179 per square foot, compared with \$105 per square foot in chain store sales. Similar statistics support the benefits of main street or lifestyle center configurations, where sales averaged \$350 per square foot compared with the \$280 per square foot national average for suburban regional retail. This suggests that while national retailers may appear easier to attract, they do not necessarily perform as well as a concentration of smaller, local businesses.

While resources currently exist for the technical support of businesses in "original Thornton," the establishment of a small business investment corporation also could provide financial resources that currently are lacking. Establishing a non-profit entity to assist startup companies, perhaps with a focus on the medical industry, is one possible strategy to build on local resources. Atten-

tion also should be paid to attracting many smaller businesses, rather than one large one, that may find local advantages for their industry. Likewise, assisting the growth of centers for local retailers may prove easier than attracting national chains, and should be considered as a complementary strategy.

Geographic Information System

A geographic information system (GIS) can be a powerful tool for economic development. Thornton already has very good resources and a system in place that should be taken advantage of. GIS can identify key property owners to help organize land assembly programs or target public/private partnerships. The system can be used to identify all vacant sites and provide data on them to potential developers. Adams County keeps a free database of sites, and the city should use its GIS system to contribute to this listing. The GIS system also can be used to conduct land use and business analysis by evaluating the inventory of land uses and identifying business clusters. Assistance with this type of analysis is available through the Adams County Economic Development Corporation.

Participation with Organizations and Institutions

The city of Thornton has done a remarkable job of collaborating with the city of Westminster in a retail tax revenue-sharing plan. This type of reciprocity should be continued to develop the attractiveness of the region as a whole. Where Thornton has a history of collaborating with its neighbors, pursuing further cooperative planning initiatives will benefit both cities. Additional support is available from Adams County thorough organizations such as the Adams County Economic Development Corporation.

City Development Regulations

In concert with amendments to the city's comprehensive plan as described in the Planning and Design section, the panel also recommends that the city consider adopting new zoning districts that will accommodate the flexible and intense level of development envisioned for the planning area. In addition, the panel recommends the adoption of sophisticated planning tools, such as development

bonuses and form-based zoning districts, to provide incentives for desirable development. Lastly, the panel recommends that the city develop design guidelines for various types of development. These guidelines are needed to foster a unique identity for the North Washington Subarea. Design guidelines should address not only architectural appearance, but also the design of public space and streets, public art, branding and identity of the regional center, gateway features, pedestrian connections and amenities, unified landscaping concepts, and uniform graphics to give the planning area a sense of place.

New Zoning Districts

The panel recommends the follow new types of zoning districts for the planning area.

Urban Village. The urban village mixed-use designation should foster the type of traditional development occurring in many parts of the country. Typically, these developments feature nonresidential uses on the ground floor and residential uses above. Residential uses may encompass all floors along side streets, and parking is located either in parking structures or behind buildings. From a design perspective, these projects emulate a traditional main street based in historical town development, something that is missing in Thornton but that has strong appeal. Sidewalks become very important public spaces in these types of developments, and the relationships of buildings to pedestrians provide a pleasant and interesting experience. Thornton can learn from the many examples of this type of development that exist in the Denver metropolitan area as well as across the nation.

The city currently has no regulations to allow this type of mixed-use development. The panel recommends a form-based district that establishes different types of building envelopes, setbacks, and design parameters for specific building typologies, depending on their location within the urban village. The base allowable floor/area ratio (FAR) should be 2.0, with permitted increases up to a maximum FAR of 4.0 based upon the provision of FAR bonuses. Density should not be prescribed, but rather should fall within the allowable FAR. This will allow developers to provide differing types and sizes of dwelling units to respond to

changing market conditions. If written with clear direction, the form-based regulations should be sufficient to accommodate and secure desired development proposals. Otherwise, the city may utilize development agreements of the type currently implemented under its planned development regulations.

Regional Business District Employment Center. The panel proposes the development of a regional business district (RBD), which it sees as a counterpart to the central business districts (CBDs) found in the cores of major cities. The RBD is designed to provide flexibility in uses and building development that will result in the creation of jobs within the community. A broad range of uses should be permitted, to allow for the greatest amount of flexibility possible. Permitted uses should include offices, manufacturing facilities, medical/hospital uses, colleges and universities, and other types of employment-generating institutions. Accessory uses should be permitted to support development by providing employees with places to secure child care, have lunch, or join their colleagues after work. The panel thus recommends that accessory uses such as hotels, restaurants, small shops, child care, and health centers be permitted within the RBD, but only when principal uses of sufficient size or employment exist to support them.

The panel recommends that this district, like the urban village district, be form based. This will allow the city to accommodate a variety of uses and to ensure that portions of the RBD abutting urban villages within the regional center provide for a seamless transition between differing uses. In particular, this would allow the employment uses to serve as a continuation of the urban village in terms of scale and appearance.

The base allowable FAR for this district should be 2.0, with permitted increases up to a maximum FAR of 4.0 based upon the provision of FAR bonuses. Residential uses should not be permitted. There should be no maximum building height, subject to FAR and approval by the Federal Aviation Administration. The planning area offers superior visibility for a corporate headquarters or a hotel. To make the most of this visibility, the city should allow the development of taller, signature buildings.

If written with clear direction, the form-based regulations should be sufficient to accommodate and secure the desired development proposals. If they do not, the city may utilize development agreements of the type currently implemented under its planned development regulations.

Interim Overlay Use District. Because the window for buildout of the planning area is anticipated to take several decades, interim uses should be permitted. Accordingly, the panel recommends an interim overlay use (IOU) district to allow temporary uses, limited to a five-year period. After five years, the city could approve renewals for additional years, at which time landscaping or buffering from surrounding development could be required. Interim uses should be low intensity and easily removable, require little investment, and have few impacts. Examples of such uses include agricultural activities such as farming and livestock grazing, landscaping nurseries and tree farms, gas and oil wells—where appropriate—driving ranges, and other similar activities.

Big Dry Creek District (Floodplain Conservation). As shown on the current North Washington Sub-area Plan, large areas of the floodplain associated with the Big Dry Creek are open space with little development potential. Under this designation, it seems unlikely that property owners would have any reason to annex these properties into the city. If property owners are not given the right to channel the floodplain so as to capture development rights, they should be afforded some sort of development rights that can be transferred within the planning area, or perhaps to other areas of the city intended for redevelopment or revitalization. Transfer of development rights (TDR) could be in the form of dwelling units or an equivalent FAR to be determined by an equation established by the city.

Many programs of this type exist throughout the country, and Thornton should consider exploring such programs as a means to retain the existing Big Dry Creek floodplain as a natural feature and corridor for the planning area. If the city does not want to retain the creek as a focus of the regional center, these areas should be designated with a land use classification and zoning district that afford them reasonable development potential. Con-

Figure 2
Suggested Density Bonuses

Improvement		FAR Bonus
Structured parking	50%–74% of required parking	0.5
Structured parking	75% of required parking	1.0
Public art	Equal to 0.5% of overall value of site and shell building improvements	0.5
Mixed use	Floor area equal to 75% residential and 25% retail	1.0
Mixed use	Floor area equal to 75% residential and 25% nonresidential	0.5

versely, if the city purchases the properties with parks and open-space tax funds, as previously suggested in this report, no new zoning district will be needed.

Storm Drainage Utility. The North Washington Subarea anticipates significant development in the future. This development can occur only if important infrastructure improvements, most notably drainage, are made. The city needs a revenue stream to provide for adequate drainage. In light of this, the panel recommends that a storm drainage utility be created.

Proposals for Density, FAR, and Building Height

The development intensities currently proposed by the city are too low to maximize the potential of the planning area. The proposed densities, FARs, and building heights promote sprawling, one- and two-story buildings with surface parking. They make inefficient use of the land and do not allow any type of development that could be considered traditional or pedestrian oriented. The panel therefore recommends substantial increases in density, FAR, and building height throughout the planning area. These increases are illustrated in the general descriptions of the proposed zoning districts.

Floor/Area Ratio. The base FAR for commercial, employment center, and mixed-use urban village areas should be increased to 2.0, with minimums established in the urban village to foster dense development. Maximum FAR should be 4.0 with bonuses. Ratios of more than 4.0 should be permitted with TDRs from the Big Dry Creek open space. Structured parking should not be included in the

FAR calculation. Increases in FAR should be permitted consistent with the designation of the area as a primary activity center.

Density. Density should not be prescribed for the mixed-use urban village. The number of units allowed within this zoning classification should be determined by the allowable FAR. In high-density residential areas, the allowable density should be increased from 18 units per acre to a base of 20 units per acre and a maximum of 40 units per acre with bonuses.

Building Height. Building height limits should be substantially relaxed to allow for more development diversity and opportunities to capitalize on the views of the mountains to the west. In the urban village and high-density residential areas, a maximum height of 65 feet should be considered. No height limit should be prescribed in the RBD.

Development Bonuses within the Subarea

Many cities throughout the nation utilize development bonuses as a means to provide incentives for desired development. Thornton should be no exception. As noted earlier, the panel is recommending increases to base FARs and opportunities to grant FAR bonuses for projects of special merit. Suggestions of bonuses, with their relative value, are offered in Figure 2. These suggested bonuses, however, should not be construed to represent the full menu from which developers should have an opportunity to choose.

Design Guidelines

Concurrent with comprehensive plan and regulatory changes, the city also should develop design

guidelines for the North Washington Subarea. While the panel does not propose specific guidelines, it suggests that the city should give special thought to adopting guidelines that address not only individual buildings, but also the spaces between buildings in a manner that binds the area together with a sense of place. Regulations that promote the use of vernacular building materials, high-quality design, and uniform elements serving as visual cues of a planned development should be encouraged.

Architectural Design Standards. These guidelines should:

- Specify materials, colors, and fenestration for buildings, parking structures, and accessory structures;
- Promote distinctive corner elements, strong entries, classic building structure elements (a base, middle, and top), crown lighting (at the tops of buildings), and decorative lighting;
- Require that rooftop mechanical equipment and loading/service areas be screened from view; and
- Specify special treatment for elevations facing interstates and other highways.

Public Space and Streets. Guidelines for these areas should cover the following:

- Public squares/greens;
- Sidewalk and trail design (width, materials, landscaping, lighting, furnishings); and
- Street design and hierarchy, medians, and landscaping.

Gateway Features. Additional design guidelines should be specified for structures, signs, and landscaping of entry/gateway features located at major entries, focal points, and traffic circles.

Landscaping. To reinforce the subarea's identity as a "place," landscaping standards should be adopted for corridors, areas abutting interstates and other highways, and at other strategic locations.

Branding/Identity/Street Graphics. The subarea will require a comprehensive identity program that unifies all of the development and signals entry into

the area. To reinforce the fact that this area is part of the city of Thornton, the panel recommends the use of the city's name in every development name, street sign, logo, and gateway feature. The panel also recommends that the city retain the services of a professional environmental graphics firm to begin this identity creation process immediately.

Public Improvements. Every bridge, road, light, sidewalk, and other public improvement should be considered an opportunity to bring a sense of identity to the subarea and reinforce the high quality of both its public and private components.

Changes to the City Review Process

To achieve any type of meaningful progress in the development of this area, whether under the plan as adopted or with revisions, the city will need to make some changes to its current development review process. Based upon the interviews it conducted, the panel believes the general perception is that the development review process in Thornton is a disincentive to development. Within the development community, Thornton is perceived as bureaucratic, and development confidence is eroded by the uncertainty of the approval process. While this may or may not be true, it is the perception that matters.

The city recently enacted a nine-month development moratorium in the North Washington Subarea to adopt the subject plan. In addition, some rezonings have been denied. The existing development process, rezoning denials, moratorium, and multiple plans for the North Washington Subarea have sent mixed messages to the development community about what Thornton desires for this area. At the same time, Thornton's neighbor to the west, the city of Westminster, appears to have seized opportunities resulting from this situation. Now, more than ever, Thornton must step up to the plate and let the development community know that the city is ready to proceed with a vision within which developers can move forward with confidence.

The city currently requires site plan approval from the city council for every project in every part of the city, regardless of its size, use, or impact. Once site plan approval is secured, develop-

ers then must secure approval of very detailed drawings from the city's Development Permits and Appeals Board (DPAB). The board's actions can be appealed to the city council. Some projects, deemed projects of economic significance, require only city council approval and do not have to obtain approval from DPAB. It is not clear why some projects are deemed significant and others are not.

If the city has confidence in its plans and development regulations—and their administration by its city staff and manager—then the city council should consider allowing more projects to be approved by a streamlined process that has very clear rules and instills business confidence. Certain projects—those involving allowed uses and those that do not require variances—should be approved as part of the regular development permit process.

The city could, perhaps, consider the waiver of conceptual site plan approval for projects with less than a certain square footage or less than a specified number of dwelling units. The city should engage in a discussion with its development community to determine exactly how this process should be structured. As an alternative, the city may wish to consider establishing a separate review board for the subarea. There are many ways to staff this board, which could include a combination of city staff and development professionals such as builders, architects, realtors, engineers, and so forth.

The panel is not in a position to recommend exactly how the city review process should be revised. However, based upon its interviews, discussions with city representatives, and observations, the panel feels that there are valid reasons to believe that the current system is an impediment to success.

Urban Renewal Area/Tax Increment Financing

The existing URA in the North Washington Subarea was established in 2003 and expires in 2028. The panel strongly recommends extending the URA to encompass the entire subarea as large areas are annexed into the city. In this manner, the city can significantly increase its land assem-

bly (eminent domain) and financing (tax increment financing) powers and capabilities.

Tax increment financing (TIF) is a development strategy whereby a portion of the increase in property and sales taxes collected in an area is returned to the URA. Such monies can be used to finance public infrastructure or acquisition costs in advance of the actual development through the issuance of a bond.

The amount of financial capital that can be made available by TIF is tied to the expected tax revenues—in this case, predominantly sales tax revenues—and property taxes from a specific project. The city already has employed this financing technique for the Larkridge development. Future TIF bonds could be applied toward infrastructure improvements to the Big Dry Creek, the employment center, gateway commercial areas, and transit-oriented developments.

Autonomous Development Authority

As a means of streamlining the development/entitlement process, and in order to send a consistent and reassuring message to the greater development community that the subarea plan will survive any given administration, the panel recommends the consideration of an autonomous development authority. Such an entity would function with an executive director—who could be an employee of the city or independent thereof—and a board of commissioners appointed by the city council, mayor, or city manager with staggered terms.

Commissioners would be chosen for their experience and skills in development and might include, for example, development consultants, former government officials, developers, public relations specialists, and others. All commissioners would be residents of Thornton, would not own land in the subarea, and would be prohibited from pursuing development projects there. A development authority typically hires its own legal counsel and other specialists as needed, although the professional costs associated with a given project often are paid by the developer. As previously noted, development authorities also can raise funds through tax increment financing to support the development process within the URA.

The Economic Reality of Sales Tax Generation

Because of the significance of sales tax generation for the city of Thornton, the city may be tempted to support new retail developments financially. The competition between cities—whoever gets the retailer first runs away with the prize—encourages a “spend first and analyze later” mentality. Sales tax revenue is worth an investment only if it results in a net increase in sales tax, commensurate with the required incentives. Any new retail development will receive a substantial portion of its sales from existing retailers. For example, the second Home Depot in Thornton undoubtedly will experience a transfers of sales from the existing Home Depot. To the extent that this takes place, it is of no sales tax benefit to the city. It is there-

fore essential that the city gain a clear understanding, based on empirical research, about the net effect of sales tax transfer versus net gain before considering such investments.

The cities of Thornton and Westminster have entered into a sales tax-sharing arrangement that pertains to any retail facilities located between the north/south Huron and Washington streets and the east/west corridors of 128th to 156th avenues. This agreement, which is unique in the state of Colorado, should be of mutual benefit to both cities. Although the city in which a retail development is physically located is favored 2:1 over the adjacent city, this agreement should moderate unproductive competition between the adjacent cities.

Conclusion

The city of Thornton is to be commended for initiating a valuable long-range planning process. The panel strongly supports the city's plan for the North Washington Subarea, with the modifications suggested in this report. The hard work, however, is yet to come. This hard work will involve implementing the plan and walking the fine line of being appropriately flexible while not forfeiting the core principles that will serve Thornton well over the long term. The market almost certainly will offer temptations to stray from the plan's core concepts. Thornton's leadership must be wise enough to resist those temptations.

The panel's various recommendations have been detailed in earlier sections of this report. In order to be most effective in using these and other activities to implement the plan, the city should work closely with landowners, developers, and/or users who are willing to "buy into" the vision, by giving them a clear and certain process and by providing incentives that encourage projects consistent with the plan. It is not inappropriate to give those who want to help implement the plan "preferential" treatment, so long as all relationships are conducted in the full light of day.

Recognizing that this is a long-term plan, the panel encourages the city not to forgo existing opportunities to move development forward. A meaningful example of that is Costco. The panel already

has noted the limited number of large retailers. Thornton will lose a valuable opportunity if it does not do whatever it can to capture Costco. The panel strongly recommends that Thornton contact Costco and assure the company that the city will be supportive and will provide an expedited approval process regardless of which Thornton site Costco might choose.

As with any long-term plan, it is important not only to do what can be done under market conditions consistent with the plan vision, but also to prevent the development of projects that would preclude the plan's realization in the long term. The panel has suggested various regulatory steps that would assist in this "preventative" action. City leadership also must consistently resist proposed developments that would have a negative impact on the plan's future.

Recognizing that full buildout of the North Washington Subarea may well take more than 40 years, the panel believes that the next five to ten years will be critical in establishing a pattern of development for the subarea. Failure to establish the proper direction will make it very difficult to get back on track. Conversely, successes in the next several years will ensure that the remaining buildout continues on the right track.

About the Panel

Richard W. (Dick) Reynolds

*Panel Chair
Needham, Massachusetts*

Reynolds, formerly a principal of Spaulding and Slye LLC, is now president of the Reynolds Group. He previously served as managing director of Spaulding and Slye's Capital Markets Group, where he was responsible for investment sales and financing in the New England region and also had oversight responsibility for the firm's 12-person Research Group, which provides economic and market research for all operating groups within the company.

Reynolds has more than 34 years of experience in real estate, starting with eight years at New England Life as an investment officer in the Mortgage and Real Estate Department. He then joined Gerald D. Hines Interests as a partner in the firm's Boston office for seven years, after which he, together with three partners, formed Reynolds, Vickery, Messina, and Griefen, a Boston-based development and management company. In 1993, this company merged with Spaulding and Slye. Reynolds performed a variety of roles at Spaulding and Slye, including acquisitions for a large private fund in joint venture with a major pension fund, reuse and disposition consulting for national corporate clients, acting on behalf of several large Boston law firms in major lease transactions, and acting as developer of suburban office projects on behalf of private equity capital.

Reynolds has served as president of the Greater Boston Real Estate Board and as chairman of the Massachusetts Government Land Bank. At ULI, he has served as chair of several Industrial and Office Park (IOPC) Councils and of the Boston District Council. Reynolds holds a BA from Tufts University and an MBA from Babson College. He and his wife of 35 years, Pam, have two sons and

are especially excited about their two young grandchildren.

John Hixenbaugh

St. Petersburg, Florida

Hixenbaugh is the zoning official for the city of St. Petersburg, Florida. He was appointed by the mayor and is responsible for the day-to-day administration of the city's land development and zoning ordinances. He also provides direct supervision to the Development Review Services Division, a group of 11 professional and technical staff members who provide zoning, site plan review, platting, sign review, tree removal, landscaping, and other development-related services.

Hixenbaugh began his career with the city of St. Petersburg in 1998, before which he held professional planning positions with the city of Port Orange, Florida, and the village of Schaumburg, Illinois. He is a member of ULI—the Urban Land Institute, the American Institute of Certified Planners, and the American Planning Association. Hixenbaugh received a BFA in drawing and an MA in Urban and Regional Planning from the University of Florida.

Satyendra S. Huja

Charlottesville, Virginia

Huja is president of Community Planning Associates, a firm focused on planning, design, development, and management consulting. He previously served as director of strategic planning for the city of Charlottesville, Virginia, from 1998 to 2004. Prior to that, Huja was the city's director of planning and community development for 25 years.

Huja is experienced in the areas of downtown revitalization, housing, historic preservation, transportation planning, art and cultural activities, and

neighborhood revitalization. He has received Honor awards from the Virginia Society of the American Institute of Architects and recognition from the Pew Foundation for downtown revitalization. Huja also has been a consultant to the city of Pleven, Bulgaria, for economic development and tourism marketing.

A member of the American Planning Association and the American Institute of Certified Planners, Huja also is an adjunct faculty member in the School of Architecture at the University of Virginia, where he teaches urban planning courses. He received his master's degree in urban planning from Michigan State University.

Glenn Kellogg

Washington, D.C.

Kellogg, a principal with Urban Advisors, Limited, has six years of experience in financial and urban planning services. He has developed a diverse background ranging from researching commercial paper at CapitalNet in London to assisting in urban design for the city of Philadelphia and designing transit centers for Bogota, Colombia.

Applying these talents to private development, Kellogg has experience managing small development projects from design to disposition. His experience in private consulting includes demographic and market research as well as land use strategies for public and corporate clients. He brings a broad perspective to projects that exemplifies the bridge between economics and design, which Urban Advisors believes is central to finding solutions to urban development issues.

Kellogg received an MCP from the University of Pennsylvania and a BA from the University of Virginia.

Hermann J. Kirchner

Toronto, Ontario, Canada

Kirchner was president of the international real estate market research firm, Larry Smith and Associates, Ltd., for 25 years. After merging that firm with Coopers and Lybrand, he served for 12 years as partner responsible for real estate and

retail consulting services at Coopers and Lybrand (now PricewaterhouseCoopers). Kirchner opened his own consulting practice, Kirchner Research Associates, Ltd., in 1992. In addition to his extensive consulting background in Canada, his international assignments include major research studies in the United States, most European countries, Africa, South America, and the Middle East.

Kirchner has completed strategic, market, and financial feasibility studies for major retailers, town centers, vacation resorts, housing agencies, the hospitality industry, and office developments. He has been responsible for more than 1,000 shopping center market studies for developers, retailers, financial institutions, and public agencies. Kirchner also has conducted extensive research on developments combining retail and entertainment, including West Edmonton Mall, the Mall of America, and various Mills Corporation centers. In addition, he has served as an expert witness before courts and quasijudicial agencies regarding lease valuations, rent arbitrations, expropriation hearings, and zoning, as well as impact issues.

Kirchner's professional affiliations include membership in the Urban Land Institute, where he has been a member of the Entertainment Development Council and the Urban Development/Mixed-Use Council. He also is a member of the National Retail Federation, the International Council of Shopping Centers, and the Retail Council of Canada. Kirchner holds master of business administration and bachelor of commerce degrees from the University of Toronto.

Gary Okerlund

Charlottesville, Virginia

Okerlund, an architect, landscape architect, and urban design consultant, is principle of Okerlund Associates in Charlottesville, Virginia, where he teaches urban design in the School of Architecture at the University of Virginia. His research, projects, and publications include proposing strategies for transit and community development in transit-oriented communities for northern Virginia; community development strategies for the Washington, D.C./Richmond Rail Corridor Study; the Brooke Station Community Plan for Stafford, Vir-

ginia; and the New River Valley Rail Corridor Plan, all for the Virginia Department of Rail and Public Transportation. Okerlund's publications include *Public Improvements on Main Street* for the National Main Street Center; *Streetscape: A Search for Appropriateness* for the National Endowment for the Arts; *Visual Values for the Highway User* for the U.S. Department of Transportation; and *A Network of Livable Communities* and *A Better Way to Grow* for the Chesapeake Bay Foundation. Okerlund served on the Mayors' Institute for City Design and has participated in the development of numerous other urban design plans and projects.

Okerlund's many awards include a Design for Transportation National Award from the National Endowment for the Arts and the U.S. Department of Transportation; several Excellence in Architecture awards from the Virginia Society of the American Institute of Architects; and a Meritorious Professional Planning Project Award from the Virginia Chapter of the American Planning Association.

Okerlund holds a master of landscape architecture degree from the Harvard University Graduate School of Design (GSD) and a bachelor in architecture degree from the University of Washington. He has taught at the Harvard GSD, Washington University in St. Louis, and Salford University in England as a visiting fellow. He has served as president of the Virginia Downtown Development Association, chair of Charlottesville's Urban Design Committee, and vice president of the Alliance for Community Choice in Transportation.

Jennifer Senick

Titusville, New Jersey

Senick is founding principal of J. Senick & Associates, a planning and grants firm with diverse public and private sector clients, including the city of Paterson, New Jersey, where she is employed as a redevelopment consultant. There she chairs the Center City Redevelopment Advisory Group, which has resulted in a \$130 million planned mixed-use development; oversaw the development of a transit village plan and continues to assist in its implementation; represents the city in county and congressional light-rail discussions expected to result in three stations in Paterson; and is the city's representative to the Task Force on the Great Falls (now a state park).

Additionally, Senick holds a research appointment at the Center for Energy, Economic and Environmental Policy in the Bloustein School of Urban Planning and Policy Development at Rutgers University, where she is pursuing her PhD degree. A resident of Highland Park, Senick is a commissioner of its redevelopment agency, project manager of its \$4 million streetscape program, and volunteers on the borough's Green Community Working Group.

Senick received her BA in government from Bowdoin College and her MA in political science from the University of California at Los Angeles (UCLA). She worked for the Rand Corporation, where she received her public policy training, for seven years.