Phoenix
Arizona
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Light Rail, Sustainability, and Infill Redevelopment

February 16–19, 2010
A ULI Rose Center Advisory Services Panel Report

Urban Land Institute
1025 Thomas Jefferson Street, NW
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The mission of the Urban Land Institute is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. ULI is committed to:

- Bringing together leaders from across the fields of real estate and land use policy to exchange best practices and serve community needs;
- Fostering collaboration within and beyond ULI’s membership through mentoring, dialogue, and problem solving;
- Exploring issues of urbanization, conservation, regeneration, land use, capital formation, and sustainable development;
- Advancing land use policies and design practices that respect the uniqueness of both built and natural environments;
- Sharing knowledge through education, applied research, publishing, and electronic media; and
- Sustaining a diverse global network of local practice and advisory efforts that address current and future challenges.

Established in 1936, the Institute today has more than 28,500 members worldwide, representing the entire spectrum of the land use and development disciplines. Professionals represented 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 the world’s most respected and widely quoted sources of objective information on urban planning, growth, and development.
About the ULI Rose Center

The mission of the ULI Daniel Rose Center for Public Leadership in Land Use is to encourage and support excellence in land use decision making. By providing public officials with access to information, best practices, peer networks, and other resources, the Rose Center seeks to foster creative, efficient, practical, and sustainable land use policies.

The Rose Center appointed the mayors of Phoenix, Minneapolis, Nashville, and Philadelphia as fellows to serve in the center through 2010. Each of the four mayors is leading a team of three additional fellows from their respective cities, working with leading experts in the real estate development, finance, and land use fields to tackle complex land use issues facing their communities. The Rose Center also holds forums on topical land use issues for public leaders. In 2010 these included how cities can achieve their sustainability goals in the challenging fiscal climate, and how they can maximize opportunities from the federal Neighborhood Stabilization Program.

In 2008, Daniel Rose, chairman of New York City–based Rose Associates, Inc., committed $5 million to create the center. Rose Associates operates throughout the East Coast as developer and manager of more than 30 million square feet of major office towers, commercial retail centers, mixed-use complexes, and high-rise residential buildings. Rose has pursued a career involving a broad range of professional, civic, and nonprofit activities.

The Rose Center’s Advisory Board is chaired by Joe Rose of the New York–based Georgetown Company and includes Seth Brown of Brooklyn–based Aspen Equities, LLC; Alex Garvin of New York–based Alex Garvin and Associates; Stephen Goldsmith, former mayor of Indianapolis and professor at Harvard’s Kennedy School of Government; Glenda E. Hood, former mayor of Orlando and former Florida secretary of state; William H. Hudnut, III, former Indianapolis mayor and ULI/Joseph C. Canizaro Chair for Public Policy Emeritus; Greg Johnson of Seattle–based Wright Runstad & Company; Tom Murphy, former Pittsburgh mayor and senior resident fellow, ULI/Klingbeil Family Chair for Urban Development; Peter Rummell of the Jacksonville, Florida–based Rummell Company; Julia Stasch of the MacArthur Foundation in Chicago; and Anthony A. Williams, former mayor of Washington, D.C., of Arlington, Virginia–based Arent Fox.
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 panel assignment is intensive. It includes an in-depth briefing day composed of a tour of the site and meetings with sponsor representatives; hour-long interviews of key community representatives; and two days of formulating recommendations. 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, participants 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, academics, 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.

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Special thanks go to District 5 City Council member Claude Mattox, Curt Upton and Josh Bednarek of the Planning Department, and George Bosworth and Walter Morlock of ULI Arizona for their time and assistance during the panel’s visit.

Interviews conducted with numerous stakeholders, including elected officials, residents, business and property owners, community and business organizations, representatives of the real estate and urban design professions, Arizona State University, and other public agencies and regional institutions, provided information and diverse perspectives that aided the panel in its analysis. The panel thanks all those who gave their time to be part of the process.
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Phoenix is the seat of 9,224-square-mile Maricopa County, which has more people than 24 states.

Panel Assignment and Executive Summary

The capital and largest city of Arizona, Phoenix is the fifth-largest city in the United States. Home to approximately 1.5 million people, Phoenix is the central city of its metropolitan area (also known as the Valley of the Sun), which is the 12th largest in the nation with nearly 4.3 million people. The seat of Maricopa County, Phoenix is 517 square miles and continually annexing more land.

The city has many desert parks and preserves. It has large Latino and Native American populations.

Founded in 1868, Phoenix was incorporated in 1881—before the state of Arizona was formed in 1912, last of the 48 contiguous states. In 1913, the city ratified a new charter with a council/manager form of government. The city council appoints the city manager, and all department heads are hired by the manager. The city has eight council districts. Very little regional governance and coordination take place.

Phoenix has relied on growth over the years to fuel its economy—it is a popular retirement destination—hence its continual annexation of new land. Employment has been all about growth, producing both residential and commercial development. The city relies on its sales tax, which has driven land use, particularly retail. Property taxes are very low, which is unlikely to change because a substantial portion of the population is elderly and on a fixed income. With the downturn in the economy, the city is looking at a 30 percent cut in budgets, and people are not buying and spending to the extent they were previously.

The city’s General Plan has to go to the voters every ten years. This process is unusual for American cities and is challenging for planners, requiring arduous work with the community to build consensus around the plan, which could be rejected by popular vote. The Planning Commission advises the City Council, but the council operates on a consent agenda, so the commission does most of the heavy lifting. Public participation operates through 15 villages whose borders do not coincide with the council districts. Each village has a board and reviews zoning cases, the General Plan, and text amendments to the zoning ordinance. The village boards have no official authority, but they make recommendations to the Planning Commission.

Opened on December 27, 2008, METRO Light Rail is a 20-mile line operating in the cities of Phoenix, Tempe, and Mesa and is part of the Valley Metro.
public transit system. The light-rail line connects the West Camelback Road and North Central Avenue corridors to downtown Phoenix and continues east along the Washington/Jefferson street corridors to Sky Harbor International Airport (via bus today, but a people mover is under construction), and on to the Arizona State University (ASU) campus in Tempe and to Mesa. All but ten of the current 28 stations are in Phoenix. Extensions to the northwest and east are being planned, and other corridors are being studied. By March 2010, ridership exceeded first-year projections by 58 percent.

In anticipation of the light-rail system, the city in 2003 adopted a Transit-Oriented Development (TOD) Zoning Overlay District to encourage development characterized by a mix of uses surrounding a transit station that caters to the pedestrian. The overlay was applied to a quarter mile on each side of the light-rail route with the exception of the route traveling through the downtown core.

The Panel’s Assignment

Under the city’s Green Phoenix Plan, announced in 2009, Mayor Phil Gordon hopes to transform Phoenix into the most sustainable city in the United States by leveraging current city efforts and resources, building partnerships, creating jobs that stimulate the local economy, and sustaining quality of life for residents. In partnership with ASU’s Global Institute of Sustainability, the city developed a Green Rail Corridor.
Demonstration Project to enhance the success of the light rail by reducing energy use and carbon emissions in a ten-mile stretch of the light-rail corridor, a half-mile wide, from Central Avenue and Camelback Road to Washington and 52nd streets, focused on conservation, solar power, retrofitting public buildings to LEED (Leadership in Energy and Environmental Design) standards, and efficient public lighting.

The TOD overlay is intended to promote the redevelopment of older strip commercial along light rail. Although it has been successful near the downtown area, large parcels of land along the corridor just outside downtown remain undeveloped or underdeveloped. Phoenix would like to reevaluate the overlay in light of the Green Rail Corridor, understand what incentives work, and propose additional ideas to promote the green corridor using two potential sites as case studies.

Meanwhile, Phoenix leaders acknowledge they will have to shift the focus on growth to remain economically sustainable and are exploring different types of industries to recruit to the city and region. The state legislature recently passed solar renewable legislation that will create a corporate and property tax incentive to locate both manufacturing and corporate headquarters for social and renewable companies. The city expects this incentive to be significant in attracting new industry.

In light of this context, the two key questions Phoenix’s Daniel Rose Fellows asked the panel to consider were:

- How can Phoenix help attract TOD to station areas?
- How can rail transit and TOD help “green” the city?

The panel addressed these questions in the broader context of the city and region and examined the two case study sites: Camelback Village Square Shopping Center at the Seventh/Camelback Station and Park Central Shopping Center between the Thomas/Central and Osborne/Central stations.

Summary of Recommendations

The city of Phoenix has several victories to celebrate today related to light rail. For its broader goals to be achieved, however, the city needs to undertake the following tasks:

- Create an urban design framework for the corridor that focuses on resource conditions such as topography, circulation, water, parks, and energy to guide future development around stations.
- Define specific sustainability goals for the corridor and metrics for measuring success over time.
- Build consensus around a shared vision, conduct individual station area planning, assess market and urban development potential, and follow through with public messaging and promotional communication over the long term.
- Set a target for what share of the region’s growth over the next 20 years the city hopes to attract to the corridor, and develop the regulatory framework to allow this growth to occur as of right.
- When analyzing sites for development potential along the corridor, consider property attributes, accessibility, interest from third-party entities, and market potential to help prioritize public resources. Based on the application of these criteria, the panel believes the Park Central site has the greatest short-term potential for transformative redevelopment along the corridor.
Context and Observations

Through the briefings, background materials, and interview process, the panel found a number of assets in both the region and the corridor that should be harnessed to help the city achieve its goals for TOD and sustainability.

Regional assets include the following:

- ASU, which has a growing campus just north of downtown along the light-rail line and has a light-rail connection to its main campus in Tempe;
- The medical and health care sector, which has a strong presence near light rail;
- The sports and entertainment sector, which has new facilities in the central business district connected to the region by light rail;
- The convention and tourism sector, which also has a new facility in the central business district on the light rail;
- Sky Harbor International Airport, which is close to downtown and accessible by light rail, with improvements underway to make the rail connection easier;
- The success of the light-rail line in terms of initial ridership and level of service; and
- Many cultural and arts institutions accessible by light rail, especially located just north of downtown.

Assets within the corridor include the following:

- The mountain views present from the east-west streets in the station areas are great attractions.
- The Grand Canal that crosses the light-rail alignment provides regional trail connections for pedestrians and bicyclists.
- Indian School Park provides a significant-sized public space amenity at the Indian School and Campbell stations along North Central Avenue.
- The Heard Museum and art galleries along North Central Avenue just north of downtown are a major attraction and identity for the North Central Avenue corridor in that portion of the alignment.
- The Central Branch of the Phoenix Public Library is an important institution along the alignment just north of downtown.
- Many new and older unique shops and restaurants are located along the alignment on North Central Avenue and Camelback Road.
- Many stable and historic neighborhoods adjacent to the North Central Avenue corridor have significant resident reinvestment and activism.
• The city’s grid infrastructure aids the walkability of streets around stations.

• A strong public art presence exists along the line.

Significant new investment has occurred in the vicinity of the light-rail corridor, including the CityScape project (a mixed-use project including residential, retail, hotel, and office with significant public space on two blocks along the light-rail line downtown), Portland Place (a mixed-use residential project along Central Avenue just north of downtown), the new corporate headquarters for Freeport McMoran at Park Central East, ASU’s Downtown Campus, and the new Convention Center. Although other projects have been delayed or potentially cancelled because of the depth of the recession, overlooking the considerable progress that has already occurred within the corridor would be unfortunate.

However, the panel sees the following challenges related to the city’s goals in the current context:

• The city has not followed through with developing new neighborhood plans for the half-mile areas around each station. The planning process as well as the plan itself are key components in articulating and implementing a vision and regulatory framework for each particular station area.

• No defining vision for the corridor takes into account the different context offered by groups of stations. For example, the stations along North Central Avenue have a different context from those downtown, which has a different context from the Washington/Jefferson corridor. The vision for the corridor needs to account for these varying contexts.

• The city has a laudable goal of using the light-rail corridor as a demonstration project to promote a sustainable city. However, the goals and metrics for sustainability are not well defined at present.

• Various public agencies play fragmented roles, and a demonstrated lack of coordination exists among the agencies with respect to the manner in which TOD projects are encouraged and advanced.

• The zoning code’s TOD overlay district codifies so many design standards that developers have been forced to seek many variances for their projects. This process is time consuming, costs money, and adds risk to projects that could make them much less feasible and attractive to private investment.

• Phoenix and Arizona have limited tools for public incentives to be used to attract the investment in the corridor desired by the city.

• No clear disposition strategy exists for the many publicly owned parcels along the corridor, which has resulted in a piecemeal approach that may not be fully leveraging public assets to achieve desired goals.

• Communication about the light-rail corridor today comes from many voices with different priorities. Speaking to the development community and existing neighborhoods with a shared vision and priorities to achieve desired goals will be important.
Toward a Green Urban Design Framework

Development of urban form priorities at the citywide scale is often the most efficient and effective route for developing regulations and design guidelines that steer design of sub-districts such as the light-rail corridor and its station areas. A coherent, clear, and well-supported urban design framework can help guide a city toward a sustained competitive position.

Assessing and building from assets is important. Possible elements or assets that may contribute to an urban design framework include topography, circulation, water, parks, energy, and development.

Topography

Topography is important because it provides orientation and views. View corridors should be preserved and enhanced. An approach to guiding urban form that reinforces orientation to and preservation of this asset could significantly affect long-term competitiveness of the city and the value of its real estate in a positive way.

Phoenix’s surrounding mountains provide a 360-degree asset. Touring Phoenix, the potential for powerful view corridors is clear. Unfortunately, the negative effect of poorly sited structures and power lines is also clear.
Circulation

Circulation, which needs to integrate travel modes, is a key driver and opportunity for guiding development. Phoenix already has a strong asset in its clear street grid and its efforts to build a comprehensive trail network.

The investment in light rail is another significant asset for circulation. Important considerations include the integration of light rail with other modes and the alignment of transportation investments across modes so that light rail is a competitive choice. Multimodal integration with the light-rail line could help support economic development and quality of life.

Water

Considerations for water are both functional and related to its potential as an amenity. Even in relatively arid climates, management of stormwater and water resources contributes to sustainability, and orientation to and enhancement of water features contribute to economic health.

Phoenix’s canal system offers tremendous potential, which has been identified as the Canalscape initiative, part of the partnership between the city and ASU. These canals are a lifeline for the region, supporting farming and providing a good portion of drinking water. This infrastructure should be leveraged to produce a distinctive and more sustainable desert urbanism by creating vital hubs of urban activity where canals meet major streets and the light-rail line, and enhancing the canals to offer more comfortable recreational corridors, non-motorized transportation options, and alternative energy generation.

Around the world, rehabilitated canals have been used to serve developments, ecological function, recreation, and city image and identity.

Planning Framework

Urban design effort should be supported by a planning framework that allows prioritization of public investments based on cost/benefit ratios. Costs and benefits could be assessed across the spectrum of sustainability. When a structure exists for assessing types of interventions against sustainability goals, the same framework can be used to develop indicators, recommendations, and priorities.

Corridorwide and station area planning will be essential to Phoenix’s investment in light rail. The line could be understood as having at least three distinct zones, with each requiring differing strategies. A strong clustering of important districts exists in the southern portion (central business district, entertainment, tourism center, ASU downtown campus, government core). A notable opportunity exists to better connect the government building core with the central business district.

At a more micro scale, the panel was asked to look at shade structures, which could be simple, providing misting and other microclimate enhancements such as drawing hot air through and up. They can provide distinctive gathering and public art opportunities.

Sustainable Design Approach

In thinking about a green or sustainable strategy for TOD, defining what is meant by “green” will be important. TOD, with its resultant reduction in vehicle trips and miles traveled that leads to lower per capita energy use and emissions, is inherently a green strategy.

A number of criteria should be considered with the ultimate goal of reducing the carbon footprint of development and therefore of the city as a whole:

- Resource conservation (energy, water, materials);
- Improved microclimate (reducing the urban heat island effect, decreasing night-sky light pollution);
- Clean air and water;
- Habitat preservation or creation; and
- Promotion of healthy active lifestyles (pedestrian oriented).

Strategies also need to be linked to specific goals and metrics so progress can be measured over time. In general, sustainable strategies should first look to passive design moves, such as good orientation, building self-shading, natural ventilation, and use of drought-resistant and native landscaping to reduce demand. Only then should technological solutions such as photovoltaic electricity generation be con-
Life-cycle cost considerations should also inform these strategies and choices. Identifying potential synergies between uses and infrastructure systems is important. For instance, should ownership allow developing an integrated system between commercial and residential uses so thermal transfer systems can take advantage of waste heat generated by commercial uses for the benefit of housing?

Many factors contribute to successful TOD. The following are among the most important:

- Creating a positive pedestrian experience (safe, comfortable, interesting, active);
- Creating a “heart” for the development (making a place not a project);
- Ensuring diversity of people, uses, and form;
Making sure the density is appropriate for the surrounding context and is dense enough to support ancillary commercial and public uses;

- Concentrating development within a quarter-mile walkable area from the station;

- Coordinating catalytic public investment in infrastructure and public facilities to support TOD (grants, tax incentives, service charge discounts, etc.);

- Ensuring development costs are supported by return on investment;

- Making sure appropriate parking is provided that does not overburden development with costs, taking advantage of shared parking, and ensuring that parking does not create a pedestrian-unfriendly environment;

- Integrating new development with neighborhood resource systems; and

- Ensuring stakeholder involvement and ownership in vision and design.

Building mass, orientation, and form should create shaded comfortable public spaces that have a cooling effect on the immediate microclimate and reduce building loads (A).

Development patterns with large paved parking areas should be avoided. A variety of shading and climate modification strategies, such as pools, fountains, and misters, should be explored (B).

Strategies for reducing potable water use should be explored. They might include rainwater harvesting, gray and black water treatment and use for irrigation and toilet flushing, and use of drought-resistant and native landscaping (C).

Strategies for renewable energy production such as photovoltaics, solar hot water, ground-source cooling and heating, and using waste energy for water heating or power generation should be explored (D).
Phoenix, Arizona, February 16–19, 2010

Housing Capacity Considerations

Projections for the next 20 years indicate the city of Phoenix will see population growth of about 400,000 inhabitants. The strategy for Phoenix should be to capture a percentage of this future growth and direct it toward the North Central Avenue light-rail corridor, defined broadly by North Seventh Street to the east, North Seventh Avenue to the west, Washington Street to the south, and Camelback Road to the north (approximately a quarter mile from the alignment).

Current Corridor Dynamics

Currently, the corridor has a development pattern that is a mix between vacant land, underused properties, and significant commercial development. Although some examples of mixed-use TOD projects take advantage of the proximity to light rail, a significant opportunity still exists to capture growth along the corridor.

Building form is the key to understanding density.
The corridor currently has approximately 5,400 housing units and a population of 10,000. The total area is 1,360 acres with an average density of four to five dwelling units per acre (DUAs). The panel analyzed the capacity of the quarter mile on both sides of the light-rail corridor to take advantage of development potential within walking distance and to promote transit ridership. This area also provides a buffer to the historic neighborhoods to the west and east that are concerned about the scale of new development projects.

This development represents an opportunity for growth along the corridor that is very close to transit. Consideration should be paid to how the scale of new development transitions to the historic neighborhoods surrounding the light-rail corridor when developing future projects.

### Intensity of Future Development

On the basis of existing conditions, the panel believes new development along the North Central Avenue light-rail corridor can accommodate significant future growth in the city. The panel developed a methodology to estimate the corridor’s overall potential holding capacity over the next 20 years. However, these are average densities, so the actual units per acre of a specific project may be higher because of the low average density (four to five DUAs) currently in the corridor. The goal of this exercise was understanding the total corridor’s development capacity, rather than prescribing densities for each station area. This capacity can provide a starting point for conversations among developers, property owners, relevant public agencies, and the community in the station area planning process.

- The panel created density ranges from the corridor of between 50 and ten DUAs based on existing research on transit-supportive densities and the existing context of downtown Phoenix and the North Central Avenue corridor. However, many different ways exist to measure and analyze density and scale, and a form-based approach (building shape, number of floors, height) may be more meaningful to different stakeholders, such as neighboring residents.

- The exercise split the corridor into five sections based on the North Central Avenue stations at Van Buren, McDowell, Thomas, Indian School, and Camelback.

- To develop estimates, the panel applied a different density factor from 50 to ten DUAs to each station area to form a gradient based on the station’s distance from downtown. Alternatively, a nodal approach—rather than a linear gradient—that applies more density at activity centers such as Park Central might be worth considering.
These factors did not include a ratio for commercial, office, or mixed uses. Other uses could affect the overall housing capacity along the corridor.

### Findings and Recommendations

On the basis of the preceding assumptions, the total capacity for the corridor study area is 33,540 housing units. Netting out existing residential development, the projected total of new units is 28,140 by 2030, an average of about 1,400 units per year along the 4.25-mile corridor. The market may not experience this absorption rate in the near term, so patience over the 20-year cycle will be necessary.

The city should set a goal for the amount of future growth it would like to funnel to the North Central Avenue corridor. This exercise set a target of directing 16 percent of new growth over the next 20 years. Phoenix does not have to develop at very high densities to capture a significant amount of future growth in this corridor. Under these development assumptions, the average density along the entire corridor would be 31 DUAs, which is a medium-density apartment or condominium product that can accommodate structured or surface parking.

These projections are a guide, and the city can choose to allocate more or less units in different station areas. Consideration should also be given to available land adjacent to the stations, and flexibility should be considered to accommodate TOD. This exercise merely provides a regional capacity context for the corridor. The corridor should be studied in more detail from a local market perspective and through a station area planning process. Without either corridor planning or light-rail station planning, the community and the city will be forced to react to projects that are proposed without a framework within which to compare scale or land use. To understand the form and scale in relation to density, the city, the developers, and the community can set an expectation of what is possible near light-rail stations.

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### Population and Dwelling Units Based on a Density Gradient for North Central Avenue

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<th>TOD District</th>
<th>DUAs</th>
<th>People/Acre</th>
<th>Percent of Roads</th>
<th>Net Acres</th>
<th>Units Allocated</th>
<th>Population Allocated</th>
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<td>Camelback/Central</td>
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<td>20</td>
<td>15</td>
<td>272</td>
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<td>Indian School/Central</td>
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<td>20</td>
<td>256</td>
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<td>25</td>
<td>240</td>
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Sustainability and Market Considerations

In a broad sense, sustainability is a commitment to future generations that they will be able to live in economically prosperous, socially just, and environmentally healthy communities. The future economic development of Phoenix will greatly affect each of these elements, and the panel has outlined goals and actions to help Phoenix realize these outcomes.

Demand for real estate uses begins with identifying an economic base and then evaluating demographic information on population, income, and employment patterns. Attraction of basic industries creates the multiplier effect of overall job creation, thus creating demand for office and industrial space. The result is population and income growth associated with housing and retail development. Although many markets may create demand for housing for other reasons, such as retirement, lifestyle, or resort living—as has been the case historically in Phoenix—employment generally drives this sector of the economy. The resulting balance of jobs and housing assists in realizing both social and economic sustainability. When a jobs-to-housing spatial mismatch exists, its effects—congestion, scarcity of workforce housing, fiscal shortfalls—can impair a region’s economic competitiveness, cause more air pollution, and create social equity issues.

When considering the financial feasibility of public investment, fiscal impact modeling takes into account infrastructure investment, public safety, public and civic spaces and fiscal issues of tax revenue and cost relationships. Conversely, the financial considerations for private investment include risk management (timing and market), return on investment, profitability, and considerations regarding life-cycle issues of capital investment and operating costs.

Evaluating the Corridor

To assess development opportunities along the corridor, the panel assembled demographic, transportation, and other data, as well as anecdotal information obtained from stakeholder interviews. This macro assessment highlights the current realities as well as potential opportunities along the corridor. The panel also began a micro assessment of the two case study station areas at Seventh and Camelback and at Park Central.

The panel created a matrix of TOD/green evaluation criteria to rank and prioritize those sites which the team considers most appropriate and probable.
for both public and private investment based on the model developed by Dallas Area Rapid Transit. It includes four key elements:

- Property attributes;
- Accessibility;
- Third-party entities; and
- Market potential.

Property factors include available land, whether the station exists or is planned, adjacent large properties, presence of seed development, and proximity to the station. Accessibility factors include traffic counts, parking use, and the Walk Score rating. Third-party factors include interest by the local jurisdiction or developers, presence of special zoning or incentives, and whether a station area plan has been completed. Market potential factors include population, area median household income, population growth rate, median income growth rate, and the ESRI Tapestry segment (market psychographics).

Walk Score is a Web site that uses an algorithm to calculate the walkability of an address based on distance to nearby amenities, such as stores, restaurants, schools, and parks. Although it does not take into account street design or safety, Walk Score has received widespread praise for providing a quantitative tool to measure the pedestrian-friendliness of an area. The higher the Walk Score the more conducive the area could be to TOD/green goals. Walk Score currently ranks Phoenix 28th among U.S. cities with a score of 50, and some of its most walkable neighborhoods are located near the North Central Avenue corridor.

Applying the evaluation criteria matrix to the two sites, the panel scored Park Central at 111 points and Seventh and Camelback at 102 points of a possible 143.

**Park Central**

This 41-acre site is currently zoned C-2 with a height waiver and is in the TOD-1 overlay zone between the Thomas/Central and Osborn/Central light-rail stations on the west side of North Central Avenue. The
Seventh and Camelback

This 15.5-acre site is currently zoned C-2 and is in the TOD-1 overlay zone. The Camelback Village Square Shopping Center comprises the northwest corner of the station and two setback boxes—a grocery and a vacant Target store—as well as retail pads along the street including an Office Max, a McDonald’s, and a Blockbuster.

More than 6,100 people live in about 2,900 households within a half mile of the station. This population is projected to grow by about 0.8 percent in the next five years. Current median disposable income is about $35,000. A local retail analysis found small market leakage in food and beverage establishments. The site has a Walk Score rating of 69. The local market is diverse, with Old and Newcomers (residents of these transitional neighborhoods either beginning their careers or retiring) at 31 percent and Inner-City Tenants (a highly transitional, diverse mix of renters) at 22 percent making up the two largest segments.

former anchor stores of the mall have been adapted to include back-office space, much of it leased by the adjacent St. Joseph’s Hospital and Medical Center, which is located directly behind the mall. Many of its smaller retail establishments, including casual restaurants, remain. Significant office employment exists on the east side of North Central Avenue, as well as several hotels to the north and south of the site. The neighborhoods to the west are stable and historic.

About 2,800 people in 1,430 households live within a half mile of the station today, and this population is projected to grow by 2 percent in the next five years. Current median disposable income is $44,000. A local retail analysis found significant market leakage in food and beverage establishments. The site has a Walk Score rating of 88 of a possible 100. The majority (58 percent) of the trade area residents are Metropolitans, who prefer to live in older city neighborhoods. Nearly half of Metropolitans are single; half work in professional or managerial positions. They pursue an active and urbane lifestyle and tend to be very involved in their community.

Seventh and Camelback station area. (Redevelopment opportunity site is outlined in green.)
Seventh and Camelback Conceptual Case Study

The panel concluded that preparing a prototypical area plan for one of the candidate locations would be useful to illustrate the application of the design and planning concepts, and demographic and housing capacity information previously discussed. Of the two sites, Seventh and Camelback was considered well suited for this purpose.

Although the panel believes the Park Central location presents the single-best TOD redevelopment opportunity and encourages the city of Phoenix to begin a dialogue with the main property owner about such possibilities, the panel was presented limited information on this site and did not have an opportunity to meet with the owner to discuss receptivity to the introduction of a TOD planning effort. Therefore, the Seventh and Camelback location was selected for the case study.

Assets for the Seventh and Camelback station area include existing higher-density housing within the quarter-mile pedestrian shed, two nearby schools, a large continuous development parcel, and a neighborhood park within a quarter mile.

Station area challenges include the existing suburban development pattern, barriers between the TOD site and surrounding higher-density housing, and large underused surface-parking areas.

Given the location of the station in the center of the street right-of-way, creating a strong sense of

Assets at Seventh and Camelback station area.
Barriers at Seventh and Camelback station area.

Create a place around the station (below left).

Pedestrians need to be able to penetrate the site to access transit (below right).
place around the intersection as well as within the development itself will be necessary.

It is imperative to establish a network of pedestrian circulation that connects the TOD to its surrounding context.

A possible site concept concentrates neighborhood retail along Camelback Road and Seventh Avenue and provides a small-scale open space at the corner. Particular attention must be paid to shading this plaza as well as the sidewalks on Camelback and Seventh. Convenience parking is provided to the rear of the retail space. A grid of small-scale, shaded, mixed pedestrian and local vehicular streets with a central green space provides a variety of higher-density housing options that range from four floors of residential over retail along Camelback and Seventh to four floors of residential over parking and stacked townhouses and townhouses to the north and west.

Site concept (A). Alternatives include an intersection-to-courtyard scheme (B), a garden courtyard (C), and an alley scheme (D).
The panel has crafted an action plan for the city to move forward on its goals of using the light-rail corridor to promote sustainability and infill redevelopment. It focuses on four strategies:

- Creating a shared vision;
- Station area planning;
- Market and urban development; and
- Public messaging and promotional communication.

Tasks for each of these strategies are divided into immediate next steps, and short-term and long-term time frames. The panel has also suggested a goal or outcome associated with each for the city’s consideration.

Creating a Shared Vision

The next step to create a shared vision is collaborating with agencies and stakeholders around a new vision plan for the North Central Avenue corridor. This corridor constitutes the one location in Phoenix...
with an urban scale and texture. It has the potential to evolve into a true “uptown” and “downtown” urban corridor possessing interesting architectural character and a variety of urban experiences not available elsewhere in the metropolitan area. The goal is for the North Central Avenue corridor to become a Great Street or multimodal boulevard that is both a critical transportation corridor and a vital destination and place in and of itself.

In the short term, the city should complete the plan and communicate with the community, then track progress, successes, and failures. In the long term, the city will need to review vision plan metrics for changes and see how well it is achieving benchmarks. The North Central Avenue corridor should have a vision that is unified and agreed on by all its citizens and stakeholders.

Station Area Planning

Another critical next step for the city is to implement station area planning for priority stations along the light-rail corridor. These plans should deal with site-specific land use issues for each station area as well as multimodal access to the station and circulation around the station area. The plans will also inform the private sector about what kind of development is desired by the city and area stakeholders, which should result in development proposals that are either entitled as of right or have minimal administrative changes during their approval process.

In the short term, the city should complete and adopt plans for high-priority locations and ensure it can achieve service delivery expectations for the light rail. In the long term, the city will need to complete and adopt station area plans for the entire corridor and maintain service delivery expectations.

Market and Urban Development

The city needs to create a strategic development policy that incorporates appropriate incentives, development opportunities, and other tools for the North Central Avenue corridor. This policy will help facilitate redevelopment opportunities at the Park Central and Seventh and Camelback station areas. The goal is for the North Central Avenue corridor to have a balance between jobs and housing and to capture its share of regional growth while maintaining and improving the quality of life and sustainability of its surrounding neighborhoods.

In the short term, the city should identify and pursue redevelopment opportunities and initiate public/private partnerships at the highest-priority locations at these two stations and others that emerge with demonstrated market interest. In the long term, the city must continue to build on opportunities at all station locations along the corridor and benchmark the results and define the ultimate metrics for declaring success for the vision plan.

Public Messaging and Promotional Communication

The next step is to determine who does what to ensure accountability for public messaging and promotional communications about the North Central Avenue corridor. The goal here is for both local and external target audiences to see the North Central Avenue corridor as a high-value location and destination. Two basic questions emerge for the advocates and promoters of the North Central Avenue corridor:

1. “Where do you start the tour?” Somewhere within the corridor must be a marketing center (even if it is limited to a single conference room within the chamber, the transit agency, the city, or a storefront rented for the purpose) to which interested parties can be directed and within which they can find maps, project site plans and photos, and collateral materials that inform the reader about the corridor, its history, its assets, and its potential.

2. “Who should be the first point of contact for inquiries about development interest in the corridor?” The panel has observed that this responsibility is currently unassigned. It should be the subject of a spirited discussion among the public and private agencies with some responsibility in this area. This discussion and dialogue should result in creating a strategic marketing plan that communicates the vision and in offering accessible information with a variety of tools for key audiences.

In the short term, the city and its advocates and promoters need to create the “cool factor” to delight and excite the riders and stakeholders of the corridor. Pro-
programming new events along the corridor (such as the current First Fridays arts events) will help bring new audiences to experience the neighborhoods and ride light rail. In the long term, the task is to create enthusiasm and loyalty of riders and stakeholders alike.

Concluding Thoughts

The city of Phoenix should celebrate its victories related to light rail. There are many, from the high ridership and service levels on the initial line to the initial public and private development that is already occurring around it. By its nature, the reintroduction of rail transit to Phoenix is a giant step toward creating a greener city. This large financial commitment was not undertaken lightly and is the foundation of a more sustainable future for Phoenix.

Neighborhoods around stations will need time to transform, and this transformation will proceed in fits and starts, as real estate markets always do. It is important for the city to stay patient while remaining focused. City leaders need to exploit downturns in the market as opportunities to put the regulatory tools and incentives in place to attract private investment when conditions are once again favorable.

The North Central Avenue corridor is the appropriate starting point for the new initiative. The segment from downtown Phoenix to Camelback Road has an established history and is uniquely positioned to offer a true urban experience (one that does not depend on the automobile) within the metropolitan area. A new vision plan that addresses sustainability, livability, and an exciting urban streetscape would be timely and should assist in energizing the community to look beyond the immediate challenges of the current economic downturn.

The panel believes the best near-term TOD opportunity is at Park Central. The city needs to focus on this opportunity because it will, by its large-scale nature, be a complicated deal to complete and likely need a public/private partnership to achieve the city’s sustainability goals. The city must start market analysis and site-level planning and work closely with neighbors and prospective partners to plant the seeds of success at Park Central. Just waiting for the developer market to eventually provide a solution on its own is not going to provide a satisfactory outcome for the city or the community.

The light-rail line’s context along the Washington/Jefferson corridor is very different from along North Central Avenue and really needs a different redevelopment strategy. This segment of the light-rail line, linking Tempe, Mesa, and Phoenix with the international airport, presents intriguing opportunities for development. The unique and compelling characteristics of the segment simply need to be the subject of a separate planning exercise. By conducting individual station area plans and dividing stations into development typologies, the city will start to see development synergies that suggest different phasing and strategies. Factors such as distance between stations, existing land uses, traffic counts, and pedestrian infrastructure are critical considerations when making these evaluations.

In closing, it is always useful to acknowledge that panel findings and conclusions are a case of first impressions. Although the panel members believe the observations and recommendations are valid and warrant full consideration, the panel would be remiss if it did not acknowledge what it does not know. To the extent the assessments are well received and bear fruit, it will be because of the efforts of the participants with the community who assisted the panel in developing a better appreciation for the issues and opportunities.
About the Fellows and the Panel

Daniel Rose Center
Phoenix Fellows

Phil Gordon

Gordon was elected mayor of Phoenix on September 9, 2003, and was reelected in September 2007. In 2008, he was named the Best Mayor in North America by an international think tank located in London. As mayor, Gordon lists his three priorities for the city as public safety, education, and jobs.

He has worn many professional hats. He has taught school, owned his own business, served on the Madison School Board, and was chairman of Landiscor aerial photography company. Before serving in elected office, Gordon was a leader in the movement to revitalize, preserve, and redevelop central Phoenix.

After serving as chief of staff for Mayor Skip Rimsza in 1996, Gordon’s interest in Phoenix became his incentive to seek public office. Pledging to fight crime and preserve neighborhoods, he entered the race for Phoenix City Council and was elected in 1997 and 2000. As a councilman, Gordon spearheaded Shannon’s Law, making it a felony to discharge a firearm within city limits. He cofounded and chaired the Slumlord Task Force.

Gordon unveiled his 17-point Green Phoenix plan to make Phoenix the first carbon-neutral city in the United States, which already has the endorsement of the secretary of energy. The mayor also founded the Phoenix Global Trade Initiatives, a privately funded partnership between the city of Phoenix and the business community to build a stronger international presence for global opportunities in business and investment.

Gordon attended the University of Arizona and graduated with a bachelor’s degree in education. After earning his undergraduate degree, he entered Arizona State University School of Law and graduated cum laude.

Wes Gullett

Gullett is a founding partner in the firm FirstStrategic Communications & Public Affairs. He works primarily on strategic planning projects and representing businesses engaged in public policy efforts. He has directed and worked on numerous public policy projects at FirstStrategic, including successful efforts passing Propositions 203 and 100. Gullett’s main focus is on providing corporate leaders with strategic communications advice so they can accomplish their objectives.

Gullett served as deputy campaign manager for McCain 2000 during John McCain’s campaign for the Republican presidential nomination. His principal duties were overseeing www.mccain2000.com, the pioneering effort to bring Web technology and Web applications to a major political campaign. This Internet program was heralded as the first serious effort to bring presidential politics to the Internet. Gullett also served as the coleader of the McCain 2008 Arizona Campaign Leadership team.

In addition to working on political campaigns, Gullett has worked in the consulting world for the past 12 years. He was a partner in the Phoenix public affairs firm of HighGround, Inc.

Gullett has extensive experience in government. He was chief of staff for Arizona governor Fife Symington from July 1993 to April 1996. In addition, he served as administrative assistant to U.S. Senator John McCain. He also served as Senator McCain’s 1992 Campaign Manager.

Gullett currently serves as the chair of the Phoenix Planning Commission. He also served as chairman of the Conservation Advisory Committee for the Arizona State Land Commission and as president of the board of the Clean Election Institute.

A native of Ottumwa, Iowa, Gullett attended the University of Iowa.
From January 2003 until May 2009, Winkleman was the Arizona State land commissioner and directed the Arizona State Land Department, serving on the cabinets of Governors Napolitano and Brewer. As the land commissioner, Winkleman was responsible for the management of approximately 9.3 million acres of land within Arizona that was put into trust at statehood and used primarily to generate funds for public education. During his tenure, the Land Department’s sales revenues exceeded $1.8 billion, breaking every revenue record previously established by the department.

In June 2009, Winkleman was appointed by Phoenix mayor Phil Gordon to board of directors of the Industrial Development Authority of the city of Phoenix. Winkleman is the vice chairman of Valley Partnership, an association that promotes responsible development in the Phoenix metropolitan area. He is also on the ULI Arizona steering committee and is a member of Lambda Alpha International and REIAC.

He is a licensed real estate broker and formerly a real estate attorney and received his undergraduate degree in accounting and business administration from the University of Kansas and his law degree from the University of Virginia.

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Debra Stark

Stark began her career at the city of Phoenix and then worked for Maricopa County, reaching the position of planning manager. She was the community development director for the city of Peoria, Arizona, where she oversaw the city’s planning, building safety, and neighborhood services functions. In 2005, she came full circle and returned to Phoenix as planning director, and in February 2010, she was named chief of staff to Mayor Phil Gordon.

Stark has been involved in some memorable projects in metropolitan Phoenix including overseeing numerous master-planned communities. Most notable were Anthem (4,600 acres) and Vistancia (9,400 acres). During her career, she has worked on numerous text amendments that have dealt with such issues as adult-oriented businesses, digital signs, and form-based developments. One of her interests is planning law, and she has been involved in numerous bills that affect the planning profession in Arizona.

Stark served as both treasurer and vice president/legislative affairs for the Arizona Planning Association. She is also on the board of directors for Valley Partnership and for Arizona State University’s Phoenix Urban Research Laboratory and a member of the Maricopa County Trial Court Selection Commission.

She holds a bachelor’s degree in sociology from Western Kentucky University and a master’s degree in planning from Arizona State University.

Mark Winkleman

Winkleman is the chief operating officer of ML Manager, LLC, successor to Mortgages Ltd, which has emerged from bankruptcy. Mortgages, Ltd, was a Phoenix-based hard-money lender that had almost $1 billion in outstanding loans at the time of its bankruptcy. He is working to return as much money as possible to the approximately 1,500 investors who were damaged.

Winkleman founded MGS Realty Partners in 2000 and continues to serve as its president. MGS Realty Partners owns and operates various real estate assets and provides real estate advisory services.

Leininger joined Dallas Area Rapid Transit (DART) as chief financial officer (CFO) in December 2008. He oversees all financial activities, including budgeting, financial planning, reengineering, total quality management, investments, federal funding, debt financing, payroll, efficiency reviews, accounts payable, and general accounting, for the agency. Divisions include accounting, treasury, revenue systems and administration, and budget and financial planning with a total of 83 employees.

Prior to joining DART, Leininger was associated with the city of Irving, Texas, for five years, serving initially in the capacity of CFO and subsequently as managing director of development services and
economic initiatives. His previous public sector experience includes positions as budget director and director of the Office of Economic Development for the city of Dallas and fiscal services administrator for the city of Garland. Leininger spent nearly 25 years in the private sector in a variety of real estate development roles, including chief executive officer of ClubCorp Realty, chief operating officer of Triland International, senior vice president and managing director of the Recreational Real Estate practice of Economics Research Associates, and vice president and general manager of the Las Colinas Association, which serves the 6,500-acre Las Colinas development in Irving, Texas.

Mami P. Hara

Philadelphia, Pennsylvania

Hara is a designer and planner with 20 years of experience ranging from regional planning to project implementation, through all phases of physical planning and landscape design. Her career has focused on large-scale civic projects in urban environments, particularly waterfronts and river corridors, park and open-space systems, trail networks, neighborhoods, and cultural institutions.

She works with clients to integrate green infrastructure and urban development to enhance ecological function and civic life. Notable current projects include a 100-mile corridor plan for Indiana’s Wabash River and GreenPlan Philadelphia, a sustainability framework to guide long-term open-space policy for the city.

Kathleen Rose

Davidson, North Carolina

President of Rose & Associates Southeast, Inc., Rose combined decades of experience as a development expert and real estate analyst to build a consulting practice that assists public and private sector clients in the analysis and positioning of land use planning projects for social and economic sustainability. Rose has managed the analysis, planning, development, and marketing of retail, industrial, hotel, office, and mixed-use projects throughout the eastern United States.

She holds the Certified Commercial Investment Member (CCIM) designation of the Commercial Investment Real Estate Institute of the National Association of Realtors, an elite corps of professionals across the globe recognized for their expertise in all disciplines of commercial-investment real estate. Rose received her CCIM designation in 1989 and went on to serve on the institute’s faculty and national executive committees, including Budget and Strategic Planning, and as chair of both the International Coordinating and Designation Promotion Committees. She is past president of the Connecticut CCIM Chapter and a retired member of the North Carolina CCIM Chapter board of directors.

Rose has also served on the Advisory Services Panel for the Urban Land Institute. She is a featured speaker for professional trade organizations and has authored articles for a number of industry trade publications covering topics including retail, development, urban planning, economic development, and related subjects. Rose is also managing partner of Urban Organic I, LLC, a property company that developed South Main Square in downtown Davidson, North Carolina, a mixed-use revitalization project that was the catalyst for forming the arts district in the South Main Street corridor. Rose’s most recent endeavor is the creation of PIES—the Project for Innovation, Energy & Sustainability—a green industries incubator to serve as a model for community entrepreneurial development.

Rose is a former general certified commercial appraiser and is currently licensed as both a North Carolina and Connecticut real estate broker.

Mark Shapiro

Seattle, Washington

Shapiro joined Mithun in 2010 as a lead project designer and principal in charge for planning, urban design, and building design projects. Prior to joining Mithun, Shapiro was a principal and project designer for Kansas City–based BNIM architects where he developed planning and urban design projects for the Noisette development in North Charleston, South Carolina, and the Sustainable Redevelopment Plan for Greensburg, Kansas; and was involved in several planning and design stud-
ies for the sustainable recovery of the Lower Ninth Ward in post-Katrina New Orleans. He also held teaching positions at Syracuse and Tulane universities and served as head of the Department of Architecture at Kansas State University.

Shapiro has been recognized both nationally and internationally, most recently for his work on the Greensburg Sustainable Comprehensive Development Plan, which was awarded both the 2009 American Society of Landscape Architects National and Central States Honor Award and the 2009 Burnham Award from the American Planning Association. His work has also garnered numerous state and regional American Institute of Architects awards, most importantly for the Fayez S. Sarofim research building at the University of Texas Health Science Center.

He holds a master of city planning and urban design from the Harvard Graduate School of Design and a bachelor of architecture from the University of Cape Town.

Aaron Sussman

Sacramento, California

Sussman joined the Sacramento Housing and Redevelopment Agency (SHRA) as a senior redevelopment planner in January 2008. While at SHRA, Sussman has worked in the 65th Street Area of Sacramento on a planned mixed-use, transit-oriented development, 65th Street University Village. Additionally, Sussman worked to allocate funds to complete a Specific Plan and Finance Plan for the 65th Street Area to facilitate the development of a technology center that will foster innovation through a partnership with the university. Most recently, Sussman shifted from redevelopment to federally funded programs administered by SHRA. He manages a component of the federally allocated Neighborhood Stabilization Program to purchase and rehabilitate foreclosed housing units in Sacramento.

Prior to joining SHRA, Sussman worked as a project manager for Pardee Homes in Sacramento, a regional master plan developer. While at Pardee Homes, he successfully obtained planning entitlements for over 700 residential units on 140 acres in Sacramento. Sussman also managed three Specific Plans in the Sacramento/Stockton region that totaled over 700 acres and 4,000 units. Before his tenure with Pardee Homes, Sussman was a planner with the city of Sacramento. Projects that Sussman worked on include citywide commercial development guidelines and zoning changes, streetscape master plans, neighborhood action plans, condominium conversion zoning changes, and numerous design review projects.