

AN ADVISORY SERVICES PANEL REPORT

Southern Dallas County Texas



Urban Land
Institute

Southern Dallas County Texas

A Strategy for Developing the Southern Dallas County Logistics Hub

June 25–30, 2006
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 34,000 members and associates from 90 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

©2007 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.

Cover photo by © Skip Nall/Photodisc

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's interdisciplinary panel teams provide a holistic look at development problems. A respected ULI member who has previous panel experience chairs each panel.

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, partici-

pants 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

Thomas W. Eitler
Director, Advisory Services

Nicholas Gabel
Senior Associate, Advisory Services

Carmen McCormick
Panel Coordinator, Advisory Services

Yvonne Stanton
Administrative Assistant

Nancy H. Stewart
Director, Book Program

Laura Glassman, Publications Professionals LLC
Manuscript Editor

Betsy VanBuskirk
Art Director

Martha Loomis
Desktop Publishing Specialist/Graphics

Susan S. Teachey, ON-Q Design, Inc.
Layout Artist

Kim Rusch
Graphics

Craig Chapman
Director, Publishing Operations

Acknowledgments

The panel would like to extend its appreciation to the city of Dallas for asking the ULI panel to assist the city in its effort to plan for a trade corridor in southern Dallas County. In particular, the panel thanks Karl Zavitskovsky, director of the City of Dallas Office of Economic Planning, for initiating the panel and engaging ULI to address the issue of an inland port, and Heather Lepeska, management development associate, for her role in pulling together the logistics, briefing materials, and itinerary that were essential for the panel's success. The panel would also like to thank all of the involved jurisdictions—the cities of Balch Springs, Cedar Hill, DeSoto, Duncanville, Wilmer, Hutchins, Lancaster, Mesquite, and Seagoville—for their cooperation.

The panel was supported by the efforts of the City of Dallas Office of Economic Planning, specifically staff members Daniel Oney, research and information manager; Earnest Lloyd, economic development analyst; Kevin Williamson, economic and geographic information systems (GIS) analyst; Sonya Smith, economic development analyst; and Brenda Caldera, office assistant.

Other individuals and representatives of agencies and organizations providing support included the following:

- Richard Allen, chief executive officer (CEO), Allen Group;
- Ed Romanov, president, Allen Group;
- Dan McAuliffe, vice president, Allen Group;
- Doc Cornutt, chairman and CEO, Argent;
- Peter Beck, managing director, Beck;

- Dan Blizzard, vice president, Belo;
- Vann Cunningham, assistant vice president, economic development, BNSF Railway;
- Jeff Swope, principal, Champion;
- Steve Modery, principal, Champion;
- Jeff Turner, senior vice president, Duke Realty;
- Tony Fernandez, executive vice president, Guaranty Bank;
- Steve LeBlanc, senior vice president, Guaranty Bank;
- David Sargent, founding partner, Hermes Sargent Bates;
- Cynthia Tari, associate, Hermes Sargent Bates;
- Roy Wilshire, senior vice president, Kimley-Horn and Associates, Inc.;
- Jon Napper, partner, Panattoni;
- Mike Rader, principal, Prime Rail International;
- Gary Anderson, managing director, ProLogis;
- Denton Walker, senior managing director, Trammell Crow;
- Jim Gengler, manager, intermodal terminal operations, Union Pacific.

The panel is particularly grateful to everyone who participated in the interview process for openly sharing information about southern Dallas County.

Contents

ULI Panel and Project Staff	6
Foreword: The Panel's Assignment	7
Overview and Summary of Recommendations	10
Logistics	14
Public Policy	20
Development Strategies and Implementation	25
Conclusion	31
About the Panel	34

ULI Panel and Project Staff

Panel Chair

Michael R. Buchanan
Managing Director (retired)
Bank of America Real Estate Banking Group
Atlanta, Georgia

Panel Members

Jonathan Barnett
Principal
Wallace Roberts Todd
Philadelphia, Pennsylvania

James J. Curtis III
Principal
Bristol Group
San Francisco, California

Scott Hall
Senior Business Development Manager
City of Chesapeake, Department of Economic
Development
Chesapeake, Virginia

Gary O. A. Molyneaux
Planning & Program Development Manager
King County International Airport
Seattle, Washington

David A. Stebbins
Vice President
Erie County Industrial Development Agency/
Buffalo Urban Development Corporation
Buffalo, New York

Ernesto Velarde-Danache
Principal
Ernesto Velarde-Danache, Inc.
Brownsville, Texas

ULI Project Directors

Jo Allen Gause
Senior Director, Residential Development

George Kelly III
Scholar in Residence

ULI On-Site Coordinator

Jennifer Backover
Consultant

Foreword: The Panel's Assignment

An influx of trade from Asia, coupled with increasing port efficiencies in the United States and the buildout of ports in Mexico, is leading to a burgeoning of trade corridors across the United States. To accommodate increased trade, communities are enhancing and expanding the capacity of these routes. In particular, certain locations along these trade routes are being sought as nexuses for logistics services, as well as warehousing, industrial, and manufacturing facilities. Such colocation creates greater economies of scope and scale by enhancing the proximity of complementary services and land uses.

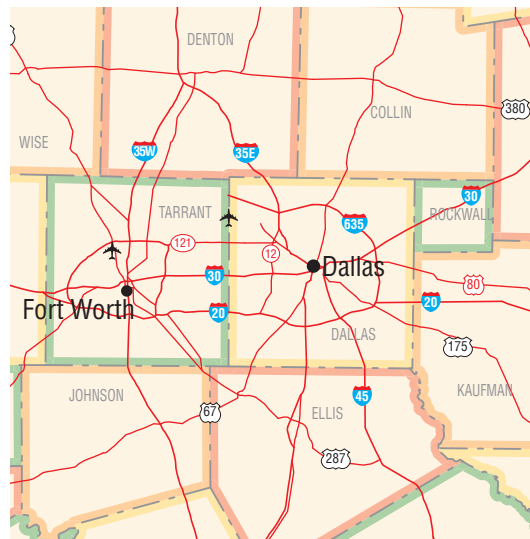
The city of Dallas asked the ULI Advisory Services panel to clarify and explore the city's options as it moves forward with participating municipalities in developing an "inland port" to exploit the influx of trade. The panel was asked to review progress to date and provide direction for future development.

An "Inland Port" and the Development of Southern Dallas County

A confluence of transportation resources running through Dallas, previously called the Dallas North American Free Trade Agreement (NAFTA) trade corridor and now referred to as the International Inland Port of Dallas, comprises more than five interstate highways and three Class I railroads. These resources, which include major trade routes running from Mexican ports and the Port of Long Beach on the West Coast to destinations in the Midwest and on the East Coast, make southern Dallas County a perfect site for international freight and intermodal logistics facilities, which effectively define the inland port concept. Because of Dallas County's location along the River of Trade Corridor, the city has sought to actualize its potential for growth by creating a plan for development of the southern portion of Dallas County.



Location map.



Regional map.

Specifically, the city asked ULI to assist in creating a plan for developing the southern portion of Dallas County as an inland port. The inland port is envisioned as a nexus for trade along the River of Trade Corridor, which would capitalize upon southern Dallas County's location by providing a myriad of services, including customs preclearance (facilities to preclear freight traffic from Mexican and Canadian customs services in Dallas); agile port capability (an inland facility to process containers from ships, thereby alleviating bottlenecks at the busiest ports); a cargo airport (to be used for smaller, primarily consumer goods shipments); and a foreign trade zone (which may also receive special state and local tax treatment).

Given these resources along with the presence of large greenfield sites in the study area, the panel was asked to evaluate southern Dallas County's potential for logistics-related development. This potential was to be measured in light of the inland port characteristics previously described. After determining the area's potential, the panel was asked to recommend next steps, paying special attention to the transportation infrastructure, its relationship to surrounding communities, the need for additional infrastructure, and the governance structures necessary to bring about development. To streamline the process, the panel was asked to address three principal aspects of the region's development: logistics, public policy, and development strategies and implementation.

The panel addressed the entire southern Dallas County region, focusing on its public policy and logistical characteristics with an eye toward implementation and development strategies for all affected communities. This enlarged scope allowed the panel to address macro issues facing the region, which the panel viewed as a necessary precursor to further development. This report outlines the panel's recommendations and provides steps for furthering development of an area the panel calls the Southern Dallas County Trade Corridor, in reference to its geography and available logistics infrastructure.

During its week in Dallas, the panel received numerous briefings from stakeholders and experts on the subjects under consideration. The panel conducted more than 50 interviews with area resi-

dents, municipal officials, representatives of public and private sector firms, corporations, developers, and academicians to develop a holistic view of the study area and its inherent opportunities and challenges. The panel then deliberated for several days, acquiring additional information, conducting analysis, and building consensus until it reached a final and comprehensive recommendation. This report represents the culmination of that process and the multidisciplinary perspective provided by the panel's diverse membership.

Study Area

The panel was asked to study the entire southeastern quarter of Dallas County, an area comprising more than 234,000 acres that is bounded on the north and the west by Loop 12 and eastward from Joe Pool Lake to Buckner Boulevard and from Buckner Boulevard to I-30. The southern and eastern boundaries are the Dallas County line. The area includes 11 municipalities plus a portion of the city of Dallas.

The area's general characteristics, relative to the other portions of Dallas County, include higher unemployment and poverty rates, fewer college-educated residents, a less-skilled workforce, higher crime rates, and less development activity and availability of services. The area has a higher concentration of minority and younger residents relative to the remainder of Dallas County. The inland port is viewed as a catalyst for economic development in this relatively underdeveloped section of the city and county.

Since the project began in 2004, the city of Dallas has sought consensus by building cooperative agreements with international and national ports. These agreements, which include agreements with the Mexican ports of Manzanillo, Lázaro Cárdenas, and Topolobampo, are seen as a precursor to development activity stemming from the current influx of trade, which is expected to increase. The city intends to eventually establish formal agreements for freight and railway traffic directly from these ports through Dallas to destinations elsewhere in the United States. These arrangements would guarantee the area's prominence as an essential node along a high-capacity trade



The Union Pacific Intermodal Terminal in Wilmer/Hutchins near Dallas uses technology that significantly decreases truck processing time.

route. In addition, a memorandum of understanding (MOU) has been signed with the Port of Houston and the U.S. Maritime Administration. An MOU has also been signed with the Panama Canal. Both MOUs may serve as opportunities for increased freight and policy developments that would benefit southern Dallas County.

Although the city of Dallas has taken the lead role in the project, an active coalition also is working on it. In addition to the city of Dallas, the coalition includes Dallas County and the cities of Balch Springs, Cedar Hill, DeSoto, Duncanville, Lancaster, Mesquite, and Seagoville. The city and these jurisdictions, along with the jurisdictions of Wilmer and Hutchins, collectively make up the study area.

Further consensus-building activity at the regional level includes interlocal agreements that the city of Dallas has entered into with the cities of Cedar Hill, DeSoto, Duncanville, Lancaster,

and Mesquite. These first steps are seen as the foundation for agreement on planning and development of the study area.

Recent developments in the study area include an intermodal facility in the towns of Wilmer and Hutchins that was built by Union Pacific (UP) in 2005. BNSF Railway has expressed interest in locating an intermodal facility near BNSF's facility. The presence of two such facilities would be unique in the United States and would provide the capability of enhanced long-haul shipments from the Port of Long Beach and increased distribution capability by truck freight at these intermodal facilities. The city of Dallas sees this possibility as a major boon for the study area.

Overview and Summary of Recommendations

The issues presented to the panel were wide ranging, encompassing numerous topics of significant importance to the sponsor and neighboring localities. In conducting its work, the panel found framing the project as two primary questions most effective:

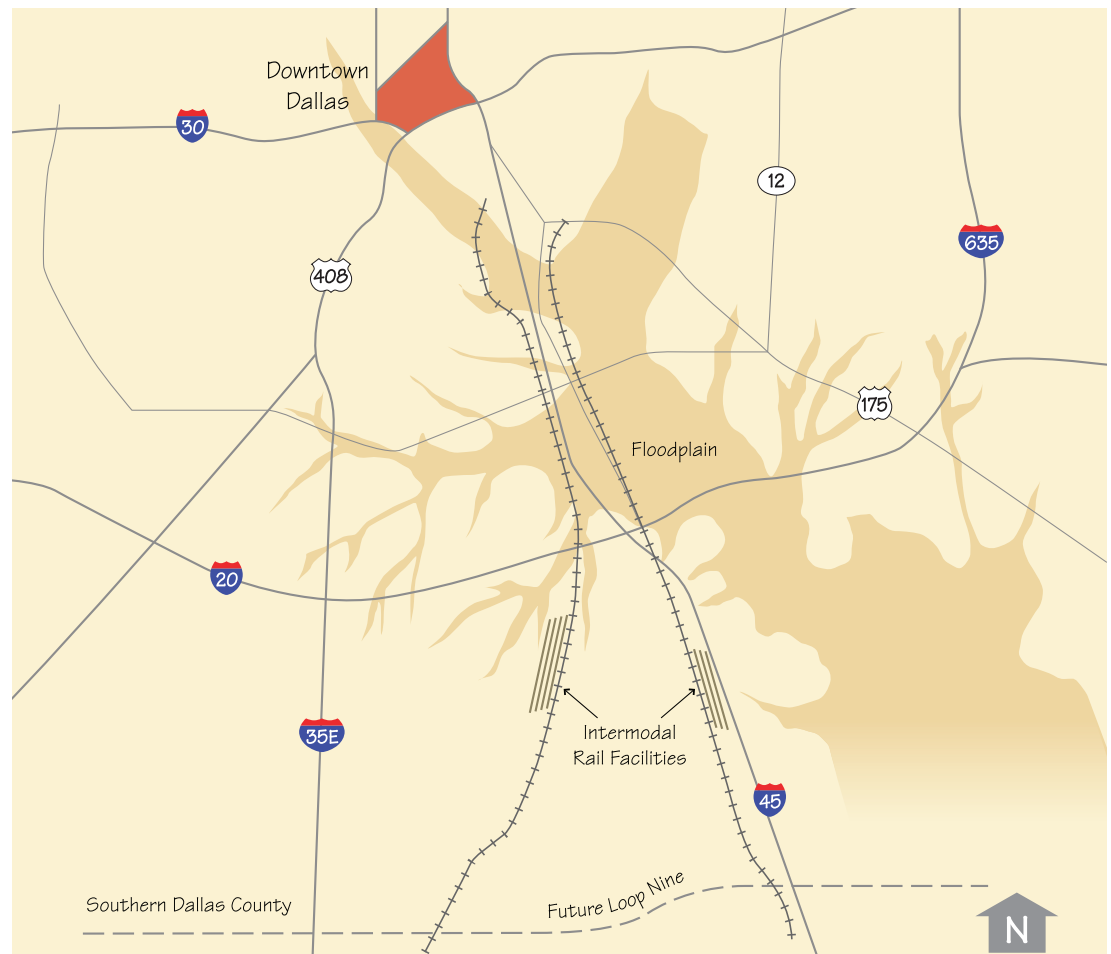
- How can the interested localities optimize the vast economic and development potentials inherent in the study area?
- How can the interested localities optimize the economic and development potential inherent in

the specific study area of southern Dallas County while also creating a dynamic live/work/play environment that provides necessary services, programs, and opportunities?

The Dallas/Fort Worth Metroplex Is an Inland Port

The panel began by considering the concept of an inland port as put forth by the sponsor and quickly arrived at the conclusion that many characteristics described are inherent to the Dallas region.

Southern Dallas County Trade Corridor.



Intermodal shipping involves moving freight by more than one mode of transportation without repacking the shipping container.



In fact, the entire Dallas/Fort Worth metroplex—with its conglomeration of intermodal industrial and warehousing facilities, freight and railways, free trade zones and airports—represents the qualities that define an inland port.

The panel then turned its attention to the consideration of each element of an inland port and its purpose within the study area. In considering the concept of an inland port in southern Dallas County, the panel found that relating the study area to the entire Dallas/Fort Worth metroplex is important to ensure that complementary uses are maintained and unnecessary redundancy and overcapacity avoided, the result of which would slacken overall supply and could negatively affect the economy.

In analyzing the characteristics of an inland port with respect to the entire Dallas/Fort Worth metroplex, the panel came to the following conclusions:

- Southern Dallas County is strategically positioned along major interstate highways and possesses an opportune geography for freight-related facilities and services. Moreover, the Dallas/Fort Worth metroplex sits at a strategic
- central U.S. location at the intersection of east/west Interstates 20 and 30 and north/south Interstates 35 and 45.
- Railways running through and near southern Dallas County provide a potential influx of trade. The Dallas/Fort Worth metroplex is a strategic railway junction served by the BNSF and UP railroads as well as the Texas Pacifico railway line, which is owned by the state of Texas. The Kansas City Southern has a branch line serving Dallas and Alliance from Shreveport, Louisiana.
- Southern Dallas County is poised to benefit from a major influx of trade stemming from container shipments emanating from Asia. The Dallas/Fort Worth metroplex is a terminus for a southern road and rail corridor leading from the major cargo terminal in Los Angeles/Long Beach, California, which is the entry port for an estimated 70 percent of containers entering the United States from Asia.
- The River of Trade Corridor is the conduit through which the revitalization of southern Dallas County will occur. The Dallas/Fort Worth

metroplex is part of the River of Trade that connects Mexico to Canada through the central part of the United States.

- Intermodal facilities provide a particular characteristic that is the linchpin for future development of southern Dallas County. The Dallas/Fort Worth metroplex has three intermodal cargo facilities: at Alliance, Mesquite, and Wilmer/Hutchins, with a fourth facility under study in Lancaster.
- Primarily because of the metroplex's proximity to inbound trade flows from Mexico, agreements with Mexican ports and the natural extension of trade delivered from them provide ample demand for intermodal, logistics, and warehousing facilities in southern Dallas County.

Southeastern Dallas County Is a Prime Location for Expanding the Metroplex's International Market Potential

In light of these findings, the panel believes that southern Dallas County is a highly desirable location for expansion of the metroplex's inland port capabilities. The entire metroplex has both a strong, established logistics industry sector and exceptional potential for sustained future growth. Southern Dallas County is unique in the metroplex because of its abundance of large greenfield development sites which, the panel notes, already have been targeted by private development firms.

Fortunately, the communities of the southern Dallas County region understand the need to develop a strategy for smart, sustainable growth to prevent uncontrollable and undesirable sprawl-like development, and they have begun initial steps to direct and plan for this growth.

The following characteristics or resources define the opportunities for development of an inland port in southern Dallas County, an area that is well positioned to accommodate anticipated long-term market demands:

- Geographical and land resources:
 - Strategic geographic position in relation to major population centers to the south;

- Availability of large, undeveloped contiguous tracts of land.

- Transportation resources:

- Immediate access to Interstates 20 and 35 plus close connections to three other interstate highways;
- Access to two Class 1 railroads, the UP and BNSF; the UP already has an intermodal facility at Wilmer/Hutchins and an intermodal facility for BNSF is being planned nearby in Lancaster and Dallas.

- Commercial resources:

- Already selected by experienced national and international commercial developers with access to sophisticated financing resources;
- Ability to create a new foreign trade zone or a subzone from an existing trade zone in the metroplex, if necessary.

- Political resources: Established cooperation among the communities in southern Dallas County, including the city of Dallas.

- Human and institutional resources:

- Underemployed workforce;
- Cedar Hill Community College;
- New University of North Texas at Dallas campus.

Given these resources, the panel recommends that the constituent jurisdictions of southern Dallas County take the following actions to ensure the study area reaches its full potential of meeting the region's long-term business growth needs. Southern Dallas County will have to overcome several issues to meet that objective.

Provide Ample, Affordable Water Sources

A tremendous need will exist for an assured and affordable water source for southern Dallas County. Several jurisdictions outside the city of Dallas currently have the ability to support large-scale industrial, commercial, and residential development on their own. For southern Dallas County to gain a competitive advantage, it must have the

ability to provide water in substantial quantities and at reasonable prices relative to alternative geographies within the county.

Create Wastewater and Stormwater Management Systems

Lack of an adequate wastewater and stormwater management system that can support large-scale industrial or commercial development is a major hindrance to further development. Runoff from waste or stormwater is a critical issue that will affect all land uses in the region. A regional development approach that engages all jurisdictions must be used to draw up a plan responding to critical issues and recommending concrete steps to be undertaken from the initial planning stages.

Build Arterial and Local Road Systems

The absence of an adequate arterial and local road system to support large-scale industrial or commercial development limits expansion opportunities to select sites. Additionally, as the planning process progresses and growth occurs, various uses will stretch the limits of existing transportation resources. Excessive usage can be offset by creating capacity along arterial and local road systems, which will allow unencumbered travel throughout the area. Efficient traffic flows will be essential to the area's success, given its emphasis on availability of transportation resources.

Institute New Environmental Precautions

To limit the need for future corrective action and resulting penalties, the area should ensure that air quality and other environmental standards and measures are met. The metroplex already is a nonattainment area for ozone pollution, which could restrict movement of trucks and trains

within the area at certain times of the day and may mean that individual projects will need to meet higher air-quality standards. The need to meet more stringent environmental standards may significantly affect southern Dallas County, and the panel therefore advises the area to plan for air-quality control measures from the outset.

Cooperate on Overarching Jurisdictional Issues

Multiple local jurisdictions in southern Dallas County need to deal with areawide issues, such as planning land use and marketing collectively, to ensure that the development is not haphazard and to enhance the entire area's development potential. Without cooperation, inefficiencies will occur and detract from the development opportunity, affecting all of the area's jurisdictions adversely. A series of frameworks amenable to such cooperation are detailed in the Implementation section of this report.

The negative local perception of southern Dallas County has resulted in local real estate market myopia. This impression must be overcome to ensure the envisaged development opportunity. Jurisdictions therefore need to agree upon a marketing plan to shape impressions of southern Dallas County and redefine the area for both local and national real estate market opportunities.

The remaining sections of this report identify and detail additional advantages and disadvantages, answering specific questions posed to the panel or questions that arose independently during its research. The final section further outlines the panel's recommendations and offers steps for implementation.

Logistics

The Dallas/Fort Worth metroplex is in a position to benefit from transportation policy initiatives currently being proposed by the U.S. Department of Transportation that seek to identify up to five national transportation corridors—the Corridors of the Future Program. After these policies are set, the selected transportation corridors may potentially receive federal funding that will enable them to function as a vital network essential to the nation's trading economy.

The Dallas/Fort Worth Metroplex Trade Hub

Generally considered, the Dallas/Fort Worth metroplex is at the center of an extensive trade hub serving regional, national, and international markets supported by high-quality transportation infrastructure. These resources suggest that the metroplex should be part of the new national corridor system. To be considered a cooperative partner at the national level, however, the region must continue to demonstrate its leadership capacity. The achievement of designation as a component of the national corridor will require leadership in the buildout of further transportation resources. Numerous past and current initiatives, such as Fort Worth Alliance Airport, the TransTexas Corridor, the River of Trade Corridor, and the Dallas NAFTA Trade Corridor, demonstrate that this leadership already is in place.

The southern Dallas County trade hub must be viewed as an extension of regional leadership that will further enhance the region's competitive advantage. Although recognized as a national trade hub, the Dallas/Fort Worth metroplex is also part of a national system of trade centers. Other competing centers include San Antonio and Houston, as well as out-of-state metropolitan areas such as Chicago, Kansas City, and Memphis. Demand in the form of shippers seeking faster and cheaper transport of goods has led West Coast and South

Coast ports to improve upon existing systems, which will quicken the pace and means by which freight moves to inland trade hubs.

Port competition is driving logistics innovation, which will result in a greater need for trade hubs such as the proposed inland port. The ports of Los Angeles/Long Beach, California; Seattle/Tacoma, Washington; and Port Rupert, Vancouver, British Columbia are adding infrastructure to accentuate the movement of freight from port of entry to the marketplace. The Mexican ports of Mazatlán, Culiacán, and Topolobampo likewise are improving facilities that will link them directly to the Dallas/Fort Worth metroplex, connecting the metroplex to manufacturing centers in central Mexico and the borderlands. The Dallas/Fort Worth metroplex must be prepared for the influx of freight and must be capable of expediting the transfer of goods to local and eastern markets. The capacity to absorb an influx of trade into and through the metroplex necessitates additional resources that will be provided by the inland port. The panel views these resources as being in addition to current resources, not in competition with the logistics supply currently existing in the Dallas/Fort Worth metroplex.

Both freight suppliers and alternate shipment methods must be accommodated. The UP and BNSF railways are the primary suppliers of freight arriving from the West Coast. Air transportation shipment providers transport smaller packages—mainly consumer goods—but in higher value per item than rail or truck shippers. Because air and rail tend to have mutually exclusive customer bases, such firms should not be viewed as competitors. Truck freight is transported along both short- and long-haul routes, with the most-efficient routes for trucking firms consisting of networks of between 300 (short haul) and 600 (long haul) miles. Railways, trucking firms, and air freight services therefore provide a convergence



Containers often arrive at an intermodal facility by train and are then placed on trucks to be driven to the customer. These parked containers will be loaded onto truck chassis.

of shipping conduits, in which each serves the others, depending on the weight of items shipped, distance, size, and priority. The location of facilities that can serve each of these service providers is an important consideration to ensure both low cost and accurate delivery as well as options for storage and retrieval.

Intermodal facilities that sort and distribute products are needed to bridge the gap between short- and long-haul routes and to provide a conduit for freight arriving from Mexican and West Coast ports. Their presence will guarantee the inland port's and the region's success. The proposed inland port, with the Dallas/Fort Worth metroplex trade hub as a base, will join facilities in the northern portion of the region, such as Alliance, Texas, which is home to a cargo airport and BNSF's intermodal facility. The addition of the UP intermodal facility based on West Coast cargo augments the region's capacity for rail and truck shipments in southern Dallas County. This new facility further complements the domestic cargo facility in Mesquite, Texas. Nevertheless, shipper and market demands for increased intermodal facilities have resulted in the proposed

development of a new BNSF intermodal facility near the UP southern Dallas County facility.

The demand for and development of intermodal facilities has placed the Dallas/Fort Worth metroplex at a competitive advantage for inclusion in the U.S. Department of Transportation's Corridors of the Future Program, which is aimed at accelerating the development of multisate transportation corridors across the country. The presence of intermodal facilities is accentuated by the metroplex's position at the crossroads of four potential trade and transportation corridors. These corridors include the Dallas/Los Angeles, Dallas/Atlanta, and Dallas/Detroit corridors as well as the Dallas/Mexican ports corridor.

The crossroad established by these trade corridors effectively creates an interdependent trading community. To reflect this reality, the metroplex should act in unison, perhaps as part of the planning and developmental process for the Southern Dallas County Trade Corridor, to establish and expand partnerships with other states, cities, and ports on the River of Trade Corridor. This coalition, like others elsewhere, would work coopera-

Cranes guided by Global Positioning System technology lift containers on and off railcars.



tively with the federal government in designating the metroplex as a trade hub and as part of the nascent national transportation corridor system.

Competitive Analysis

Although the panel's focal point is the inland port and southeastern Dallas County, the competitive strengths and weaknesses of the metroplex as a whole must be assessed to better understand the study area's potential. The metroplex's historical growth rate will necessitate expansion of current industrial, distribution, and warehouse space beyond what is currently planned. Demand for industrial, distribution, and warehouse space will grow substantially in the next decade. Over a range of ten to 15 years, the metroplex is estimated to generate demand for 65 million to 120 million square feet of warehouse distribution space. That demand range was forecast by using a 1.5 to 3 percent growth rate over ten- and 15-year horizons. The range then was triangulated by examining relative growth rates

and absolute growth measures in other major global-pathway markets.

According to Cushman Wakefield, the Dallas/Fort Worth metroplex industrial market has grown from 256 million to 365 million square feet between 1993 and 2005, adding 109 million square feet in slightly more than a decade. Warehouse and distribution space has grown from 215 million to 300 million square feet over the same period, adding approximately 85 million square feet.

In comparison, several analogous cities have expanded similarly over the same time frame. The Chicago industrial market has grown by 175 million square feet, the Los Angeles industrial market has expanded by 100 million square feet, and California's Inland Empire industrial market has added 112 million square feet. Average growth rates over this period for Chicago, Dallas/Fort Worth, and Los Angeles range from 1.4 to 1.6 percent. The Inland Empire has experienced an approximately 3 percent growth rate. These growth rates point to the likelihood of continued growth

along major trade hubs, in concurrence with the previously mentioned 1.5 to 3 percent growth rates used in the panel's analysis of the Dallas/Fort Worth metroplex.

These growth rates are indicative of the metroplex's strengths and southern Dallas County's potential as an inland port.

Strengths

Sustainable growth has been a longstanding advantage for the metroplex, producing solid growth with relatively flat rental rates. This strength may be further bolstered through the development of an inland port.

A second but equally important characteristic for development in southern Dallas County is the presence of large, contiguous greenfield sites. These sites create a unique advantage for the southern Dallas County subregion. The sites represent a development resource that, if appropriately exploited, will result in a significant increase in the logistical capacity of the county as a whole.

Third, the presence of a ready labor force and adjacent educational institutions represents a human resources advantage for employers seeking to locate in southern Dallas County. Vocational and certificate programs, in particular, offer opportunities to train the sophisticated and highly skilled workforce necessary to operate technologically advanced warehousing and logistics facilities as well as freight operations.

Weaknesses

The most apparent hindrance to the development of an inland port is a lack of regional cooperation. Achieving this cooperation will be the metroplex's and southern Dallas County's greatest challenge as other regions vie for inclusion in national initiatives and begin to attract greater shares of maturing international markets. It will directly affect the development of southern Dallas County's inland port.

The response from local and state governing officials, administrative bodies, relevant private sector firms, and existing public/private partnerships

Union Pacific's Intermodal Terminal uses a state-of-the-art security system.





Dallas/Fort Worth is a trade hub.

to calls for cooperation will be critical. Suppliers and users will perceive the atmosphere created through cooperation as a congenial environment in which to do business. To be successful in the global economy, jurisdictions must end city-to-city, state-to-state, and regional competition in favor of global competition.

Local competition among jurisdictions affected by the inland port will be especially difficult to forgo in early life-cycle stages. As potential site users begin to realize opportunities for development and procure sites, a “checkerboard” effect may occur. This pattern of use could result in the study area’s having fewer of the large, contiguous parcels required by large users as the landscape becomes dotted with smaller parcels, thus limiting the potential to attract larger users.

Opportunities

The presence of large greenfield sites clearly represents a strength and an advantage. The fact that large portions of southern Dallas County are undeveloped presents an unparalleled opportunity for the creation of balanced land uses, which could further catalyze development of the region. Such a balance will enable the region to maximize industrial, warehouse, and distribution space while also planning for the housing, retail and office space, and infrastructure necessary to support the workforce.

The panel envisions numerous uses for these larger parcels. Such uses would be a boon to the entire region and therefore require a regional planning approach to both sustain the existence of such parcels and plan for the supporting infra-

structure inherent in their development. Large users will need to be attracted on a cooperative basis, and this effort should be a part of the marketing initiative for the inland port. Examples of large users that could be attracted to the area include the following:

- Airframe manufacturing facilities (with potential sites of more than 800 acres);
- Automobile manufacturing facilities (sites more than 1,000 acres);
- Warehousing facilities for major retailers (1,500,000–3,000,000 square feet; examples include J.C. Penney's center at Alliance and Wal-Mart's Joliet, Illinois, facility).

Attracting any of the preceding users could be a catalytic event for southern Dallas County.

Furthermore, targeting and supporting the development of manufacturing facilities and warehouse users who can backfill container traffic to the West Coast will strengthen the metroplex's role in the global supply chain. The panel's recommendation is not to foreclose on opportunities for large users when developing a master plan.

Regional cooperation will be required to define and agree upon a balance of land uses. A recent example of such cooperation can be found in the agreements entered into concerning the Wintergreen Road and Pleasant Run Road grade separation among the cities of Hutchins and Wilmer, Dallas County, the Allen Group, and the North Central Texas Council of Governments (NCTCOG), and the agreement between the Texas Department of Transportation and NCTCOG on Tower 55 freight rail improvements. Such agreements demonstrate that success is achievable through cooperation. In solving problems that affect multiple jurisdictions, such agreements represent the clear, open, and transparent processes required for all parties to succeed.

Southern Dallas County should continue to address growth and development opportunities from a regional perspective through existing organiza-

tions. Several local organizations are in place to facilitate this effort, including NCTCOG, the Dallas NAFTA Trade Corridor Coalition, and the Best Southwest Cities. In addition, local jurisdictions, private sector firms, regional organizations, and the state must refine their individual marketing and development programs to emphasize cooperation to engender interest from the global marketplace, particularly from Fortune 500 multinational corporations, which represent potential large users.

From a logistical standpoint, the southern Dallas County inland port will increase the region's ability to absorb demand. The buildout of additional industrial, warehouse, and distribution space in southern Dallas County will require implementation of a balance of uses to ensure sustainability. The panel firmly believes that logistics-related development will help the region to realize its full potential and competitive advantage.

On the basis of its analysis of logistics potential, using the demand range for the Dallas/Fort Worth metroplex as a base and the average economic growth indicators listed previously, the panel concludes that the resulting capital outlays for additional industrial, warehouse, and distribution space, along with the hiring of attendant labor and administrative employees, will bring in tax receipts and salaries capable of supporting a balance of land uses and infrastructure throughout the entire metroplex. The panel also notes that this success is contingent on future growth, which hinges increasingly on regional and subregional cooperation. Such cooperation will be essential for the outgrowth of the inland port project. The metroplex as a whole will benefit from the increased trade created by the inland port, which will buoy an influx of trade with additional facilities and logistics capabilities.

Public Policy

The panel believes that a number of prerequisites exist for the successful development of the Southern Dallas County Trade Corridor. From a public policy and planning perspective, all of the area's municipalities must be involved in the following activities:

- *Initiate planning.* Development is already well underway, and planning needs to begin immediately to place all current initiatives in context.
- *Create a comprehensive regional plan.* A comprehensive regional plan is needed for the entire southeast quadrant of Dallas County, as already defined, including the relevant sections of the city of Dallas and the 11 other municipalities. This plan should be created under the direction of a steering committee representing all the government entities affected, including the county.
- *Engage a professional staff.* The plan should be prepared by a consulting team of national stature. This team not only should be led by an urban design and planning firm but also should include environmental and infrastructure engineers, real estate market analysts, and strong public involvement.
- *Adopt uniform regulations.* Ensuring the successful implementation of the comprehensive regional plan will require a system of development regulations that is similar across all of the municipalities involved, so that these municipalities do not present a mixed message to developers.
- *Develop a capital improvement program.* Implementing the plan will require a capital improvement program that specifies timing and priorities.

Public Involvement and Communication

Change of this significance requires public input and communication as early as possible, making it critical that people be brought together around a clear vision of a desirable outcome. Opposition should not be allowed to unite around real or imagined fears of future development.

Area residents and the general public should be involved and informed early in the master-planning process, so they are aware of expected changes to their communities and can participate in and take advantage of the many positive opportunities this process presents. Early and meaningful public involvement will not only positively affect planning and development efforts, but also can remove obstacles to development that may otherwise be created as a result of fear of the unknown.

Land Use and Urban Design

The vision for the area should be to create a livable community, not just a logistics hub. Both public and private stakeholders must address the importance of developing new community facilities and programs to serve the needs of both existing residents and the new companies that are expected to locate in the affected area. Quality of life and community facilities are important considerations for companies making location decisions.

Modern logistics and distribution facilities involve significant high-tech equipment that will require good basic education and special training. A skilled and ready workforce will be a critical requirement for companies choosing to locate in the study area. This need suggests that additional support will be required for the region's primary, secondary, and postsecondary educational facilities.

The study area already has a solid foundation for these educational needs, with the presence of two

community colleges and the creation of the new University of North Texas at Dallas campus. The panel understands that Cedar Hill Community College already has begun to develop a special curriculum for the logistics industry, which is an excellent start. Establishing a new four-year university campus in the study area is not only an important symbolic development but also can provide a critical educational component for the variety of employment opportunities expected to be created in the region. The new campus will also create a market for a wider variety of private investment and development.

Although logistics and distribution facilities are expected to be the predominant land use in the study area, the panel believes identification and preservation of areas for a variety of other types of land uses is important to ensure a balanced and livable community and protect future development opportunities.

Additional Issues

The panel addressed a variety of additional public policy issues—including organizational issues, regulatory issues, environmental policy issues, and technological policy issues—and described the opportunities and barriers that these issues present.

Organizational Policy Issues

Southern Dallas County constitutes a geographic area of more than 200,000 acres, encompassing 12 different municipalities. Maximizing the study area's development potential requires the creation of a cohesive regional organization that can identify and address significant issues, including the following:

- Prioritization and decision making;
- Cross-jurisdictional issues;
- Transportation and utility infrastructure needs;
- Funding of special projects;
- Economic development marketing and planning initiatives;
- Use of economic development incentives.

A legitimate need exists to identify and bring together in a functional coalition all appropriate groups in a way that will enable them to meet the needs of both the region and individual localities.

Several viable models are available for this coalition to follow. Such groups include the NCTCOG, which has an established and successful structure for studying and funding of key regional issues, including the following subgroups:

- Development Excellence Steering Committee;
- Environment and Development Committee;
- Regional Transportation Council/Metropolitan Planning Organization;
- Public Works Council;
- Water Resources Council;
- Vision North Texas Management Committee;
- Freight Working Group;
- Aviation Planning Working Group;
- Regional Training Center.

Whatever final form it takes, the intraregional coalition must be capable of advancing the development desires of the various localities involved and ensuring that an open, accessible, and transparent decision-making process serves all stakeholders. The coalition should work closely with the NCTCOG because it controls the receipt and distribution of federal transportation funds.

Regulatory Policy Issues

The major changes expected to occur in southern Dallas County need to be managed within a regulatory framework that is uniform in its application, is fairly administered, and implements the objectives of the plans for the area. Although the city of Dallas already has a complete regulatory mechanism and administrative staff in place, many of the other communities in southern Dallas County have only part of what they need, and some have no regulatory mechanisms at all. These communities can and should work together to establish and fund regulations and administrations that serve all of them.

Each community must have a building approval and inspection mechanism, a planning and zoning department, and a planning and zoning commission. Building codes and development regulations should be similar throughout southern Dallas County, so that developers will not be able to play one community against another.

The panel recommends that each jurisdiction in southern Dallas County take the following actions on regulatory policy issues:

- Enact a building code (if it does not already have one);
- Enact zoning and subdivision regulations, in accordance with a regional master plan;
- Establish a building department (if it does not already have one) to approve building plans and conduct building inspections;
- Establish a planning and zoning department (if it does not already have one) to conduct planning studies and approve development plans.

Environmental Policy Issues

Environmental issues that will affect development in southern Dallas County include air-quality nonattainment, wetlands protection, stormwater management, and environmental justice. A large part of southern Dallas County falls within the Trinity River system, including an extensive floodplain and large areas of environmentally sensitive land. A regional environmental conservation concept should be incorporated into the planning process. Floodplains and areas of special environmental sensitivity need to be identified early in the planning process, so that they will not be compromised by development plans. Building a regional stormwater management system into the plan also will be critical to the success of future development.

Air-Quality Nonattainment. The U.S. Environmental Protection Agency (EPA) has designated the Dallas metroplex as a nonattainment area for ozone standards. The current deadline to meet EPA standards is 2009. The state of Texas, through the Texas Commission on Environmental Quality (TCEQ), is responsible for developing the State Implementation Plan (SIP) for the

eight-hour ozone standard. This plan is due June 15, 2007. With local input, the TCEQ is in the process of developing the plan and expects to be able to go out for public comment on a proposed plan by the end of December 2006. A final plan then needs to be adopted and submitted by the June 2007 deadline. Failure to submit a plan or submission of an inadequate plan can result in certain Clean Air Act sanctions, such as loss of certain highway funding. Failure to meet the ozone standard by the attainment date will result in the area's being reclassified to the next-higher classification and will require that the state submit a new SIP meeting the more-stringent Clean Air Act requirements for the higher classification.

In nonattainment areas, any development that uses federal funds or requires a permit from a federal agency will be placed in the "general conformity" category, which means that it must meet higher standards than other development. This classification is meaningful for the area because of the significantly increased volume of truck and rail traffic anticipated from future logistics development. If the project area is well defined and included in the Texas SIP, however, individual projects automatically will be assumed to be conforming, and no special regulatory examination will be required. The city should continue to work with the state to ensure adequate treatment in the SIP.

Wetlands Protection. Nationally, wetlands issues have received considerable judicial, legislative, and regulatory attention in recent years. Wetlands issues could raise significant concerns in the development of southern Dallas County. A considerable amount of land within the Trinity River Basin, especially to the east of Interstate 45, falls within the 100-year floodplain. Although limited potential wetlands areas have been identified in southern Dallas County, the size of the floodplain area indicates that state and federal wetlands regulations are likely to apply in significant areas.

Stormwater Management. The large-scale logistics development anticipated for southern Dallas County will create a vast amount of impervious surface, primarily in large parking lots, which in turn will create significant stormwater management issues. Prevention of erosion and environ-

mental degradation through the use of regional stormwater management systems and new surface paving materials will be an important issue for new development.

Environmental Justice Classification. *Environmental justice* is defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The U.S. EPA has a goal of environmental justice for all communities and individuals throughout the country. According to the EPA, this goal will be achieved “when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.”

Several areas in southern Dallas County are likely to fall under applicable federal regulations. If a proposed development is likely to create significant noise or light pollution effects on adjacent neighborhoods, and these neighborhoods meet the EPA’s definition of a disadvantaged community, the project will have to meet federal environmental justice requirements before it can receive any necessary federal permits. Grants may be available from the EPA’s Office of Environmental Justice to assist affected communities so that they can develop proactive, strategic, and visionary approaches to address their environmental justice issues and to achieve community health and sustainability.

In a project of this scale, all stakeholders—including cities, private developers, and industry—must realize that if only one parcel within the study area requires a federal permit (for example, for wetlands), the entire area could be subject to examination by federal regulatory agencies for compliance with a wide variety of issues, such as air quality or environmental justice. The region must take a proactive approach in identifying potential environmental issues.

Environmental Policy Recommendations. The panel makes the following recommendations on environmental policy issues:

- Local environmental groups are becoming interested in new developments in the southern Dallas County region and are starting to voice concerns. Currently, no real organized opposition exists, but creating public understanding of the advantages of development soon is important, so that public discussion can focus on creating positive opportunities for the future. The region’s communities should proactively engage all environmental stakeholders in up-front discussions to position the entire metroplex as an international model for successful sustainable development.
- The Texas Emission Reduction Program is available to provide financial assistance for the replacement of high emission-producing train engines that spend 75 percent of their operating time within nonattainment areas. The panel recommends that local communities begin a dialogue with state and federal regulatory agencies to expand this program to include engines for trains on long-haul, interstate routes as well.
- Southern Dallas County’s general planning and development area should be described in terms of its potential future impact and included in the SIP to protect the potential for future development as much as possible.
- Southern Dallas County municipalities and stakeholders should begin to undertake the following efforts as soon as possible:
 - Identify potential wetlands areas, either as part of a master plan or, if the master plan is not created soon, before the master plan.
 - Engage in discussions with logistics service providers to set reasonable and cost-effective environmental standards and expectations for area and individual facilities.
 - Encourage or require the use of regional stormwater management systems.
 - Encourage or require the use of newly developed porous materials to reduce the amount of impervious surfaces and runoff from large parking areas.

Technological Policy Issues

The identification and use of new technologies has the potential to vastly improve the flow of goods and people throughout the entire metroplex as well as along interstate and international transportation corridors. Successful integration of technology with the logistics planning process could result in major benefits to the local and national economies, lower costs to individual consumers and commuters, improved highway design, and a healthier environment. In addition, the use of new technologies could significantly increase the safety and security of goods and communities.

Some discussion has taken place regarding establishing specific technologies—such as using radio frequency identification devices for trucks and containers, establishing centers where interstate transportation fees could be prepaid, and so forth—within the Southern Dallas County Trade Corridor. Because of the dynamic evolution of technologies and complexity of state, federal, and international trade regulations, the panel suggests that maximum effort be made to avoid tying the hands of and limiting industry by requiring the use of specific technologies. Instead, the use of creative incentives should be considered that will encourage the private sector to create, use, and integrate advanced logistics technologies.

The panel makes several recommendations regarding technological policy issues for southern Dallas County municipalities and stakeholders:

- Consider creating a logistics technologies consortium that would include four-year and community colleges, private logistics services providers, and private technology companies. The goal of this consortium should be to identify and create new products and processes to increase efficiencies and security.
- Explore ways to incorporate “smart road” technologies on local streets and highways to more efficiently manage vehicle movement. Numerous universities and companies are actively conducting research into the development of such technologies, which include automated traffic

control systems that allow remote rerouting of traffic in the case of blocked or congested highways, road sensors that monitor weather and traffic conditions, and automated collision warning and avoidance systems.

- Investigate the use of truck and container scanning for product confirmation.
- Work with the U.S. Department of Homeland Security and its Transportation Security Administration to develop proper container screening technologies for the detection of illegal materials, including nuclear and biological materials.
- Consider ways to confirm that containers are empty when they enter or leave a terminal.
- Investigate the use of biometric scanning to confirm driver identity.
- Explore the use of computer modeling and simulation to optimize traffic flows within intermodal and other logistics facilities, to develop the most efficient street and highway designs, and to assess the entire logistics process.
- Investigate the use of satellite and cellular devices for vehicle and container tracking as well as for truck and product security.
- Ensure easy and sufficient placement of cellular communication towers that will allow efficient and proper operation of logistics management systems.
- Develop methods of integrating computerized record-keeping systems with those at border points of entry or points of origin.
- Explore innovative container seal designs to increase the ease of product tracking and container security.

Development Strategies and Implementation

The Southern Dallas County Trade Corridor presents a tremendous opportunity for new private development and investment. As previously mentioned, the confluence of major transportation facilities in this area, the existence of one—and potentially a second—intermodal facility, and the abundance of large tracts of undeveloped greenfield sites near the urban core present an unparalleled opportunity for new industrial development. Firms will locate logistics and distribution facilities in this area to take advantage of cost savings brought about by a nexus of existing and planned transportation and warehousing facilities, as well as existing road and rail infrastructure, which will, in turn, lower logistics costs and allow increased flexibility in warehousing. For these reasons, the panel believes the submarket is primed for development.

Although industrial development already is occurring in southern Dallas County, extensive future development will be constrained by the lack of adequate public infrastructure, including water, roads, sewers, and fire and police services. Realizing this area's ultimate development potential, therefore, will require a comprehensive and collaborative approach to prepare for development.

Private investors can expect reasonable returns on their investments, given the current cost of land in southern Dallas County. However, because industrial rents have not increased significantly during the past decade, participants in the real estate development process need to recognize these limits, establish reasonable yield and return expectations, and maintain cost controls. Investors can add value to their holdings by using planning and urban design principles to create a live/work/play community. Such a community should adhere to sound environmental and sustainable development practices. Therefore, to add value, the objective of both public and private stakeholders should

be the creation of a sustainable environment that simply does not exist today.

Given the relatively low rental rates for warehouse, distribution, and manufacturing facilities—and the existing public infrastructure constraints that will affect financial returns—the public sector must contribute significant capital outlays to support infrastructure investments and bolster development in southern Dallas County. These capital outlays will be recouped over the long term, through property taxes and increased regional employment.

Development Strategy

The panel believes that the development strategy for southern Dallas County must incorporate a commitment to regional planning, be focused on a specific geographic area, include diverse land uses, and address current infrastructure deficiencies.

Regional Planning

Successful development in southern Dallas County will require a strong commitment to public/private and multijurisdictional land use and transportation planning, infrastructure financing and construction, and marketing and community development initiatives. Implementation of this strategy is discussed in more detail in the Implementation section.

Geographic Focus

Although private investment can and will occur throughout the greater project area, the primary focus of public infrastructure investment should be to support major private investment opportunities. This initial infrastructure development should occur within a core development—or impact—area defined by the confluence of I-20, I-35E, I-45, and the two long-haul railroads, BNSF and UP. This area includes portions of the city of Dallas as well as the cities of Lancaster, Wilmer, and Hutchins.

Development already is occurring throughout the impact area, especially where public services and infrastructure are available. The panel therefore believes that the impact area should be the major focus for initial development, especially additional public infrastructure investments. This focus does not preclude private sector projects and investments outside the impact area. Such projects should not be discouraged, particularly if the proposed project is on a site with adequate public services and infrastructure.

Within the impact area, because of public and private investments already made or planned, specific attention should be paid to two subareas. First, the Houston School Road and I-20 interchange area should be considered because of the planned development of the University of North Texas at Dallas (UNT-D) campus there and the area's proximity to the key trade interchange created by the intersection of I-20 and I-35E. Moreover, the planned UNT-D campus suggests that more-diversified development—including residential, retail, hospitality, and service office uses—could occur in this subarea. Second, the I-45 corridor in the vicinity of the I-20 interchange and the UP intermodal center already has many inland port assets. These assets, as well as the corridor's interstate and rail connections to Houston, provide a strong foundation for industrial development in this subarea.

Mid- to long-term development will occur along the I-20 corridor extending from Desoto on the west to Mesquite on the east, but also extending north and south along I-35E, I-45, and U.S. 175.

Land Uses

The panel recommends an overall vision for the area that will create a live/work/play community. The comprehensive plan and individual projects should produce a diverse mix of land uses and real estate products, including industrial, residential, retail, service, and community facilities. However, the core development opportunity is industrial, more specifically, big-box logistics and distribution facilities.

The focus will and should be on the development of big-box distribution and logistics centers serving metropolitan, multistate, regional, and some

national distribution markets. This development will provide the “biggest bang for the buck” relative to return on investments for the private sector and, through real property taxes, for the public sector. However, a comprehensive development strategy needs to include opportunities to develop a mix of real estate products, including residential, retail, and “accessory” office development—such as sales offices, support services, and so forth. This development mix should be addressed both as part of an overall vision and master plan for the area and within individual development projects, particularly the large-scale development projects that are possible in the impact area.

Although strong demand for manufacturing facilities may not occur initially, efforts should be made to encourage this type of development in the future to balance the development activity in the impact area and, most important, to expand employment opportunities for area residents. Large-scale development projects should preserve larger tracts of land to position both the project and the community with the potential for these types of projects.

Infrastructure Development

Because current infrastructure deficiencies are going to be critical to future plans, these plans should address an assured source for the water supply, as well as water distribution and wastewater purification services; arterial, service, and access roads; and potential transit connections.

A Coordinated Approach. The affected municipalities; regional, state, and federal governments; and major development firms should take a coordinated approach to ensure timely and appropriate construction of the infrastructure required to serve the area.

Capital Sources. A diverse group of investors should be encouraged to participate in the market potential offered by the area. In addition to the large land holdings already in the process of being assembled and prepared, many opportunities remain for investors and development firms planning alternative product types and scales of development. Moreover, multiple and diverse investors will enhance the area's marketing position and its ability to attract public and private financial capi-

tal by raising the national awareness of the development opportunity and broadening the reach toward the end users of the properties to be developed in the area.

Airports. Dallas/Fort Worth International Airport and Fort Worth Alliance Airport both have tremendous excess capacity for cargo operations. The panel therefore has been unable to justify land-banking for a cargo airport at either Lancaster or Mesquite. Both the Mesquite Metro and Lancaster Municipal airports may be better positioned as corporate and commuter airports to support the area's business and industrial development potential.

Implementation

The panel believes that a new governmental entity will be required to realize the development of the Southern Dallas County Trade Corridor and suggests a number of models that could be used to create such an entity. It also makes several recommendations regarding funding and staffing this entity.

Organize for Success

The foundations for governance have already been established with the creation of the Dallas NAFTA Coalition and the contractual and inter-local agreements that have already been executed. What is required next is to formalize and broaden this governance coalition to more effectively deal with the challenges faced by the community.

All of the key stakeholders involved in and affected by this project need to be represented to ensure the success and sustainability of the development opportunities presented by the area and its market potential. The governance and oversight body should possess the powers necessary to ensure a regional approach in developing the impact area. The intent of such an entity should be to engender cooperation and ensure that prudent measures are taken in the development of the Southern Dallas County Trade Corridor.

Faithful execution of the coalition's recommendations and a unified voice will be essential to engaging the business community and bringing the coalition's vision to fruition. Ongoing monitoring,

benchmarking, or other metrics should be established to determine parameters of success for the new entity. These tangible measures must be indicative of ongoing economic effects in the impact area and will serve as a basis for future decisions on growth and sustainability.

The overall cost of constructing the basic infrastructure that will be required to facilitate and sustain new private investment is substantial. A coordinated and cooperative approach toward implementing this infrastructure will be needed to effectively plan for and construct the water supply, sewer, storm drainage, and other facilities that will be required to support expected development. An effective and responsive organization will also ensure that new development in this area of the metroplex will optimize benefits for existing residents and communities in the impact area and throughout the metroplex. The communities of Wilmer, Hutchins, and Sunnyvale must become part of the governance entity created to oversee expected future development in the area.

The panel recommends that the governance and oversight body should include representatives of at least the following key organizations:

- The state of Texas, including both elected officials and representatives of key agencies, such as the Texas Department of Transportation;
- The North Central Texas Council of Governments;
- The two major railroads operating in the project area, BNSF and UP;
- The University of North Texas system in Dallas and the community colleges operating in the impact area;
- Key domestic and foreign private sector interests, including major property owners, real estate development companies, and logistics, transportation, and shipping companies.

The panel recommends that the organization be responsible for taking the following actions:

- Developing a master plan for the project area;

- Coordinating infrastructure investments and construction;
- Identifying and securing funding for infrastructure investments;
- Identifying and facilitating implementation of the port, trade, and logistics programs and facilities that will enhance the area's market position as a trade and logistics hub;
- Developing a public communications plan;
- Marketing the overall area as a trade and logistics hub and creating a comprehensive external marketing plan;
- Establishing a cohesive voice and policy position, in particular as it relates to state and federal policy and funding requests;
- Ensuring opportunities for a diverse array of investors to participate in the opportunities presented by the logistics hub;
- Identifying and coordinating public development incentives;
- Engaging decision makers in manufacturing/exporting firms from fast-growing East Asian economies, such as China, South Korea, Singapore, Malaysia, and Japan, and keeping them abreast of geographic and cost advantages by illustrating the logistical opportunity the area represents.

Governance Models

A number of models are available to establish the organizational structure of this entity. Efforts to create an inland port authority and the regional partnership approach represented by the NCTCOG also present opportunities to structure the appropriate type of organization.

The Southern Dallas County Trade Corridor covers an area of more than 200,000 acres and includes 12 jurisdictions. In addition, the state and the NCTCOG play important roles in determining the future of the area. The panel suggests that a new governance structure be established to guide the future of the corridor and proposes three general models for cooperation and governance—all of which have demonstrated success elsewhere—

that it believes local jurisdictions should review and evaluate. Each of these models provides varying levels of responsibilities, powers, and funding sources and capabilities. All include private sector participation.

Cooperative Agreements Model. This model is based on a nonbinding agreement among participating entities to manage the development and review process for the corridor. The model provides a “place at the table” for all parties. The approach enables technical and oversight committees to work within the established policies of the participating jurisdictions. Projects and programs such as roadway and utility infrastructure are prioritized, and recommendations are returned to the appropriate local jurisdiction for implementation. Land use decisions are made by the affected jurisdictions, while activities such as local financing, grant applications, or regional funding are coordinated and leveraged through an oversight and coordinating committee.

This model allows jurisdictions to retain local control but permits review by other participating jurisdictions and the private sector. To be successful, local jurisdictions must have defined policies to guide the work of the oversight and coordinating committee. The disadvantage of cooperative agreements is that jurisdictions may change previously agreed-upon priorities and policies and withhold needed resources.

Special District or Authority Model. State statutes permit a wide variety of special-purpose governmental units, including infrastructure districts and port and development authorities. This model requires the establishment of a specific boundary and a prescribed set of powers, and it is usually limited to a single issue or task, such as port operations, rail operations, or a water district. Special districts require the approval of the state legislature. The governing board can be federated, elected, or appointed.

Special districts generally have limited authority, such as land use development, port operations, or the development of specific infrastructure like water and sewer services. In many cases, the land use authority applies only to land directly owned or controlled by the district. General land use zon-

ing and permitting authority often remains with the local community. The size of the Southern Dallas County Trade Corridor and the identified need for water, sewer, transportation, and other infrastructure services may suggest that more than one special district would be required to address this array of needs.

Special-purpose units of governments can be supported by a variety of taxing sources. Tax revenues are generally limited to specific uses in the authorizing legislation. Finally, a special district that potentially encompasses up to 11 local jurisdictions and addresses land use, infrastructure, and development issues may not represent the best model for success.

Interlocal Memorandum of Agreement (MOA)

Model. This model formalizes the relationships among the participating parties through a binding agreement. Participating jurisdictions and other organizations, through the agreement, grant certain limited rights to a new cooperative organization. This organization could be a government agency, nonprofit corporation, or cooperating committee.

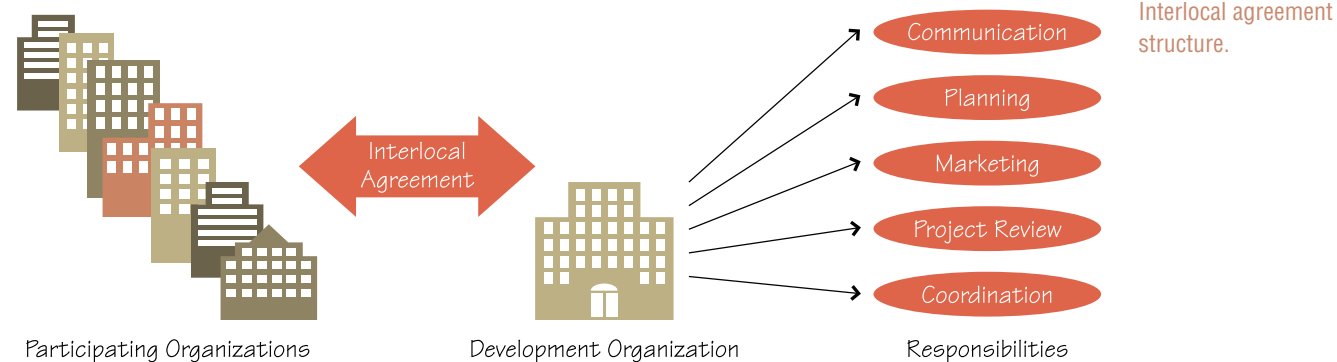
The interlocal MOA model would define a level of authority and a set of responsibilities, such as planning, permit reviews, infrastructure prioritization, and development management. The MOA model permits the participation of all parties and can and should include private sector and regional representation. The model encourages jurisdictions to establish clear policy direction while defining an equitable funding mechanism for supporting the new organization.

The establishment of an interlocal MOA is time consuming and may not initially include all jurisdictions. Local jurisdictions will need to clearly define a vision and supporting public policy for the new organization. The advantage of this model is that many of the jurisdictions already have interlocal agreements in place concerning infrastructure and development issues. These agreements can serve as a basis for establishing an implementation agency to guide the development of the Southern Dallas County Trade Corridor.

Coordination and Governance Recommendations

The panel recommends that the local jurisdiction, in partnership with the NCTCOG and the private sector, establish a working group to review the issues that should be contained in a potential interlocal MOA. Such an agreement would establish a new organization to guide the development of the Southern Dallas County Trade Corridor. Membership in the new organization should include affected local jurisdictions, representatives of the private sector, the NCTCOG, and the state. Local jurisdictions would retain traditional responsibility for land use decisions and funding based on the plans and priorities provided by the new organization or agency.

Because of the limited time the panel has had to understand local governance issues, it is unable to recommend a specific governance structure. It firmly believes, however, that a cooperative, coordinated approach to development is essential for the area's long-term, sustainable success.



Funding. The governance entity will require funding to carry out its mission, to engage consultants to prepare the master plan, and to hire staff to oversee those efforts. The panel recommends that each of the stakeholders participating in the governance entity contribute to the operating budget, taking into account each participating stakeholder's ability to pay.

A comprehensive regional funding strategy must be addressed if the area is to accomplish its long-term goals and needs. Individual localities will not surrender control over their own budgets, but rather all stakeholders will be working toward accomplishing a set of agreed-upon regional goals in addition to locality-specific budgetary needs. The regional funding strategy should include the identification of available programs and resources to be used, such as special-purpose districts for infrastructure development, mechanisms for leveraging public money, and public/private partnerships.

The region may be eligible for many of the significant number of state and federal grant and loan programs available to logistics and transportation corridor projects. A regional strategy should significantly reduce intercity competition for these funds, increasing the likelihood of approval by the various state and federal agencies.

Staffing. Initially, support for the coalition—in the form of economic and feasibility analysis—may be provided by the City of Dallas Department of Economic Development. This initial research could serve as a launching point for the coalition's establishment of an authority to oversee the impact area. However, the governance entity will eventually—and soon—require a dedicated, full-time staff. At a minimum, this staff should be led by a professional familiar with the logistics industry, real estate development, urban planning, public infrastructure, and public policy. As the organization matures, hiring additional staff to assist with marketing, community relations, and financing may be desirable. A national search should be conducted to seek an individual with a proven record of success in creating industrial, logistics, and light-manufacturing developments to head this entity.

Conclusion

The panel believes that the region is in an excellent position to formulate and realize a vision for the Southern Dallas County Trade Corridor. The area is a highly desirable location for expansion of the metroplex's inland port capabilities and is well positioned to accommodate anticipated long-term market demands. Local municipalities understand the need to develop a strategy for smart, sustainable growth to prevent uncontrollable and undesirable sprawl-like development and have begun steps to direct and plan for this growth. The panel recommends that the city of Dallas and other local municipalities take the following actions as they work together to formulate and realize their collective vision.

Create a Cohesive Vision

The vision for the area should be a livable community, not just a logistics hub. A comprehensive and coordinated master plan for the entire study area is necessary to maximize development opportunities, overcome some of the disadvantages previously identified, encourage the development of livable communities, protect natural resources, and ensure the long-term sustainability of new development. The master plan must provide a cohesive vision for the entire area that cuts across multiple jurisdictions without overriding individual municipalities' land use and development controls.

Preparation of the master plan must begin as soon as possible and should be completed as expeditiously as possible. Development already is occurring in the impact area, and the opportunity to adequately plan for this development is slipping away.

The master plan can and should provide a framework for decision making with respect to phasing and capacities of infrastructure investments. The process required to create the master plan can and should include a comprehensive and detailed

inventory of existing infrastructure and should identify current and projected infrastructure and capacity needs as well as various institutional vehicles for constructing, operating, and maintaining the infrastructure.

Plan for a Balance of Land Uses

Although logistics and distribution facilities are expected to be the predominant economic drivers in the impact area, the panel believes identifying and planning for a variety of other types of land uses—including those described below—are important to ensure a balanced and livable community and protect future development opportunities.

Residential

New residential development will be important to sustain logistics-related development and to provide housing for new employees. Residential areas should be effectively buffered from industrial areas, and conflicts between residential development and truck traffic should be minimized.

Light Manufacturing

Although the market potential for manufacturing and light industrial appears to be limited at present, designating and preserving areas for manufacturing will be important because opportunities for such development likely will arise in the future. The very large tracts of greenfield sites adjacent to key transportation facilities present a rare opportunity for a major industrial facility. The current practice of returning a large percentage of empty containers to ocean port facilities currently served by the intermodal centers suggests an opportunity to add value to the supply chain and return containers filled with finished goods produced in the metroplex. Furthermore, manufacturing and light-industrial development will expand and enhance employment opportunities for area residents.

Additional Uses

Retail, hospitality, and service office development will also be required and desired to support and sustain the primary logistics and transportation development. Appropriate areas for these types of development need to be identified.

Community Facilities

Various community facilities, such as parks, recreation centers, and schools, will be needed to support and enhance the area's livability. Parks and facilities that provide recreation opportunities for residents and employees can also protect natural resources.

For all of the area's municipalities to unite around a single plan, these land uses must be distributed equitably among the municipalities, consistent with the specific character and location of each municipality. Finally, the plan needs to go beyond conventional means of land use allocation to shape the three-dimensional character of landscapes and buildings and enable the creation of compact, walkable, mixed-use communities.

Communicate the Opportunity

In addition to a master development plan, the area will need a comprehensive master marketing plan. The impact area's potential needs to be well communicated to the market at large and, in particular, to targeted users. A marketing package will help further delineate the benefits of the Southern Dallas County Trade Corridor and encourage outside investment. Inherent in the marketing plan is a thorough market analysis defining targeted industries or sectors, both domestic and international. A thorough analysis of potential users for the corridor as a whole and, in particular, for the intermodal facilities, as well as warehousing and potential manufacturing sites, will provide the necessary direction and next steps for creation of a master marketing plan. Local economic development and relevant federal agencies should be used as conduits to distribute and market the plan.

Keep the Public Involved

The new logistics and distribution developments expected to occur in this area will significantly

affect area residents—mostly in a positive way. Keeping residents informed and involving them and the general public early in the planning process, so they are aware of expected changes to their communities, is important to provide meaningful participation and allow residents and small businesses to take advantage of the many positive opportunities presented to them.

Early and meaningful public involvement will not only result in positive adjustments to planning and development efforts but can also remove obstacles to development created as a result of fear of the unknown. The panel recommends that a public communication plan include the following:

- Public forums and information meetings held at key milestones in the planning process and in specific subareas of the larger impact area;
- A newsletter;
- A dedicated website.

Work Closely with Outside Stakeholders

In addition to the communication process with the general public, the jurisdictions will need to work closely with stakeholders from outside the area. The panel recommends the establishment of an “advisory council” of port authorities to identify or create opportunities for cooperation. The purpose of the council would be to engage U.S. and Mexican port directors and other relevant transportation officials, as well as customs services and forwarding brokers, to exchange information on industry trends and gather information on the potential for growth and improvement of existing facilities, services, and operations.

The panel also recommends the creation of an alliance with U.S.—as well as Canadian and Mexican—freight carriers and their associations (rail, shipping, and truck) to better meet their needs by defining, for example, mutual operating standards for freight carriers and facilities. Another important element in this effort will involve establishing, maintaining, and strengthening ties with import/export banks, state and federal trade

representatives, and national and international trade organizations.

Explore Creative Approaches to Infrastructure Development

As previously mentioned, the area requires extensive infrastructure improvements, and the cost of developing this infrastructure will strain local government finances. Creative and cooperative approaches will be required to secure the necessary funding to construct this infrastructure. Stakeholders will need to use every tool at their disposal to accomplish this task. These tools and resources, many of which have been used in other parts of the metroplex and are familiar to the project stakeholders, include the following:

- Tax increment financing;
- Special-purpose districts;
- Cooperative agreements with private investors to provide the financing necessary to construct public infrastructure upfront in return for future reimbursements from the municipality;
- State infrastructure banks and Section 129 loans;
- Existing state and federal grant programs.

Stakeholders also will need to cooperatively seek special state and federal funding for critical infrastructure projects that are regional in nature or affect multiple local jurisdictions. Securing an adequate water supply is a critical infrastructure

need for the area and, based on information supplied to the panel, one in which the city of Dallas will play a crucial role. The city of Dallas must be willing to share its water supply with other affected communities if the region—and the city—is expected to realize its full potential.

Create a Livable Community, Not Just a Logistics Hub

Public and private stakeholders should focus on creating a livable community that offers new companies and existing residents a desirable quality of life. New parks and recreation facilities will be needed.

Logistics companies considering moving to southern Dallas County will look for a skilled and ready workforce. Achieving this goal will require additional support for the region's primary, secondary, and postsecondary educational facilities.

The area already has a solid foundation for these educational needs with the presence of two community colleges and the emergence of a new University of North Texas campus at Dallas. In addition, Cedar Hill Community College has begun to develop a special curriculum for the logistics industry, which is an excellent start. The establishment of a new four-year university campus in the impact area would provide a critical educational component for the variety of employment opportunities expected to be created in the region as well as creating a market for a wider variety of private investment and development.

About the Panel

Michael R. Buchanan

Panel Chair
Atlanta, Georgia

At the time of his retirement, Buchanan was managing director of Bank of America Real Estate Banking Group in Atlanta, Georgia, where he was responsible for homebuilder and commercial real estate banking nationwide. Buchanan spent 30 years with Bank of America and its predecessor banks, where he was involved in all phases of real estate banking.

Buchanan is a graduate of the University of Kentucky, the Harvard Program for Management Development, and the Stonier School of Banking. He is a member and past trustee of the Urban Land Institute and served as development vice chair of the Institute's Suburban Office Council. He is an active member of the Real Estate Roundtable and its Real Estate Capital Policy Advisory Committee. Buchanan serves on the board of directors of three publicly owned and three privately owned companies in the real estate industry. He also has served as a trustee and a member of the executive committee of the Georgia Conservancy and as a member of the Nature Conservancy's real estate advisory board.

Jonathan Barnett

Philadelphia, Pennsylvania

Barnett is an architect, planner, educator, and author of numerous books and articles on the theory and practice of urban design. He has been an urban design adviser to many U.S. cities, including long-term associations with Charleston, South Carolina; Cleveland, Ohio; Kansas City, Missouri; Miami, Florida; and Pittsburgh, Pennsylvania. He has also been an adviser to several U.S. government agencies, including the General Services Administration, the National Park Service, the

Department of Housing and Urban Development, the National Endowment for the Arts, and the National Capital Planning Commission.

Barnett's work on large-scale urban development and redevelopment projects includes the reuse plans for the Philadelphia Naval Shipyard; the Treasure Island Naval Station in San Francisco; the former air force base in Myrtle Beach, South Carolina; and reuse plans for former railway yards in Philadelphia and Sacramento, California. He was the urban designer for studies of the Ocean View Avenue corridor in Norfolk, Virginia; the Highway 111 corridor plan for Indian Wells, California; and the Euclid corridor in Cleveland.

His work on suburban development includes studies of development guidelines for four townships in western Pennsylvania; the urban design for Daniel Island, a 4,500-acre planned community near Charleston, South Carolina; and the master plans for the Village of Irvington, New York, and Brookfield, Wisconsin, a suburb of Milwaukee.

Barnett is also a professor of city and regional planning at the University of Pennsylvania. He was formerly professor of architecture and founder of the graduate program in urban design at the City College of New York and has been the William Henry Bishop visiting professor at Yale, the Eschweiler Professor at the University of Wisconsin, the Kea Distinguished visiting professor at the University of Maryland, and the Sam Gibbons Eminent Scholar at the University of South Florida. His books about urban design include *Urban Design as Public Policy*, *Introduction to Urban Design*, *The Fractured Metropolis: Improving the New City, Restoring the Old City, and Reshaping the Region*.

A magna cum laude graduate of Yale, Barnett holds a master's of arts degree for the University of Cambridge, and a master's of architecture from Yale. He is a fellow of the American Institute of

Architects, a member of the American Institute of Certified Planners, and a member of the Urban Land Institute.

James J. Curtis III

San Francisco, California

Curtis is a cofounder and principal of Bristol Group, Inc. Bristol Group is a real estate investment and development firm based in San Francisco. Its portfolio is national in scope and consists of more than 13 million square feet of properties and more than 3 million square feet in the development pipeline. The firm is broken into two components. The first is a private industrial company of more than 9 million square feet focused in southern California, Chicago, northern New Jersey, and Miami. The second component consists of a variety of value-added opportunities.

Curtis serves as a trustee of the Urban Land Institute and is a past chairman of the Small Scale Development Council. He is also a member of and on the board of governors for the Counselors of Real Estate and Lambda Alpha International.

Curtis holds a BS in finance and economics from Marquette University and an MS in real estate/urban land economics from the University of Wisconsin. He was a cofounder of the University of Wisconsin Real Estate Alumni Association in 1976. In 2004, Curtis received the Counselors of Real Estate's Lovejoy Service Award. In 1997, he was presented with the University of Wisconsin's Graaskamp Distinguished Alumni Award.

Scott Hall

Chesapeake, Virginia

Hall is the senior business development manager for the City of Chesapeake, Virginia, Department of Economic Development. While with Chesapeake, a city of 220,000 residents in the Hampton Roads region of Virginia, Hall has gained experience in international marketing, enterprise zone administration, comprehensive land use planning, and redevelopment planning.

He has worked ten years as an economic development professional, including research, small busi-

ness development, business assistance, marketing, and planning. Hall has also served as research director for the Virginia Peninsula Economic Development Alliance, a regional public/private economic development marketing organization.

A native of West Virginia, Hall received his BA in political science from Marshall University in 1985 and his master's of urban studies from Old Dominion University in 1999. He served as a commissioned officer in the United States Navy before entering the field of economic development. He is a member of the Urban Land Institute, the International Economic Development Council, the Southern Economic Development Council, the International Council of Shopping Centers, the Brazilian/American Chamber of Commerce, the Virginia Economic Developers Association, and ACCRA.

Gary O. A. Molyneaux

Seattle, Washington

Molyneaux is a transportation and land use development specialist. He has more than 25 years of private and public experience in rail, aviation, surface transportation, and cargo services. He served as the executive director of the Washington State Rail Development Commission and currently serves as the airport planning manager for King County International Airport/Boeing Field (KCIA) just outside Seattle. KCIA is the nation's 28th-largest air cargo center and is home to UPS, BAX, and DHL.

Molyneaux served on Governor Gardener's Task Force on the Financial Future of Washington State—Transportation Committee. He currently serves on the Regional Cargo Strategy Committee for the Puget Sound Regional Council. He received a master's degree from Southern Illinois University—Edwardsville and a PhD from the University of Illinois in geography and planning. He is a member of the Airport Systems Capacity Committee, Transportation Research Board, and National Academy of Sciences. He is a full member of ULI and has served on two previous advisory service panels.

David A. Stebbins

Buffalo, New York

Vice president of Buffalo Urban Development Corporation, a local nonprofit development entity that specializes in urban and brownfield redevelopment, Stebbins also serves as Waterfront Projects coordinator for the Erie County Industrial Development Corporation, which is responsible for coordinating over \$100 million in waterfront projects in the city of Buffalo.

Stebbins formerly served as chief executive officer and chief operating officer for Buffalo Economic Renaissance Corporation, a local not-for-profit economic development corporation responsible for all economic development activities in the city of Buffalo, including lending and publicly sponsored real estate development projects. Stebbins managed development of a variety of real estate projects, including multitenant industrial buildings and downtown mixed-use, urban infrastructure, brownfield redevelopment, and business park projects.

Stebbins has 25 years of diversified experience in urban planning and development, with a BA in environmental design from the University at Buffalo and an MA in city and regional planning from the University of North Carolina–Chapel Hill. He qualified as a member of the American Institute of Certified Planners in May 1986 and has been a ULI member for 17 years, having recently been accepted as a full member.

Ernesto Velarde-Danache

Brownsville, Texas

Velarde-Danache, an attorney licensed only in Mexico, was admitted to practice in 1982 after receiving his law degree from the Universidad Regiomontana. He holds an LLM from the University of Cambridge, England, and has attended courses pertaining to international law in Mexico, the United States, and the Netherlands. He was the Mexican representative to the International Year of Peace Conference held at the United Nations in Geneva, Switzerland. He is a member of the Cambridge Graduate Lawyers Society and the National Association of Corporate Lawyers of Mexico, the National Association of Corporate Lawyers of Mexico and the Mexican bar.

Velarde-Danache has been associated with the largest corporate law firm in Mexico City as well as with a local international law firm in Brownsville, Texas. In 1988, he started his own practice as a Mexican lawyer in Brownsville, Texas, and Matamoros, Tamaulipas, Mexico; he has recently opened an office in Reynosa, Tamaulipas, Mexico, to provide legal services to the local maquiladora industry. Currently, he has offices in the three cities as well as associated offices in Monterrey, Nuevo Leon, and Mexico City.

Velarde-Danache is the president of the Matamoros Business Development Committee and a member of the International Bar Association, Toastmasters International, Brownsville Rotary Club, and Brownsville Economic Development Council. He is also the host of a live Mexican television show called *Con Sentido Común*, which airs on channel 7, Televisa. He is fluent in English, Spanish, French, and Italian.