REINVENT PHOENIX

SUSTAINABLE HOUSING STRATEGY FOR THE UPTOWN DISTRICT

Partners:

City of Phoenix

U.S. Department of Housing and Urban Development

St. Luke's Health Initiatives

ASU Global Institute of Sustainability, Arizona State University

REINVENT PHX

Sustainable Housing Strategy for the Uptown District, Phoenix (2012—2040)

Report submitted to the City of Phoenix Planning and Development Department by the ASU-SOS Team for the project grant “Reinvent Phoenix – Cultivating Equity, Engagement, Economic Development and Design Excellence with Transit-Oriented Development”, funded by the U.S. Department of Housing and Urban Development (HUD)

Principal Investigators

Dr. Aaron Golub, Dr. Arnim Wiek

Faculty Affiliated with the Project

Dr. Deirdre Pfeiffer

Graduate Research Assistants

Tamsin Connell, John Harlow, Josh Schmidt, Adam Stranieri

Postdoctoral Researcher

Dr. Braden Kay

January 28, 2014

School of Sustainability

Arizona State University

ASU SCHOOL of SUSTAINABILITY

ARIZONA STATE UNIVERSITY

Acknowledgements

This Housing Strategy report has benefited from the commitment and collaboration of our project partners at the City of Phoenix, including Curt Upton, Lysistrata “Lyssa” Hall, and Jacob Zonn. We would also like to thank the City of Phoenix Neighborhood Services and Housing Departments for their support and data contributions. Our partners at Street Luke’s Health Initiative, including Ernesto Fonseca, Mimi Majumdar Narayan, Mariana del Hierro, Dean Brennan, Pam Goslar, and C.J. Eisenbarth Hager produced a thorough community-based health assessment report that informed housing priorities.

This study relied on the support of local experts. We want to express our gratitude to Theresa Brice from LISC, and Silvia Urrutia from the Laz Raza Organization for their contributions and dedication.

A working group from the Stardust Center for Affordable Housing and the Family at ASU significantly contributed to the content of this report to ensure interventions and investments are appropriate to the District. This group includes: Susan Bergquist, Maricopa County Health; Teresa Brice, LISC; Reid Butler, Butler Housing; Ernesto Fonseca, Saint Luke’s Health Initiative; Andy Gordon, Arizona Multibank; C.J. Hager, Saint Luke’s Health Initiative; Fred Karnas, Saint Luke’s Health Initiative; Don Keuth, Phoenix Community Alliance; Vincent Lopez, Darlene Newsome, UMOM; Maricopa County Health; Joe Stegmayer, Cavco Industries; Brian Swanton, Gorman & Company; Silvia Urrutia, Raza Development Fund; and Feliciano Vero, Urban Sol Development. Support was also given by the Stardust Center to assist with expert reviews of our research.

Graduate students at the School of Sustainability, and other members of Sustainability Transition and Intervention Research Lab in the School of Sustainability assisted throughout the study with preparation activities and events.

We also would like to acknowledge the role of local leaders, and the residents and business people actively contributing to shaping the future of the District, including members of the Transit District Steering Committee.

Table of Contents

Executive Summary

The transition strategy presented in this report describes a set of coordinated interventions necessary to create sustainable housing in the Uptown District. The current state of housing in the District is not sustainable for housing options and affordability. There is a clear need for effective interventions to achieve a sustainable state of housing in the future.

Sustainable housing strives for diverse, healthy, affordable, socially inclusive, resource-efficient, and culturally sensitive housing, derived from sustainability and livability principles (HUD, 2009). This strategy is intended to achieving the goals of sustainable housing. Three goals are of highest priority - meeting demand with adequate housing options; providing sufficient quality of housing and promoting healthy housing conditions; and securing affordability of housing. The following table translates these goals into specific targets and indicates the distance to target that the strategy needs to cover.

Indicator	Sustainability Target	Current State Data	Distance-to-target
Goal 1 – Meeting demand with adequate housing options			
Options for elderly	933 units	1340 units	0% = 0 units
Goal 2 – Providing sufficient quality of housing and promoting healthy housing conditions			
Lacking basic amenities	<0.1%	0% = 0 units	~0 units
Lacking fitness	<0.1%	2.7% = 200 units	~ 20 units
Goal 3 – Securing affordability of housing			
Units for extremely low income	2386 units	144 units	2100 units
Units for very low income	1574 units	1175 units	~300 units

This transition strategy seeks to achieve the above targets through interventions in new construction, and rehabilitation. The strategy details the actions, resources, potential barriers, and specifics on necessary investments for each intervention.

New Construction Intervention

This intervention includes investing in new construction of multifamily housing along Central Avenue and at Park Central. Through this intervention, the District can gain newly constructed units (contributing to the need for 2182 highly affordable units), with all new buildings taking advantage of new codes that support construction of healthy, green, and ADA-compliant homes. The following actions, among others, will be necessary:

1. Pass form-based code that creates predictable zoning for developers along Central Avenue, Indian School, and Camelback

2. Enlist a marketing and real estate development professional to support new construction initiatives in the District.

3. Develop an affordable housing pilot project on Central and Indian School that provides proof of concept, and incentivizes further investments.

4. Make progress on economic development, green systems, health, and mobility strategies that will support further investment in sustainable housing.

Rehabilitation and Revitalization Intervention

This intervention includes rehabbing single- and multifamily homes. The rehabilitation intervention will contribute to the creation of 2100 needed affordable housing units and over 100 rehabilitated units with currently very low fitness scores. The following actions are needed to begin the transition towards sustainable housing using rehabilitation investments:

1. Adjust zoning and ordinances to support affordability, accessibility, health, and LEED standards.

2. Support policies that allocate resources to city departments and non-profits for rehabilitation and revitalization of affordable units.

3. Develop a pilot project that demonstrates successful rehabilitation of homes in key neighborhoods.

Conclusion

The strategy also includes a database of implementation tools (financing tools, partnerships, codes, capacity building, and incentives) that are available to implement each intervention. The strategy includes a 5-year action plan that details the actions that will achieve critical early wins, and move the sustainable housing transition in the District forward. In summary, this strategy seeks to guide the District towards housing that is diverse, healthy, affordable, socially inclusive, resource-efficient, and culturally sensitive through critical interventions in new construction, and rehabilitation.

Correspondence to Scope of Work

Scope-of-Work Items	Corresponding Report Chapter
Task 3.3 District Housing Strategies	
Housing preservation and development opportunity sites	Vision report
Recommend types of housing designs to meet District needs	Chapter 4
Sub-Task 3.3.a: Housing Demand Forecast	
Projected units to meet 2040 demand	Table 1
Sub-Task 3.3.b: Recommended Policy Changes	
Recommendation of policy changes to overcome barriers	Chapter 4
Sub-Task 3.3c: Recommend Equitable Housing Investments	
Recommended locations of Housing Types	Vision Report

Chapter 1 – Introduction

1.1. Housing Challenges in the Uptown District

The Uptown District is between 15th Avenue and 7th Street, with Missouri Avenue as its northern boundary, and Indian School Road as its southern. The southwest corner of this area, south Grand Canal and west of one parcel west of 7th Avenue, is more than half a mile from the light rail, and therefore not included in the District (Figure 1).

The far western area of the District is characteristic of the historical car-centric development patterns in many parts of Phoenix. Strip malls line the major roads (15th Ave, Camelback, and 7th Ave), with some multi-family housing closer to main roads, and single-family neighborhoods in the interior of blocks. The Grand Canal traverses mostly residential areas, and is often hidden from view behind the rear walls that line resident's backyards.

About 10,000 people (a majority being college age and office workers) live within a half mile of the 7th Avenue and Camelback Road station, which is in the Alhambra Planning Village. Much of the housing stock in the immediate area around the station is rental properties. The neighborhood historically attempts to shield local businesses and neighborhoods from the impacts (congestion, noise, etc.) of nearby Central Avenue. Development standards for the 7th Avenue Urban Main Street Overlay were recently drafted, and place emphasis on local businesses, community, and revitalization.

Moving east, the light rail station at Central Avenue and Camelback Road is a major regional transit hub. This area is the gateway to the northern part of Central Ave, and acts as the transition zone between the high-rise developments to the south, and large residential homes to the north in the historic Murphy Bridal Path. About 6,000 residents live within half a mile of the light rail station. The Windsor Square, Medlock Place, Pierson Place, and St. Francis neighborhoods surround the station, with much of these neighborhoods having historical designation. Most of the single-family homes in this area were built in the first half of the 20th century. Windsor Square and Medlock Place have large and impressive homes, often on immaculately landscaped streets and lots. While college age and office workers comprise most of the population here, there are more elderly residents (about 20%) here than around the 7th Avenue station.

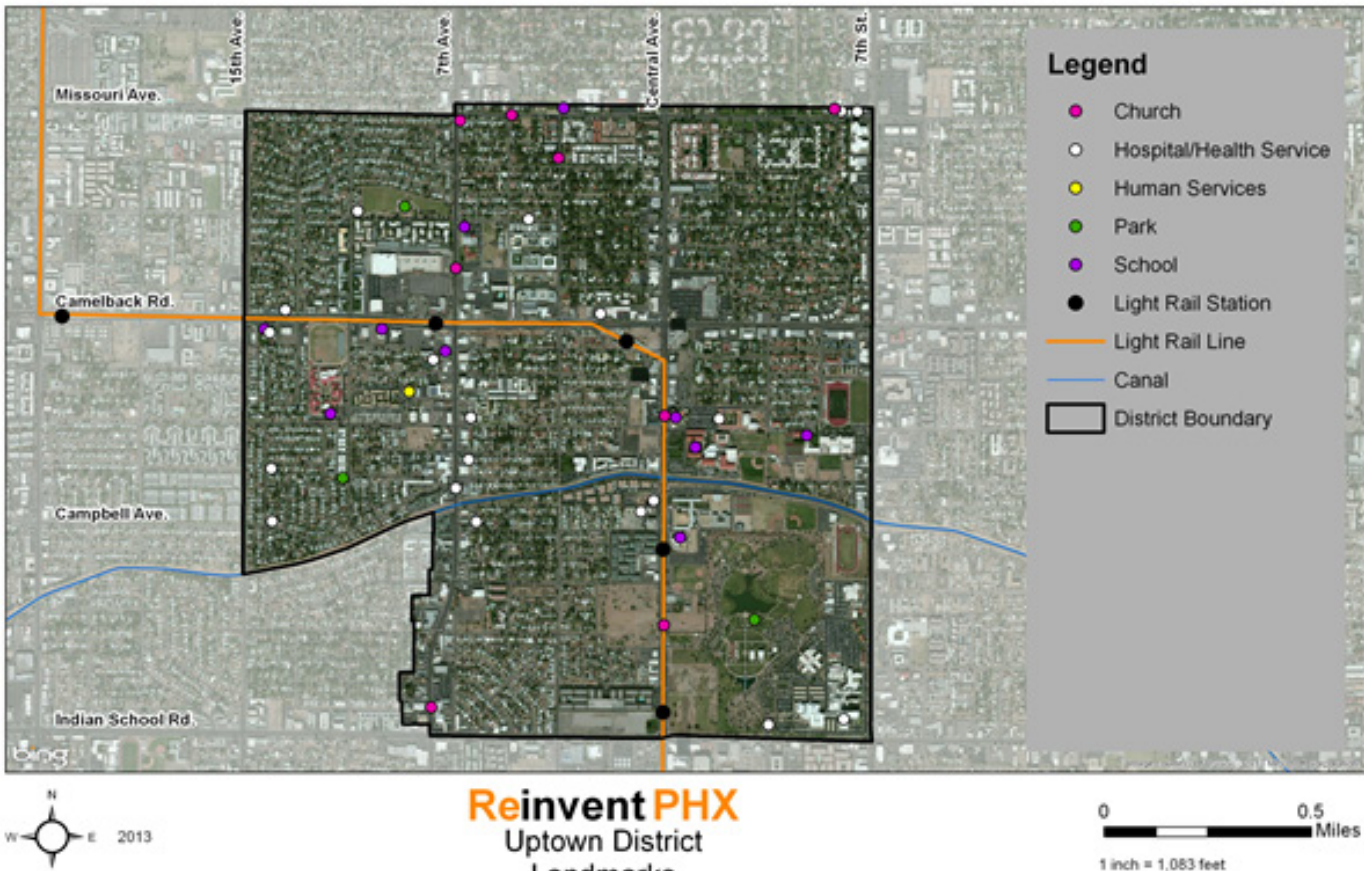


Figure 1. Major Midtown District streets and landmarks

A 2008 study by Arizona State University and the City of Phoenix engaged dozens of residents along Camelback, especially focusing on the light rail station areas around Central and Camelback, 7th Ave and Camelback, and 15th Ave and Camelback. The report generally found:

- Community members are very concerned about the height of new development projects
- The area lacks transition zones that blend high-density uses with single family residential areas
- Parking and traffic congestion are major issues for many residents and visitors
- The area lacks sufficient mixed-use zoning to facilitate alternative development options
- As light rail development continues, many residents fear they might be 'priced out' of the area

Moving south along Central Avenue, there are several prominent schools: Brophy Preparatory, St. Francis Xavier Elementary, Xavier Preparatory Academy, and Central High School. Central High School is adjacent to the Campbell and Central light rail station, with popular Lux Café to the west. A new four-story apartment building is going into the vacant lot south of Lux. Single-family homes between 7th and Central Avenues noticeably lack the vegetation density and quality found north of Camelback Road.

On the District's southern border lies the Central Avenue and Indian School Road light rail station, in the Encanto Planning Village. There are 5,500 and 20,000 workers within a half mile of the light rail station, even with many huge vacant lots in the area. The station area is a hub for medical facilities, with six hospitals in surrounding areas. The Veteran Administration Hospital and Phoenix Indian Medical Center are major employers in this part of the District – with many of their workers riding transit. Steele Indian School Park is the most prominent feature in this part of the District. The park is 74 acres, with a lake, an outdoor amphitheater (with seating for 1,500 people), and a 15-acre Entry Garden.

During the 1950s, Phoenix's downtown core was diminishing, with people and development shifting to other areas of the Valley. At the time, Central Avenue was mostly lined with estate homes, which soon gave way to the Art Museum, the Phoenix Towers, Park Central Mall, and Durant's restaurant. High-density commercial development continued in the 1960s, with many of Central Avenue's signature buildings, such as the Phoenix Financial Center, completed during this period amidst resistance from surrounding neighborhoods. In 1971 the City adopted the Central Phoenix Plan, which called for unlimited building heights along much of the Central Avenue Corridor (CAC), an office high-rise area that extends from McDowell Road to Camelback Road between 3rd Avenue and 3rd Street. However, development during this period mostly stalled in the CAC, while investors and developers focused their resources primarily in the downtown core. The 1980s and 90s saw a mix of real estate booms and downturns. After 2000, office space began conversions to residential, partially due to voters approving the light rail.

Using the guiding concept of sustainable housing that strives for diverse, healthy, affordable, socially inclusive, resource-efficient, and culturally-sensitive housing (Edwards, 2000; Bratt, 2002; Chiu, 2004; Astleithner et al., 2004; Winston & Pareja Eastaway, 2008; HUD/TOD/EPA, 2009; Hack et al., 2009; Wheeler, 2009; Bolt et al., 2010; Manzi et al., 2010), the Uptown District is confronted with various challenges. About 71 acres – 5.2% of the area – lie vacant, and of 6,155 housing units, 19% are vacant. There is insufficient housing affordability to accommodate various income groups, and therefore, diversity will remain a challenge. Housing cost burdens are above most acceptable levels.

This current state assessment report details the issues above and provides an overview of relevant intervention points for urgently needed policies and other types of improvement strategies. The report introduction continues with an overview of the Reinvent Phoenix planning process, the core definitions of sustainable housing, and the objectives of the assessment study. The next chapter describes the assessment methodology (Chapter 2). The following chapter spells out the sustainable housing goals used in the assessment (Chapter 3). The key results of the assessment are organized by the goals (Chapter 4). A set of causal maps articulates potential intervention points and system features for the strategy-building module (Chapter 5). The report finally summarizes conclusions for the strategy building process (Chapter 6).

1.2. Profile of the "Reinvent Phoenix" Grant

"Reinvent Phoenix" is a City of Phoenix project in collaboration with Arizona State University and other partners, and funded through HUD's Sustainable Communities program. This program is at the core of HUD's mission to "create strong, sustainable, inclusive communities and quality affordable homes for all." It specifically strives to "reduce transportation costs for families, improve housing affordability, save energy, and increase access to housing and employment opportunities" and to "nurture healthier, more inclusive communities" (OSHC, 2012). The program explicitly incorporates principles and goals of sustainability/livability (HUD/TOD/EPA, 2009):

1. Enhance economic competitiveness
2. Provide more transportation choices
3. Promote equitable, affordable housing
4. Support existing communities
5. Coordinate and leverage federal policies and investment
6. Value communities and neighborhoods.

In this spirit, from 2012—2015, the Reinvent Phoenix program aims to create a new model for urban development in Phoenix. The goals for this new model are to improve quality of life, conserve natural resources, and maintain desirability and access for the entire spectrum of incomes, ages, family sizes, and physical and developmental abilities along the light rail corridor. Reinvent Phoenix aspires to eliminates physical and institutional barriers to transit-oriented development. To do so, the grant teams work to catalyze livability and sustainability through capacity building, regulatory reform, affordable housing development, innovative infrastructure design, economic development incentives, and transformational research and planning.

Participatory research design ensures that a variety of stakeholder groups identify strategic improvements that enhance safe, convenient access to fresh food, healthcare services, quality affordable housing, good jobs, and education and training programs. Reinvent Phoenix focuses on six topical elements: economic development, green systems, health, housing, land use, and mobility (corresponding to the Livability Principles). These planning elements are investigated in five transit Districts (from east to west and south to north): Gateway, Eastlake-Garfield, Midtown, Uptown, and Solano. Planning for the Downtown District of the light rail corridor is excluded from Reinvent Phoenix because of previously completed planning efforts, partly using transit-oriented development ideas.

Reinvent Phoenix is structured into planning, design, and implementation phases. The project's planning phase involves building a collaborative environment among subcontracted partners, including Arizona State University, Saint Luke's Health Initiatives, Discovery Triangle, the Urban Land Institute, Local First Arizona, Duany Plater-Zyberk & Company, Sustainable Communities Collaborative, and others. While the City of Phoenix coordinates these partnerships, Arizona State University and Saint Luke's Health Initiatives are working with residents, business owners, landowners, and other relevant stakeholders in each of the grant's five transit Districts. This effort assesses the current state of each District, as well as facilitates stakeholder expression of each District's sustainable vision for the future. Finally, motivated actors in each District co-create step-by-step strategies to move toward those visions. Transit-oriented District Steering Committees, formed in the planning phase, host capacity building for their members, who shepherd their Districts through the remaining Reinvent Phoenix phases.

City of Phoenix staff and Duany Plater-Zyberk & Company lead the design phase. Designs for canal activation, complete streets, and form-based code complement the compilation of a toolbox for public-private partnerships to stimulate economic development along the light rail corridor. The design phase takes its cues from the public participation in the planning phase, and maintains ongoing monthly contact with Transit District Steering Committees to ensure the visions of each District are accurately translated into policy and regulations. These steps update zoning, codes, regulations, and city policies to leverage the new light rail system as a major asset. The design phase is crucial for preparing an attractive environment for investment and development around the light rail.

Finally, the implementation phase will use the city's partnerships with the Urban Land Institute, Local First Arizona, the Sustainable Communities Collaborative, and District Steering Committees to usher in a new culture of development in Phoenix. With the help of all partners, transit-oriented development can be the vehicle to renew Phoenix's construction industry, take full advantage of

the light rail as a catalyst for transformation, and enrich Phoenix with a livable and dynamic urban fabric.

1.3. Sustainable Housing Research

One sub-project of Reinvent Phoenix focuses on housing and aims to develop diverse, healthy, affordable, socially-inclusive, resource-efficient, and culturally-sensitive housing along the light rail in the District. The housing project fully aligns with HUD's Sustainable Communities program objectives, as stated above (see Livability Principle No. 3, above).

Sustainable housing is specified in the following five goals:

1. Meet demand with adequate housing options
2. Provide sufficient quality of housing and promote healthy housing conditions
3. Secure affordability of housing
4. Conserve natural resources in homes
5. Maintain valuable cultural and historical character

In pursuit of these objectives, we employ a transformational planning framework (Wiek, 2009; Johnson et al., 2011), conducting sustainable housing research in three linked modules. We start with a thorough assessment of the current state of housing in the District in 2010/2012 against principles of livability and sustainability (current state assessment) (Golub et al., 2013); in parallel, create and craft a sustainable vision for housing in the District in 2040 (visioning) (Wiek et al., 2013); and finally develop strategies for changing or conserving the current state of housing towards the sustainable vision of housing in the District between 2012 and 2040 (strategy building). The framework is illustrated below.

Because of the close link between housing, land use, mobility, and other planning elements, the central meaning of housing often remains poorly defined in housing assessments. With the intent to avoid duplications, overlap, and confusion, we follow in this strategy report the following definition: *Housing refers to the structural and functional features of homes (residential buildings) in a given District.* Consequentially, features of a District that pertain to the connection and distribution of homes and other buildings, open spaces, infrastructures, services, etc. will be addressed under the land use planning element.[1]

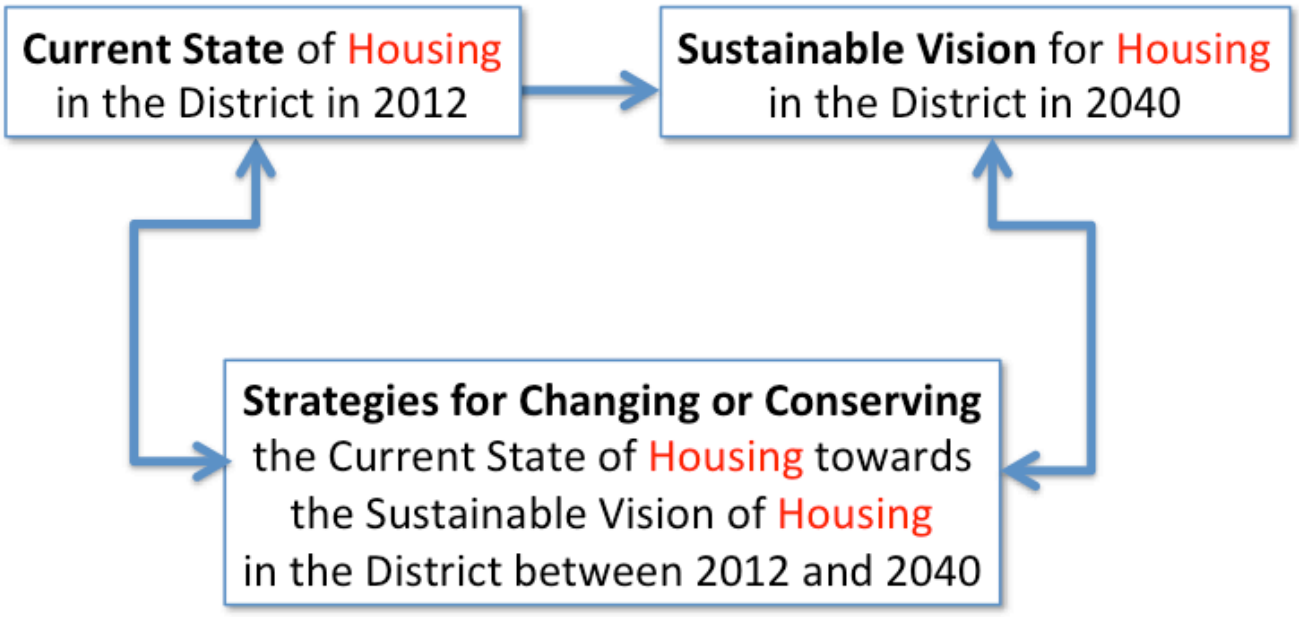


Figure 2. Transformational sustainability planning framework (Wiek, 2009)

[1] Examples: current zoning; current spatial distribution of housing in relation to light rail stations; current access to services; etc.

1.4. Objectives of the Strategy Study

The strategy presented in this report directly refers to the housing challenges (detailed in Golub et al., 2013) and proposes interventions on how to address these challenges, significantly improve the housing situation in the District, and achieve the vision and goals of sustainable housing in the District (detailed in Wiek et al., 2013). In accordance with the mandate of Reinvent Phoenix to contribute to sustainable community development, adapt to rising temperatures, increase resiliency to climate change, and improve energy- and water-efficiency of buildings and infrastructure, this strategy study actively pursues the improvement of housing conditions, following sustainability and livability principles (Gibson, 2006; HUD/DOT/EPA, 2009).

The guiding question of the sustainable housing strategy study is: *What are evidence-based interventions to provide diverse, affordable, and healthy housing that conserves natural resources and promotes cultural and historical neighborhood character for all residents?*

The specific objectives are:

1. To link sustainable housing goals and targets to evidence-based interventions and investment options.

2. To detail the interventions along with actions, actors, assets, coping tactics (for barriers) needed to achieve sustainable housing goals and targets.

3. To highlight a set of investment options designed to achieve sustainable housing goals and targets.

4. To compile a set of exemplary implementation tools that help implement the investment options.

5. To outline a five-year action plan to implement the interventions and investments.

Additional objectives include:

1. To develop a process and content template for sustainable strategy development that can be reproduced in the other four transit Districts and thus guide the Reinvent Phoenix strategy development activities over the coming years.

2. To enhance capacity in strategy development among planning professionals and collaborating partners to use in subsequent initiatives and projects.

3. To enhance capacity in strategy development for students and faculty to use in other research, teaching programs, and projects.

Chapter 2 – Research Design and Data Sources

We acknowledge that the term strategy is being used in a variety of contexts. In a research context a strategy is defined as *a set of interventions coordinated among different stakeholders with the intent to transforming the current state of a system (e.g., a city, a neighborhood, a company) into a sustainable one* (Wiek & Kay, 2013). The following documents details the coordinated interventions necessary to achieve a sustainable state for housing in the District. Each intervention includes investments and implementation tools that residents, businesses, organizations, and city government need to employ in order to achieve the desired outcomes. Conceptually, we differentiate different levels of the strategy (Fig. 8)

The methodological approach employed in this study is based on the transformational planning framework (Wiek, 2009). The specific procedures for building a transition strategy have been detailed in Wiek and Kay (2013) and Kay et al. (2013), and are here applied to sustainable housing as follows:

1. Summarizing the inputs or ingredients for the strategy, i.e., the current state assessment, the vision, and a theory of change. All three elements need to be specified to an extent that progress can be measured. Key information pertains to the gaps between the current state and trends for housing on the one hand, and future goals and targets (vision) on the other hand. For example, for the indicator "percentage of homes using renewable energy," the current state is <1% of housing units, but the target is >50%. The gap between the current state and the target state specifies the extent of what the strategy needs to accomplish.

2. Developing a set of coordinated interventions to achieve desired outcomes. For the overall vision of sustainable housing, each major goal has specific interventions that need to be identified and coordinated. For example, to achieve the goal of providing healthy housing options for all residents of the District, the intervention of rehabilitation of houses with poor fitness may seem promising. The transformational planning framework is goal oriented and thus the vision, the current state assessment, and the strategy all start with stating the goals of sustainable housing. Yet, the strategy aims at coordinating interventions that achieve multiple objectives at the same time. For example, the rehabilitation of houses does not only pursue enhancing housing fitness and creating healthy housing conditions, but can also contribute to energy performance (conserving natural resources).

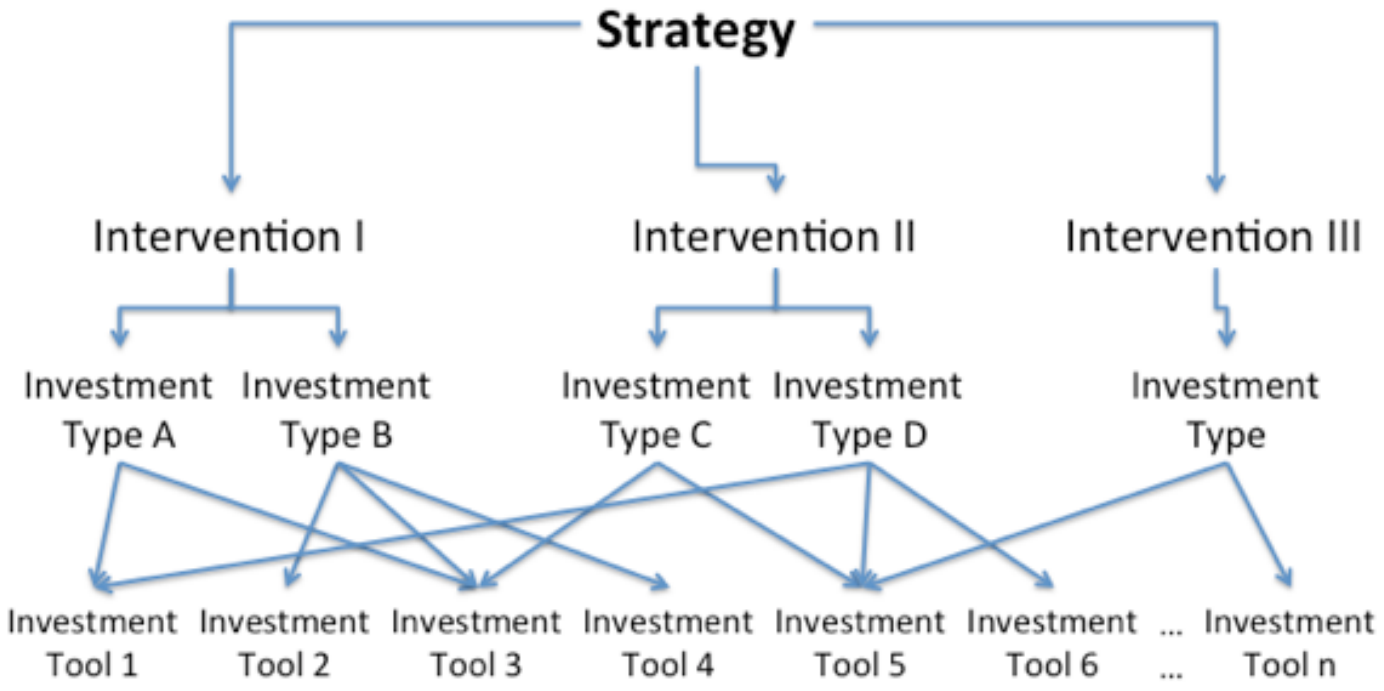


Figure 3. Hierarchical structure of the strategy for sustainable housing

Thus, from the perspective of implementation, it is more useful to use the interventions as organizing principles, and design interventions that contribute to as many goals as possible. Thus, we describe each major intervention separately by:

a. Stating the goals and targets the intervention pursues.

b. Identifying the intervention points, i.e., drivers that cause the problematic current state. Systemic relevance of the intervention point and feasibility of intervention at this point are important criteria for the selection of intervention points. A potential intervention point could be the lack of code enforcement that contributes to the current state of low housing fitness.

c. Specifying key components of each intervention, i.e., intervention actions, actors, available assets, resources needed, potential barriers, and implementation tools. Components can be identified through best practices examples, academic literature review, and interviews with city staff, residents, and local experts.

d. Describing specific investment options that offer different pathways or investment options within an intervention. For example, the new construction intervention captures both construction of single-family as well as multifamily homes. For realizing an investment option, different implementation tools can be used.

e. Describing implementation tools, clustered in tools for financing, capacity building, partnerships, rules (codes), and incentives. We provide key information on the implementation tools, so that residents, developers, and city staff are able to select among available tools. Similar to interventions and investment options, the majority of tools can be used to implement multiple investments. For example, a community development corporation (partnership tool) can be used to support new construction of multifamily homes, or the adaptive reuse of motels into housing units.

3. Providing evidence for the effectiveness and efficiency of the proposed interventions, investments, and implementation tools. Evidence is required to ensure that intervention, investments, and implementation tools are selected that are likely to be capable of getting the job done. Evidence can be provided by local experts, academic literature, or cases from other cities.

4. Detailing actions for a specific 5-year action plan for the roles and responsibilities of residents, developers, and city staff, as well as for the Transit District Steering Committee.

Data for this strategy document comes from two primary sources:

1. Data inputs for the strategy are drawn from multiple sources as this study builds from the current state assessment and the visioning study. The specifics of these data sets are explained in the respective reports (Golub et al., 2013; Wiek et al., 2013).

2. Data about the core components of the strategy are based on input from local experts and through the review of academic literature.

Chapter 3 – Strategy Inputs

The following chapter includes a summary of the current state and the vision for sustainable housing in the Uptown District, as well as a specific theory of change that are the inputs for the strategy.

3.1. Current State of Housing in the Uptown District

The current state assessment is based on five goals of sustainable housing, derived from sustainability and livability principles (HUD, 2009):

1. Meet demand with adequate housing options
2. Provide sufficient quality of housing and promote healthy housing conditions
3. Secure affordability of housing
4. Conserve natural resources in homes
5. Maintain valuable cultural and historical character

The current state assessment indicates that the current housing conditions in the Uptown District are mixed overall. Of particular concern is low affordability driven by high District housing prices. The Uptown District struggles with unsustainable states primarily in the affordability goal domain, with mixed performance among the other goals:

1. *Demand is not currently met with adequate housing options*. Vacancy rates for owned units has a low distance to the sustainability target, whereas rented units have medium, which may result in blight, crime, and divestment. ADA visitability compliance is expected to be very low, in accordance with general building practices. The percentage of housing options in the District available to elderly residents is plentiful.

2. *Current quality of housing is high*. Very few units lack basic electricity or other energy supply. District average housing fitness (roof, siding, landscape issues) basically meets the sustainable target. Landscape quality (immediate surrounding of homes) and water quality is sufficient.

3. *Currently, the District struggles with several housing affordability challenges.* District renters making 80% of AMI is the only affordability indicator meeting its target. Owners at 30%, 50%, and 80% of AMI fail to meet the targets, though the 30% indicator has a low distance to target. Of particular concern are the 90% of low-income Uptown residents who are housing cost burdened.

4. *The assessment on the current state of conserving natural resources in homes is inconclusive*. There is not enough reliable information available to assess the current state of housing in Uptown in terms of its environmental performance. However, water consumption data shows a very high distance to target, and renewable energy use and LEED construction do not meet sustainable levels.

5. *The current state of maintaining valuable cultural and historical character is close to sustainable.* Neighborhood stability is fairly high with more than 20% of families residing in the District for more than 10 years, and historical preservation nearly meets the sustainable target.

In summary, the District is in need of affordable housing options with good environmental performance (energy efficiency). Thereby, tradeoffs between different housing features require special attention when crafting sustainable housing visions and strategies. For example, cooling homes improves health, but also increases energy costs. Similarly, high fitness housing is safer, but less affordable.

Data from stakeholder engagements in the District suggest that additional affordable housing is not a priority for Uptown residents. Preservation of historical neighborhoods, and their character, was prized over commercial and multi-family residential development along arterials. The centrality of protecting historic residential areas with owned single-family homes might impede development of multi-story apartment buildings on arterials. Though conserving natural resources also poses challenges, stakeholder input has prioritized preservation of historic, owned, single-family residential neighborhoods above other challenges.

HUD has operationalized its mandate through *Livability Principles* (2009). Interpreting the assessment results in light of the livability principles indicates the following set

of priorities:

Transportation costs, affordability indicators, renewable energy use, and LEED certification are indicators that have a high distance-to-target, and are closely tied to the principles.

- Livability Principle 1 aims at *providing more transportation options and reducing transportation costs*. The current state data suggests that there is a critical need to address transportation costs through increasing services and employment opportunities close to homes, and building housing near District employers.

- Livability Principle 2 aims at *supporting equitable and affordable housing*. The current state of affordability challenges indicates non-compliance with this principle, which suggests a need for more housing units that are affordable at 30%, 50%, and 80% of AMI.

- Livability Principle 5 aims at *making smart energy choices.* Current state data on LEED certification and renewable energy show high distances-to-target.

3.2. Vision for Sustainable Housing in the Uptown District

The relevant passage from the overall vision for the Uptown District reads (Wiek et al., 2013):

In 2040, the Uptown District has a unique identity with local, independent businesses in adaptively reused and mixed-use buildings and cool, walkable streets. Distinctive historic neighborhoods have preserved a family-friendly community and sense of place. Multi-income housing and employment are available throughout the area, especially on major streets. Street-level pedestrian-friendly environments include bike and running paths, local farmers markets, and a major civic plaza. Located near the light rail, the District's parks contribute to an active and healthy community.

The specific vision for sustainable housing in the Uptown District is derived from this vision and is aligned with the five sustainable housing goals mentioned above (1.3). It reads:

In 2040, Uptown provides a mix of mixed-use and mixed-income buildings of a range of heights to supply a diversity of clean and secure apartments for families and individuals of all ages, income levels, and occupations. Although there is District-wide interest in mixed-use buildings, design and execution look different in each transition area.

This housing vision is operationalized with quantified targets for lead indicators. These targets give clear metrics to determine the progress in achieving the five sustainable housing goals. The following table summarizes a few exemplary targets as well as distances-to-targets as key reference points for the strategy building.

This table sets targets for important indicators in order to define the number of units necessary to achieve a sustainable state of housing in the District. Increasing the number of affordable units is a clear priority, while increasing the units appropriate for the elderly needs to be considered.

Through the visioning process, three priority areas (transition areas or areas of change) were selected in order to make the vision spatially explicit (Figure 9). Data from the vision report determines building types, heights, and other characteristics appropriate for each locality.

Table 1. Sustainable housing goals, current state, and distance-to-target data

Indicator	Sustainability Target	Current State Data	Distance-to-target
Goal 1 – Meeting demand with adequate housing options			
Options for elderly	8.4% PHX = 675 units	6.0% = 485 units	2.4% = 190 units
Goal 2 – Providing sufficient quality of housing and promoting healthy housing conditions			
Lacking basic amenities	<0.1%	2.6% = 72 units	~ 70 units
Lacking fitness	<0.1%	5.9% = 213 units	~ 210 units
Goal 3 – Securing affordability of housing			
Units for extremely low income	1627 units	469 units	1158 units
Units for very low income	1073 units	1012 units	61 units

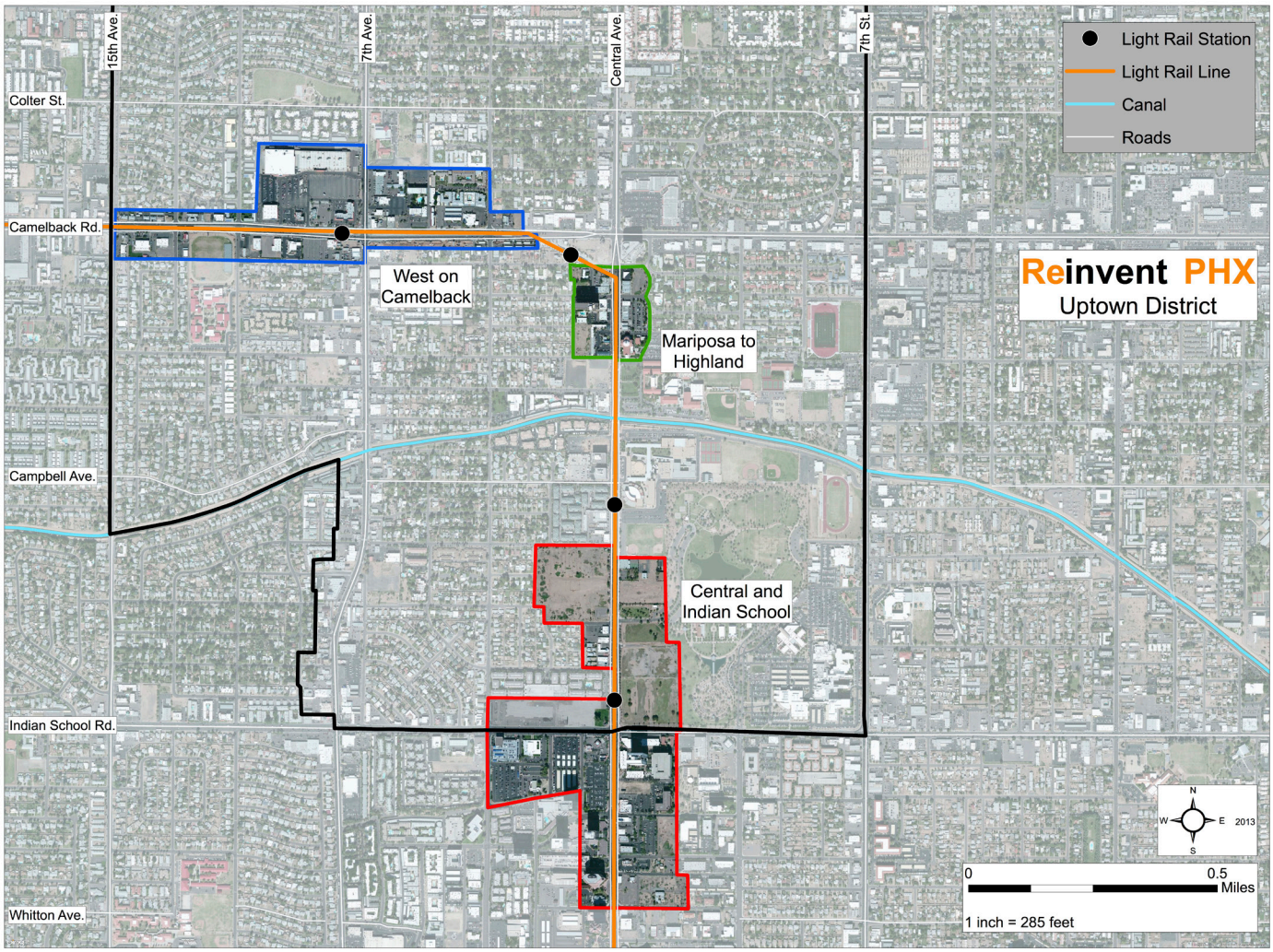


Figure 5. Map of the transition areas identified by Uptown stakeholders

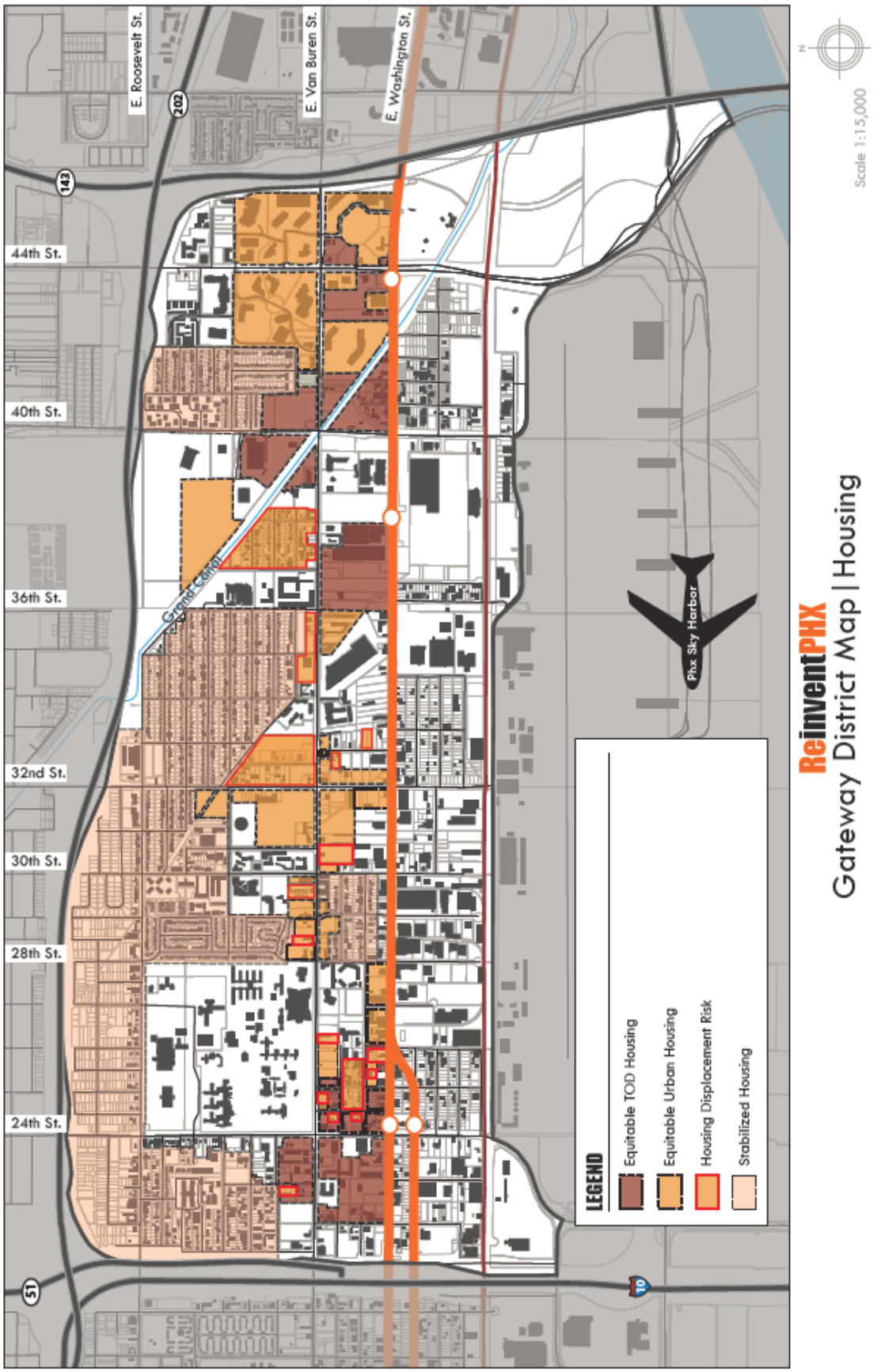
1. Central Avenue south of Camelback Road is lined with mixed use and live-work buildings hosting cafes, small retail stores, and restaurants on the ground floor, with offices and apartments above. The area's live/work buildings have encouraged artists to exhibit in Indian School and Culver parks, as well as in the civic space at Uptown Plaza. Public art, markets, and annual festivals attract people from all over the valley. Central Avenue and Camelback Road is only more desirable in 2040, attracting professionals and artists to move into the area.

2. In 2040, Central Avenue and Indian School Road is home to healthy lifestyles and affordable residences. The variety of affordable housing opportunities attracts a diverse population from artists in live/work apartments to small families in mixed-income apartments. Residents enjoy walking or biking to their destinations on shaded, safe pathways, and Steele Indian School Park is landmark destination for sports and recreational programs. The vacant lots that once surrounded this corner now host diverse housing stock. Live/work housing draws artists who can exhibit in the park or in Uptown Plaza. Families of all incomes live in mixed-income apartments, some in buildings up to 15 stories, which were constructed to meet high demand for housing in the District. These apartments along Central Avenue and Indian School Road provide short walking and biking distance from the light rail station and the park with its arts and farmers markets. Taller buildings on these major corridors gently transition into low-rise toward the center of blocks. Ground floor retail and work spaces in the area draw many locals for lunch and to relax after work. Local restaurants provide outdoor dining in plazas along Central Avenue, and food trucks frequent the park for festivals and fairs. High-rise residents wake up to the Phoenix sunrise and mountain vistas each morning, and enjoy views of active streets. Affordable and mixed-income housing have remade made Central Avenue and Camelback Road into a vibrant, diverse, and activated Phoenix neighborhood.

3. In 2040, the Camelback corridor balances business and commercial development on Camelback Road with the residential feel of the area. This anchors a lively corridor that hosts new housing developments interspersed with co-working spaces, Changing Hands Bookstore, and Stinkweeds and Zia Records. Camelback Road is the backbone of attractive neighborhoods that line both sides of the street along the light rail.

Finally, a more detailed map captures desired housing development in four groups: *Stabilized Housing* (areas where rehabilitation is necessary), *TOD Housing* (areas close to the light rail for taller new and adaptively reused mixed-used housing), *Urban Housing* (New and adaptive reuse housing not close to the light rail); and a category of *Housing Displacement Risk* (areas where the market could incentivize replacing single-family homes in favor of new multifamily developments). These designated areas inform where different interventions in the District should be implemented.

Figure 6. Housing vision map with categorized housing types



3.3. Theory of Change

The production of new multifamily developments, and newly built single-family homes on small lots in neighborhoods adjacent to Central Avenue, in conjunction with a minor single-family home rehabilitation in single family neighborhoods (i.e. Pasadena), will create adequate and affordable housing options of sufficient quality across the District.

If these housing units are constructed with an emphasis on health, visitability, and energy efficiency, these construction efforts will lead to a sustainable housing situation in the District. This will not happen without significant efforts by residents and housing advocates to ensure more aggressive codes and enforcement.

Due to the amount of vacant land, there is an opportunity to invest in new construction. Emphasis should be placed on increasing housing units on underutilized land to easily increase the number of units. Single-family revitalization, and new construction can fill the gaps and ensure housing diversity. In the following strategy, we describe how these interventions and corresponding investment options can be enacted over the next 30 years.

Chapter 4 – Sustainable Housing Strategy for the Uptown District

4.1. Linking Sustainable Housing Goals to Interventions and Investment Options

The overall and specific sustainable housing goals are the reference points for developing the strategy and its interventions. The strategy aims at coordinating interventions that achieve multiple objectives at the same time. The interventions of new construction, rehabilitation, and adaptive reuse all contribute to achieving the five goals of sustainable housing. Thus, from the perspective of implementation, the interventions are the organizing principle, and their design should contribute to as many goals as possible. Therefore, each intervention is described separately in the subsequent sections, detailing the specific investments, actions, resources, implementation tools, etc.

Table 2. Sustainable housing goals linked to interventions

Goal	*Strategy*		
	New Construction Intervention	*Rehabilitation Intervention*	*Adaptive Reuse Intervention*
1. Meeting demand with adequate housing options	Construction of new units, unit types, and costs to better match demand	Rehabilitation of existing units to better match demand	Reuse of existing buildings to add units and unit types to better match demand
2. Providing sufficient quality of housing and promoting healthy housing conditions	Code enhancements for new construction to improve the environment and public health	Rehabilitation of older housing stock to address environmental and health issues	The reuse process to address environmental and health issues
3. Securing affordability of housing	Construction of new units at affordable prices	The rehabilitation of existing units at affordable prices	The reuse of existing buildings for housing to add new affordable units
4. Conserving natural resources	Green and energy efficient construction codes to make new homes more resource efficient	Green and energy efficient rehabilitation to improve resource efficiency	Reuse of older building stock avoids the environmental costs of new construction
5. Maintaining valuable cultural and historical character	Frontage and design codes to maintain neighborhood character	Rehabilitation of older homes to maintain neighborhood character	Reuse of older buildings to maintain neighborhood character

4.2. New Construction Intervention

New construction in the Uptown District entails producing new multifamily apartments and condos on vacant and underutilized land, as well as building single-family homes and small multifamily homes on small vacant lots in current residential neighborhoods.

4.2.1. Core Components

4.2.1.1. Aspired Sustainability Impacts

New construction of multifamily and single-family units can achieve positive outcomes for all five housing goals. For example, construction of new units appropriate for specific needs (e.g., for elderly) and at appropriate costs can help better meet demand. Building code enhancements (green, energy efficient, etc.) can foster healthful housing conditions, environmental performance, and resource efficiency. Frontage and design codes can reinforce neighborhood character, and construction of new units at affordable prices can improve housing affordability.

Through this intervention, the following *specific* sustainable housing targets will be achieved by 2040:

- 1500 newly constructed units (contributing to the need for 2100 highly affordable units)
- All new buildings should take advantage of new codes that support construction of healthy, green, and ADA-compliant homes
- 5 pilot projects that demonstrate new construction of accessible, healthy, and resource-efficient multifamily housing by 2024.

4.2.1.2. Intervention Points

The current system has produced unaffordable housing for too many residents in the Uptown District. New organizational capacity and marketing is needed to address the lack of knowledge and motivation to create the necessary financing packages for affordable multifamily housing or single-family projects in the District. Resource efficiency and visitability measures need to be incentivized in order to achieve targets. With strong marketing and creative financing, the community's vision for increased affordable housing can be reached.

4.2.1.3. Investment Options

There are two new construction investment options: new multifamily buildings and new single-family houses. There is a significant difference between these investments, and they are appropriate for different areas of the District (Fig. 5). New construction of multifamily is appropriate in transit-oriented development (TOD) housing zones by station areas, while new construction of single-family homes is appropriate in rehabilitation zones where there are concerns about culturally and historically sensitive housing that does not disrupt current character. In terms of the greatest impact, new construction of multifamily homes in TOD zones should be made a priority, while new single-family construction adds additional units, but not as efficiently.

4.2.1.4. Intervention Actions

The following actions are critical for accomplishing the goals and targets outlined above:

1. Pass form-based code that creates predictable zoning for developers along Central Avenue, Indian School, and Camelback
2. Enlist a marketing and real estate development professional to support new construction initiatives in the District.
3. Support policies that allocate resources for construction of high quality affordable units.
4. Develop an affordable housing pilot project on property at Central and Indian School
5. Make progress on economic development, green systems, health, and mobility strategies that will support further investment in sustainable housing.

4.2.1.5. Resources

The following resources are needed to support the new construction intervention. Assets (resources that already exist) are in italics:

- *Anchor businesses*
    - *Lux*

- *Hotels*
- *Major property owners*

- *City of Phoenix Departments*
  - *Housing*
  - *Neighborhood Services*

- *Developer and homeowner knowledge of relevant design concepts and implementation processes*

- *Native American Connections (NAC)*

- *Federal financing mechanisms* (See Investment Tools in Section 4.5.)

- *Neighborhood Associations*
  - *Four Corners*
  - *Pasadena*

- *Organizations with capacity for financing and developing affordable multifamily units*
  - *Chicanos por la Causa*
  - *Local Initiatives Support Corporation Phoenix (LISC)*
  - *Native American Connections*

- Private financing and developers willing to invest in the District

- Marketing and highlighting of investment opportunities by local organizations and politicians to overcome financing and developer awareness barriers.

4.2.1.6. Barriers

- Resident concern about increases in affordable units in the District

- Developer opposition to new codes due to concerns about increased cost of development

- Lack of adherence to healthful, environmental, and resource efficient code

- Lack of awareness of transit-oriented development investment opportunities

- Lack of coordination between developers to improve resources use efficiency

- Lack of financing for construction of market rate and TOD multifamily units

- Political opposition to health, resource efficiency, and visitability regulations

4.2.1.7. Intervention Timeline

This timeline outlines a transition towards Uptown's sustainable housing vision driven by new construction over the next 30 years. Much can change during this time; thus, this transition strategy must be revisited and updated. Some of the actions listed as happening by 2025 or 2030 may be feasible before the stated date and could possibly be addressed sooner. The purpose of this timeline is to demonstrate a possible sequence (pathway) to achieve the 2040 vision, with the recognition that some things may come faster or slower.

By 2020

- Finance and support a marketing and real estate professional, for 3—5 years, who would package developers and financing for sustainable housing developments.

- Pass immediate (short-term, low-cost, low-hanging fruit) legislation to improve visitability, energy efficiency, and affordability.

- Construct multifamily units close to the Park Central with the support of NAC, LISC, and other partners.

- Work with Neighborhood Services to produce single-family and small-scale multifamily units in the Garfield neighborhood.

- Create a recognition program for sustainable builders in the Uptown District (potentially as a subset of a program along the entire light rail corridor).

By 2025

- Increase multifamily construction along Central Avenue.
- Examine "live near work" affordability programs operated by companies and local school districts.
- Develop all potential housing sites in the Pasadena neighborhood, and renovate of all substandard housing (by private owners or the Neighborhood Services Department).

By 2030

- Construct multifamily units near Central and Indian School to utilize last large vacant parcels
- Pass further measures to increase affordability, accessibility, health, and resource efficiency.
- Develop long-term funding and policy solutions for long-term affordability. By 2030, the political climate could allow for more aggressive housing affordability measures that are not currently feasible.

4.2.2. Investment Options

4.2.2.1. Constructing New Multifamily Housing

Multifamily housing include duplexes, triplexes, townhomes, and apartment buildings of any size. Housing units that include other uses, such as ground floor retail, are also considered multifamily housing.

Figure 7. New multifamily housing

Aspired Sustainability Impacts

Through this investment, the following *specific* sustainable housing targets will be achieved by 2040:

- Additional units available to meet elderly demand
- Additional units suitable for low-income residents
- Reduced housing costs through additional affordable housing
- Enhanced health and environmental performance of housing

New construction will improve housing diversity and allow low-income residents, singles, and other small households such as the elderly or college students to reside in the District. New units will be safer and have better air quality, as they will be built under better construction standards and will not have hazardous materials such as asbestos and lead-based paint. Further, denser housing has less of an environmental footprint in terms of energy and water use. For example, it will take less water to maintain a shared yard that is used by many people, rather than watering many individual yards. New multifamily housing will reduce the percentage of low quality housing to below 0.1% and reduce the average cost of housing. Instead of spending 22.1% of their total income on housing, residents will only spend about 15%.

Implementation Tools

Multifamily new construction uses the following implementation tools:

- *Financing* – HUD financing (including Section 200s)
- *Partnerships* – Marketing programs involving DPP, LISC, and local neighborhood associations
- *Community Development Corporation*
- *Codes* – Frontage and ADA codes
- *Capacity Building* – Affordability financing training for developers
- *Incentives* – Tax credits and expedited permitting

4.2.2.2. Constructing New Single-family Housing

Single-family housing is detached, often having a garage and front and back yards with fencing to separate property lines. New single-family housing will be only constructed where zoning allows only single-family housing or in historic preservation areas.

Figure 8. New construction of single-family house

Aspired Sustainability Impacts

- Enhance District housing fitness
- Additional units available for elderly
- Increase energy efficiency
- Preserve historical character

New single unit construction will contribute to housing diversity in the District (primarily in Garfield), enable larger families to remain in one place throughout the family lifecycle, and provide housing to families who need more space. It will reduce the percentage of poor quality housing to below 0.1% and improve the health, energy efficiency, and visitability of the District (if built using sustainability and visitability standards, e.g., energy efficient appliances, better air filtration systems, avoidance of asbestos and lead-based paint, etc.).

Implementation Tools

Single-family new construction uses the following implementation tools:

- *Financing* – HUD financing (including Section 200s), Community Development Block grants, HOME Investment Partnerships Program, New Market tax credits, public housing programs, and Local Housing Trust Fund
- *Partnerships* – Community Development Corporations, Neighborhood Solar Partnerships, and Community Land Trusts
- *Codes* – Visitability, ADA, frontage, and green codes
- *Capacity Building* – Affordability financing training for developers
- *Incentives* – Tax credits, renewable energy incentives, and expedited permitting

4.3. Rehabilitation and Revitalization Intervention

This intervention entails rehabilitating single-family homes, and multifamily apartments and condos. Revitalization goes beyond physical rehabilitation and includes cultural programs, crime prevention, and increased social connections among residents.

4.3.1. Core Components

4.3.1.1. Aspired Sustainability Impacts

Rehabilitation and revitalization of multifamily housing and single-family housing can achieve all five sustainable housing goals. Rehabilitation of existing units can help better match demand, and rehabilitation of older housing stock can foster healthy housing conditions and environment performance. The rehabilitation of existing units at affordable prices can improve affordability, while green and energy-efficient rehabilitation can contribute to resource conservation. The rehabilitation of older homes can reinforce neighborhood character in the Garfield and Eastlake Park neighborhoods.

Through this intervention, the following specific sustainable housing targets will be achieved by 2040:

- Revitalized single- and multifamily units in the Uptown District will contribute to the 2100 needed affordable housing units

- 20 rehabilitated units with currently very low fitness scores
- 20 units need basic amenities through enforcement
- 3 pilot projects to demonstrate rehabilitation of single-family units
- 3 pilot projects to demonstrate rehabilitation of multifamily units

4.3.1.2. Intervention Points

While it is clear that economic development and education drivers need to be addressed to increase income, so that affordability measures improve, there is also a need to rehabilitate a large number of homes with very low fitness scores.

4.3.1.3. Investment Options

Within the rehabilitation intervention, there are two investments: single-family houses, and multifamily houses. There is a significant difference between these rehabilitations, and each investment is appropriate for different zones of the District (Figure 5). Rehabilitation of multifamily is appropriate in TOD housing zones by station areas, while rehabilitation of single-family homes is appropriate in rehabilitation zones where there are concerns about culturally and historically sensitive housing that does not disrupt the current character. In terms of the greatest impact, rehabilitation of multifamily homes in TOD zones should be made a priority.

4.3.1.4. Intervention Actions

1. Adjust zoning and ordinances to support affordability, accessibility, health, and LEED standards.
2. Support organizations that guide revitalization of existing housing.
3. Support policies that allocate resources for rehabilitation and revitalization of affordable units.
4. Pilot a project that demonstrates continuing efforts to rehabilitate homes in the Willow and Alvarado neighborhoods.

4.3.1.5. Resources

The following resources are needed to support the rehabilitation and revitalization intervention. Assets (resources that already exist) are in italics:

- *ADA standards*
- *City of Phoenix Neighborhood Services Department*
- *Developer and homeowner knowledge of relevant design concepts and implementation processes*
- *Federal financing mechanisms*
- Private financing and developers willing to invest in District

4.3.1.6. Barriers

- Developer opposition to investing in health, green, and ADA code improvements
- Lack of financing for recommended upgrades
- Inability of homeowners to access funds for rehabilitation
- Political opposition to health, resource efficiency, and visitability regulations

4.3.1.7. Intervention Timeline

This timeline outlines a transition towards Uptown's sustainable housing vision driven by rehabilitation and revitalization over the next 30 years. Much can change during this time; thus, this transition strategy must be revisited and updated. Some of the actions listed as happening by 2025 or 2030 may be feasible before the stated date and could possibly be addressed sooner. The purpose of this timeline is to demonstrate a possible sequence (pathway) to achieve the 2040 vision, with the recognition that some things may come faster or slower.

By 2020

- Create new zoning, ordinances, and design standards for inclusive design and green building in Phoenix, with higher standards in Reinvent Phoenix Transit Districts.
- Complete single-family retrofit pilot projects that build on the success of Neighborhood Stabilization Program

(NSP) and Energize Phoenix (i.e. far western sections of the District)

By 2025

- Fully support a city sponsored housing rehabilitation program
- Lobby for anti-displacement measures that retain socio-economic diversity in the District

By 2030

- Complete healthful retrofits (including lead and asbestos)
- Increase the local agency managed public housing stock (housing trust fund, community land trusts, etc.)
- Rehabilitation of multifamily units along 7th Street and 7th Avenue.

4.3.2. Details on Investment Options for Rehabilitation and Revitalization

4.3.2.1. Rehabilitating/Revitalizing Multifamily Housing

Multifamily housing that is in poor condition (i.e., has hazardous materials such as lead or asbestos, is structurally compromised, etc.) will be rehabilitated, so that residents can reside in healthier, environmentally friendly, and visitable housing.

Figure 9. Multifamily housing rehabilitation and revitalization

Aspired Sustainability Impacts

- Enhance housing fitness
- Reduce water consumption
- Foster District and regional affordability

Revitalized multifamily housing will reduce the percentage of poor quality housing to below 0.1%. The vacancy rates will be lowered below 2% for owners and 8% for renters, down from the current vacancy rates of 11% and 17%, respectively. Furthermore, visitability design standards will be applied to revitalized housing, which will enable residency among the elderly and disabled, and thus enhance housing equity and accessibility. Revitalized housing will help improve resident's health by removing toxic materials, such as asbestos and lead-based paint, or blocking air pollution (soil vapor intrusion). It will also be more environmentally friendly. It will use energy more efficiently by having energy efficient appliances and systems (i.e. air conditioning, LED lighting). It will conserve water resources by using water-efficient appliances (i.e. low flush toilets, top loading washing machines) and by concentrating water usage into a smaller area, thus requiring less piping and water pumping. It will also help mitigate the urban heat island UHI effect.

Implementation Tools

- *Financing* – HUD financing (including Section 200s), Community Development Block Grants, HOME Investment Partnerships Program, Low-Income Housing Tax Credit Program, New Market Tax Credits, HOPE VI Program, Choice Neighborhoods Implementation Grant Program, Supportive Housing for the Elderly, Section 8, Section 202, Section 220 Program, Section 221(d)(3) Program, Section 221(d)(4) Program, Section 231 Program, and Section 241(a) Program
- *Partnerships* – Community Development Corporations and Local Housing Trust Fund
- *Codes* – Frontage codes
- *Capacity Building* – Affordability financing training for developers
- *Incentives* – Tax credits and expedited permitting

4.3.2.2. Rehabilitating/Revitalizing Single-family Housing

Single-family housing that is in poor condition will be revitalized so residents can reside in healthier and environmentally friendly housing.

Figure 10. Rehabilitated multifamily homes

Aspired Sustainability Impacts

- Reuse materials
- Enhance fitness
- Preserve historical character

Revitalizing single-family houses can help lower the percentage of poor quality housing to below 0.1% and increase housing diversity. It can also enhance resident health and increase energy efficiency by using appropriate construction standards that lead to better air quality and avoiding toxic materials such as asbestos and lead-based paint. Installing more energy- and water-efficient appliances will reduce the environmental footprint of units. Furthermore, because single-family homes are often owner occupied, revitalizing them contributes to household savings and intergenerational wealth transfer.

Implementation Tools

- *Financing* – HUD financing (Including Section 200s), Community Development Block Grants, HOME Investment Partnerships Program, New Market Tax Credits, and Energy Innovation Fund PowerSaver Pilot 203(k) Program
- *Partnerships* – Community Development Corporations and Local Housing Trust Fund
- *Codes* – Frontage codes
- *Capacity Building* – Affordability financing training for developers
- *Incentives* – Tax credits and expedited permitting

4.4. Adaptive Reuse Intervention

The adaptive reuse intervention has only one investment, which is the adaptive reuse of industrial and commercial buildings into multifamily housing. Adaptively reused multifamily housing repurposes underutilized or abandoned commercial or industrial buildings as housing. Since commercial and industrial buildings tend to be larger and occupy large lots, new housing built via adaptive reuse will most likely be multifamily.

4.4.1. Aspired Sustainability Impacts

Reuse of existing buildings to add units and unit types can help better match demand. It can also enhance affordability, if new units are offered at affordable prices. If adaptive reuse takes advantage of existing building material, it avoids the environmental costs of new construction. Reuse also contributes to preserving neighborhood character, while creating 'living history' through adaptation and modification. Through this intervention, the following specific sustainable housing targets will be achieved by 2040:

- Units in adaptively reused buildings in the Eastlake-Garfield District will contribute to the 1230 needed affordable housing units
- Reused buildings contribute to the construction of healthy, green, and visitability
- 5 pilot projects that demonstrate adaptive reuse of building to create multifamily units that are accessible, healthy, and resource efficient in the first 10 years

Through this intervention, the following general sustainable housing targets will be achieved by 2040:

- Reuse materials
- Reduce water consumption
- Increase District affordability

Adapting old industrial or commercial buildings into

new, multifamily housing will improve the community's vibrancy and aesthetics, and reduce its environmental footprint. Cleaning up and repurposing old or vacant buildings may improve safety by reducing the number of vacant buildings and having more "eyes on the street." Adaptive reuse should help reduce the percentage of poor quality housing to below 0.1% and may improve resident and environmental health with more energy efficient appliances and better construction standards. Adapting buildings that are near public transit or walking distance to employment, may reduce housing and transportation costs. People currently spend an average of 22.1% of their total income on transportation, which can be reduced to below 15% with the addition of sufficient quantity of new, well-placed multifamily housing.

4.4.2. Intervention Point

Existing buildings in the Eastlake-Garfield District can address the need for health, green, and ADA compliant and affordable housing units. Former motels along Van Buren Street and warehouses south of Washington Street can be adaptively reused in addition to new construction, and rehabilitation.

4.4.3. Intervention Actions

1. Include adaptive reuse opportunities for motels and warehouses as part of a marketing and awareness campaign spearheaded by the Downtown Phoenix Partnership.

2. Adjust zoning and ordinances to support affordability, accessibility, health, and LEED standards for adaptive reuse projects.

3. Create organizational capacity to adaptively reuse warehouses.

4. Support policies that allocate resources for adaptive reuse for affordable units, and create a pilot project of affordable TOD housing in the Warehouse District (south of Washington Street or along Van Buren Street).

4.4.4. Resources

- City of Phoenix Planning and Development Services Department and their Adaptive Reuse Program
- Developer and homeowner knowledge of relevant design concepts and implementation processes
- Federal financing mechanisms
- Old motels along Van Buren Street and warehouses in the Warehouse District
- Private financing and developers willing to invest in District

4.4.5. Barriers

- Developer fear of increased costs and decreased profit margins
- Lack of financing for construction and renovations that support health, resource efficiency and accessibility
- Political opposition to health, resource efficiency, and visitability regulations
- Weak marketing and success sharing for similar Phoenix projects (Oasis on Grand Avenue, e.g.)
- Environmental conditions of old buildings and properties

4.4.6. Intervention Timeline

This timeline outlines a transition towards Eastlake-Garfield's sustainable housing vision driven by adaptive reuse over the next 30 years. Much can change during this time; thus, this transition strategy must be revisited and updated. Some of the actions listed as happening by 2025 or 2030 may be feasible before the stated date and could possibly be addressed sooner. The purpose of this timeline is to demonstrate a possible sequence (pathway) to achieve the 2040 vision, with the recognition that some things may come faster or slower.

By 2020

- Create new zoning, ordinances, and design standards for inclusive design and green building for Phoenix with higher standards for Reinvent Phoenix Districts.
- Complete adaptive reuse pilot projects that build off of success of NSP and Energize Phoenix in the Sky Harbor and Wilson neighborhoods.

By 2025

- Fully support a city sponsored adaptive reuse program now building on its Van Buren Street and Warehouse District success in the rest of the District.

- Complete financing to enable remaining adaptive reuse opportunities.

By 2030

- Adaptively reuse any remaining motels or warehouses in the District

4.4.7. Implementation Tools

- *Financing* – HUD financing (Including Section 200s), Community Development Block Grants, HOME Investment Partnerships Program, Low-Income Housing Tax Credit Program, New Market Tax Credits, Section 8, Section 202 Supportive Housing for the Elderly Program, Section 213 Program, Section 220 Program, Section 221(d)(3) Program, Section 221(d)(4) Program, Section 231 Program, Section 232 Program, Section 811 Supportive Housing for People with Disabilities Program

- *Partnerships* – Community Development Corporations, Local Housing Trust Fund, and Community Land Trust

- *Codes* – Frontage codes

- *Capacity Building* – Affordability financing training for developers

- *Incentives* – Tax credits and expedited permitting

4.5. Details on Implementation Tools for New Construction, Rehabilitation/Revitalization, and Adaptive Reuse

Table 3 Details on Implementation Tools for New Construction, Rehabilitation/Revitalization, and Adaptive Reuse

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
FINANCING													
Community Development Block Grant Program	Grant	New or Rehab or Reuse MF	Federal	State / City	Any	Unspecified (Locate near transit to reduce transportation cost burdens)	http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs	X	X	X	x		X
HOME Investment Partnerships Program	Grant, Gap Funding	New / Rehab MF	Federal	Developers	Below Market required, including very-low incomes	Unspecified (Locate near transit to reduce transportation cost burdens)	http://portal.hud.gov/hudportal/HUD?src=/hudprograms/home-program	X		X			X
Low Income Housing Tax Credit Program	Tax Credit	New MF	Federal	Developers	Below Market required	TODs receive higher ratings	http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/training/web/lihtc/basics	X		X			X
New Market Tax Credits	Tax Credit	New MF	Federal	CDC / Community Development Entity	Any	Distressed Areas – HUD Desiganted Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs)	http://www.communityfundinggroup.org/nmtc-overview.html	X		X			X
Choice Neighborhood Program	Grant	Rehab of existing public housing MF	Federal	City	Below Market	Existing public housing		X		X			X

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Public Housing	Grant	New MF	Federal	City, County or State	Below Market	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			X
Housing Choice Vouchers (of Section 8)	Rent Subsidies to Residents	MF/ SF	Federal	City, Locality	Below Market	Unspecified (Locate near transit to reduce transportation cost burdens)	http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/about/fact_sheet			X			X
Project-Based Subsidies (of Section 8)	Rent Subsidies to Residents of new/rehab MF projects	MF	Federal	City	Below Market	Unspecified (Locate near transit to reduce transportation cost burdens)	http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/rfp/s8bkinfo	X		X			X
Housing Trust Fund	Rent Subsidies to Residents	New or Rehab or Reuse MF/ SF	Local	City, State	Below Market	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			X
Section 202 Supportive Housing for the Elderly Program	Grants or Rent Subsidies to Residents	Rehab MF / SF	Federal	Developers	Below Market AND Over 62 yo, OR Disabled	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Section 231 Program	Mortgage insurance	New / Rehab MF	Federal	Developers	Over 62 yo, OR Disabled	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Section 811 Supportive Housing for People with	Grants or Rent Subsidies to Residents	New MF	Federal	Developers	Below Market AND Over 62 yo, OR Disabled	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Section 232 Program	Loans	New / Rehab MF	Federal	Developers	Sick or disabled seniors	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Section 213 Program	Loan Insurance	Cooperative Housing Construction or Acquisition MF / SF	Federal	Cooperative	Any	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Section 221(d) (3) program	Loan Insurance with LIHTC	New / Rehab MF or Cooperative	Federal	Developers / City	Moderate Income OR Over 62 yo, OR Disabled	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Section 220 Program	Loan Insurance	New / Rehab MF / SF	Federal	Developers / City		"Urban Renewal"		X		X			
Section 221(d) (4) Program	Loan Insurance	New / Rehab MF	Federal	Developers / City	Families, Seniors or Disabled	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Section 241(a), 542(b)	Loan Insurance	Rehab / Additions MF	Federal	Developers / City	Below Market	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Program Energy Innovation Fund PowerSaver Pilot 203(k) Program	Loans	Rehab for energy efficiency < 4 units	Federal	Homeowners or property owners	Any	Unspecified				X	X		X
Presales	Presale	New	Federal	Property owners	Any	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			
Tax credits for solar power installation	Tax credit	New or Rehab or Reuse MF	State and federal	Homeowners or property owners	Any	Unspecified		X		X	X		X
Private solar finance bundling firms	Tax credit/ loan	New or Rehab or Reuse MF	State and federal	Homeowners or property owners	Any	Unspecified		X		X	X		X
Neighborhood Stabilization Program	grant	New or Rehab or Reuse	City	Homeowners or property owners	Any	Unspecified	http://www.nhsphoenix.org/neighborhood_stabilization.html		X	X	X	X	X
PARTNERSHIPS													
Community Land Trust	Resident-based	New or Rehab or Reuse MF / SF	Local	Residents	Any	Unspecified (Locate near transit to reduce transportation cost burdens)	http://www.newtowncdc.org/?page_id=168	X		X			X
Community Development Corporations	Business- or resident-based	New or Rehab or Reuse MF / SF	Local	Residents and/or businesses	Any	Unspecified (Locate near transit to reduce transportation cost burdens)	http://www.phxrevitalization.org/aboutus.htm	X		X		X	X
Community Solar Partnerships	Property-owner based	New or Rehab or Reuse MF / SF	Local	Residents	Any	Unspecified	http://www.nrel.gov/docs/fy12osti/54570.pdf			X	X	X	

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Condos with a Homeowner Association	Resident-based	New	Local	Residents and/or businesses	Any	Unspecified				X		X	X
Neighborhood Association	Resident-based	New or Rehab or Reuse	Local	Residents	Any	Unspecified						X	X
Reclaimed Materials Partnership	Business-based	New or Rehab or Reuse	Local	Residents	Any	Unspecified	http://www.stardustbuilding.org/				X		
Partnerships for energy efficiency in multifamily housing	Property-owner based	MF	Local	Residents and/or businesses	Any	Unspecified	http://www.cntenergy.org/media/Engaging-as-Partners-in- Energy-Efficiency-MF-Housing-and-Utilities-Final-012512.pdf			X	X		
Code Enforcement	City	New or Rehab or Reuse	City	Residents, Contractors, Developers, Landlords, Property Managers	Any	Unspecified	http://phoenix.gov/pdd/devcode/buildingcode/index.html		X		X		
Community Benefit Agreements	Contract between developer, city and	New or Rehab or Reuse	City	City, Developers,	Any	Unspecified	http://communitybenefits.blogspot.com/ http://www.azcentral.com/news/election/topstories/	X		X	X	X	X
Community Amenities (Parks, community centers, libraries)	Amenities	Any	City	City, Developers,	Any	Unspecified (Locate near transit to reduce transportation cost burdens)				X		X	X

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Support for Neighborhood Events	Programs	Any	City	City,	Any	Unspecified						X	X
CODES													
Frontage Codes	Zoning Codes	New	City	Planning Department	Any	Unspecified	http://www.formbasedcodes.org/taxonomy/term/21					X	
Building codes to improve indoor air quality	Building Codes	New or Rehab or Reuse	City	Planning Department	Any	M52 area	http://www.mah.gov.on.ca/AssetFactory.aspx?did=8790		X				
Visitability Codes	Building Codes	New or Rehab or Reuse	City	Planning Department	Any	Unspecified	Pima County Inclusive Home Design Ordinance http://cms3.tucsonaz.gov/files/dsd/Inclusive_Hm_Deisign_commentary.pdf http://www.cga.ct.gov/2010/rpt/2010-R-0101.htm	X		X			
Energy Conservation (Building) Code	Building Codes	New or Rehab or Reuse	City	Planning and Development – Building Codes	Any	Unspecified	International Energy Conservation Code (2012) – Adopted by the City of Phoenix http://publicecodes.cyberregs.com/icod/iecc/2012/index.htm			X	X		
Preserve Single-Family Home zoning in areas of preservation	Zoning Codes	New or Rehab or Reuse	City	Planning Department	Any	Single family home preservation areas		X	X	X	X	X	X

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Inclusionary Zoning	Zoning Codes	New or Rehab or Reuse	City	Planning Department	Low Income	Unspecified (Locate near transit to reduce transportation cost burdens)		X		X			X
Capacity Building (Knowledge)													
Financial literacy training	Skills	All	City or County or 3rd Party	Residents	Any	Unspecified	http://iamempowered.com/get-empowered/housing-financial-literacy http://www.nhsphoenix.org/education.html http://www.newtowncdc.org/?p=69			X			X
Alternative transportation programs	Knowledge	All	City or County	Residents	Any	Unspecified	http://www.southernenvironment.org/uploads/publications/connecting_home_and_work.pdf			X			X
Developer capacity building for meeting/ exceeding code requirements	Skills	All	City	Developers Contractors	Any	Unspecified	http://phoenix.gov/pdd/devcode/buildingcode/index.html	X	X		X		
Shade Tree programs	Skills, materials, and knowledge	All	City or County	Property owners	Any	Unspecified	http://www.aps.com/en/residential/savemoneyandenergy/coolingheating/Pages/shade-tree-program.aspx			X	X		

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Sound Mitigation Services	Knowledge and materials	All	City	Property owners	Property owner, renter	Airport Noise Contour Area	http://skyharbor.com/community/simsInfo.html		X				
Solar Systems Residential Guidelines	Knowledge	New or significant remodels of SF / Duplex	City	Developers, Contractors, Property owners	Property owner, renter	Unspecified	http://phoenix.gov/webcms/groups/internet/@inter/@dept/@dsd/@trt/documents/web_content/dsd_trt_pdf_00367.pdf			X	X		
Water Conservation Education	Knowledge	All	City, County, State	Property owner, renter	Property owner, renter	Unspecified	http://www.azwater.gov/azdwr/StatewidePlanning/Conservation2/				X		
Vapor Intrusion Guidelines	Knowledge	New or Rehab	City	Developers, Contractors, Property owners	Property owner, renter	Unspecified	http://phoenix.gov/webcms/groups/internet/@inter/@dept/@dsd/@trt/documents/web_content/dsd_trt_pdf_00589.pdf		X				
Landscape Design Review Guidelines	Knowledge	New commercial, industrial and subdivision	City	Developers, Contractors, Property owners	Property owner, renter	Unspecified	http://phoenix.gov/pdd/development/sitecivil/landscape/index.html		X				
Landscape Design Review Guidelines	Knowledge	New or significant remodels of SF / Duplex	City	Developers, Contractors, Property owners	Property owner, renter	Unspecified	http://phoenix.gov/pdd/development/permits/residential/resdocs/resguides/index.html		X				
Document demographic change in neighborhoods	Knowledge	New or Rehab	City		Any	Unspecified	Document and map displacement pressures within existing planning process (Consolidated planning, Annual Action Plan)	X		X		X	X

Technical Program Title	Sub Type	Intervention Investment Option	Source	Applicant	Beneficiaries Resident Type	Location	Sources / Examples / Links	Meeting Demand with Options	Healthy Housing	Affordability	Resource Efficiency	Neighborhood Character	*Cross-Cutting Goal:* Anti-Displacement
Incentives													
Intensity Bonus	Financial	New MF	City	Developers	Any	Station areas	http://www.wahpdc.org/densitybonus.htm http://www.sddt.com/news/article.	X		X			X
Modified Parking Standards	Financial/ Space	New MF	City	Developers	Any	Station areas	http://www.huduser.org/rbc/newsletter/vol7iss2more.html	X		X			X
Expedited Permitting	Time	NA	City or County	Developers	Any	Station areas	http://www.wahpdc.org/expermitting.html	X		X			X
Fee Waiver	Financial	All	City or County	Developers	Below market	Station areas	http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=NC46F	X		X			X
Property tax abatement	Financial	MF/AR	City or County	Developers	Any	Station areas	http://www.mitod.org/	X		X			
Incentives for ENERGY STAR	Financial	New/Rehab	Federal	Developers or property owners	Any	Unspecified	http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_incentives			X	X		
Incentives for Adaptive Reuse	Financial	Reuse	City	Developers or property owners	Any	Unspecified	http://phoenix.gov/pdd/services/permitservices/arp.html	X		X			
Green Construction Incentives	Financial	New / Rehab / Reuse	City	Developers, contractors or property owners	Any	Unspecified	http://transformgov.org/en/Article/100607/Phoenix_AZ_Offers_FirstEver_Reduced_Permit_Fees_for_Green_Building		X		X		

4.6. Synthesis – 5-year Action Plan for Sustainable Housing in Uptown

The following plan details the aforementioned intervention actions that government, non-profits, businesses, residents, and Steering Committee members can take to implement the sustainable housing strategy. It is important to note that new construction is first on this list to ensure that it is prioritized. Some actions for new construction will be to the benefit of implementing housing rehabilitation, and the creation of housing through adaptive reuse.

4.6.1. New Construction Intervention Action Plan

1. Pass form-based code that creates predictable zoning for developers along Camelback, Indian School Roads and Central Avenue.

    a. The Uptown District Steering Committee can work with the City of Phoenix Planning Department to ensure that the code is suitable for their District.

    b. The Steering Committee can communicate their support for the new form-based code to the City Council and Mayor.

    c. City Council must pass the Uptown Policy Plan that will include a regulating plan that will allow the Planning Department to create and enact the new code.

2. Hire a marketing and real estate development professional to support new construction initiatives in the District. Local experts have clearly stated the need for this position to be hosted within an existing organization, such as the Native American Connections. This person would help market critical Uptown development sites, work with developers on appropriate financing packages, and determine which housing submarkets need more inventory (i.e. elderly, 80% AMI, families, young professionals, etc.).

    a. Create a job description, fund, and hire a marketing and real estate professional (LISC and Native American Connections).

    b) Gather key stakeholders (including non-profits and financial institutions, e.g. LISC, Stardust Center, Arizona Chapter of the US Green Building Council (USGBC), The Southwest Autism Research & Resource Center (SARRC), Saint Luke's Health Initiatives (SLHI)) to work with the new hire on attracting developers, and investors focused on the goals for healthy, green, diverse and affordable housing.

    c) Begin a capital campaign to develop a $1—2 million predevelopment assistance fund for diverse affordable housing.

    d) Create a 5-year strategic plan for the new hire aligned with Reinvent Phoenix

3. Support policies that allocate resources for construction of new, high quality affordable units.

    a. Hold a roundtable to determine long-term policy goals and draft interim ordinances that immediately improve affordability, accessibility, health, and resource efficiency.

    b. Work with the City of Phoenix Neighborhood Services Department (NSD) to use NSP and other HUD funding to support construction of single-family and small multifamily housing.

    c. Recognize sustainable builders in the Uptown District through an official program that rates the best uses of new policies.

4. Develop a Central Avenue and Indian School Road Affordable Housing Pilot Project.

    a. Design and develop a strong pilot housing project at Indian School Road and Central Avenue in collaboration with the local neighborhood associations, Native American Connections, the Steering Committee, and other key partners.

    b. Build upon best local practices used by Native American Connections and Sustainable Communities Collaborative.

5. Make progress on economic development, health, green systems, and mobility strategies that will support further investment in sustainable housing, including:

    a. Increase employment opportunities.

b. Increase services and educational opportunities close to housing.

c. Increase street and sidewalk safety to attract private investment.

d. Increase transportation options close to housing.

e. Increase tree coverage and reduce temperatures to save energy and water

4.6.2. Rehabilitation and Revitalization Intervention Action Plan

1. Adjust zoning and ordinances to support affordability, accessibility, health, and LEED standards.

    a. Meet with Councilmembers to discuss possible, immediate building code changes to work toward model policy given the success of highlighted efforts (Steering Committee, SARRC, LISC, and ASU)

    b. Pass initial zoning and ordinances that move toward ideal code (City Council).

2. Support organizations to guide revitalization of existing multi- and single-family housing.

    a. Celebrate Phoenix and Uptown examples of revitalization efforts that make major strides in improving accessibility, health, and resource efficiency (Steering Committee, Neighborhood Services and Housing Departments).

    b. Support homeowners in targeting rehabilitation projects in the District that preserve historic character (Steering Committee and local Neighborhood Associations).

3. Support policies that allocate resources for construction of new affordable units, and create a pilot project demonstrating continued efforts to rehabilitate homes in the Pasadena.

    a. Determine 1—3 small neighborhood areas to pilot stabilization efforts (Steering Committee).

    b. Establish best practices for accessibility, health, and resource efficiency (NSD, ASU, and SLHI).

    c. Set goals for how many homes to revitalize in this process (Steering Committee).

    d. Search for additional funding and explore alternative funding mechanisms such as community land trusts.

    e. Celebrate revitalization efforts, and set ambitious goals for 2025.

4.6.3. Adaptive Reuse Intervention Action Plan

1. Include motel and warehouse adaptive reuse opportunities into the new marketing and awareness campaign spearheaded by DPP.

    a. Create an adaptive reuse campaign for Van Buren Street and the Warehouse District that builds on Local Arizona First's adaptive reuse workshops.

    b. Use the success of similar projects (e.g. Oasis on Grand Avenue and Chicanos por La Causa on Van Buren Street) to spur new adaptive reuse efforts.

    c. Support one pilot project on Van Buren Street and one in the Warehouse District by 2017.

2. Adjust zoning and ordinances to support affordability, accessibility, health, and LEED standards for housing-oriented adaptive reuse projects (Planning Department and Steering Committee).

3. Support policies that allocate resources for adaptive reuse for new affordable units, and create an affordable TOD housing pilot project in the District (Downtown Phoenix Partnership).

    a. Explore expansion of NSP and other programs to include adaptive reuse (Neighborhood Services Department).

    b. Explore ability of Housing Department to adaptively reuse Van Buren Street motels near its existing properties.

Chapter 5 – Discussion and Conclusions

This sustainable housing strategy has been developed based on a community-informed sustainability vision, a detailed sustainability assessment, and a theory of change. These inputs were then processed into evidence-based interventions and investments to transition housing in the District from its current state to a sustainable state of diverse, healthy, affordable, energy-efficient, and culturally sensitive housing. The strategy adopts a long-term perspective that needs to be coordinated with short-term actions and clear roles and responsibilities to be successful.

5.1. Critical role of Steering Committee, City Council, City Departments, Local Experts

The proposed strategy is intended to be a dynamic roadmap for people and organizations interested in sustainable change, helping them take ownership and collaborate to achieve the goals and targets set forth. The Transit District Steering Committee will play a critical role in executing this strategy, and motivating City Council, city departments, and local organizations to play significant roles in financing, regulating, and supporting the deployment of interventions. While city government cannot be the sole implementer of this strategy, it is critical that City Council and city departments find ways to align their funding, programming, and internal goals with this strategy. Village Planners and Steering Committee members need to be proactive in ensuring that councilmembers and city departments feel invested in supporting sustainable housing. There is a critical role for local organizations and experts to provide support to the Steering Committee in implementing this strategy. Affordable housing advocates and sustainability experts can help prioritize and adapt interventions and investments based on monitoring, comparison, and new insights from across the country.

5.2. Testing Strategy, Interventions, Investments

More work is necessary to further understand the drivers of the housing challenges, and to specify the vision for sustainable housing in order to further enhance the effectiveness and efficiency of interventions and investment options. Further research needs to scrutinize barriers to implementation and potential coping strategies. This strategy report is intended to provide a basis for use-inspired research that will lead to a culture of evidence-based sustainable housing policy making in Phoenix.

Testing interventions and investments is critical to the success of this strategy. The Steering Committee and supporting staff needs to monitor which interventions are the most effective and efficient. Pilot projects can help determine the sustainability impacts of each investment. For example, an early adaptive reuse pilot project turning motels into affordable housing for the elderly can help determine the ability of that investment to achieve the specific adaptive reuse targets. If financing, construction, or tenanting of those pilot projects proves to be difficult, then new construction of multifamily units might be a better investment to reach those targets. A culture of experimenting with and testing of investment options can lead to effective and efficient policymaking that demonstrates the highest impact with limited resources.

5.3. Coordination across Strategies

The housing strategy depends on a broader transition strategy across all six planning elements. For example, safety programs, law enforcement, and provision of amenities are critical interventions for enacting this housing strategy. Similarly, economic development strategies for job training and employment will increase affordability and reduce transportation costs. If these strategies are not pursued in concert, it is possible that targets will not be reached.

5.4. Anticipating the Next Set of Interventions, Investments, and Implementation Tools

Interventions and investments are not static. It is most likely that over the next decades, different interventions, investments, and implementation tools will be used to achieve the housing targets set forth. The Steering Committee and supporting city staff should attempt to anticipate possible future interventions, investments, and implementation tools not yet utilized in the current strategy. It is also likely that new financing mechanisms such as crowdsourcing or TIFs become viable options for the District, and could be essential implementation tools to reach housing affordability targets. While this strategy provides a solid set of intervention and investment options,

it is important that these options are continually tested and monitored, while emerging options are explored.

5.5. Crafting the next 5-year Plan

It is also important to understand that there is a lot of uncertainty about what will occur in the future that might make aspects of this strategy obsolete. Therefore, it is important that the strategy is regularly revisited and revised. Every five-year cycle should give the Steering Committee, city departments, and other stakeholders the opportunity to revisit progress towards the goals and targets, and craft a new five-year plan. This will give stakeholders an opportunity to decide on critical actions that include what roles and responsibilities need to be fulfilled in the next five years. Lessons from the previous five years should inform the creation of the next five years, so that realistic expectations are set for what the group can accomplish in this timeframe. While the long-term view of this strategy is important in terms of 'keeping the eyes on the prize', it is critical that the Steering Committee and other stakeholders in the District organize themselves around short-term action plans.

References

City of Phoenix. (1990). Eastlake Park Neighborhood Redevelopment Plan. [Online] Available at: http://phoenix.gov/webcms/groups/internet/@inter/@dept/@dsd/documents/web_content/pdd_pz_pdf_00052.pdf

Edwards, B. (2000). Sustainable housing: architecture, society and professionalism. In: Edwards, B. & Turrent, D. (Eds.) (2000). Sustainable Housing: Principles and Practice. E & F Spoon: London. pp. 13-42.

Environmental Protection Agency (EPA) (2013). Motorola, Inc. (52nd Street Plant) Superfund Site Overview. [Online] Available at: http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/BySite/Motorola, Inc. (52nd Street Plant)

Gibson, R.B., (2006). Sustainability assessment: basic components of a practical approach. Impact Assessment and Project Appraisal, vol. 24, pp. 170–182.

Golub, A., Wiek, A., Pfeiffer, D., Schmidt, J., Harlow, J., Connell, T., Stranieri, A., Kay, B. (2013). Sustainable Housing Assessment for the Eastlake-Garfield District, Phoenix. Project Report to the Reinvent Phoenix Project, City of Phoenix.

(HUD) U.S. Department of Housing and Urban Development, U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA) (2009). Partnership for Sustainable Communities: Livability Principles. Washington D.C.: HUD/DOT/EPA.

Johnson, C., Upton, C., Wiek, A., Golub, A. (2011). Reinvent Phoenix: Cultivating Equity, Engagement, Economic Development and Design Excellence with Transit-Oriented Development. Project Proposal. City of Phoenix and Arizona State University.

Kay, B, Wiek, A. & Lorbach, D. (2013). The Concept of Transition Strategies. Working Paper. Sustainability Transition and Intervention Research Lab, School of Sustainability, Arizona State University.

Office of Sustainable Housing and Communities. (2012). Guidance on Performance Measurement and Flagship Sustainability Indicator Fact Sheets. Retrieved May 28, 2013, from the Department of Housing and Urban Development website: http://portal.hud.gov/hudportal/documents/huddoc?id=OSHCPerfMeasFlagSustInd.pdf

Wheeler, S.M. (2009). Sustainablity in community development. In R. Phillips & R. H. Pittman (Eds.), An introduction to community development (pp. 339–351). New York: Routledge.

Wiek, A. (2009). Transformational Planning for Sustainability. Working Paper. Sustainability Transition and Intervention Research Lab, School of Sustainability, Arizona State University.

Wiek, A. & Kay, B. (2013). Strategies for Intentional Change Towards Sustainability; A Review of Key Paradigms. Working Paper. Sustainability Transition and Intervention Research Lab, School of Sustainability, Arizona State University.

Wiek, A., Golub, A., Kay, B., Harlow, J., Soffel, M., Altimirano Allende, C., Johnson, S., Mertins, S., Montes de Oca, M., Kuzdas, C. (2013). Sustainable Vision for the Eastlake-Garfield District, Phoenix. Project Report to the Reinvent Phoenix Project, City of Phoenix.

Appendix

Sources

List of HUD Multifamily Programs in greater detail

- *http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/progdesc*

Choice Neighborhoods Information

- *http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/cn*