REINVENT PHOENIX



Partners:











Sustainability Vision for the Gateway Transit District, Phoenix

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Executive Summary

The vision presented below builds on rich inputs from residents, workers, business owners, and landowners on the Gateway Transit District in the year 2040.

In 2040, the Gateway District hosts new and renovated housing options, a small grocery store, and other family-owned businesses that employ District residents. Aesthetic Sonoran landscaping with strategic oases complements parks and the Grand Canal. Mobility hubs in the District, especially those close to light rail stations, enjoy bustling pedestrian and bike traffic. People can live close to where they work, and are able to satisfy most of their daily needs without a car. Overall, Gateway is a balanced, diverse, thriving, connected, green, and healthy District.

Balanced Land Use – In 2040, the District has a balance of residential, commercial, and mixed-use areas. Vacant land has been developed and vacant buildings have been rehabilitated and tenanted.

Diverse Housing – In 2040, residents live in diverse, cohesive neighborhoods. Various housing options are suitable and affordable to current and potential future residents, including working families, students, seniors, and professionals.

Thriving Economic Development – In 2040, the District is a hub of economic activity. New businesses and investments have grown the number of jobs in the District, making for low unemployment. Service and retail jobs are available to anyone, and the education and health care industries attract professionals.

Connected Mobility – In 2040, residents walk, bike, ride public transit (bus or light rail), or drive to move through the District. Many roads have bike lanes, and transit hubs are lined with places where people live, work, and shop. Streets are safe, accessible, and inviting to pedestrians. Overall, it is easy to get around without a car.

Green Infrastructure – In 2040, the Gateway District is landscaped with trees and plants. Most places display the Sonoran landscaping that requires little water and accentuates Arizona's natural character. There are more lush parks, squares, and green streets that require more water and maintenance, but they also provide cooling (mitigating the urban heat island effect), shade for pedestrians, and storm water collection and retention.

Health and Vitality – In 2040, parks and cooler, well-lit, walkable streets with bike lanes support active lifestyles. A new grocery store offers fresh and healthy food at reasonable prices, and obesity has declined. People spend less time in cars, and adults and children appreciate new, safe places for recreation. The Arizona State Hospital, Maricopa Medical Center, Mountain Park Health Center, and other health care providers in the District support residents in building healthy lifestyles.

Areas of Change vs. Stability

In interviews, satellite events, and two Visioning Forums, approximately 250 residents, workers, business owners, and landowners identified specific and general locations where they would support preservation and change. After pooling stakeholder responses, six areas of change were selected:

- Van Buren Street and 24th Street
- The 24th Street light rail station area
- · Vacant lots near Celebrity Theatre
- Van Buren Street and 32nd Street
- The large vacant lot south of Loop 202
- The Grand Canal

Mountain Park Health Center Gateway clinic site at Van Buren Street and 38th Street is considered a major asset in the District and it has been identified as an area of stability because the planning process is already advanced.

The following areas are considered areas of preservation and stability:

- Existing educational institutions, including Crockett Elementary School, Wilson Elementary School, and Gateway Community College
- Existing and proposed medical institutions, including Maricopa Medical Center, Arizona State Hospital, and Mountain Park Health Center
- Existing cultural resources, including Chinese Cultural Center and Pueblo Grande Museum
- Existing residential neighborhoods
- Existing office parks
- The Park 'n Swap

Key Synergies – An Interconnected District

Highlighting and capitalizing on "solution multipliers" will drive the strategy building process and focus implementation efforts in the District. Key synergies in 2040 include:

- Greater residential and job density at mobility hubs fades gracefully into single-family neighborhoods.
 This builds traffic to transit options and attracts economic development.
- Beautiful, shaded, walkable, and safe areas mix reasonably priced, well-maintained housing with family-owned businesses that employ local residents and provide services locally.
- Grand Canal activation makes the District a Valleywide destination, fosters economic development, and offers recreation and exercise space to local residents and workers.
- Circulator buses and streets with bike lanes give easy access to the light rail and connect residents and workers to Grand Canal, attractive public spaces, fresh food outlets and parks, which encourage people to be active throughout the District.
- Calmer and well-lit streets provide a safe and familyfriendly atmosphere that attracts new residents and encourages long-time residents to stay and improve their properties.

Sustainability (With Lead Indicators and Targets)

Sustainable Housing is characterized, among others, by its ability to foster diverse neighborhoods that are affordable to all residents, with access to goods and services, including employment. It also involves efficient utilization of energy and resources for both the construction and daily function. The housing vision for the Gateway District in 2040 adequately meets the criteria of creating diverse, affordable options for different types of residents [Lead Indicators/Targets: Construction of affordable housing units; Reduce housing and transportation costs]. Emphasis on walkability and non-motorized transportation

makes the District highly accessible. However, there is little mention of ways to promote local heritage, especially given the diversity of the residents. It will be important to identify ways to ensure that rising prices are not a threat to this culturally and historically rich area. Further, the idea of sustainable construction and sustainable buildings is not addressed. Besides the idea of adaptively reusing historic buildings, it is unclear whether renovated or new buildings will be constructed sustainably (e.g., using reused, recycled, or green materials), or whether the newly constructed buildings will run efficiently (energy use) [Lead Indicator/Target: Reduce per capita grid electricity consumption].

Key ideas behind Sustainable Economic Development are to create a diverse, place-based economy with an equitable employment base that provides employees with opportunities to earn a living wage. In its vision for 2040, the Gateway District has created an economy that is diverse and localized, as there is emphasis on stores and restaurants that are local, and family-owned. There is also a range of employment opportunities for residents of all skill levels, which include jobs, such as lawyers and doctors, that aim to attract recent student graduates, current professionals, as well as retail and service jobs [Lead Indicator: Employment density]. Unclear is in how far this economy is able to provide universally equitable opportunities for people to earn a living wage. It may be important to ensure that all employees will receive a wage that covers costs of basic needs such as food, transportation, and housing, as well as basic social services (health insurance, etc.). While affordable housing units and more affordable transportation options are present to help reduce housing and transportation costs, it is unclear whether a potential minimum wage job is sufficient without relying on government subsidies.

Features of Sustainable Mobility include a network of transportation options, including those that are motorized and non-motorized, and are safe and accessible for all residents. Having a variety of options should contribute to a reduction in greenhouse gas emissions and also to improvements of air quality. Having diverse mobility options is a priority of the Gateway vision, with great improvements in peoples' ability to walk, bike, and take public transit [Lead Indicators/Targets: Reduce VMT per capita; Increase average weekday transit boardings; Increase Streetsmart Walkscore]. There is an emphasis on creating a district-wide network that allows people to easily get to important destinations, such as healthcare and educational facilities, among other services. There are areas designated for the light rail (Washington Street),

cycling (bicycle streets), and walking (calmed streets, Van Buren Street); however, it is not clear if there are any streets that prioritize buses. It may be important to ensure that bus infrastructure is not continued to be put second behind personal automobile infrastructure. It may also be important to highlight how bicycle streets and calmed streets will be maintained in order to stay true to their designation.

The Gateway 2040 vision of *Green Infrastructure* is based on the availability of parks and open spaces, as well as the hybrid landscaping. The element of an increased number of trees aligns the vision with sustainability criteria, as those trees will provide important services such as shade and storm water management [Lead Indicator/Target: Increase tree canopy cover]. The hybrid landscaping design also addresses the issues of drought and water use. However, due to the urban nature of the District, some elements of green infrastructure are lacking, for instance, natural land and open spaces that conserve ecosystem values and functions. All of the ecosystems found in the area have been altered, and thus cannot provide many of the ecosystem functions provided in more natural areas.

Finally, *Health* in the Gateway district in 2040 is greatly improved and incorporates key features of active living. The vision addresses convenient and safe access to healthy food, grocery stores, a local market, and a variety of local restaurants [Lead Indicators/Targets: Reduce annual bike/ped injuries; Reduce annual bike/ped fatalities; Increase % of units w 5 min walk to healthy food; Increase % of units w 5 min walk to public recreation]. The addition of healthy lunch programs in school is also vital to the vision's sustainability. However, cohesive and empowered citizenship seems to be lacking from the overall vision. While the vision does touch on greater walkability and an increase in public space, a cohesive and empowered community would see more involvement in community organizations, such as neighborhood associations or youth leadership groups. Another underdeveloped element of sustainable health is the quality of air and water. Part of the district sits on a superfund site, and yet this issue was not addressed in the 2040 vision.

Correspondence to Scope of Work

Scope of Work – Guiding Question	Corresponding Chapter / Section / Sub-Section
Which areas within the district should be changed? Why? Which areas within the district should be preserved? Why?	Section 3.2 (Introductory Sub-Section) – This section presents results from visioning forums (map and accompanying text) that identified areas of change and areas of stability, as well as provides stakeholders' and residents' justifications for why these areas were selected.
What types of changes (within the land use, housing, economic development, mobility, green infrastructure, and health element framework)?	Section 3.1 – This section presents the district-wide vision of desirable land use, housing, economic development, mobility, green infrastructure, and health in the Gateway District (according to stakeholders and residents). Each sub-section details the changes for the specific elements.
Where should each type of change occur?	Section 3.2 – This section specifies desirable changes of each planning element for the seven areas of change within the Gateway District. Each sub-section details the changes for one specific area of change.
Which changes are the highest priorities?	Section 3.2 – This section specifies which changes received the highest priority scores for the seven areas of change within the Gateway District (based on the visual preference survey).
Which properties should develop at greater heights and intensities? How much greater? Where?	Section 3.2 – This section specifies which properties should develop at greater heights and intensities in the seven areas of change within the Gateway District (based on the visual preference survey).
Sustainability Outcomes	Section 3.5 – This section operationalizes key elements of the Gateway vision through indicators and performance measures (targets/thresholds), based on a variety of sources. Includes table with lead indicators and sustainability performance measures.

Chapter 1 – Introduction

1.1. Profile of the Gateway District

The Gateway Transit District is the farthest east of Reinvent Phoenix's six light rail corridor districts (Johnson, Upton, Wiek, & Golub, 2011), bound by I-10 to the west, the Loop 202 (Red Mountain Freeway) to the north, State Route 143 (the Hohokam Expressway) to the east, and East Air Lane to the south (see district map). The Gateway District has the opportunity to become a central nexus and hub of urban activities in the Phoenix Metropolitan area due to its location at the intersection of major highways, Grand Canal, historic Van Buren Street, the light rail, and Sky Harbor International Airport with its new Sky Train. This segment of the light rail corridor contains three stations: 24th Street/Washington Street, 38th Street/Washington and 44th Street/Washington Street. With these three stations, and more under consideration, this area is a major transportation hub with great potential for transit-oriented development.

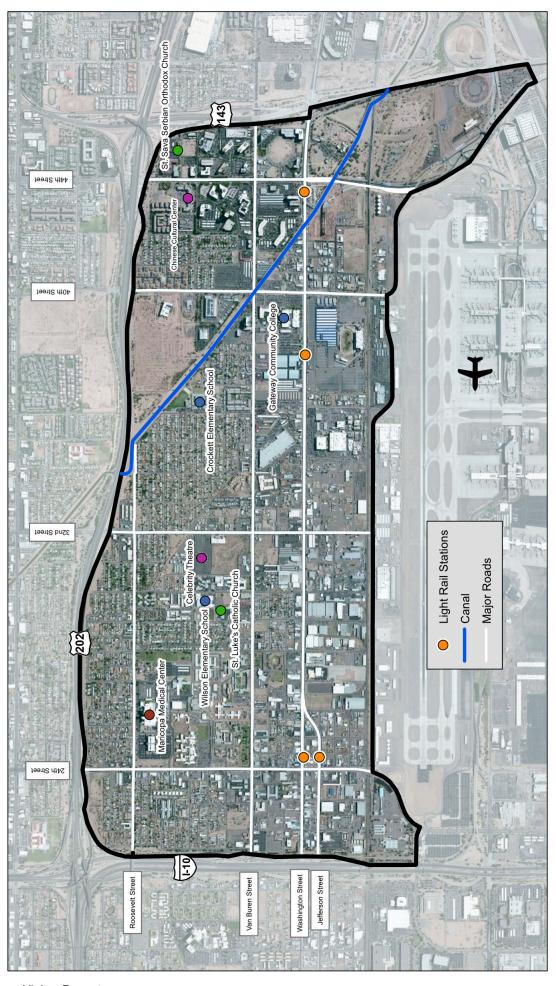
The Gateway District has a rich history dating back to as early as 200—300 BC with the Hohokam people settling along the Salt River. Currently, 13,928 people live in the Gateway District's 240 census blocks with centroids. An important feature of the spatial distribution is that only 106 people live south of Washington Street. Among all residents, 72% percent identify themselves as ethnically either Hispanic or Latino, and 11 percent identify themselves as African American. There are a total of 2,539 families, with an average of 4 people per family. Single mothers head 31 percent of families, and the median age is 31 years. The population density of the District is 3,685 people per square mile, and there are 4,537 total housing units, 84% of which are occupied. Of those occupied units, 71 percent are rentals (U.S. Census Bureau, 2012).

Airport parking and other airport-related businesses are located in the area. Other landmarks include the former Greyhound track, which is now home to Phoenix's largest flea market, a major Honeywell facility, and Gateway Community College. Commercial office space lines the north section of 44th Street, as well as the Chinese Cultural Center and OASIS Hospital. Natural features include the Grand Canal and the Pueblo Grande National Historic Landmark, which hosts a museum dedicated to the prehistoric and historic cultures of the Valley of the Sun (Pueblo Grande, 2012).

The District is bisected into the Wilson Elementary School District on the west and the Balsz Elementary School

District to the east. There are four main residential sections of the District, which are primarily single-family homes with newer condominiums and rental properties. The Sky Harbor neighborhood is just east of the 24th Street light rail station. The David Crockett Elementary School north of Van Buren Street between 32nd and 40th streets anchors the Sunbeam neighborhood. The third neighborhood stretches east from 40th Street to the Chinese Cultural Center, and includes an African refugee community. The fourth neighborhood is north of Van Buren Street between I-10 and 24th Street.

The Gateway District encounters a diversity of urban sustainability challenges, which have found responses in numerous intervention activities by the city administration, Arizona State University, and civic entities (Wiek, Foley, & Guston, 2012). Sustainability challenges include: scarcity of job opportunities for residents, reflected in underinvestment in building stock and deteriorating industrial base; lack of amenities accessible by walking or cycling; urban heat island effects due to lack of vegetation cover and choice of construction materials; social isolation between the diverse (ethnic) sub-communities in the area; and historic groundwater contamination from industrial production (Wiek & Kay, 2011). In response to these challenges, several synergistic efforts are underway in the area, including transit-oriented development along the new light rail route through the 'Reinvent Phoenix project funded by the U.S. Department of Housing (Johnson et al., 2011). Other initiatives with activities in the Gateway District are: the federal grant "Energize Phoenix," funded by the U.S. Department of Energy, to support energy efficiency improvements for buildings (Dalrymple, Bryck, Melnick, Fraser, & Heffernon, 2011; Dalrymple, Bryck, Melnick, & Heffernon, 2012); the initiative "Discovery Triangle," an inter-city regional effort to integrate education, economic prosperity, and recreation (Discovery Triangle, 2012); proposals seeking to reinvent the water utility-oriented Grand Canal (Ellin, 2009); specific plans for a new community health care center expanding services into the community (Xiong, Talbot, Wiek, & Kay, 2012); interventions to enhance accessibility through a tree and shade program and other measures in Gateway's Sky Harbor Neighborhood (Bernstein et al., 2012; Machler, Golub, & Wiek, 2012); and finally, Phoenix's ongoing General Plan update process, which invites citizens to participate in the city planning process and seeks to leverage these efforts into a bright future for Gateway (Wiek, Selin, & Johnson, 2010).





1 inch = 1,334 feet





1.2 Profile of the Reinvent Phoenix Project

Reinvent Phoenix is a project by the City of Phoenix that is being done in collaboration with Arizona State University and other partners. The project is funded through the U.S. Department for Housing and Urban Development's (HUD) Sustainable Communities program. Over a three year period 2012-2014, the project aims at creating a new model for urban development in Phoenix – one that improves quality of life while maintaining desirability and attainability for the entire spectrum of incomes, ages, family sizes, and physical and developmental abilities along the light rail corridor. The Reinvent Phoenix program eliminates physical and institutional barriers to transit-oriented development and catalyzes livable, sustainable development through transformational research and planning, regulatory reform, innovative infrastructure designs, economic development incentives, capacity building, and affordable housing implementation activities. Participatory research design ensures that a variety of stakeholder groups are involved in identifying strategic improvements that enhance safe, convenient access to quality, affordable housing, well-paying jobs, education and training programs, and fresh food and healthcare services. Reinvent Phoenix focuses on six topical elements: land use, housing, economic development, mobility, green infrastructure, and health; in five transit districts including (from east to west and south to north) Gateway, Eastlake, Midtown, Uptown, and Solano [Planning for the Downtown District of the light rail corridor is excluded from Reinvent Phoenix because of completed previous planning efforts, partly using transit-oriented development ideas]; and is structured into planning, design, and implementation phases.

The projects's planning phase involves building a collaborative environment between the subcontracted partners, including Arizona State University, St. 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 this partnership, Arizona State University and St. Luke's Health Initiatives are working with residents, business owners, landowners, and other relevant stakeholders in each of the project's five transit districts. This effort will establish current state assessments of each district, as well as facilitate the community's expression of each district's vision for the future. These visions will comply with HUD's livability principles as well as with a set of well-recognized quality principles, including sustainability principles (Wiek and Iwaniec 2012). Finally, step-by-step strategic plans to move from the present toward those desirable futures will be co-created with motivated actors in each district. Transit District Steering Committees,

created in the planning phase, will host capacity building for their members, who will shepherd their districts through the remaining Reinvent Phoenix phases.

City of Phoenix staff and Duany Plater-Zyberk & Company will lead the design phase. Designs for canal activation, complete streets, and form-based code will complement the compilation of a toolbox for public-private partnerships to stimulate economic development along the light rail corridor. The design work will take its cues from the public participation in the planning phase, and maintain ongoing monthly contact with Transit District Steering Committees to ensure the visions of each district are accurately translated into the new policy and regulations. These steps will update the salient zoning, codes, regulations, and city policies for making the most of 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 leverage the city's partnerships with the Urban Land Institute, Local First Arizona, Sustainable Communities Collaborative, and others to keep developers and funding institutions involved throughout the process. These bodies will be central to ushering in a new culture of development in Phoenix. With the help of all partners involved, transit-oriented development can be the vehicle to renew Phoenix's construction industry, take full advantage of the light rail as a transformative amenity, and enrich Phoenix with a livable and dynamic urban fabric.

1.3 Objectives of the Gateway District Visioning Study

The visioning research activities summarized in this report were conducted as part of the Reinvent Phoenix project, mandated to foster transit-oriented and sustainable development of urban communities in Phoenix.

The objectives of the study were manifold:

- To generate a vision of transit-oriented and sustainable land use, housing, economic development, mobility, green infrastructure, and health, specific to the Gateway District for the year 2040. The vision was expected:
 - a. To comply with a set of widely recognized quality criteria, including compliance with sustainability criteria, consistency, and specificity (Wiek and lwaniec, in press);

- To be generated through a variety of public engagements in order to integrate local knowledge, values, and preferences as well as create public buy-in for the visions created (willingness to contribute to the implementation);
- c. To integrate several formats, including descriptions, visuals, narratives, and operationalized targets (for specific indicators) to resonate with different audiences and provide information that can be used for various subsequent activities.
- d. To be applicable in the transformational planning effort of Reinvent Phoenix that integrates visioning, current state assessment, and strategy building (Wiek 2009; Johnson et al., 2011). This requires coordination with ongoing current state assessment activities (indicator selection).
- II. To create a network of key stakeholders and residents who are willing to stay involved in the subsequent Reinvent Phoenix activities and phases (design and implementation) in the Gateway District (Johnson et al., 2011).
- III. To develop a process and content template for visioning research that can be reproduced in the other four transit districts and thus can guide the Reinvent Phoenix visioning activities over the coming years (Wiek, Iwaniec, & Kay, 2012).
- IV. To enhance capacity in visioning and public engagement for planning professionals as well as for stakeholder groups and the public that can be utilized in subsequent initiatives and projects (Smith & Wiek, 2012).
- V. To enhance the capacity of students and faculty to collaborate in urban visioning and public engagement efforts that can be utilized in other research and teaching programs and projects.

Chapter 2 - Visioning Research Process

2.1 Overview – SPARC Visioning Research Methodology

The methodological framework employed in this study is based on the so-called "SPARC" methodology – a novel sustainability visioning methodology that has also been adapted for urban planning research (Wiek et al., 2012a). The SPARC methodology adopts and modifies various visioning methods currently in use in urban planning practice (Minowitz & Wiek, 2012). The acronym "SPARC" represents the first letter of key methodological features: Systemic, Participatory, Action-oriented, Relevant, Consistent. Here, we give a very short overview of the SPARC methodology. In the next section, we provide more details about the specific application in the Gateway visioning study. For further details, consult the two working papers referenced above.

We use the term "vision" in this methodology to reference a state in the future deemed desirable. As such, visions are a subgroup of scenarios (possible future states) and demarcated from predictions (likely future states). Visions can be operationalized in specific (qualitative and quantitative) goals and targets (Wiek & Binder, 2005; Machler et al., 2012). A vision is different from the process that leads to the achievement of the vision (which is relevant for strategy building). Accordingly, visioning is the process of creating a vision in a more or less structured and reproducible way, as opposed to scenario building (possible future states), forecasting (likely future states), and backcasting (pathways to desirable future states).

Today, cities around the world develop their sustainability visions to guide investments, policies, and action programs, or at least to promote sustainability. Similarly, the majority of cities in the United States and Canada have adopted visioning processes for their plan updates, often incorporating sustainability ideas; prominent examples include: Imagine Austin (Austin, Texas), New Orleans 2030, VisionPDX (Portland), Imagine Calgary, GoTo2040 (Chicago), 100 Year Sustainability Vision (Vancouver), Sustainable Montreal, Jacksonville Vision, and Rockford Plan for Sustainability (Rockford). These processes are usually characterized by large public engagement (>1,000 participants), a variety of public engagements settings (e.g., surveys, forums, workshops), and moderate data processing and research support.

The enthusiasm for visioning activities has not been fully matched with rigor and accuracy. The lack of a sound theoretical base and methodology has repeatedly been criticized (Shipley, 2002; Van der Helm, 2009; Wiek & Iwaniec, in press). Scholars and practitioners recognize deficits in visioning projects such as lack of public involvement, extractive engagement techniques, and insufficient data processing. The resulting visions are then flawed, lacking systemic relationships ('laundry lists'), with inconsistencies and conflicts between vision statements, and reliance on insufficient sustainability concepts. The observed deficits can ultimately lead (and have led in the past) to planning that results in ineffective and conflicting projects and programs, misuse of public money, unintended negative consequences for society and environment, and subsequent public disappointment and dissatisfaction.

Wiek and Iwaniec (in press) have recently reviewed and synthesized the academic literature on quality criteria for developing desirable future states (visions), specifically for sustainability visioning – which is critical for the visioning activities within the Reinvent Phoenix project (specific mandate). Sustainability-oriented quality visions resulting from participatory urban planning activities display ideally 10 synergistic quality features (Tab. 1). They ought to be: visionary, sustainable, systemic, coherent, plausible, tangible, relevant, nuanced, motivational, and shared

These quality criteria can then be used as design guidelines for visioning methodology. The guiding question is: What methods, tools, and procedures need to be employed, and how do they need to get combined in order to be capable of creating high quality sustainability visions (i.e., visions that comply with the compiled quality criteria)? Sustainability-oriented visioning methodology ought to meaningfully combine and iteratively apply visualization and creativity techniques (corresponding to different quality criteria). These should be embedded in participatory settings with methods for vision review, sustainability assessment, system analysis, consistency analysis, plausibility appraisal, target specification, actor-oriented analysis, and priorities analysis.

The "SPARC" methodology applied in this study has specifically been developed to comply with these design guidelines and quality criteria (as mentioned above, the acronym "SPARC" represents the first letter of key methodological features). The key ingredients of SPARC are: iterative procedures from vision drafts to a sophisticated vision; linking creative and analytical approaches; collaborative interactions with stakeholders and residents;

	Quality Criterion	Key Features	
1	Visionary	Desirable future state; with elements of (aspirational) surprise, utopian thought, far-sightedness, and holistic perspective	
2	Sustainable	In compliance with sustainability principles; featuring radically transformed structures and processes	
3	Systemic	Holistic representation; linkages between vision elements; complex structure	
4	Coherent	Composed of compatible goals (free of irreconcilable contradictions)	
5	Plausible	Evidence-based – informed by empirical examples, theoretical models, and pilot projects	
6	Tangible	Composed of clearly articulated and detailed goals	
7	Relevant	Composed of salient goals that focus on people, their roles, and responsibilities	
8	Nuanced	Detailed priorities (desirability)	
9	Motivational	Inspire and motivate towards the envisioned change	
10	Shared	Display a critical degree of convergence, agreement, and support by relevant stakeholders and residents	

Table 1. Key features of the quality criteria for sustainability-oriented visions (Source: Wiek and Iwaniec, in press)

and, visioning as capacity building (Wiek et al., 2012a). The general SPARC methodology offers a large variety of options for designing visioning processes. We detail below the specific choices we made to optimally adopt the SPARC methodology for the Gateway visioning study, considering partnerships, opportunities, and constraints.

2.2 Steps, Methods, and Participatory Settings (Public Engagement)

The visioning process was conducted with several public engagements and was structured into six phases:

- I. Framing
- II. Literature review, expert panel, and stakeholder interviews
- III. Visioning forums with visioning survey (plus satellite events)
- IV. Visioning workshops with visual preference survey
- V. Analysis and synthesis (including consistency analysis and sustainability appraisal)
- VI. Reporting back to the community

We provide details on each of the six steps and summarize some of the key features of the public engagement approach at the end of this section.

I. Framing

The framing phase oriented, structured, and bounded the visioning process. Framing outcomes include: visioning objectives, i.e. content (planning elements), format (description, narratives, indicators), temporal scope (2040), spatial boundaries (Gateway District); visioning methodology and participatory design (including type and number of participants; number of events); project duration, structure (timetable), and resources (budget); as well as lists of participants (potential, invited, recruited). The majority of these features had been determined in the preparation of the grant proposal (Johnson et al., 2011), in the subsequent negotiations on the specific Scope of Work, and in the first few weeks of the visioning study. The results of this phase are presented under Section 1.3 above (Objectives).

II. Literature review, expert panel, and stakeholder interviews

In the second phase, we had planned – following the SPARC methodology – to ask community members to articulate the *general* values they hold regarding transit-oriented and sustainable land use, housing, economic development, mobility, green infrastructure, and health, specific to the Gateway District (the six planning elements). Exemplary values would have been safety, security, high environmental quality, and equity. These values could then have been reformulated as vision statements and compiled in an initial vision draft. However, through literature and document reviews as well as conversations with experts we realized,

first, that such an elicitation of values/vision statements would be incomplete due to the number and complexity of the planning elements; and second, that such values oriented towards sustainability and livability carry specific tensions and trade-offs. We concluded that we needed to develop a new strategy (so that we would not overwhelm the participants), and that understanding these key tensions and trade-off constellations in more detail seemed to be critical for drafting a commonly shared vision for and with the community. Therefore, we decided to focus the visioning survey and the visioning forums on these key tensions and to organize an expert panel to specify the tensions prior to the community engagement. On September 11, 2012, we held an expert panel with Curt Upton (City of Phoenix Planning and Development Department), Josh Bednarek (City of Phoenix Planning and Development Department), Lyssa Hall (City of Phoenix Parks and Recreation Department), and Deirdre Pfeiffer (School of Geographical Sciences and Urban Planning, ASU) at Phoenix City Hall. The experts were asked to: (i) to provide basic values for each of the six planning elements (with definitions) based on ideas of community sustainability and livability; and (ii) to provide contested issues and specific tensions (tradeoffs) related to these values (based on their knowledge about community perspectives). The elicited information was reviewed, cleaned up, and revised afterwards. The expert panel yielded a set of more than 20 value tensions or trade-off constellations that informed the subsequent construction of a visioning survey and the design of the visioning forums. The expert panel results are included in the Appendix to this report. In parallel, our Director of Community Partnerships, John Harlow, conducted a series of informal interviews with various Gateway stakeholders to gauge their interest in getting involved with the Reinvent Phoenix project, and even entering a more formal partnership (Transit District Steering Committee), as well as to elicit information that provided additional insights for the survey construction and the design of the forums.

III. Visioning forums with visioning survey (plus satellite events)

The third phase intended to elicit reactions to the identified tensions and trade-off constellation. The goal was to determine a first overview of stakeholders' and residents' general values on key issues of land use, housing, economic development, mobility, green infrastructure, and health in the Gateway District. Specifically, we were interested in eliciting value positions regarding key tensions surrounding elements of sustainable community development, including transit-oriented development, density, walkability, safety, and so forth. In order to allow for different media and levels of public engagement, we decided to construct a survey for

online and in-person distribution, to design visioning forums at Gateway Community College, as well as participate in events that were organized in the community (not by the research team). The majority of such "satellite" events allows only for reduced visioning activities, mainly survey distribution.

The visioning survey was constructed using a "vignette" approach similar to the "scenario approach" in psychometric research or dilemma stories in preference studies (Menzel & Wiek, 2009). Such a survey provides participants with a (future) scene and questions directly refer to this scene. For instance, in one vignette we gave participants a sense of what a transit-oriented development neighborhood could look like. However, we also wanted to offer participants the opportunity to articulate apprehensions against transit-oriented development. To this end, we formulated the vignette in a way that transit-oriented development is beginning to take shape near where the participant lives. This way, the survey can reveal participants sympathy for transit-oriented development in their neighborhood. The full survey construction and distribution comprised more than 10 steps, including: various rounds of drafting and review (research team, survey experts, topical experts), pretests, translation (Spanish), creating an online version (in Google docs), distributing survey (sending link to residents and stakeholders via e-mail), sending reminders, cleaning data, etc. The survey was provided in English and in Spanish. The complete survey is included in the Appendix to this report. The values survey was available as a paper copy at various events and online as a Google survey form starting in early October, 2012 until November 21, 2012. The paper form had 81 responses, and the online survey, 16, for a total of 97 responses. While not all participants responded to the demographic questions, of those responding, 60 percent were female and 57 percent rented their home. The racial and ethnic profile of respondents was: 34 percent Hispanic or Latino, 24 percent White, 3 percent African-American, and 39 percent chose "other." The employment status of







the respondents varied as well, with 49 percent working full-time, 14 percent part-time, with 32 percent unemployed and 5 percent in school. [Note: Since the initial closure of the survey on November 21 for analysis and inclusion in this report, there have been more than 50 new responses and data sets; they will get analyzed in early 2013.]

The research team organized two visioning forums at Gateway Community College with the following objectives and activities: (i) Elicit responses to presumably contested value statements (survey and discussion based on expert panel results), including fleshing out vision elements and tensions between elements, exploring prioritization between vision elements, identifying tradeoffs between vision elements; and (ii) Identify spatially explicit areas of stability and change (mapping activity), including exploring what degree of change is desired and what that change could look like, and identifying specific locations for where change could occur. The preparation of the visioning forums comprised of several steps, including drafting of workshop activities and material, reviews, facilitator-training, run-through, dry-run, and so forth. All forum activities were offered in English and Spanish (simultaneous translation). The detailed guides of the visioning forums are included in the Appendix to this report. In addition to the two visioning forums, the visioning survey was distributed and briefly discussed at three "satellite" events. Information about location, participants, etc. of all visioning forums is compiled in Table 2.

IV. Visioning workshops with visual preference survey

While the vision forums with the visioning survey were primarily targeted at general values regarding key issues of land use, housing, economic development, mobility, green infrastructure, and health in the Gateway District, the visioning workshops were designed to elicit specific preferences. The visioning workshops used a visual preference survey as the main instrument to elicit this information.

The construction of the visual preference survey was based on literature review and expert feedback. It compiled alternative specific vision elements that corresponded to and specified the values elicited through the visioning forums and the visioning survey. Participants were asked to comment on and prioritize the presented options. Because of time constraints there was no online version of the visual preference survey available. The full survey construction comprised similar steps as were outlined for the visioning survey above. The complete visual preference survey is included in the Appendix to this report. The sample size and composition corresponds to the workshop participant sample described in Table 2.

The research team organized two visioning workshops at Gateway Community College with the following objectives and activities: (i) Collect data on participant preferences for planning alternatives, including land use functions, housing (building types, heights), mobility options (street sizes and modifications), green infrastructure (landscaping options), and land use (civic spaces options); (ii) Begin to synthesize visions for each area of change, integrating the various ideas specific to the planning elements; and (iii) Collect data for vision narratives that would make the vision tangible and enhance the relevance of the vision to the people living in the Gateway District. The preparation of the visioning workshops took place in several steps, including drafting of workshop activities and material, reviews, facilitator-training, run-through, dry-run, and so forth. All workshop activities were offered in English and in Spanish (simultaneous translation); for some breakout groups workshop activities were facilitated in Spanish only. The detailed guide of the visioning workshop is included in the Appendix to this report. Information about location, participants, etc. of the visioning workshops is compiled in Table 2 below.

V. Analysis and synthesis

The fifth phase was structured into a series of analytical procedures including data coding, statistical analysis, data interpretation, consistency analysis, sustainability appraisal (including target specification), and numerous visualizations (GIS mapping, priority mapping, etc.). The various analytical methods ensured that the resulting vision would adequately represent and summarize the elicited information, but also provide critical insights on to what extent the community vision is in compliance with sustainability criteria, and how coherent (consistent) the vision elements are with each other. For details about the analytical methods consult Wiek et al. (2012a). All analytical results are presented in the next chapter (Chapter 3).

VI. Reporting back to the community

Reporting back to the community has not yet been completed, but is planned for completion in early 2013. This step is critical to make sure that participants can process and reflect on the results from the visioning process. It also allows for feedback that can result in further modifications of the vision. Finally, reporting back keeps residents and stakeholders engaged, and prepares them for the next stage of Reinvent Phoenix activities in the Gateway District (strategy building).

Public engagement

Public engagement was a very high priority throughout the visioning process. In this study, the research team involved more than 250 residents and stakeholders through surveys, forums, workshops, and other public engagement activities. A key activity, in parallel to the major public engagement events, was conducting exploratory and informal interviews. Core team members conducted these interviews throughout the study in order to gain further understanding of the Gateway District, possible areas of change, more information about plans for particular parcels, and the needs of stakeholders. Interviews were conducted with a wide variety of stakeholders that included city staff, local school officials, residents, neighborhood association leadership, local business leaders, property owners, and residents. The City of Phoenix Planning and Development



Department provided the initial list of interviewees, and then a snowballing approach was used to identify additional key stakeholders. Interviews were conducted under the rules and guidelines of Arizona State's Institutional Review Board, and accordingly, quotes are not attributed to specific stakeholders without individual approval.

While stakeholder participation in this study was robust with more than 250 involved residents and stakeholders, and is sufficient to fully substantiate the presented vision, there is room for improvement. Stakeholder recruitment met several barriers over the course of the study. Barriers ranged from stakeholder burnout and time constraints, lack of trust in city- and university-run processes to low interest from disenfranchised communities based on perceptions of slow or no impacts from similar efforts. Some residents expressed that they have been "over-studied", while some Spanish-speaking residents cited SB1070 and Arizona's laws regarding immigration as reasons for low interest and participation in public planning efforts. People that work in the District, including hotel workers, school staff, and office workers cited scheduling difficulties and a lack of interest in the area as reasons for not participating in forums and workshops. Property owners and business leaders were also difficult to engage, as some did not want to share future development plans, and others were not convinced that community-oriented visioning is a worthwhile endeavor. Online survey participation was also difficult due to time limitations and the limited use of computers in the low-income communities that make up the District. The barriers identified in this process will be used to devise stronger participation strategies for future work in Reinvent Phoenix, and the Steering Committee for this District will work with the research team to ensure that more residents and business leaders are included in subsequent Reinvent Phoenix activities.

A critical difference between the public engagement approach adopted in this study vs. other community-based visioning or action research approaches is the nature of the engagement. The adopted approach is conceived of as capacity building as much as it is intended to generate a high-quality district vision. This requires more than just consultation but actual collaboration with the community. The district vision is supposed to be a community vision – or more precisely, a vision that, ideally, would be signed off by all relevant constituencies, including various residents, stakeholder groups, as well as the city government and administration. However, the visioning activities conducted under the Reinvent Phoenix project are different from conventional community-based planning activities - which have the sole purpose of eliciting what the community wants. The visioning task under the Reinvent Phoenix project is more complex - the goal is to create a district vision that fulfills two requirements (as opposed to only one): (i) the vision ought to comply with sustainability concepts and ideas; AND (ii) the vision ought to be agreed upon by the community (and, in fact, agreed upon to an extent that the community is willing to actively pursue it).



Event	Location	Date	Total Participants	ESL Participants	Activities
	Gateway Community				Survey and discussion;
F1	College	10/10/12	12	2	Change/Stability area mapping and discussion
F2	Gateway Community College	10/17/12	17	9	Change/Stability area mapping and discussion, with integrated survey questions
SF1	City of Phoenix Aviation	11/01/12	5	0	Reinvent Phoenix presentation;
01 1	orty of a flocinix / widdon	11/01/12			Change/Stability area mapping
W1	Gateway Community	11/7/12	16	2	Visual preference survey and discussion;
***	College	11/1/12	10		Narrative statements
W2	Gateway Community	11/10/12	22	11	Visual preference survey and discussion;
V V Z	College	11/ 10/ 12			Narrative statements
SF2	Gateway Community	11/14/12	Q	0	Reinvent Phoenix presentation;
01 2	College	11/ 14/ 12		U	Change/Stability area mapping
Survey	Crockett Community Celebration, Wilson PTO Meeting, F1, Internet (online)	10/3/12— 12/01/12	97	32	Survey
MPHC	Gateway Community College		90	25	Additional visioning forums and workshops focusing on the new MPHC clinic site
Total			268	81	

Table 2. Overview of public participation events in the Gateway visioning study

Chapter 3 - Results

The results of the visioning study are presented in five sections:

- District-wide vision description Summarizes the vision of desirable land use, housing, economic development, mobility, green infrastructure, and health in the Gateway District in 2040, according to stakeholders and residents.
- II. Vision descriptions for specific areas of change Details the vision of desirable land use, housing, economic development, mobility, green infrastructure, and health in specific areas of change within the Gateway District in 2040, according to stakeholders and residents (who also preselected the specific areas of change).
- III. Vision narratives Provides a series of vision vignettes from different residents and stakeholders in the Gateway District that illustrate how people envision to live, work, and play in the Gateway District in 2040 (if the vision becomes reality).
- IV. Consistency appraisal of visions Summarizes how coherent the vision is that was provided by stakeholders and residents, identifying potential synergies as well as potential conflicts.
- V. Sustainability appraisal of visions Summarizes how sustainable the vision is that was provided by stakeholders and residents, using a broad range of transparent sustainability criteria, including HUD's performance measurement and flagship sustainability indicators (Office of Sustainable Housing and Communities, 2012). This section is of critical importance considering the mandate of Reinvent PHX to foster sustainable community development.

All results presented in Sections 1-3 are based on empirical data from the various participatory research activities summarized above (Chapter 2). In order to make the link to the respective data set as transparent as possible, these result sections reference the respective data following a simple data source code (see Box above).

Data Source Code

IN = Interview

F1 = Visioning Forum

F2 = Visioning Forum 2

FM = Visioning Forum Map

SE = Satellite Event

SQ = Question from Visioning Survey

W1 = Visioning Workshop 1

W2 = Visioning Workshop 2

VPS = Visual Preference Survey

SLHI = St. Luke's Health Initiatives' workshop report (SLHI, 2012)

3.1 District-Wide Vision for the Gateway District in 2040 – Vibrant Communities in the Gateway to Phoenix

The Gateway District in 2040 - A Synopsis

In 2040, housing options, mobility patterns, economic development initiatives, and green infrastructure installations combine to create a pattern of mixed-use land development. Specific areas within the District, especially those close to light rail stations, are highly walkable and bikeable. Sufficient opportunities for work, shopping and business are now located in the district, and many residents are able to walk, bike, or ride transit to meet their daily needs. These elements of the District's landscape contribute to an active and healthy community. Overall, Gateway is a balanced, diverse, thriving, connected, livable, and healthy District.

Land Use - A Balanced District

In 2040, the Gateway District has a balance of residential, commercial, and mixed-use areas. Mixed-use areas cluster around the light rail stations at 24th, 32nd [This new light rail station was proposed at various occasions, including: IN George Hancock, Phoenix Ale Brewing; IN Don Keuth, Discovery Triangle & Phoenix Community Alliance], 38th, and 44th streets and the Van Buren Street corridor, the heart of the District where people live, work, shop, and play [56 percent support Van Buren Street becoming mixed use//SQ12]. Washington Street, a major transit and vehicle



throughway, features larger retail stores and restaurants accessible to both residents and light rail travelers; and, historic neighborhoods maintain the cultural and residential identities that have defined them for decades.

New construction and repurposed historic buildings comprise a diverse building stock [F1; F2]. Buildings with two- to three-stories fill some residential areas near transit stations and along Van Buren Street [F1; W1; W2], and areas near busy roads are buffered from noise by three to five story structures [W1, W2]. Along the northern boundary of the District, some six- and seven-story commercial buildings mitigate noise from the freeway [F1; W1; W2].

Community gatherings and public events bring energy to Gateway's many public spaces [W1; W2]. In the middle of a dynamic neighborhood bordering the Grand Canal, which was once a large vacant lot [Area of Change 5: Vacant Lot South of the 202], a public square hosts free

Land Use	Exemplary Specific Ideas
Parks (40)	Recreation/sports (13)
	Safety (6)
	Accessibility (4)
	Size of park (3)
Public, Open Space (23)	Library/computing center (3)
	Community meeting place (3)
	Lawn for picnic (2)
	Splash park (2)
Mixed Use (8)	Along light rail (3)
	Along Van Buren Street (3)

Table 3. Land use preferences stated by stakeholders in visioning forums and visioning workshops (numbers in parentheses indicate the number of times these land use features and specific ideas were mentioned)

concerts during the spring [F2; W1; W2]. Van Buren Street and Washington Street are popular, safe, and inviting environments for pedestrians. Trees shield public plazas and street-side patios from the road, offering places to sit, which make these streets lively and pleasant [W1; W2]. Each neighborhood has a park [64 percent support large parks in their neighborhood//SQ14] that is safe and accessible to all people in the District, and supports a variety of recreational activities for residents and visitors of all ages. Popular recreational amenities include soccer fields, basketball courts, playgrounds, and shade structures with picnic tables and grills [F1; F2; W1; W2].

Housing – A Diverse District

In 2040, residents live in diverse, cohesive neighborhoods. The District is family-oriented, and people of diverse ages, occupations, and ethnicities feel welcome, comfortable, and connected. Various housing options are suitable and affordable to current and potential future residents, including students, elders, and professionals [38 percent support professionals such as doctors or lawyers as neighbors//SQ6].

Many residents and their families have been living in the District for years, and many have made beautiful improvements to their homes. Much of the existing housing has been preserved. There are also new houses and apartments, including some two- and three-story buildings and townhomes. Some of these include a coffee shop or small grocery store on the ground floor, where neighbors bump into each other [45 percent support multi-story buildings in their neighborhood if they provided a service such as a grocery store//SQ10; 93 percent support retail in their neighborhood//SQ5].

A mix of three-, four-, and five-story apartment buildings line Van Buren Street and other major roads. These apartments are a short walk from services and attractions like the local market or the Celebrity Theatre. Taller, mixed-use buildings border the light rail, and their residents generally commute by public transit [W1]. At the District's western edge, a few higher-end buildings offer apartments, condos, and lofts closer to downtown [F1; F2]. Older housing in the Gateway District has been slowly rehabilitated, and newer buildings cater to both old and new residents, making for a diverse District [F1; F2]. Gateway is an enticing place to live or just visit, whether to work, raise a family, or enjoy the community.

Housing	Exemplary Specific Ideas
Diversity of housing options (30)	Affordable (8)
	Mixed use (7)
	Senior (5)
	Transition options for homeless (3)
	Disabled (3)
	Artists (2)
	Higher end near downtown (2)

Table 4. Housing preferences stated by stakeholders in visioning forums and visioning workshops (numbers in parentheses indicate the number of times these land use features and specific ideas were mentioned)

Economic Development - A Thriving District

In 2040, the Gateway District is a hub of economic activity. Businesses include small grocery stores, local markets, bakeries, coffee shops, restaurants, retail stores, hotels, and B&Bs [F1; F2]. Many of the owners of these businesses reside in the District [F1; F2], and because of the area's diversity, restaurants offer a variety of cuisines from around the world. The Park 'n Swap has moved to a formerly vacant lot [Area of Change 3: Vacant Lot Adjacent to the Celebrity Theatre] [F1; F2], and remains a regional attraction. It's expanded to showcase the food and products of local businesses, and people from all over the Valley enjoy going to shop and try out new foods [F1].

Because the Gateway District attracts more visitors, hotels along Van Buren Street has been revitalized, with improvements to existing hotels and new small lodging opportunities like B&Bs opening up [F1]. The motel district along Van Buren Street has been significantly reconfigured. Many of the establishments were closed and converted to other uses, while a few have been preserved and upgraded





as boutique hotels serving air travelers from the nearby Sky Harbor International Airport. Many businesses are family-owned and closely connected to the community [F1; F2]. Buildings, old and new, are well maintained, and draw on the Van Buren Street's history, to restore a positive character and rich sense of place in a location that used to be plagued by drugs and prostitution.

People frequent the entertainment district near Celebrity Theatre to see movies at the new theater, eat at restaurants, and visit the shops [Area of Change 3: Vacant Lot Adjacent to the Celebrity Theatre] [F1, W1, W2; 86 percent support a movie theater close to their neighborhood//SQ11]. This area is popular for people of all ages. Mainly, though, it provides a safe and fun place for young adults to visit at night.

Economic Development	Exemplary Specific Ideas
Businesses (52)	New hotels (10)
	Retail (9)
	Restaurants (8)
	Family businesses (7)
	Grocery Store (6)
	Local, accessible (6)
	Markets (4)
	Bakery/coffee shop (3)
	Ice cream shop (2)
Jobs (12)	Service jobs (2)
	Skilled jobs (2)

Table 5. Economic development preferences stated by stakeholders in visioning forums and visioning workshops (numbers in parentheses indicate the number of times these land use features and specific ideas were mentioned)

Business growth and investment have increased the number of jobs in the District [91 percent support more jobs and businesses in the area//SQ4; 56 percent accept increased traffic as a tradeoff for more jobs//SQ4], making for a low unemployment rate in the District. Service and retail jobs are available to people of all education levels, and the education and health care institutions in the District attract college graduates. Professionals work along 44th Street in the Gateway Towers and surrounding offices (43 percent support professionals such as doctors and lawyers as neighbors//SQ3), which creates a diverse overall mix of employment opportunities in the District.

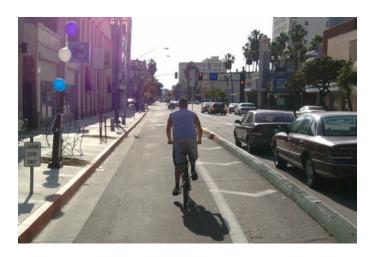
Mobility - A Connected District

In 2040, residents use many modes of transportation to move within the Gateway District. People walk, bike, ride public transit (bus or light rail), or drive to fulfill their daily needs [88 percent want to live in an area with options to walk, bike, or take the bus to all services//SQ17; 47 percent want to be able to bike or walk to all services//SQ17]. Most of the heavily trafficked roads have bike lanes, and streets with less traffic are lined with places where people live, work, shop, and play [W1, W2]. There are more bus stops in the District, and they all have shade trees or structures, as well as accurate schedule postings.

Streets are safe, accessible, and inviting to pedestrians. They are lined with trees, well maintained and lit, and crime is a distant memory [F1; F2]. Increased safety, paired with more restaurants, public spaces, and stores, has turned the District's streets into popular and attractive places. Visitors from across the city take the light rail to work and spend time in the District [F1; F2].

Mobility	Exemplary Specific Ideas
Walkability (40)	Safety—lighting, crime, prostitution (21)
	Traffic calming (10)
Bicycle	More, safer bike paths (20)
Infrastructure (24)	Bike park-and-ride (2)
Buses (20)	District connectivity (8)
	Circulators (4)
	Increased service (3)

Table 6. Mobility preferences stated by stakeholders in visioning forums and visioning workshops (numbers in parentheses indicate the number of times these land use features and specific ideas were mentioned)



Residents and bicycle commuters use a network of bike lanes to get around the District and travel to other parts of Phoenix. Some streets are very bicycle oriented [92 percent support more bike lanes//SQ15], with one lane for cars replaced by a bike lane separated from the street by a curb [50 percent support buffered bike lanes in place of a lane of traffic//SQ15]. It is easy to cycle to the light rail stations, which all feature secure "bike-and-ride" centers where riders can park and lock their bikes [F1; F2].

An enhanced bus system complements the pedestrian and bicycle infrastructure. A neighborhood circulator (bus) takes people to destinations along Van Buren Street [Areas of Change 1 & 4: Van Buren Street], to the light rail stations, and to the Grand Canal [F1, F2]. New bus routes connect neighborhoods to Gateway Community College and the Maricopa Medical Center, and a special route runs along Van Buren Street. Overall, it is easy to get around in the District without a car.

Residential streets are safe for pedestrians and cyclists, especially children walking or biking to school or the park [91 percent support traffic calming//SQ16]. These streets are also lined with shade trees, which keeps people walking, even as summer approaches [W1; W2]. With lower amounts of traffic on residential streets, shaded bus stops, buffered bike lanes, walkable areas on Washington Street and Van Buren Street, and easy light rail access, the District has augmented its connectivity to the Valley at large.

Green Infrastructure - A Green District

In 2040, the Gateway District is landscaped with trees and plants. Most places display the Sonoran landscaping that requires little water and accentuates Arizona's natural



delange.org

character [W1; W2]. There are some lush oases of plants and grasses interspersed in the District [W1; W2]. These more verdant parks, squares, and green streets require more water and maintenance, but they also provide important services, such as cooling (mitigating the urban heat island effect), shade for pedestrians, storm water collection and retention, and beautification [City of Phoenix (2010): Tree and Shade Master Plan, p. 9]. Along the Grand Canal, strategic landscaping gracefully transitions from Sonoran into the occasional oasis with nonnative or desert-adapted trees that provide a fuller canopy to shade users of the Grand Canal (walking, biking, jogging, etc.) [W2].

Health - A Healthy District

In the past 30 years, the residents and employees of the Gateway District have seen great improvements to the health and wellbeing of their community. Parks, bike lanes, and walkable streets support active lifestyles, and obesity and related chronic diseases have declined. People spend less time in their cars and both adults and children appreciate new, safe places for recreation, including the redesigned Grand Canal [Area of Change 6: Grand Canal] [F1; F2]. With traffic calming measures in residential areas, new and well-maintained sidewalks, and more people out cycling and walking, vehicular traffic has declined. This has improved the air quality, and reduced traffic accidents [W1; W2].

Residents have celebrated the new grocery store and an influx of small markets in the District [F1; F2; SLHI]. The grocery store, markets, and community gardens provide all Gateway residents and employees access to fresh and healthy food [W2; SLHI]. A healthy-food movement was started in the local, public schools, and it has been

adopted by all institutions in the District, allowing universal access to healthy meals, whether in restaurants, at work, or at home [Xiong et al., 2012]. The Arizona State Hospital, Maricopa Medical Center, Mountain Park Health Center,

Synergies Across Planning Elements

Some of the vision elements are synergistic across the District. Highlighting these "solution multipliers" supports the strategy building process and the pursuit of the Gateway District vision. Key synergies include:

- Walkability (Health; Housing; Mobility) through shade (Green Infrastructure), beautification (Land Use), and small businesses (Economic Development).
- Public spaces (Land Use) and parks (Green Infrastructure) encourage people to be active (Health) and on the streets (Mobility).
- Circulator buses (Mobility) provide access to destinations in the District, which make it a more exciting place to visit (Economic Development).
- Mixed-use areas (Economic Development;
 Housing; Land Use) enhance walkability
 (Health; Housing; Mobility) and cycling (Health;
 Mobility) because people can access stores
 and services (Economic Development).
- Higher densities decrease housing costs
 (Housing), while also increasing the numbers
 of workers and customers available for local
 businesses (Economic Development) and
 the numbers of passengers on public transit
 (mobility).
- The consistency analysis (Section 3.4) provides a further discussion of district-wide synergies.



Kevin Kellog / Mountain Park Health Center

and other health care providers in the District support residents in building healthy lifestyles. Better recreation spaces, higher mobility, access to healthier food, and improved safety enable people in the Gateway District to lead happy, healthy lives [SLHI]. The Mountain Park Health Center Gateway clinic at Van Buren Street and 38th Street has played a major role in improving health care and preventative health promotion in the District [Xiong et al., 2012]. Improved walkability across Van Buren and the Grand Canal, as well as shuttle services have made it much easier for everyone in the District to access the clinic. Skilled community liaisons at the health clinic assist the diversity of community members in understanding the health care system and following through on prescribed medications and activities. Many families come to the clinic campus, not just for regular check-ups but to play, exercise, and learn [Area of Change 7: Mountain Park Health Center Gateway clinic].

3.2 Vision Descriptions for Specific Areas of Change within the Gateway District

In the two visioning forums, as well as in stakeholder interviews and satellite events, Gateway District residents and stakeholders identified specific and general locations that they would like to see changed or preserved. The map below is showing residents' and stakeholders' preferences regarding areas of change vs. areas of stability. Green dots represent areas where residents and stakeholders supported change, and red dots represent areas where participants support preservation and stability (no significant changes).

Six areas with strong opportunity for change were selected based on clusters of green dots, and their boundaries are overlaid on the map. The six areas of change are:

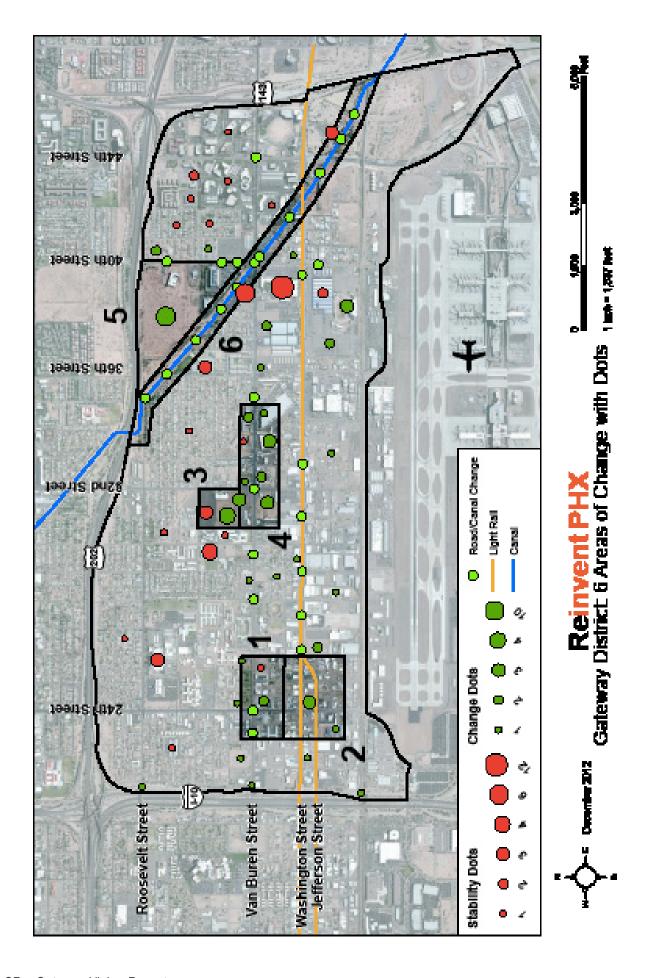
- I. Van Buren Street near 24th Street Stakeholders see Van Buren St. as a potential center for the District, but currently the corridor is regarded as dangerous and blighted. Historically, Van Buren Street was a popular nightlife destination, and stakeholders associate the decline of the District with Van Buren Street's contemporary seediness. Most participants in the public engagement events were far more interested in discussing Van Buren Street than Washington Street and the light rail.
- II. Area around the 24th Street light rail station The 24th Street light rail station is an underutilized resource because there is very little around the stop to support ridership. In proximity to the station, there are vacant lots, buildings and warehouses. Housing near the light rail is hidden behind motels, and commercial strips, and only few residents from these areas participated in this study.
- III. Vacant lot south of Celebrity Theatre Stakeholders nearly unanimously identified Celebrity Theatre as a desirable attraction in the District, but it is not well integrated into the surrounding area. This particular area is also close to Wilson Elementary School, and stakeholders showed a strong preference for reducing crime, blight, and adult businesses near the school. 32nd Street was numerously identified as a high-traffic corridor, and for this reason, its intersection with Van Buren Street received a lot of attention.
- IV. Van Buren Street near 32nd Street See comments above: Van Buren Street near 24th Street.
- V. Vacant lot south of the 202 The vacant lot lies in close proximity to two residential neighborhoods and borders 40th Street. Strong interest in change came from members of the community directly across 40th Street from the lot.
- VI. The Grand Canal The Grand Canal is an underutilized resource because it is viewed as unsafe and it is difficult to access. The canal is a major focal point for residents that would prefer more direct access to Crockett Elementary School from the East part of the District, and from residents near Crockett that would like to have a safe and accessible recreation area.

In addition, the Mountain Park Health Center Gateway clinic site at Van Buren Street and 38th Street considered a major asset in the District; it has been identified as an area of stability because the planning process is already advanced. We report below (3.2.7) on findings from a study the research team conducted in Summer 2012 in the first phase of the Reinvent Phoenix project [Xiong et al., 2012].

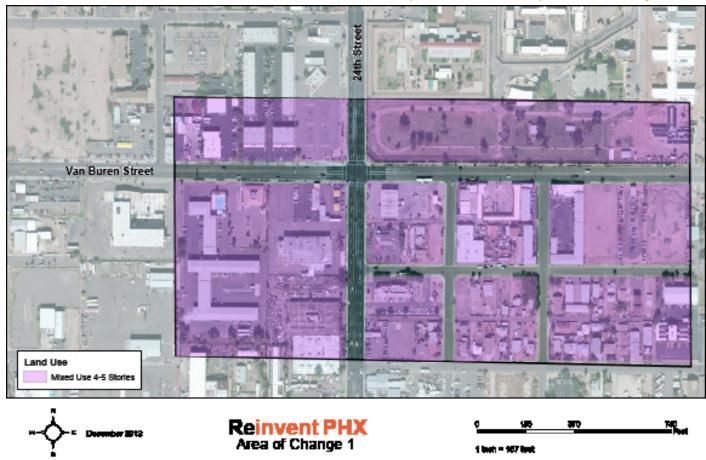
Stakeholders showed strong preference to preserve some areas in the District. Locations prioritized for preservation (red dots) include:

- I. Existing educational institutions, including Crocket Elementary School, Wilson Elementary School, and Gateway Community College Stakeholders and residents showed strong interest in educational institutions. These institutions are viewed as positive resources in the community, and stakeholders seemed particularly interested in preserving institutions that supported children. Family-oriented concerns were prominent throughout Gateway District engagements.
- II. Existing and proposed medical institutions, including Maricopa Medical Center, Arizona State Hospital, and Mountain Park Health Center Medical institutions are appreciated because they provide jobs to residents. As mentioned above the new Mountain Park Health Center clinic was particularly popular because many of the stakeholders and residents who attended the visioning forums and workshops were involved in visioning activities for the new clinic and campus (see below 3.2.7).
- III. Existing cultural resources, including Chinese Cultural Center and Pueblo Grande Museum – Cultural resources are valued as institutions that provide identity to the District. Pueblo Grande, in particular, is viewed as the area's heritage, and stakeholders and residents strongly supported its preservation.
- IV. Existing residential neighborhoods Stakeholders and residents were concerned that new developments would not consider the needs of existing residents. Not only should development in the area be oriented to provide services for and be affordable to existing residents, but new developments should not encroach on the residents that have lived in Gateway for years or even decades.

- V. Existing office parks Existing office parks were seen as institutions that provide jobs. Stakeholders and residents wanted more employment options brought to the District, and they viewed a loss of the office parks as counter to this need.
- VI. The Park 'n Swap The Park 'n Swap was viewed as a District institution, and stakeholders and residents felt strongly that the market is either preserved in its current location or moved to a vacant lot somewhere else in the District.



3.2.1. Vision for Van Buren Street. near 24th Street - A Complete Street, a Complete Community



This vision describes the east area of change for Van Buren Street (near 24th Street). For comparison and a more integrated understanding of Van Buren Street as a corridor, see below the west area of change for Van Buren Street (near 32th Street) (3.2.4).

five-story buildings [14/24//VPS]. At the street level, people congregate in neighborhood parks and squares [F2; 13/34 park//VPS; 14/34 square//VPS], which are open, visible, and lighted, and suited to diverse recreational activities [W1; F2].

Synopsis

In 2040, Van Buren Street is the thriving heart of the Gateway District, harkening back to its heyday as the city's first paved road [SE]. The street and its surrounding areas are home to diverse residents and bustling neighborhood activity that create a dynamic corridor through the District.

Land Use - Work, Live, and Play in Place

In 2040, Van Buren Street is home to a balanced mix of commercial and residential uses. Near 24th Street, there is more housing, because it a desirable place to live for people who work downtown [W1; 4/9 balanced mix//VPS; 5/9 50 percent residential//VPS]. The skyline includes four- and

Notes

- Development would be conscious of existing residential neighborhoods in the area
- Small parks are envisioned along Van Buren
- Small squares are envisioned throughout the area

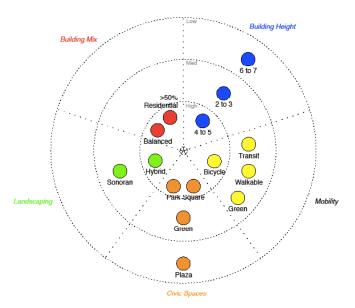




Housing - Diverse Options for Diverse Residents

In 2040, the area hosts an artists' community and student apartments. There is also affordable housing for seniors, and low-cost units for people with disabilities, near the Maricopa Medical Center [F1; FM]. Residences blend into the area's mixed-use character, and many people live up above first floor businesses [W1]. Many residents have lived in the area for many years, even as property values have increased [F1].

Gateway District: Area of Change 1



The figure above summarizes the simplified preference structure for all planning elements, based on the visual preference survey [W1; W2]. For details on the data aggregation for this bulls-eye visualization below, consult the data sheet in the Appendix to this report. For details of voting results from the visual preference survey, consult the pie charts provided in the Appendix to this report.

Economic Development - A Blast from the Past

In 2040, local residents enjoy a strong sense of place [F1], with small, family-owned markets and stores providing the majority of services [F1; F2]. People frequent these small businesses and eat at convenient local restaurants and bistros [F2; FM]. Restaurant patios open onto the sidewalk, where diners can watch people walk past [F2]. There is a pharmacy at 24th Street and Van Buren Street [FM], and new airport hotels have rehabilitated old motels [F2; FM; SE]. Honoring Van Buren Steet's iconic history as Phoenix's main street, neon lights dot the skyline [SF2]. There is a new library [F2] and multi-use center [FM], and the artists' community's events attract people from across the Valley [F1].

Mobility - Walk Here, Bike There

In 2040, Van Buren Street is a walkable two-lane avenue with wide bike lanes [8/32 mixed use avenue//VPS; 14/32 bicycle avenue//VPS]. Traffic on Van Buren Street is quieter, now that it's one lane (SLHI), and children can easily cross to get to school [F2]. Nearby streets are shaded by trees and calmed for pedestrians and cyclists, encouraging small business development on the corners [W1]. Cyclists cruise the bike lanes that run along Van Buren Street parallel to the light rail line on Washington Street [F2; W1]. Van Buren Street is well lit at night, with people out for a walk or dinner [F2; SLHI]. Pedestrians can ride the neighborhood circulator (bus) [SE], and in general, people are able to get around without a car.

Green Infrastructure - The Best of Both Worlds

In 2040, landscaping in the area is water conscious, and plantings are a hybrid of Sonoran and oasis features [17/23 hybrid//VPS]. While green infrastructure does require water, it creates a lush feel and attracts people to outdoor public spaces [W1]. Native trees and plants use less water while some nonnative varieties provide shade, which encourages walking even during the hot summer months [W1].

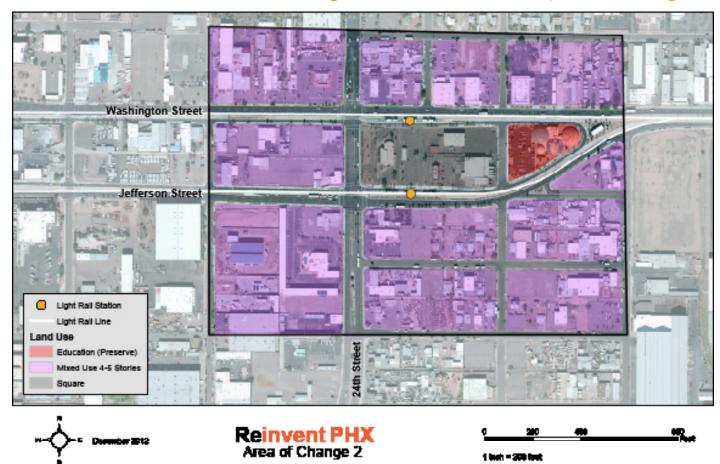
Health - Access to Healthy Eating and Active Living

In 2040, children in the District play and have fun in nearby parks and feel safe walking or biking to school [F2]. Graffiti has been removed from buildings, creating a positive and healthy environment [SE]. Pedestrian and bicycle infrastructure promotes more active lifestyles, local pharmacies provide access to medicine, and the District's grocery store ensures access to fresh foods that contribute to balanced diets [F1; F2].

Synergies Across Planning Elements

- Increased pedestrian and bike traffic (Health, Mobility) supports local businesses (Economic Development) that populate the storefronts of mixed-use developments (Economic Development, Housing, Land Use).
- People congregating in civic spaces (Green Infrastructure, Health, Land Use, Mobility) and on restaurant patios (Economic Development) increases activity in the area (Housing, Mobility), deterring crime (Health), and making the streets safer for pedestrians at night (Health, Mobility).
- Pedestrian and bicycle infrastructure (Health, Mobility), recreational opportunities (Green Infrastructure, Land Use), and pharmacies (Health) and groceries (Economic Development) contribute to improved public health (Health).
- Higher building decrease housing costs
 (Housing), while also increasing the numbers
 of workers and customers available for local
 businesses (Economic Development) and
 the numbers of passengers on public transit
 (mobility).

3.2.2. Vision for the Area Around the 24th Street Light Rail Station – A Reason for People to Get off the Light Rail



Synopsis

Four- and five-story mixed-use buildings typify the area around the 24th Street light rail station. Small, businesses cater to local residents as well as riders of the light rail. The area is walkable and bikeable, and street-level activity creates a sense of energy around this light rail stop.

Land Use - Desirable Destinations

In 2040, community members live and work in mixed-use neighborhoods of four- and five-story buildings [W1; 18/28 4-5 Stories//VPS] that offer many commercial options [7/10 50 percent Commercial//VPS]. Residents take care of most of their daily needs close to home, and local business owners profit from loyal customers that live nearby. An attractive square at the southwest corner of Washington Street and 24th Street invites light rail passengers to relax by its trees, grass, and benches before boarding the train [W1; 14/27 Square//VPS].

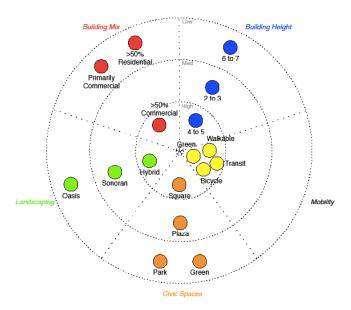
Housing - Supporting Diversity

In 2040, a diverse mix of people lives in the area [W1]. While many people live in four- to five-story apartment buildings, there are also live-work dwellings, artist studios, and lofts [F2; 18/28 4-5 Stories//VPS]. Old warehouses on the north side of Washington Street have been converted to housing, mainly for professional who commute by light rail to work downtown [FM].

Notes

- Development would be conscious of existing single-family homes in the area
- Warehouses on Washington are adapted/reused

Gateway District: Area of Change 2



The figure above summarizes the simplified preference structure for all planning elements, based on the visual preference survey [W1; W2]. For details on the data aggregation for this bulls-eye visualization below, consult the data sheet in the Appendix to this report. For details of voting results from the visual preference survey, consult the pie charts provided in the Appendix to this report.

Economic Development - A Little Something for Everyone

As housing in the area supports a diverse mix of people, this population, in turn, supports local businesses [W1]. In 2040, local businesses include restaurants, specialty shops, produce and dry goods markets, and coffee shops [W1; F2]. Businesses are generally small-scale and family-owned, and many residents work in the area. These businesses provide jobs, fresh food, and everyday necessities for neighbors, and draw visitors to the area as well.

Mobility - Calm and Connected

In 2040, it is easy to get from one place to another. Streets are conducive to walking, cycling, and riding transit [W1; 12/37 Mixed Use Blvd//VPS; 13/37 Green Blvd//VPS; 11/39 Transit Ave//VPS; 15/29 Mixed Use Ave//VPS; 13/32 Mixed Use St//VPS; 12/32 Calmed St//VPS]. People walk to the light rail on wide sidewalks, or ride their bikes to the station in wide, safe bike lanes. Several bus routes take passengers to the northern parts of the District via 24th Street [W1]. Calm, accessible streets now characterize the area.

Green Infrastructure – Providing Shade while Conserving Water

In 2040, landscaping conserves water, as vegetation is a blend of native and nonnative plants [W1; 15/23 Hybrid// VPS]. The effect is a water-conscious landscape that provides sufficient shade that people can endure high summer temperatures. The area's vegetation is beautiful, and people gather in green places.

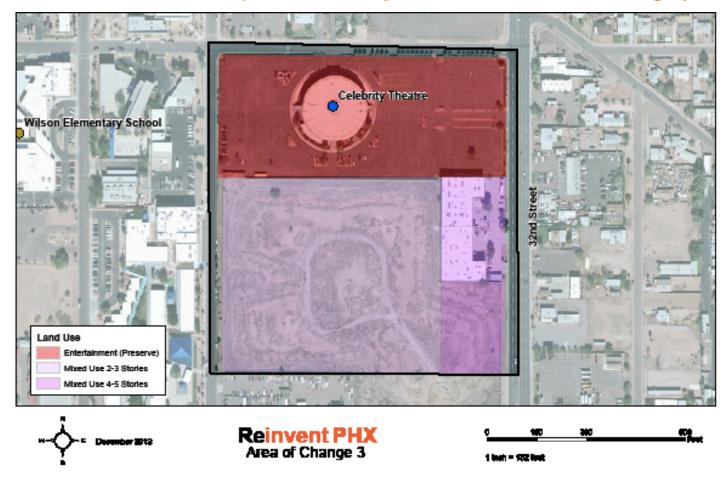
Health - A Way of Life

In 2040, this attractive area is also a healthy one. Residents walk to the square where children like to play [W1]. Cyclists bike to the Grand Canal, and use it as a corridor to other Valley locations [W1]. Many people use the market near the light rail station that carries fresh fruits, vegetables, and some specialty health food items [F2].

Synergies Across Planning Elements

- Diverse housing options like apartments in mixed-use buildings (Economic Development), live-work, studios, and lofts (Land Use, Housing) support entrepreneurs and local business owners (Economic Development).
- New residents in the area (Land Use, Housing) provide a consistent market for new businesses (Economic Development).
- Mixed-use development (Land Use) promotes walkability (Health) around the light rail and may boost transit ridership (Mobility).
- Higher building decrease housing costs
 (Housing), while also increasing the numbers
 of workers and customers available for local
 businesses (Economic Development) and the
 numbers of passengers on the light rail (mobility).

3.2.3. Vision for the Vacant Lot Adjacent to the Celebrity Theatre - A Little Peace from a Bustling City



Synopsis

Small plazas and neighborhood parks provide public gathering spaces in what was once a vacant lot adjacent to the Celebrity Theatre. The area is a bridge from residential neighborhoods into entertainment options that cater to a variety of age groups.

Land Use - Designing a Quiet Place

In 2040, the neighborhood features a balanced mix of uses comprised of small businesses scattered amongst residential buildings [8/11 Balanced Mix//VPS]. Fourto five-story apartment buildings with ground-floor retail and office space overlook 32nd Street to the south [W2; 8/12 4-5 Stories//VPS], and the buildings buffer traffic noise. Two- and three-story residential buildings and small businesses make up the interior of the area [W1; 4/12 2-3 Stories//VPS]. People spend time in small plazas, between businesses [W2], and parks encourage outdoor activity and provide gathering places. These parks are set up for

multigenerational uses, with soccer fields and playgrounds for activity and shaded benches for enjoying the outdoors [W2; 20/32 Plazas//VPS].

Housing - Good, Safe, Affordable

In 2040, housing is safe and affordable for the residents that have lived in the area for years, as well as for new residents that have joined the community [F1; F2]. There are a variety of different housing options, from four-to five-story apartment buildings, to two and three story homes [8/12 4-5 Stories//VPS; 4/12 2-3 Stories//VPS].

Notes

- Small plazas are envisioned throughout the area
- Small parks are envisioned throughout the area

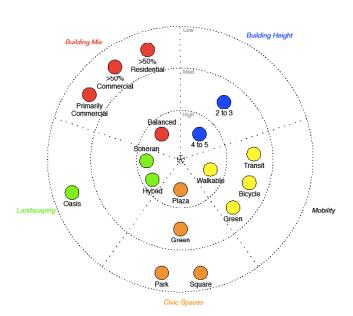




Economic Development – Local Businesses and Local Jobs

In 2040, grocery stores and community markets are accessible from the neighborhood, and offer employment options for local residents [F1]. Other small businesses include restaurants, coffee shops, ice cream stores, and retail [F1; W1]. Celebrity Theatre is integrated into the neighborhood, and an adjacent entertainment district provides a variety of amusement options to the community [F2; FM].

Gateway District: Area of Change 3



The figure above summarizes the simplified preference structure for all planning elements, based on the visual preference survey [W1; W2]. For details on the data aggregation for this bulls-eye visualization below, consult the data sheet in the Appendix to this report. For details of voting results from the visual preference survey, consult the pie charts provided in the Appendix to this report.

Mobility - A Safe Place to Walk and Bike

In 2040, 32nd Street is lined with mixed-use buildings and hosts a variety of transit options [W1; 8/10 Balanced Mix// VPS; 22/49 Mixed Use Ave//VPS]. Wide sidewalks, bike lanes, parks, and small businesses sprinkled throughout the neighborhood enliven the streetscape [20/49 Bicycle Ave//VPS]. Space for pedestrians and cyclists has improved community health and people feel safe on the streets. The smaller neighborhood streets that weave through the lot adjacent to Celebrity Theatre are slow and safe, and promote walking [W2; 18/28 Calmed Streets/VPS].

Green Infrastructure - Beautiful Shade

In 2040, landscaping offers shade and improves the neighborhood's aesthetics. Keeping true to the Arizona climate, drought-tolerant Sonoran and hybrid vegetation make up most of the green infrastructure [20/44 Sonoran// VPS; 23/44 Hybrid//VPS]. Trees and shade structures line the streets and dot the neighborhood parks, offering more protection from the summer sun without increasing the use of declining water resources.



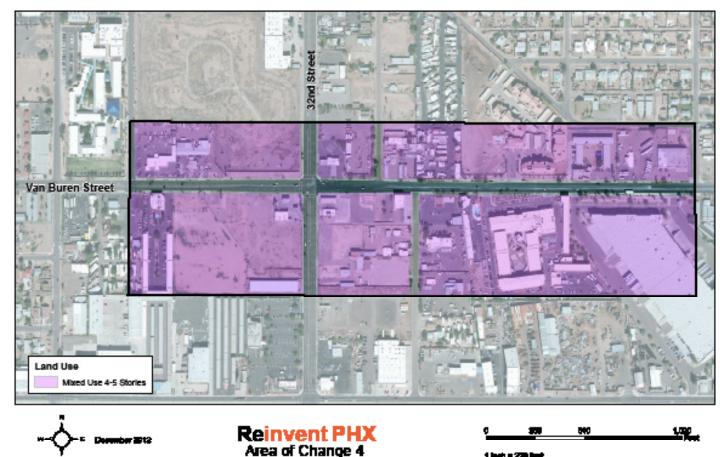
Health - Good Living, Wellbeing

Mixed land uses and safe, pedestrian friendly streets create walkable and bikeable neighborhoods [W1; W2; 22/49 Mixed Use Ave//VPS]. Local grocery stores offer fresh and healthy foods, and the abundance of parks and areas for recreation encourage exercise and enjoyment of the outdoors [F1; W2]. Equal access to healthy food options, a variety of safe ways to move about the neighborhood, and the availability of green open space has ameliorated the health and wellbeing of residents.

Synergies Across Planning Elements

- Small plazas (Green Infrastructure, Land Use) facilitate community building while supporting surrounding businesses (Economic Development].
- Grocery stores [Economic Development] improve health of the neighborhood's residents [Health] and employment options [Economic Development].
- Mixed land uses [Housing, Land Use], bike lanes, and transit [Mobility] foster active communities [Health].

3.2.4. Vision for Van Buren Street near 32nd Street - A Dynamic Center



Synopsis

In 2040, Van Buren Street near 32nd Street plays a dual role as both the heart of the Gateway District and a major bicycle throughway. Many residents live and work near this corner, and benefit from libraries and community centers.

Land Use – A Place to Live and Work, a Place to Shop and Play

In 2040, Van Buren Street is home to mixed-use buildings featuring street-level retail with apartments and offices on the upper floors [12/19 50 percent Commercial//VPS; 5/19 Balanced Mix//VPS]. These buildings are mostly four-and five-stories tall. However, some scattered two- to three-and six- to seven-story buildings add diversity to the area's skyline [21/39 4-5 Stories//VPS; 11/39 Stories//VPS; 8/39 6-7 Stories//VPS]. In a few places, small parks and plazas front onto the sidewalk between buildings [18/55 Parks//VPS; 31/55 Plazas//VPS].

Housing - A Step up for Those Who Need It

In 2040, in additional to various housing options for the community, Van Buren Street provides housing to all members of the community. There is transitional housing for the homeless, anchored by UMOM New Day Centers, and, affordable housing for lower-income members of the community (FM). The rundown buildings on the north side

Notes

- Development would be conscious of existing residential buildings in the area
- Some 2-3-story mixed-use buildings are envisioned throughout the area
- Some 6-7-story mixed-use buildings are envisioned throughout the area
- Small parks are envisioned throughout the area

of the street have been replaced with new, safe places for people to call home (FM), and existing houses have slowly improved through renovations.

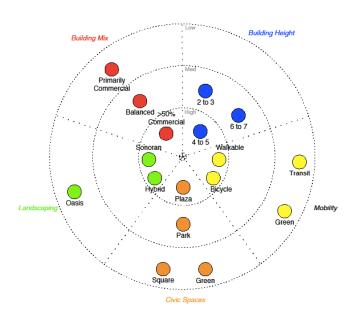
Economic Development – Providing Services for Basic Needs

In 2040, storefronts on Van Buren Street provide most services, and economic development revolves around building social and human capital. There is a small grocery near the corner with fresh, healthy foods [W1]. A job-training center near 32nd St prepares residents for the new jobs spurred by the economic growth in the area [F1]. Honoring Van Buren Steet's iconic history as Phoenix's main street, popular landmarks such as the Bill Johnson's Restaurant are well maintained [SE]. A library a computer center provides access to information and technology [FM], and a multi-generational center is a focal point where residents of all ages come together to celebrate their community [F1].

Mobility - A Corridor for Pedestrians and Cyclists

In 2040, Van Buren Street is a safe corridor for pedestrians and cyclists [FM; W2]. Wide sidewalks complement the mixed-use developments that line the street [22/42 Mixed Use Ave//VPS], allowing pedestrians to walk to local businesses from their homes and offices. Ample,

Gateway District: Area of Change 4



The figure above summarizes the simplified preference structure for all planning elements, based on the visual preference survey [W1; W2]. For details on the data aggregation for this bulls-eye visualization below, consult the data sheet in the Appendix to this report. For details of voting results from the visual preference survey, consult the pie charts provided in the Appendix to this report.



well-marked bike lanes and traffic slowing measures have made this stretch of Van Buren Street even safer for pedestrians and cyclists [W2; 20/42 Bicycle Ave//VPS].

Green Infrastructure - Shelter from the Sun

In 2040, Van Buren Street is landscaped with Sonoran and hybrid vegetation [20/44 Sonoran//VPS; 23/44 Hybrid// VPS]. Low-water trees shade the sidewalks and bike lanes, making walking and cycling more comfortable under the Arizona sun.

Health - An Active Corridor

In 2040, Van Buren Street fosters healthy lifestyles in the Gateway District. Grocery stores provide access to healthy food [W1]. Parks sidewalks, and bike lanes create opportunities for physical activity [18/55 Parks// VPS]. Living, working, and doing business in this corridor facilitate good health.

Synergies Across Planning Elements

- Job training, community centers (Economic Development), and transitional (Health) and affordable housing (Housing, Land Use) support residents' needs.
- Local residents (Housing) fill the service sector jobs in the area (Economic Development).

3.2.5. Vision for the Vacant Lot South of Loop 202 - From Vacant to Vibrant



Synopsis

In 2040, what was once a vacant lot is now a vibrant, mixeduse community connected to the Grand Canal and nearby residential neighborhoods. The lot was an archaeological site, and the results of the excavations provided inspiration for the area's future aesthetics and development [W2].

Land Use – Blending the Phoenix Character with Urban Amenities

In 2040, the area is a mixed-use neighborhood, featuring both commercial and residential options [W1; W2; 12/32 50 percent Commercial//VPS; 11/32 50 percent Residential//VPS; 7/32 Balanced Mix//VPS]. Buildings are mostly two-and three-stories, but some four- and five-story buildings are scattered throughout the area [30/73 2-3 Stories//VPS; 26/73 4-5 Stories//VPS]. Six- and seven-story commercial buildings provide a buffer between the area's northern boundary and the Loop 202 [W1; 17/73 6-7 Stories//VPS]. There are parks and squares interspersed in the area, where

children play soccer [F1; F2; W1; W2; 40/104 Parks//VPS; 24/104 Squares//VPS; 28/104 Green//VPS]. A sizable performance space at the center of the neighborhood is the focal point of the community [W1; W2].

Notes

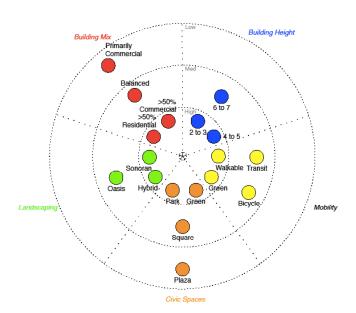
- The medical facility would be preserved
- Development would be conscious of existing uses
- Parks are envisioned throughout the area
- Small pockets of primarily residential neighborhoods are envisioned in the area



Housing - Options to Meet Everyone's Needs

In 2040, diverse housing options allow residents of all income levels to call the area home [W2]. Affordable housing for low-income residents and transitional housing for homeless and citizens with less resources gives anyone that wants to live in the area the opportunity to do so [F1; FM]. A senior center provides housing opportunities for residents to remain in the area as they age [FM]. Most

Gateway District: Area of Change 5



The figure above summarizes the simplified preference structure for all planning elements, based on the visual preference survey [W1; W2]. For details on the data aggregation for this bulls-eye visualization below, consult the data sheet in the Appendix to this report. For details of voting results from the visual preference survey, consult the pie charts provided in the Appendix to this report.

people live in two- to three-story buildings, but there are a few single-family homes as well [W2; 30/73 2-3 Stories// VPS].

Economic Development – Small Businesses with a Big Benefit

In 2040, small, community-oriented businesses provide jobs to District residents [FM; W2]. Grocery stores offer fresh food [W2], and a cultural center features restaurants and shops representative of the diverse cultures living in the District [W1]. A community center provides a place for neighbors to gather [F1].



Mobility - Safe Streets for a Walkable, Vibrant Community

In 2040, road design makes it easier to walk and bike in the area. Avenues have wide sidewalks busy with pedestrians [26/67 Mixed Use Ave//VPS]. Wide, well-marked bike lanes create a safe space for cyclists, and trees shade the sidewalks for walking [25/67 Bicycle Ave//VPS; 32/67 Green Ave//VPS]. Trees shade smaller streets that feature traffic calming measures to improve safety for pedestrians and cyclists [24/72 Green Streets//VPS; 41/72 Calmed Streets//VPS]. Boulevards near the area feature mixed-use developments and shaded sidewalks, but are still primarily designed for moving cars through the District [W1; 34/98 Mixed Use Blvd//VPS; 39/98 Green Blvd//VPS].

In 2040, roads in the area are safe for pedestrians and cyclists [W2]. Lower speed limits, detached sidewalks, separated bike lanes, and speed bumps make for calmer streets [W1; W2]. Footbridges across the Grand Canal link the neighborhoods on each side to each other [F1]. Parks are walking distance from residential neighborhoods and schools, and circulator buses run throughout the area [FM; W1; W2].

Green Infrastructure - Creating Shade in the Desert

In 2040, Sonoran and hybrid landscaping create green spaces and shade for the area [31/75 Sonoran//VPS; 30/75 Hybrid/VPS]. Oasis landscaping is an escape from the desert at the main square, but is otherwise limited to preserve water [W1; 14/75//VPS Oasis]. Rights of way are lined with trees to improve walkability, and parks feature shade structures to protect children from the sun as they play [W1].

Synergies Across Planning Elements

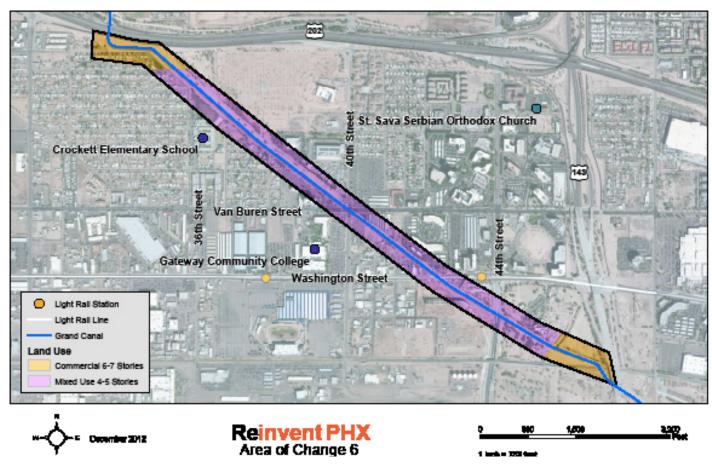
- Groceries (Economic Development) and community gardens (Land Use) support healthy diets (Health).
- A cultural center (Economic Development, Land Use) and pedestrian bridges across the Grand Canal (Mobility) create connections to neighboring communities.
- Shade (Green Infrastructure) promotes pedestrian traffic (Mobility).

Health - Nutritious Food and Active Lifestyles

In 2040, what was once a vacant lot is now home to an active community. Parks provide spaces for people to play soccer and other sports, while streets are designed to promote walking and biking [F1; F2; W1; W2]. Markets and the community's garden complement lifestyles in the area by supplying fresh, locally grown produce [W2].



3.2.6. Vision for the Grand Canal - A Regional Route for Cyclists and Pedestrians



Synopsis

In 2040 the Grand Canal is a major recreational corridor for the District. Cyclists, pedestrians, and joggers enjoy the Grand Canal for exercise, but the Grand Canal is much more than a recreational amenity for the District. The Grand Canal connects non-motorists across the Valley, drawing people to the Gateway District and allowing Gateway residents to travel to other places in the region.

Land Use - A Walk in the Park

In 2040, land bordering the Grand Canal corridor is mixed between residential and commercial uses, slightly favoring commercial opportunities [7/21 Balanced Mix//VPS; 7/21 50 percent Commercial//VPS]. Building heights are mostly four to five stories, but six- and seven-story commercial buildings border the freeway, as taller commercial buildings buffer nearby residences from the noise of the Loop 202 [W2; 9/26 4-5 Stories//VPS; 10/26 6-7 Stories//VPS]. Moving south along the Grand Canal, users pass by two-and three-story commercial buildings and residential

neighborhoods [W2; 7/26 2-3 Stories//VPS]. Neighborhood parks are generally within a short walk of the Grand Canal, providing children a fun and safe alternative to the shopping and recreational opportunities on the Grand Canal itself [W1]. Community gardens complement the

Notes

- Development would be conscious of existing open space and single-family homes along the canal
- 2-3-story mixed-use buildings would be scattered along the canal
- Primarily residential neighborhoods would be scattered along the canal
- Community gardens would be scattered along the canal
- Neighborhood parks would be scattered along the canal

neighborhood parks by attracting people of all generations, and have established the Grand Canal as the Gateway District's greenway [W1]. Multipurpose waterfalls, pedestrian bridges and the landscaping of neighboring properties add to the aesthetics of the area [W1]. [Pie chart of VPS voting data]

Housing – Interconnections for Community

In 2040, housing in the Grand Canal corridor has a unique relationship to the Grand Canal and nearby businesses. Connections to neighboring amenities give the greenway a neighborhood feel. With numerous outlying parks, recreational opportunities, community gardens, and shopping locations, the Grand Canal corridor hosts a diverse mix of residents [W2]. Within walking distance of the Grand Canal, transitional housing supports homeless and low-income residents [W2]. A walk along the Grand Canal corridor displays a distinctive environment created by the interaction between housing, business, and the Grand Canal itself.

Building Mix Primarily Commercial Primarily Regidential Sonoran Oasis Sonoran Oasis Sonoran Green Park Walkable Mobility

The figure above summarizes the simplified preference structure for all planning elements, based on the visual preference survey [W1; W2]. For details on the data aggregation for this bulls-eye visualization below, consult the data sheet in the Appendix to this report. For details of voting results from the visual preference survey, consult the pie charts provided in the Appendix to this report.



Economic Development - Stop and Shop

In 2040, residents and visitors to this Grand Canal area have access to numerous services. People frequent small shops and eat at local restaurants and food trucks set up on the Grand Canal banks [W1]. Children particularly like to visit the ice-cream parlor [W1]. Bicyclists using the corridor can service their bikes at a repair shop [F2], and other small businesses cater to the pedestrian traffic. This mini-economic engine of shop owners and family-oriented businesses has created many new jobs [W2].

Mobility - Easy Access

In 2040, calmed streets near the Grand Canal corridor have low speed limits that make travel much safer for pedestrian and bicyclists [W1; W2; 24/44 Calmed Streets//VPS]]). Protected crossings at major cross-streets and shaded paths have encouraged people to walk and bike to the Grand Canal [16/44 Green Streets//VPS]. Boulevards and larger roads in the area also provide bike lanes to accommodate cyclists that wish to access the Grand Canal [W1; W2; 19/32 Bicycle Boulevard]. While light-rail users can access the Grand Canal on the trolley from the 38th Street station, bicyclists from neighboring regions have access to the Grand Canal from bike paths extending outside of the Gateway District [W1]. These paths allow cyclists to completely avoid highways, and pedestrians can cross the Grand Canal on walking bridges [W2]. People of all ages use this corridor throughout the day.

Green Infrastructure – A Shaded Pathway

In 2040, landscaping along the Grand Canal corridor is a mix of both hybrid and Sonoran vegetation [W1; W2;

15/63 Sonoran//VPS; 38/63 Hybrid//VPS]. While Sonoran landscaping fosters a regional identity and conserves water, and hybrid landscaping provides extra shade for pedestrian pathways, which extends the Grand Canal's use into the summer months [W1; W2].

Health - Recreation and Holistic Wellbeing

In 2040, the Grand Canal encourages active lifestyles, as the area is a venue for walking, jogging, and biking [W2]. Multiplying the benefit of recreation, children use the Grand Canal to get to nearby soccer and baseball fields [W1]. Wellbeing is not only measured by recreation. Creativity is displayed and inspired by public art installations along the Grand Canal [W2]. Safety is a high priority for all visitors, and people feel safe walking along the Grand Canal due to its protective fencing and adequate lighting [F2; W2]. These features provide safety to those who travel the Grand Canal at night as well as for those who visit the Grand Canal corridor alone [F2; W2]. The landscaping provides a green buffer between sidewalks and streets, protecting pedestrians from street traffic, while pedestrian paths allow users to avoid highways entirely [W2].

- Synergies Across Planning Elements
- Shade trees (Green Infrastructure) allow pedestrians, joggers, and other users to travel the Grand Canal year round (Economic Development, Mobility).
- Canal travel (Mobility) epitomizes active lifestyles (Health).
- Calmed and green roads (Mobility) provide connections to the Grand Canal for non-motorized users (Health, Mobility).
- Improved density adds more activities and people on and near the Grand Canal, adding security for users (Mobility) and customers for nearby businesses (economic development).



Ben Elliot

3.2.7. Vision for the Mountain Park Health Center Clinic Site – Community Access to Comprehensive Health and Wellness Care

The following vision was generated in a separate participatory visioning study, conducted in Summer 2012 in collaboration with Mountain Park Health Center. The details of this vision study are provided in Xiong et al. (2012). We present here an abbreviated and adapted version of the vision for the Mountain Park Health Center Gateway clinic at Van Buren Street and 38th Street:

In 2040, the Mountain Park Health Center (MPHC) Gateway Clinic is a vibrant community center and health resource, where residents come, not just for check-ups and appointments, but also for recreation, socializing, and learning. The clinic is equipped with comprehensive health services and acts as a convenient one-stop shop for busy patients who have limited mobility and transportation. The site is easy to access from all directions. Those in the immediate neighborhood often walk or bike along the shaded paths on the Grand Canal or down tree-lined Van Buren Street or 40th Street. Patients from further away take the light rail or bus, which has convenient stops close to the clinic and good signage and lighting to mark the way. For those who need further assistance in getting to the clinic, there is a MPHC volunteer coordinator who works with neighborhood associations and helps manage carpool lists. A local pedicab startup has begun to take elderly patients from the light rail station or other farther locations to the clinic. Not only is the clinic accessible, but it is convenient for parents too, who can drop off their children at the Gateway Community College day care center across the street and walk across the safe pedestrian crossing on Van Buren Street to make their appointments.

While the clinic does not house all specialists and services, it does have dental health services, a pharmacy with translation assistance for ESL patients, extended hours, nutrition education program, and a fitness program in conjunction with the YMCA across the street. The clinic campus is a safe, lush green area with ample space for recreation, a playground, picnic tables and benches, a walking path, and a community garden. The clinic has a Bicycle Learning and Rental Program on campus, where community members can take classes in learning to ride safely and rent bicycles. There is also a large outdoor multipurpose space that is used for fitness classes like yoga, zumba, and strength building exercises in some mornings and evenings. Other days, community groups can reserve the space for meetings and gatherings. Everyone can enjoy healthy food at the farmers' markets and food trucks that are often in the parking lot.

MPHC is unique in that the many of the health education programs are integrated into the campus and the wider community. For example, the nutrition program utilizes the on-campus community garden and farmers' market for vegetables. These vegetables are then taken to the in-clinic demonstration kitchen, where nutritionists, community members, and even professional cooks come and teach cooking classes that expose community members to new vegetables, healthy recipes, and cooking methods. Partnerships with local schools like Crockett elementary allow MPHC to extend the nutrition program to children, who can take field trips to the campus to work in the garden, cook in the demonstration kitchen, and catch a glimpse of what the health profession entails.

The clinic is truly embedded in the Gateway community and functions through critical partnerships with Gateway Community College, local school districts, neighborhood associations, and many more organizations. Health outreach is accomplished through working with schools to set up internships and site visits, and through creating a Neighborhood Health Mentorship Program to bridge cultural and language barriers. For instance, the Mentorship Program helped train trusted Somali refugee community members in sexual health and women's health issues. In turn, the trained mentors taught women in their community about otherwise taboo subjects that affected their health.



Kevin Kellog / Mountain Park Health Center

3.3 Vision Narratives

Vision narratives better resonate with residents and stakeholders because they make the vision tangible and enhance its relevance to the people living in the respective area (Wiek et al., 2012a). This section reports on results from the visioning workshops in which we asked participants to describe how they would live, work, and play in the Gateway district in the future described through their vision. This activity also fulfilled the purpose of integrating the respective area-of-change vision across the individual planning elements. From this input, the research team crafted a series of narratives assigned to different residents and stakeholders in the Gateway District based on socio-demographic and other information. The narratives illustrate how people envision living, working, and playing in the Gateway District in 2040 (if the vision becomes reality). For selected narratives, we have elicited permission from real people currently living or working in the Gateway District, who were involved in the visioning study and willing to lend their name to the respective narrative. The numbers in parentheses indicate the correspondence with data from the visioning workshop (narrative activity). For reference, the data sheet is provided in the Appendix to this report.

Resident

Every day, I ride the light rail to 24th Street. From there, the circulator takes me past the Salvation Army straight to work (26) at the new multigenerational center (26). From time to time, I see folks from the center on the train, and they recognize me from the front desk. It's been nice to transition to just one job, instead of the two I had before. Now that I don't work nights, I spend evenings relaxing at home or doing little art projects at the craft shop down the street from where I live (aoc1 vision). There are lots of trees on that walk, which make it a nice and comfortable even if the sun is still out (aoc1vision).

When I need some exercise, I take the circulator, then the bus, to get to one of our new parks (22, 26, aoc1vision). My favorite is just south of the 202. It has a lot of wide-open green space on what used to be a vacant lot. I often see neighbors playing soccer or football on the field (26). There's also a children's playground, where I take my grandkids when they visit (aoc1vision, 20). I've heard there are affordable places to live in the area, so I'm thinking about moving somewhere between work and the park (20, aoc3vision).

Resident (Refugee Community)

My family and I feel safe, welcome, and supported in this neighborhood. Although our culture and experiences from back home are very different, development in the neighborhood such as new businesses with job openings that do not require advanced English language skills, the Mountain Park Health Center (MPHC) Gateway clinic, and a new daycare center have helped to ease the transition.

Since MPHC opened up, I have walked there often along the shady paths on Van Buren Street and 44th Street. My children are learning how to ride bicycles after attending the community bike program. The MPHC has space reserved for community activities so a group of refugees and I have been meeting there weekly to learn English. Most times, we stick around for a while to participate in MPHC exercise and wellness programs or to try some new food from the food trucks in the parking lot. My parents also come here to enjoy the community garden, where we have a small plot of vegetables. The experience of gardening coupled with good health care from MPHC Somali staff members has helped them deal with post-traumatic stress disorder.

Parent

Después de la semana de trabajo, me gusta caminar con mi familia al parque cerca de Celebrity Theatre (33, 13, 12, 17, 19). El parque está muy bien cuidado, y el equipo es seguro, así que no tengo que prestar demasiada atención mientras los niños están jugando (23, 33). Por lo general, caminamos de regreso a casa, pero a veces tomamos el autobús (13, 14, 15, 16, 17, 19, 33), si los niños están muy cansados. Las calles están bien iluminadas, los vecinos se saludan, y el vecindario se siente seguro (33, 13, visiones).

Poco a poco, nuevos pequeños negocios han aparecido en los edificios revitalizados a lo largo de la calle Van Buren (15, 17). Disfruto de mi viaje en bicicleta, y ese tiempo ayuda a despejar mi mente antes de empezar la jornada de trabajo (12, 16, 17, 19, 33). Incluso puedo andar en bicicleta en algunas mañanas de verano, a causa de la sombra que los árboles dan a lo largo del camino (aoc1vision). El valor de las propiedades y los alquileres han aumentado (12), pero el centro de capacitación laboral cerca de la calle 32 me ayudó a encontrar un buen trabajo, y el precio de mi hogar es razonable (aoc3 visión, 13, 15, 18).

[English Translation: After the workweek, I enjoy walking with my family to the park near Celebrity Theatre (33, 13, 12, 17, 19). The park is maintained well, and the equipment

is safe, so I don't have to pay too much attention while the kids are playing (23, 33). Usually we walk home, but sometimes we take the bus (13, 14, 15, 16, 17, 19, 33), if the kids are really tired. The streets are well lit, neighbors wave to each other, and the neighborhood feels safe (33, 13, visions).

New small businesses have slowly appeared in revitalized buildings along Van Buren Street (15, 17). I enjoy my bike commute, and that time helps to clear my mind for the workday (12, 16, 17, 19, 33). I can even bike on some summer mornings, because of the shade trees along the path (aoc1vision). Property values and rents have increased (12), but the job-training center near 32nd Street helped me find good work, and my place is reasonably priced (aoc3 vision, 13, 15, 18).]

Child

My favorite place to eat around here is the *taquería* at Van Buren Street and 36th Street. They have the best tacos in the city! We always go there on the way home from the light rail station at 32nd Street (Phoenix Ale, Don Keuth). After school on Fridays, I go with my friends for ice cream at the Grand Canal (12), and we sit in the shade to watch people walking and jogging (12, 22). I see a lot of my neighbors there.

I feel safe in my neighborhood. Family and friends are always around, and other kids are playing outside (22). I love to play basketball in the street, and I go to Wilson to play soccer whenever I want. I can walk there fast, and biking is even faster (12, 22). I usually go at least twice a week to play with my friends, and every Sunday there are the neighborhood soccer games. Afterward, my family usually stays to barbecue and hang out with the other neighbors (12, 22). Sometimes I introduce my parents to new friends, and I help with interpretation if they need it.

Professor

I am really grateful for the opportunities youth have around the neighborhood (5). Wilson Elementary and Gateway Community College host lots of extracurricular activities, and the businesses along the Grand Canal have attracted lots of people walking, running, and biking the Grand Canal path. Kids play there, and I see more kids outside than I did a few years ago (5, 11). I'm glad to live near where I work, and new businesses popping up on Van Buren Street have made for a nice mix of options in the neighborhood (26).

I hardly use my car now, because I live close to the bus and light rail and they take me where I need to go. I mainly use my bicycle to commute to the school where I teach (11, 26), and it's a short walk to the senior center where I volunteer a couple afternoons a week (5). There's a lot of activity in the neighborhood these days. Things are always happening at the new park north of the Grand Canal (11), and it's nice to see the murals that students put up on the walls facing Van Buren Street's sidewalks (5).

Profile: Tonia Mosher, Assistant Teacher at Crockett Elementary School

"My name is Tonia Mosher and I work as an assistant teacher with preschool children that have special needs. I work in the Gateway District at Crockett Elementary School, which is part of the Balsz School District. I have been employed here for three years, and the children and the school are what I value the most about the Gateway District. I do not live in the District at this time, but commute to work everyday from West Phoenix. My hope is that the future holds safer and more family-friendly communities and neighborhoods for the children with whom I work. Right now, there are not enough safe and friendly options for the children. I see too much adult entertainment venues and other such shops, which are not appropriate for children, and are not conducive to raising children and having safe and happy families. It is my hope that things will change for the better for the children and families in the Gateway District."



Health Professional

I work at the OASIS Hospital and commute from my home downtown on the light rail (7, 9). I bring my bike with me and ride up to work from the 38th Street station. It's a nice ride, with wide bike lanes and people walking along the sidewalks (district vision, 9). Shade trees and good landscaping make for a relaxing commute, and keep it cool enough to occasionally bike in the summer.

On my lunch break, I usually walk to the local deli and eat on the outdoor patio (9, 25). I'm glad to see people walking around, now that the vacant lots around the hospital have been developed. There are quite a few new businesses, and some have become local gathering places for folks to connect and get to know each other (district vision, F1). It's fun to work where there are friendly people and a sense of community (7).

Profile: Dr. William Van Arsdell, Pediatrician at Mountain Park Health Center

"My career has been devoted to community pediatrics. The past nine years as a member of the Mountain Park Health Center team at the Chinese Cultural Center have been the most rewarding in my professional life. I particularly value the ability to provide community-based pediatric care that is made possible by this local community and the mission of Mountain Park Health Center. Although my home is near the Western terminus of the light rail, and I would prefer to take it to work, the time requirement is prohibitive; and, I drive each day. The ten-hour days at the office are spent seeing patients, following up on test results and consultations, and communicating with families, colleagues, physicians at Phoenix Children's Hospital and Maricopa Medical Center,



consultants, and school personnel regarding our patients and their families. I feel it is wonderful that a large number of my patients walk with or are carried by their parents to the Health Center, that many know and talk with each other, and that there is a sense of shared community for the majority of my patients and their families – a very uncommon and precious thing in our world today."

Office Employee

I don't live in the Gateway District, but my office is in the area, and I commute up 44th Street. I usually take the light rail, and then ride my bike the rest of the way (2,6). The Sky Train has made Van Buren Street much nicer than it used to be (district vision, 3), and I generally use it when I have a flight. For lunch, I stop by one of food carts or small restaurants along the Grand Canal (AoC6 vision, 28, 10).

Once in a while, my family takes the light rail out to meet me near the Grand Canal after work. The kids play in the new greenbelt park (2, 10, 28, AoC6 vision), and I like to avoid the rush hour. Some Saturdays I jog the Grand Canal, and see families picnicking and playing frisbee. My parents can't believe how much the area has changed. There's a great community feel, and I'm happy to spend so much time there.

Business Owner

Our grocery store is doing quite well (1, 2, 18, 19, 24, SLHI). It's a small space, but my husband and I think that our location on Van Buren Street has become a little landmark in the neighborhood. We make sure that all our employees also speak Spanish, because so many of our customers do. That's helped us to hire mostly people who live nearby (1, 18, 19). Some folks live close enough to walk to our store, but many drive, take the bus, or ride the light rail (11, 17, 32).

Because business has been good, we've been able to put a down payment on a recently rehabilitated house (25, 28, 29) a short walk from the store. We've lived here a while, and we're really pleased that our store has helped bring together people in our community (4, 26, 31). Neighbors stop in for groceries, and to say hello, and to chat about how things have changed.

There are more streetlights (SLHI), better sidewalks (SLHI), and things feel a bit safer than years ago (13, 22, 23). Sales at night have steadily improved, and we only see things getting better. We carry products from around here,

including Phoenix Ale Brewery beer, and the business community along Van Buren Street has grown to support each other more and more. There's a few taller buildings going in near the light rail that will probably bring us a few customers, and efforts to restore some of the old homes around here have really improved the look and feel of the neighborhood (1, 2, 8).

Profile: George Hancock, Co-Founder and General Manager of The Phoenix Ale Brewery

"I am George Hancock, General Manager of The Phoenix Ale Brewery located at the corner of E Washington Street and 30th Street. Co-founder Greg Fretz (Fretzy) and I leased the space and started brewing in June, 2011. Six months later, we opened The Taproom, where the public can come in and sample our ales in full view of the brewing operation. We brew eight different styles of beer, and ship them to supermarkets, liquor stores, restaurants, and bars all over Arizona. We will shortly start shipping them to other states, because the market for beers like ours is growing quickly. We really like our brewery building and the location. The local neighborhood made us feel welcome from the start. and the fact that we face the light rail tracks means that thousands of people see the brewery every day. We have great access to the markets in Phoenix, Scottsdale, and Tempe, and it is easy for our suppliers to find us and deliver to us. We are optimistic about the future for the area. There seems to be good momentum for improvements, which would be greatly enhanced by adding a light rail stop at 32nd Street."

3.4 Consistency Analysis of the Gateway Vision

The following section discusses the results of a consistency analysis conducted to identify synergies and conflicts between elements in the Gateway District vision. Consistency is a critical quality criterion for visions, suggesting that they should be composed of compatible goals and free of inconsistencies and conflicts. Incompatible or conflicting goals would provide an ambiguous direction and might lead to conflicting or, at least, non-synergistic developments in the real world (when the vision gets implemented), which might undermine the overall aspirations of the vision (Wiek & Iwaniec, in press). The results of the consistency analysis provide important insights for modifications and fine-tuning of the vision (reconciling potential conflicts) in order to enhance its consistency and thereby its chances of success (delivering on the promise). The full consistency analysis is presented in Appendix to this report.

3.4.1. District-wide Synergies

Access to services: Ultimately, the same services may not be available in every Area of Change, but it is possible for these services to be accessible to all residents, regardless of where they live. The visions communicate a connected district where individuals can easily move between Areas of Change by foot, on a bike, or by neighborhood circulators. It is unlikely that every Area of Change would have a grocery store and pharmacy (both universally desired businesses), but it should be possible to locate new amenities where all District residents can easily access their services.

Housing near jobs: In all areas, housing is proposed in close proximity to businesses and potential jobs. In this vision, many Gateway residents would be able to walk, bike, or ride transit to work, enjoying rapid commute times and costs.

Economic development and safety: Restaurants with patios, and other such businesses with foot traffic, can create a vibrant urban atmosphere. Having more activity on District streets would deter crime. Increases in safety then effectively increase the walkability of the District at night.

Bike and Pedestrian Connectivity: The visions clearly see Van Buren Street and the Grand Canal becoming corridors for bicycle and pedestrian travel. As most Areas of Change border Van Buren Street, people would be able to bike freely not just across the District, but between Areas of Change as well. Pedestrian bridges between Area of Change 5 and the Grand Canal epitomize the types of connections that would not only provide access to the Grand Canal, but would also prevent the Grand Canal from posing a barrier between the communities that border it.

Health: Mobility, economic development, land use, and green infrastructure data all support a healthy lifestyle. Mobility preferences show a desire for walkable and bikeable streets. Economic development data shows a strong interest in groceries and pharmacies. Land use responses show support for mixed-use land development that is walkable and bikeable, as well as civic spaces that promote recreation. Green infrastructure data shows a need for shade that would promote walkability and recreation.

Mixed-Use Development: Housing, mobility, economic development, and land use data predominantly support mixed-use development throughout the Areas of Change. The District-wide vision paints a picture of vibrant mixed-use communities popping up throughout the District, and the synergies across planning elements support this.

3.4.2. Key Synergies by Area of Change

Area of Change 1: Housing preferences show a desire for diverse residents in the area. Prospective residents could fill the service-oriented jobs that would be created under the economic development vision. The most prominent synergies, as in all the Areas of Change, are between health, mobility, and economic development.

Area of Change 2: Diverse housing options like live-work, studios, and lofts support the local entrepreneurs envisioned for economic development.

Area of Change 3: The land use desires for ample parks and soccer fields matches the interest in creating a family-oriented community.

Area of Change 4: The housing vision of transitional housing for the homeless complements the economic development vision of a job-training center.

Area of Change 5: Land use and mobility preferences are supported by all planning elements. This area's vision is very consistent.

Area of Change 6: Mobility is the primary focus, and canal safety and accessibility are key concerns. Increased pedestrian traffic complements interests in economic development.

3.4.3. Potential Conflicts

Friction between areas of change and neighboring communities: Many areas of change border or are in proximity to existing primarily residential neighborhoods. Areas of Change that are predominantly commercial or mixed use may not match the character of neighboring communities. Development should be sensitive to the character of existing communities and develop gradually in transitional spaces between Areas of Stability and newly developed Areas of Change.

Contrasts between a residential neighborhood and entertainment demands in Area of Change 3 (Vacant lot south of the Celebrity Theatre): Area of Change 3 is envisioned as both a quiet residential neighborhood and an entertainment destination next to Celebrity Theatre. Not all residents will find an entertainment district relaxing.

Spatially explicit building heights in Area of Change 6 (The Grand Canal): Quantitative voting data in Area of Change 6 shows even support for two- to three-, four- to five-, and six- to seven-story buildings. Discussions at the Workshops did not identify where specific buildings heights should occur along the Grand Canal, but inferences can be made from the discussions regarding Area of Change 5 (Vacant lot south of Loop 202). The two areas were discussed sequentially at the same table. The vision for the vacant lot included six- and seven-story buildings bordering the Loop 202. As the Grand Canal borders the vacant lot, we assume that these same respondents also wanted taller buildings at the northern end of the Grand Canal, near the freeway. Therefore, as one travels south along the Grand Canal, we would anticipate a transition from six- and seven-story buildings to four- and five-story buildings, and eventually to two- and three-story buildings.

3.5 Sustainability Appraisal of the Gateway Vision

The following section discusses the results of a sustainability appraisal conducted to determine in how far the Gateway District vision complies with the guiding concept and specific criteria of sustainability, as derived from various academic and professional literature sources. Reinvent Phoenix is a grant funded through the U.S. Department for Housing and Urban Development Sustainable Communities Program and has the explicit mandate to foster sustainable community development. Accordingly, sustainability becomes a critical quality criterion for the Gateway vision - not optional, but mandatory. It is important to note that sustainability visions are a specific type of visions. These visions ought to be not only desirable, but also guide us towards a more sustainable future. In fact, there might be tensions between what is desirable and what is sustainable - what is desirable from a short-term or individual or even community perspective might not be sustainable from a long-term and collective perspective. Thus, we expect sustainability visions to comply with multiple value-laden or normative principles, in short, with sustainability criteria (Wiek & Iwaniec, in press). The sustainability appraisal is summarized in the next sub-section (3.5.1); exemplary lead indicators and performance measures are summarized in the following sub-section (3.5.2); and the detailed appraisal with sustainability criteria and a full array of indicators and performance measures is presented in the Appendix to this report, based on a variety of academic and professional sources, including the OSHC "Performance Measurement and Flagship Sustainability Indicators" (Office of Sustainable Housing and Communities, 2012).

3.5.1. Sustainability Appraisal Summary

Sustainable Land Use is characterized, among others, by accessible, compact development on previously vacant land that promotes public health and active living as well as community vitality and cohesion. The 2040 vision for the Gateway District satisfies many of these criteria. Neighborhood stores and parks in walkable/bikeable distance, as well as an enhanced public transit system (for longer distances), addresses accessibility to important services, such as employment, healthy food, and local destinations. High walkability and bikeability speaks to the criteria of promoting healthy, active lifestyles; and, the focus on mixed-use development is in line with compact development designed to reduce vacant land, driving, parking space, and resource use [Lead Indicators/Targets: Reduce supply of vacant land, vacant commercial space, vacant housing units; Reduce supply of surface parking]. One criterion, which is not fully addressed in the land use vision, is building a cohesive community. There is a diversity of housing options, but it is unknown if this leads to the formation of diverse, yet cohesive communities. However, there are good indications that creating neighborhoods where more people are out and walking increases the likelihood of interactions among community members.

Sustainable Housing is characterized, among others, by its ability to foster diverse neighborhoods that are affordable to all residents, with access to goods and services, including employment. It also involves efficient utilization of energy and resources for both the construction and daily function. The housing vision for the Gateway District in 2040 adequately meets the criteria of creating diverse, affordable options for many different types of residents [Lead Indicators/Targets: Construction of a affordable housing units; Reduce housing + transportation costs], and its emphasis on walkability and non-motorized transportation makes the district highly accessible. However, there is little mention of ways to promote local heritage, especially given the diversity of the residents of the district. It will be important to identify ways to ensure that rising prices are not a threat to this culturally and historically rich area. Further, the idea of sustainable construction and sustainable buildings is not addressed. Besides the idea of adaptively reusing historic buildings, it is unclear whether renovated or new buildings will be constructed sustainably (e.g., using reused, recycled, or green materials), or whether the newly constructed buildings will run efficiently (energy use) [Lead Indicator/ Target: Reduce per capita grid electricity consumption].

Key ideas behind Sustainable Economic Development are to create a diverse, place-based economy with an

equitable employment base that provides employees with opportunities to earn a living wage. In its vision for 2040, the Gateway District has created an economy that is diverse and localized, as there is a big emphasis on stores and restaurants that are local, and family-owned. There is also a range of employment opportunities for residents of all skill levels, which include jobs, such as lawyers and doctors, that aim to attract recently graduated students and current professionals, as well as retail and service jobs [Lead Indicator: Employment density]. Unclear is in how far this economy is able to provide universally equitable opportunities for people to earn a living wage. It may be important to ensure that all employees will receive a wage that covers costs of basic needs such as food, transportation, and housing, as well as basic social services (health insurance, etc.). While affordable housing units and more affordable transportation options are present to help reduce housing and transportation costs, it is unclear whether a potential minimum wage job is sufficient without relying on government subsidies.

Features of Sustainable Mobility include a network of transportation options, including those that are motorized and non-motorized, and are safe and accessible for all residents. Having a variety of options should contribute to a reduction in greenhouse gas emissions and also to improvements of air quality. Having diverse mobility options is a priority of the Gateway vision, with great improvements in peoples' ability to walk, bike, and take public transit [Lead Indicators/Targets: Reduce VMT per capita; Increase average weekday transit boardings; Increase Streetsmart Walkscore]. There is an emphasis on creating a districtwide network that allows people to easily get to important destinations, such as healthcare and educational facilities, among other services. There are areas designated for the light rail (Washington Street), cycling (bicycle streets), and walking (calmed streets, Van Buren Street); however, it is not clear if there are any streets that prioritize buses. It may be important to ensure that bus infrastructure is not continued to be put second behind personal automobile infrastructure. It may also be important to highlight how bicycle streets and calmed streets will be maintained in order to stay true to their designation.

The Gateway 2040 vision of *Green Infrastructure* is based on the availability of parks and open spaces, as well as the hybrid landscaping. The element of an increased number of trees aligns the vision with sustainability criteria, as those trees will provide important services such as shade and storm water management [Lead Indicator/Target: Increase tree canopy cover]. The hybrid landscaping design also addresses the issues of drought and water use. However,

due to the urban nature of the district, some elements of green infrastructure are lacking, for instance, natural land and open spaces that conserve ecosystem values and functions. All of the ecosystems found in the area have been altered, and thus cannot provide many of the ecosystem functions provided in more natural areas.

Finally, Health in the Gateway district in 2040 is greatly improved and incorporates key features of active living. The vision addresses convenient and safe access to healthy food, as we see grocery stores, as well as a local market and a variety of local restaurants [Lead Indicators/Targets: Reduce annual bike/ped injuries; Reduce annual bike/ ped fatalities; Increase % of units w 5 min walk to healthy food; Increase % of units w 5 min walk to public recreation]. The addition of a healthy lunch program at school is also vital to the vision's sustainability. However, cohesive and empowered citizenship seems to be lacking from the overall vision. While the vision does touch on greater walkability and an increase in public space, a cohesive and empowered community would see more involvement in community organizations, such as neighborhood associations or youth leadership groups. Another underdeveloped element of sustainable health is the quality of air and water. Part of the district sits on a superfund site, and yet this issue was not addressed in the 2040 vision.

3.5.2. Sustainability Outcomes – Indicators and Performance Measures (Targets)

This sub-section summarizes exemplary aspects covered under planning elements, lead sustainability indicators, and sustainability performance measures (targets) (Table 7). The lead indicators have been included in the sustainability appraisal summary presented in the previous sub-section. Through indicators and performance measures (targets), visions are made tangible and operational, which is an important quality criterion. If visions remain abstract, they do not convey what they entail and imply. Tangible visions enable comprehension and provide clear guidance for designing, monitoring, and evaluating policies and programs. Abstract values and broad goals provide an initial orientation, but they cannot substitute for a tangible vision. A tangible vision is not a suffocating corset that determines each and every detail; it still leaves room for inspiration. Yet, it provides enough substance for imagination to flourish. A key to specifying a vision is the provision of qualitative and/ or quantitative targets, thresholds, tipping points, or other normative reference points. The targets of a sustainability vision should indicate sustainable states, not simply reference states or benchmarks such as 'better than last year' - they ought to rely on sustainability criteria (Wiek &

Binder, 2005; Wiek & Iwaniec, in press). Exemplary lead indicators and performance measures are summarized in the table below; and applied in more detail in the detailed sustainability appraisal provided in the Appendix to this report.

Planning Element / Aspects	Lead Indicators [Johnson et al., 2011]	Sustainability Performance Measures (Targets) [Johnson et al., 2011]
Land Use Use type (residential, etc.) Height(s) Building types Civic spaces (including parks)	 % vacant land % vacant commercial space % vacant housing units % surface parking 	 Reduce supply of vacant land by 50% Reduce supply of vacant commercial space to under 10% Reduce supply of vacant housing units to under 10% Reduce supply of surface parking by 50%
Housing Housing types (diversity) Residents (diversity) Height(s) Reused buildings	 Number of new units of affordable housing Housing + transportation affordability index Per capita electricity usage from grid 	 Construction of a minimum of 100 units of affordable housing Reduce housing + transportation costs by 5 % points Reduce per capita grid electricity consumption by 30%
Economic Development • Types of businesses • Services: retail, markets, etc. • Size: small, medium, large • Types of jobs	 Employment density 	1. N/A
Mobility Street types Walkability Bicycle infrastructure Public transit	 VMT per capita Number of average weekday boardings Streetsmart Walkscore 	 Reduce VMT per capita by 50% Increase average weekday transit boardings by 100% Increase Streetsmart Walkscore by 30 points
Green Infrastructure • Landscaping • Shade • Beautification	 % tree canopy cover Ratio of trees lost to trees planted [Source: City of Phoenix (2010)] 	 25% tree canopy cover [Source: City of Phoenix (2010)]
Health - Recreation - Food - Walkability/Bikeability (Safety)	 Number of annual bike/ped injury Number of annual bike/ped fatalities % of housing w 5 min walk of healthy food % of housing w 5 min walk of recreation 	 Reduce annual bike/ped injury by 50% Reduce annual bike/ped fatalities by 75% Increase % of units w 5 min walk to healthy food by 10 % points Increase % of units w 5 min walk to recreation by 10 % points

Table 7. Overview of aspects covered under planning elements, lead sustainability indicators and sustainability performance measures (targets)

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