

The Scottsdale City Image Study  
A Report to the Redevelopment and Urban Design Studio  
October, 1999

## I. Introduction

From February, 1998, through October, 1998, I served as Designer in Residence for the City of Scottsdale's Redevelopment and Urban Design Studio. My primary research project considered people's perceptions of the visual form, physical character and layout of Scottsdale at the citywide scale.

My underlying hypothesis is that in a large and rapidly growing city like Scottsdale, design at the citywide scale can assume a special importance. City design policies, I believe, can create a clear visual identity—an organized pattern of built form and landscape, or an identifiable, memorable system of public and community places. I call this aspect of city design a "civic framework," and hypothesize that a strong civic framework, clearly linked in people's minds to commonly held values about life in the city, can foster pride and investment in the city.

The goal of this research project was to identify how residents of and workers in Scottsdale might perceive its civic framework—the major elements of its built form and landscape. The expectation was that a better understanding of Scottsdale's civic framework could inform the countless design and planning decisions, public as well as private, that ultimately add up to the city's sense of place. (The research did not test the underlying hypothesis that a well-articulated city form could strengthen people's pride in the city.)

The research involved interviews with 119 people who live and/or work in Scottsdale, using techniques derived from Kevin Lynch's pioneering studies of Boston, Jersey City and Los Angeles.<sup>1</sup> The interviews sought to understand how people

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<sup>1</sup>. See Kevin Lynch, *The Image of the City* (Cambridge, Mass.: MIT Press, 1961). This project was also influenced by work that William R. Morrish, Catherine R. Brown and Grover Mouton

orient themselves in the city, how they interpret the physical form of the city, what places are most recognizable or memorable to people, and how people value the important elements of city structure and areas of the city.

This report summarizes the methods of this research project and the major findings of the research. It presents suggestions for city design policy in Scottsdale and for further research. Appendices provide more details about and tabulations of the specific responses. A version of this report, illustrated with graphics and photographs, will be published jointly by the City of Scottsdale Redevelopment and Urban Design Studio, and the Arizona State University Herberger Center for Design Excellence.

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conducted in Phoenix for that city's public art program in 1988. See William R. Morrish, Catherine R. Brown, Grover E. Mouton, *Public Art Plan for Phoenix: Ideas and Visions* (Phoenix: Phoenix Arts Commission, 1988). One of their main accomplishments was to propose a new dimension to thinking about urban design at the citywide scale—one that I wanted to probe more specifically in Scottsdale.

## II. Studying Large-Scale City Form

There has been little research into the design of urban form at the citywide scale for several decades. After a host of citywide and regional studies were attempted in the 1950s, 60s and 70s, the study of urban form has narrowed to a focus on specific areas or projects.<sup>2</sup> It is important to ask, then, why reviving this type of research is relevant to Scottsdale today.

Following are some potential reasons for being concerned about Scottsdale's physical form and visual character at the citywide scale, some of which are derived from Kevin Lynch's seminal book, *The Image of the City*. All of these reasons, I will argue, have special relevance for Scottsdale.

- A city's legibility, or the ability people have to understand a city's layout and orientation, is important to the well-being of the people who live in, work in and visit a city. The legibility of a city affects people's ability to organize their activities in the city, helps them feel secure in their environment, and can heighten the depth and intensity of experience they have in the city.

In Scottsdale, legibility can be important for both tourists and residents. As Scottsdale is a large city, a rapidly growing city and a city that has strong controls on commercial signage, residents, workers and tourists must rely on other clues to understand how to get around. This is especially important as Scottsdale plays host to hundreds of thousands of visitors, who need to feel comfortable in getting about the city.

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<sup>2</sup>. A good review of this literature can be found in Jack Nasar, *The Evaluative Image of the City* (New York: Russell Sage Foundation, 1998).

- The physical form of a city can be one of its most distinguishing characteristics. Consider the memorability of San Francisco with its hills, New York with its skyline, or Venice with its canals.

In Scottsdale, this is important because many people say they are attracted to the city as residents, business owners or visitors because of distinguishing characteristics, such as its vivid Sonoran landscape and mountains. Voters have repeatedly affirmed the importance of the physical form of the city in referenda establishing mountain and desert preserves, the Indian Bend Wash park system, and certain signage controls.

The conservation of distinguishing aspects of a city's form can be important to the city's economic health, particularly if its economy is partly dependent on tourism, as is Scottsdale's.

- People can build strong attachments to clear, differentiated city forms such as prominent natural features or buildings, or neighborhoods with distinctive visual character. One could hypothesize in turn that strength of attachment to the form of the city is related to one's social and political connection to the city—one's willingness to identify oneself with it, to invest in it, to be a citizen.

In Scottsdale, this is important because rapid growth in the city, both in terms of geography and population, has caused people to question what the city's fundamental essence is. If Scottsdale is no longer a small city of a few square miles, or a moderate-size city of 65,000 residents, what is it? The form and structure of the city must be defined anew through public investment, regulatory and conservation strategies, but in ways that convincingly embrace the long-held values of its residents within the reality and experience of the new city.

- Having an understanding of or a vision for the overall form of the city might clarify decisions that are to be made on an areawide, neighborhood or site basis.

Scottsdale already plans at the citywide scale, through its General Plan and various vision plans (Scottsdale Shared Vision, Cityshape 2020). Many of the provisions of this planning express a vision for the overall physical form of the city, most notably the Environmental Design Element of the General Plan.

The relationship between the overall form of the city and distinctions among different areas of the city is also approached already in the General Plan. The Environmental Design Element, for example, make distinctions between landscape character, development form and street design that are appropriate in different areas of the city. The ongoing Character Planning process seeks to initiate more in-depth area specifically planning, including consideration of area-specific design issues.

### III. Methodology

To learn about Scottsdale's physical form and visual character, we began by researching the way people understand the structure, identity and appearance of Scottsdale.<sup>3</sup>

We interviewed 119 people, asking them to answer questions, draw maps, identify pictures of streets and places, and rank pictures of various streetscapes in terms of their preference. This was not a simple survey or a multiple choice test, but a series of open-ended questions that led to conversations, some of which lasted two hours. Because of the length of the interview, and because of the unpredictability of the time that might be spent discussing any particular topic, not every participant was asked every question.

Participants included: city staff, members of various boards, commissions and neighborhood associations, participants in Scottsdale Leadership and Scottsdale Voices programs. Other participants were referred by people who had already been interviewed or recruited by people who received an invitation letter, or who had responded to a newspaper article, cable broadcasts or public lectures about the project.

While the range of interviewees strongly reflected the city's geographic diversity, younger city residents and people who had recently moved to the city were probably underrepresented.

As a condition of the interview, participants were told that their involvement in the project would be kept confidential (e.g., none of the names of the participants would be released) but that any of their comments might be incorporated into a public research report.

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<sup>3</sup>. Interviews were conducted by Designer in Residence Todd W. Bressi and interns Dan Sirois and Anthony J. Craig.

Most participants were interviewed in the offices of the Redevelopment and Urban Design Studio, although many people were interviewed at other locations of their choosing. These included workplaces, community centers or clubhouses, or restaurants throughout the city. The interviews were conducted from April through October, 1998.

### Interview structure

The questions asked are derived from the questions Lynch asked in his research, but were modified for the special circumstances we found in Scottsdale. Examples include:

- What is the first thing that comes to mind when you think of Scottsdale?
- Suppose I were visiting Scottsdale from out of town, and had never been here before. What one place would you take me to show me what you think the real Scottsdale is like? Can you describe what that place is like?
- What elements of Scottsdale do you think are most distinctive or vivid—places that are easiest for you to describe and remember?

In requesting people to draw maps, we asked:

- Please draw a map of Scottsdale, just as you would describe it to someone who wasn't very familiar with the city, putting on it all the important places, areas and ways to get around you think they should know about.

Questions added that are more particular to Scottsdale include:

- What area or place do you consider to be the center of the city? What makes that the city center?
- If you had to draw a line between north and south Scottsdale, where would it be? Can you describe the difference between the two areas?



- What places in Scottsdale—in your neighborhood or anywhere in the city—give you a sense of community? Can you describe the sense of community you have in that place?

The photo-response discussions generally involved three sets of photographs. First, respondents were shown various snapshots taken along main arterial streets and asked to rank the streets in order of preference, asked to explain what they reacted to positively or negatively in each snapshot, and to identify the streets. Respondents were then shown a second set of snapshots taken along main arterial streets, asked to identify the streets, and asked to describe the element of the streetscape that helped them identify the street. Finally, respondents were shown a series of snapshots taken in the northbound lanes of Scottsdale Road and asked to put them in the proper sequence, as they would be encountered by a driver heading in a northerly direction.

#### Data recording process

For open-ended verbal questions, interviewers took written notes of the conversation. For mapping questions, we retained the written maps that participants drew and tabulated the elements that were drawn; we also recorded the order in which participants drew various elements, so as to better understand which elements of city form were most important in helping people structure the form of the city. For the photo-response questions, interviewers used tally sheets to record preference, identification and sequence responses; the interviewers also took written notes of responses to follow up questions, such as. "What did you see in that picture that helped you identify the street?"

#### Data analysis method

For open-ended verbal questions, we highlighted and recorded key phrases. We then tabulated the frequency of various phrases (grouping phrases that covered similar ideas).

We tabulated the mapping data in two ways. First, we counted both the frequency with which various physical elements were drawn. Second, we noted the relative order in which they were drawn (that is, was Scottsdale Road the first element drawn? The second? The third?). Each element was given a score in terms of frequency and in terms of the order in which it was mentioned (first quartile, second quartile, third quartile, fourth quartile). The "frequency" tabulation provides a one-dimensional picture of how vivid or memorable a particular element of the city is. The "order" tabulation provides a sense of how important that element is to a person's understanding of the layout of the city.

We tabulated the photo response questions in two ways. First, we counted how many times each image was identified correctly or not identified, which resulted in a percentage score for each image. Second, for the preference questions, we gave each image a score based on the relative preference that respondents expressed for that image (e.g., out of a group of nine images, most preferable would have been ranked #1, least preferable would have been ranked #9). These were averaged to find a mean score for each image.

#### IV. General Findings

Several major themes about Scottsdale's visual character, physical form and layout emerged from the interviews.

- Respondents recognized and valued several of Scottsdale's basic visual characteristics, particularly its natural appearance and understated physical presence.
- Respondents could describe many of the basic elements of Scottsdale's layout or structure, such as the pattern of mountains, streets and canals. Except for the mountains, however, the appearance of these elements was not always highly valued.
- Respondents remarked upon only a small number of specific places, primarily commercial and civic areas, with enough frequency that they could be considered part of a citywide shared landscape.
- Respondents recognized the general character of various areas of the city and the streets that run through them. But they could not describe specific details about these places very clearly.
- Respondents generally considered it easy to find their way around the city, although they considered it more difficult to get around specific neighborhoods.
- Scottsdale's structure is changing, it is becoming a city of multiple parts.
- Respondents regarded downtown as important to Scottsdale for the cultural, tourist and political activities that occur there, and its layout and image were generally clear to respondents. However, it is not a part of most respondents' everyday lives.

- Respondents regarded the Sonoran landscape as a very important aspect of the city's visual character, but were less able to express how the Sonoran landscape affects the city form. Respondents who have lived in the city for a long time feel increasingly remote from the desert as a place that is part of their everyday lives.<sup>4</sup>

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<sup>4</sup>. The word "desert" was generally, and imprecisely, used by respondents to refer to the valley floor and to indigenous patterns of vegetation and wildlife found both in the valley and on mountain slopes. It would be more accurate to use the term "Sonoran landscape" or "upper Sonoran landscape." Throughout this study, the word "desert" will be used to describe respondents' impressions of the city, but the term "Sonoran landscape" will be used in summaries or recommendations.

Finding #1: Respondents recognized and valued several of Scottsdale's basic visual characteristics, particularly its natural appearance and understated physical presence.

Respondents repeatedly stated a clear appreciation for Scottsdale's natural setting and the understated physical presence of the city. They also consider the city's unusual shape and the rapid pace of change basic elements of the city's physical character.

*A. Scottsdale is described as a "clean" and "neat" city, as an "open," "spacious" and "low" city.*

In terms of cleanliness and neatness, when asked what elements of the city gave that impression, respondents generally discussed streetscapes and residential neighborhoods. They noted well-maintained streetscapes (both arterials and neighborhood streets) and policies that emphasize landscaping along the edges of streets over buildings, parking lots or signs.

Some respondents who mentioned "cleanliness" or "neatness" attributed that aspect of the city's character to public policies, such as signage ordinances. Others attributed it to "pride" on behalf of landowners, either homeowners or associations.

Some respondents related the city's clean, neat, uncluttered appearance to its social structure, remarking that Scottsdale is an "upscale" place, "wealthy," "affluent" or "exclusive." Others related these characteristics to its resort economy or "leisure" lifestyle. In this respect, the city's efforts to maintain an ordered landscape have significant meaning, communicating a certain aspect of the city's values.

In terms of openness, respondents referred in part to the city's desert character and large amounts of unbuilt land, and in part to the form of built-up areas—the low scale of buildings and the way that buildings are set back from major streets. Some respondents even mentioned the prevailing low

scale of native vegetation, which contributes to open views and contrasts dramatically with the height of saguaros.

Sometimes, however, respondents described the sense of openness by using words that have mixed connotations, such as "spread-out" or "sprawling," "monotonous" or "homogenous," and "centerless."

*B. The landscape—the desert and the mountains—figures prominently in people's descriptions and image of the city.*

Respondents considered Scottsdale to be a desert city. The aspects of the city's design that give this sense is evidenced in responses to a number of questions. For example, respondents said they preferred streetscapes that are comprised of native vegetation. They also commented positively on the open, undeveloped character of the northern part of the city.

Mountains figured prominently in respondents' mapping of the city, and street views with mountains in them tended to rate more highly than street views without mountains, all other factors being equal. Respondents often mentioned mountains anecdotally in our conversations, as in describing their daily trips around the city.

A landscape element remarked upon far less frequently, but with equal passion when it was mentioned, was the sky. Respondents commented in particular on the sunsets, the play of light on mountain faces and the clarity of the night sky. The expanse of the sky may figure subliminally into comments about the openness of the city.

*C. Scottsdale is understood as a city that is "long and skinny."*

Asked to describe the general physical character of the city, a remarkable number of respondents said "long and narrow." Asked to map the city, most respondents began by drawing the

boundaries of the city, replicating its long, rectangular form.

How people's sense of Scottsdale's unusual shape relates to their sense of the structure of the city, or how they organize their activities within the city, is less explicit.

Some respondents remarked that the length of the city, combined with the lack of through north-south routes, makes it difficult to travel from one end of Scottsdale to the other. Indeed, respondents were just as likely to organize their lives laterally, working and shopping at places accessible along major east-west corridors, as they were to organize their lives in a north-south direction.

*D. Scottsdale is regarded as a city of change, much of it for the worse.*

For many respondents, the sense of Scottsdale's character is intertwined with the rapid change the city has undergone.<sup>5</sup> It is a city where familiar places, familiar patterns of movement and activity, and familiar streetscapes and views seem to be constantly remade. In certain ways, Scottsdale is far more dynamic than areas that are already heavily urbanized, and for many people this is unsettling.

Few respondents spoke of those changes in a positive light; some directly critiqued the city's rapid development, others regretted changes to places and landscapes that had been familiar. Many complained of the poor quality or the unvarying visual character of development in certain parts of the city, compared to their expectation of the quality that would occur in Scottsdale.

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<sup>5</sup>. In the interview, we did not ask respondents directly about their opinion of growth, or their opinion of the character of new development. The comments reported in this section are drawn from responses to various questions, primarily the question, "What is the first thing that comes to mind when you think about Scottsdale?"

Finding #2. Respondents understand many of the basic elements of Scottsdale's layout or structure, such as the pattern of mountains, streets and canals. However, the appearance of these elements is not always highly valued.

The layout of arterial streets, the greenbelt, the canals and the edges of the city are remarked on with consistency and clarity. Respondents use these elements in various ways to understand their way around the city, or what part of the city they are in.

However, while these elements are understood as important parts of the city structure, they are not necessarily recognized as being special or memorable because of their design quality.

There are omissions in people's sense of Scottsdale's layout, as well. With the exception of Indian Bend Wash, people generally do not consider parks and open spaces, or the trail and path network, to be elements of the city structure.

And there is a clear disjunction between people's appreciation of the landscape's visual qualities and their understanding of how the landscape influences the structure of the city.

*A. Overwhelmingly, the arterial grid is the most commonly recognized element of the city's structure.*

The grid is very often one of the first elements drawn in a map of Scottsdale or downtown Scottsdale, and the grid is recognized as a major component in making it easy to find one's way around Scottsdale (and the greater metropolitan area). Moreover, respondents know how the grid basically works— that there are three main north-south streets and that main east-west streets occur at regular intervals.

However, respondents are less clear, at least when they draw general maps of the city, about where important breaks in the grid are—for example, where Pima Road and Hayden Road end, or which east-west streets connect to Pima and which don't.



*B. The design of arterial streets contributes strongly and positively to Scottsdale's image.*

Some of the general design or visual qualities of arterial streets also contribute to people's sense of place, such as the openness and cleanliness mentioned before. This is evident in the landscaping and maintenance along many streets, the depth of setbacks, the lack of commercial signage clutter and the frequent views of mountains—all remarked on frequently in discussions of street preferences. The prevalence and quality of landscaped medians was especially regarded as a characteristic that sets Scottsdale apart from other cities.

But asked to name the most vivid element in the city, or a place that they would show visitors, respondents rarely mention a specific street. And asked to name their favorite street in the region, two out of three respondents chose a street elsewhere, most often Mill Avenue in downtown Tempe or north Central Avenue. Hayden Road was mentioned more than any other street in Scottsdale, about as often as Central and Mill were.

Scottsdale Road was identified as an element of city form more than any other street. It was one of the first and most frequently drawn elements on both city maps and downtown maps. It was one of the best recognized streets, compared to the range of streets shown in photo recognition tests. Its character is well known, as most respondents, given a mixed-up series of photos taken along Scottsdale Road, were able to place most of the images in the right order. Several respondents said they would specifically drive visitors along the length of Scottsdale Road so they could see the diversity and evolution of the city, and several even listed it as their favorite street.

But respondents did not rate most of the streetscapes along Scottsdale Road very highly in terms of preferability,

compared to other streets in the city. It is not a street in which respondents seemed to have a strong degree of pride.

Hayden Road is valued, primarily for the sections that pass through Indian Bend Wash and McCormick Ranch. Respondents said they enjoy the lushness of the landscape, the high quality of maintenance and, for northbound drivers, the dramatically framed views of the mountains.

Most respondents recognized that this special, lush planting is not native, but they said they appreciated it nevertheless because it is neat and clean, it gives a sense of respite, and it is like landscapes in places where they lived at other times in their lives. Some respondents said they did not like the visual character of Hayden Road because its landscaping is not native.

*C. People have a clear sense of most of Scottsdale's edges.*

Respondents often used Scottsdale's boundaries to help orient themselves when drawing the layout of the city. They said they recognized some of the edges because of the change in landscape or development patterns (particularly along edges to the east and north).

The edge to the west is often confused with the path of Scottsdale Road, which overlaps the city boundary for part of its length. The southeast edge of the city, with the largely undeveloped lands of the Salt River Pima Maricopa Indian Community, was remarked on with clarity in a majority of the maps.

The strength of Scottsdale's edges is also related to the character of the streets that lead into the city. Asked to name their favorite gateway, respondents named streets with an open landscape character and relatively free flow of traffic as they approach the city, and strong change in character near the city boundary.

Along these streets, the visual character changes significantly outside the city boundary. (For example, Galvin Parkway and McDowell Road were mentioned because they conveyed the sense of passing through the desert to get to the city; Camelback Road and Lincoln Road were mentioned because of the character of the neighborhoods they passed through.) Also, most of the streets mentioned frequently at memorable gateways have curved sections just at or outside the city boundary, contrasting with the grid within the city (Camelback from Phoenix, Galvin Parkway from Phoenix, Indian School from Phoenix, McDowell from Phoenix, Shea from Fountain Hills, Scottsdale/Tom Darlington from Carefree).

Where gateways are marked by public art projects (Indian School Road, various exits from Loop 101/Pima Freeway), those projects were noted by respondents who selected them as memorable gateways. The only exception was Phoenix's "City Boundary Project," which was not mentioned by any of the respondents who choose either McDowell Road or Galvin Parkway.

*D. Canals are mentioned frequently as an element of structure.*

The Hayden-Rhodes Aqueduct (Central Arizona Project/CAP canal) figures more prominently into maps than the Arizona Canal. Canals are generally not discussed as places or locations, but as markers or breaks in the pattern. For example, in descriptions of the boundary between "south Scottsdale" and "north Scottsdale," the CAP canal was mentioned frequently; the Arizona Canal was mentioned infrequently.

*E. The only element of the park, trail or path system that registers routinely as an element of city structure is Indian Bend Wash.*

Very few maps depicted any element of the park, path or trail system, even the path that runs the length of Indian Bend Wash, connecting south to the Rio Salado and north to master-planned communities via Camelback Walk.

*F. Although respondents considered the landscape, particularly the mountains and the desert, essential aspects of Scottsdale's character and quality, they did not generally recognize the landscape, or the terrain, as a fundamental generator of the city's form.*

Respondents generally commented on the visual character of the city's landscape features, with a smaller number commenting on the experience of being in the mountains or the desert.

Some mountains—the McDowells, Camelback and Pinnacle Peak—appear frequently on the maps respondents drew of the city. But other mountains, such as Mummy Mountain, Saddleback, Papago Buttes or the Superstitions, do not appear very often on maps, even though they frame views from roads and other public places.<sup>6</sup>

Respondents seemed to regard the mountains primarily as a visual backdrop. They were strongly aware that mountains terminate many of the views along major roads—and valued this highly. This figured strongly into their evaluation of why they like or don't like a streetscape, for example; some respondents told us they organize their commutes, or their trips around the city, so they could take roads that had great views of mountains, and others talked of the therapeutic effect of driving home after work, toward the McDowells, and seeing the setting sun reflected on the face of the mountains.

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<sup>6</sup>. Many of the mountains that surround Scottsdale, such as Mummy Mountain, Camelback Mountain, and Papago Buttes, or which are visible from Scottsdale, such as the Superstitions, are not within the Scottsdale city limits. Respondents referred to them in various ways. Mountains like Camelback, Mummy and the Papago Buttes were mentioned often as specific reference points or landmarks. Others were mentioned as giving views from parks and roads a sense of closure. Therefore, while not technically in the city limits, they are integrally part of people's experience of the city, or its landscape.

To a lesser extent respondents recognized specific mountains as visual landmarks or as boundaries, in other words, as significant elements of city structure. Specific peaks are sometimes used for reference, generally by people traveling along main roads, and sometimes the McDowell range is used by people as a reference to know if they are heading east or north (since the range runs almost at a 45-degree angle).

Respondents were less likely to convey a sense that mountains nearly surround Scottsdale, arguably constituting an edge of sorts. While it's true that the city's boundaries are not contiguous with the mountains mentioned above, is also true that mountains do close many views from major streets and open spaces in the city. On three sides—east, north and west—mountains arguably do frame the boundaries of the city. Yet few people talk about Scottsdale's layout in this sense, as a city nestled in a bowl of mountains.

Respondents conveyed little perception of the terrain as generator of city form. They spoke very infrequently about the slope of the land, rarely communicating any sense that the city slopes, almost continuously, from northeast to southwest.

Yet the slope of the land is critical to the form of the city. It creates the stunning views from the north into the valley. It conditions the flow of water along the washes—water rolls off the mountains, spreads across the land in sheets, and percolates into the soil. And it influences the type of vegetation that is native to various parts of the city.

Respondents rarely spoke about the network of washes, which strongly influences the pattern of development and conditions the experience of driving along many of the roads in the northern part of the city.

Finding #3. Only a small number of specific places, primarily open spaces and commercial areas, were remarked upon with enough frequency that they could be consider part of a citywide shared landscape.

*A. Civic Center Mall and Indian Bend Wash are the places that respondents remembered most frequently and vividly, and the places they valued most highly.* Several factors seem to be associated with the memorability and positive identity of these places: their public and social nature, their landscape qualities and the diverse range of activities they sustain.

By far the most memorable, valued place is Civic Center Mall. Although respondents recognized it as important to the city in a symbolic way, they also said they value it for reasons that demonstrate active engagement with the place—for the quietness and tranquillity of the space, and for the special activities and events that occur there.

Civic Center Mall, more than any other urban place described by respondents, is a place where people connect with a full range of their senses. Respondents talked about the smell of the flowers in the landscape or of food cooking in restaurants; the contrast of the heat and the shade, light and shadow; and the sounds of water, music and people talking.

The second most memorable, valued place was Indian Bend Wash, which is a long, narrow string of parks, golf courses and open spaces that also serves as channel for flood waters. The wash was often remarked upon as a community space, a place Scottsdale has built with pride. It was valued for the many activities one can take part in there, because it is a place where you can see other people, and because of its lush, oasis-like landscaping. The wash was also recognized with pride as a great engineering accomplishment, as it serves as a major drainage corridor.

Interestingly, when respondents were asked to respond to the open-ended question, "What is the first thing that comes to mind when you think about Scottsdale," Indian Bend Wash was mentioned far more frequently than Civic Center Mall. Yet the qualities of the place mentioned in conjunction with that answer are similar to those given by respondents who considered it a vivid place, or a place that embodies what Scottsdale is all about. We speculate that the wash may be mentioned more as "the first thing that comes to mind" because it is larger and, since it runs parallel to Hayden Road for part of its length, more visible; because it may figure more into people's ordinary lives; and because it may define Scottsdale more uniquely (as a remarkable engineering and park planning accomplishment) than Civic Center Mall.

*B. Respondents also considered a handful of commercial districts—Fifth Avenue, Old Town and Fashion Square as places that demonstrate what "Scottsdale is all about." But they did not speak of these places with the same, unequivocal pride that they expressed for places like the Civic Center or Indian Bend Wash.*

Fifth Avenue, Old Town and Fashion Square were regarded by respondents as the heart of downtown's retail activity, as well as places that capture something of Scottsdale's essence. Respondents mentioned these places more frequently in verbal descriptions of downtown and drew them more frequently on maps of downtown than other downtown places or districts, such as West Main or Marshall Way.

Respondents tended to describe Fifth Avenue and Old Town as tourist places, and they characterized those places with a mix of favorable and unfavorable comments. They praised the comfortable scale, consistent architectural character and interesting layout of these districts but criticized the overwhelming presence of cars and the poor mix of businesses.

Of these three areas (Fifth Avenue, Old Town, Fashion Square), Old Town aroused special passions. Respondents said they also regarded Old Town as a place that marks Scottsdale's beginnings—still clear in some people's memories—as a small community where downtown was the community center. This emotional or historic connection, however, did not translate easily into respondents' assessment of downtown's visual character. There was little mention (either in the mapping exercise, or in the extended verbal descriptions we requested of downtown) of the remaining, genuine connections to the city's history—such as Cavaliere's Blacksmith Shop, the Little Red Schoolhouse, and the church at Brown and First streets. Respondents were more likely to describe Old Town in terms of tourist-related shopping blocks—the commercial architecture is described as “hokey” and the area is lamented because “real stores aren't there, not the way it used to be.”

More respondents said they used Fashion Square in their ordinary lives, though generally not on a regular basis. While respondents said they enjoyed its activity and flash, some expressed concern about its inward orientation and overwhelming scale. (It should be noted that most of these interviews took place before the completion and opening of the new south wing of Fashion Square Mall, which might influence people's descriptions of or perception of the mall.)

*C. Few of Scottsdale's residential areas appeared frequently in maps or in discussions of places that are vivid or where visitors might be taken. McCormick Ranch, however, is the most imageable of Scottsdale's residential communities.*

McCormick Ranch was mentioned frequently in conversations, though seldom as a vivid place or a place to take visitors. Respondents remarked on its street pattern in discussions about their sense of orientation in the city; they remarked on its landscaping in discussions about street design; and they remarked on the contrast between its master-planned character



and the gridded character to the south, sometimes noting McCormick Ranch as a zone of transition, or a boundary, between south and north Scottsdale.

*D. Other commercial areas, while mentioned frequently, are remembered more for their activity than for their visual character.*

Respondents mentioned the Airpark and the Shea–Scottsdale areas often as major activity centers, sometimes even as emerging centers of the city. But respondents rarely mentioned them as vivid places, or described them in discussing trips around the city; apparently respondents do not carry a strong visual image of these places in their minds.

*E. What makes places memorable?*

Most of the places remarked upon as vivid and memorable areas of the city have a degree of architectural uniqueness or consistency, and most of them are centers for various types of activity, as well. But there are other factors to consider, some of which involve the relationship between these areas and the larger civic framework.

- Most of the places regarded as vivid can be experienced at the pedestrian scale, at a slower pace that allows for different levels of enjoyment. Indeed, the two most valued places, Civic Center Mall and Indian Bend Wash, elicited a wider range of sensory reactions than most other places in the city, except for the desert and the mountains.

Moreover, all of the places regarded as vivid (except for Civic Center Mall and Fashion Square Mall) can be experienced at both the automotive and pedestrian scales. It is likely that these two scales of experience tend to overlap and reinforce each other in people's minds.

- Most of the places regarded as vivid are anchored to major arterial streets—thus, they are linked perceptually to the city grid, which is the most recognized organizing

structure of the city. McCormick Ranch, for example, is integrally related to the design of several arterials (Via de Ventura, McCormick Parkway, Hayden Road), which sets it apart from most other planned communities, such as McDowell Mountain Ranch, Greyhawk and Scottsdale Ranch.

In downtown, this anchoring works at two scales. Most major areas (except Civic Center Mall) address the grid (Scottsdale Road, Indian School Road and Goldwater Boulevard) at entry points with streetscape elements that are carried into the center of the districts. They are also aligned along the evolving pedestrian corridor that connects Civic Center Mall to Fashion Square Mall.

- Most of these places consist of multiple or linked elements or spaces. For example, Civic Center Mall incorporates three important civic institutions—city government, the public library and the Scottsdale Cultural Council—that are represented by architecturally memorable buildings. Civic Center Mall, Indian Bend Wash and Fashion Square also consist of multiple spaces that accommodate a range of everyday activities and special events.

In this sense, Fifth Avenue, Marshall Way, the West Main gallery district and Old Town operate as a large district that is linked by the Main–Marshall pedestrian corridor and reinforced by regular events like Artwalk. These multiple, linked spaces and facilities allow for more people to encounter these areas in their own way, increasing their chances of registering as an element of the civic structure.

Finding #4. Respondents were able to convey a general sense of the character of different parts of the city, or the character of places they encounter every day. But they cannot describe very clearly specific details about these places.

Respondents seem to understand and appreciate Scottsdale's form on a general level. But details about the city's character seemed to reside beneath their consciousness, or beyond their ability to express, or were just not noted at all. We observed this in discussions of arterial streets, neighborhoods, memorable areas and specific landmarks.

#### *A. Arterial streets*

Respondents demonstrated a strong understanding of the layout of the grid system and said they rely heavily on the grid system to find their way around the city. However, the ability of respondents to recall the visual character of the streets they frequently travel, or to identify specific streets from photographs, is less consistent.

For example, we asked respondents to describe a route that is familiar to them, such as their trip to work. While respondents had a relatively easy time giving directions, they rarely described the visual character of the roadways along which they would travel or of the areas through which they would pass. When prompted to comment more specifically on the visual characteristics of the routes or landmarks they might see, or to name specific landmarks they might see at important intersections in their journeys, most respondents could describe only the general landscape or streetscape character, not any individual structure, elements or other landmarks.

How well do people recognize streets? There is no absolute standard to go by. In this research, when shown photographs of specific arterial streets, respondents were not able to identify many of the streets consistently. The most identifiable streets were those that had some unique landscape or streetscape elements, often coupled with a high volume of

traffic (indicating heavy use). These included the stretch of Hayden Road in McCormick Ranch, Scottsdale Road in downtown and in the northern desert, the section of McDowell Road that is lined with auto dealerships, and the Doubletree Ranch Road gateways to Gainey Ranch.

The inability of respondents to recognize other streets more consistently may be due to a simple lack of familiarity—after all, Scottsdale is a large city and people have very focused territories within it. This may also be due to the lack of distinctiveness of streets. Interesting, respondents generally could identify the area of the city in which a street is located, even if they did not know the name of the specific street, or confused the street itself with one that is very similar.

What clues do people use to recognize streets, or the area of a city in which a street is located? Most often, respondents noted the general streetscape and landscape character of the street environment itself—a remarkable accomplishment of city street design policies (occasionally, respondents used the number of traffic lanes to help determine the identity of a street; other elements included walls, power transmission line, or gateway features, such as the landscape elements along Doubletree Ranch Road at the entrances to Gainey Ranch).

Secondarily, respondents used regional landscape features, most often the view of a far-off mountain or the adjacency of undeveloped Sonoran landscape. Or they recognized the general character of adjacent development, such as the auto dealerships along McDowell Road. (Viewing images of McDowell Road, respondents often identified the street on the basis of the visibility of the dealerships, and they further determined the direction of travel from the views of Papago Buttes.)

Very few respondents recognized a street based on the presence of a specific built element of the city, such as a building. For example, one group of respondents was shown an image taken

on Camelback Road looking east through the intersection with Scottsdale Road, with a view of the Fashion Square office tower (at the northwest corner of the intersection) in the foreground. While many respondents did use this building to recognize the intersection, few were clear as to whether the image was taken on Scottsdale or Camelback, or as to which direction they were facing.

Respondents often remarked in the interviews that as good drivers, they pay attention to the traffic, not the roadscape, and there is likely truth to that. Yet, that respondents could pick up on some visual clues belies the comment that they are not paying attention to the landscape. The juxtaposition of responses suggests that while street character is recognizable when prompted with photographs, there is little along the roadscape that is so vivid that it penetrates into people's consciousness. This, too, could be an outcome of city street design and development policies, which require generous setbacks and landscaping that effectively screen buildings from the driver's field of vision.

### *B. Neighborhoods*

Respondents conveyed a basic although incomplete sense of the different residential areas of the city, such as the tract homes south of downtown, the "ranches" (McCormick Ranch, Gainey Ranch and Scottsdale Ranch), the rural properties and planned developments further north. These distinctions came out primarily in discussions of the character of north and south Scottsdale, or when respondents were asked specifically to describe the different areas of the city; the different areas were not identified consistently in maps of the city or discussed often as vivid places, or as places to take visitors.

Most often, respondents were able to contrast the extremes, such as developments like the Hallcraft homes south of downtown and like McDowell Mountain Ranch north of the Hayden-

Rhodes aqueduct. They were less clear about the character of the developments in between Shea Boulevard and the Hayden-Rhodes aqueduct, often referring to the area as a "sea of red tile roofs." They rarely remarked upon the rural sections that still exist along Cactus Road and south of the Airpark, or areas east of the Hayden-Rhodes aqueduct along Shea Boulevard.

In these comments, respondents generally referred to basic elements of neighborhood form, such as house and lot sizes, subdivision and development patterns, and landscaping strategies. Respondents were less likely to describe a neighborhood in terms of a specific, memorable element, such as a park, a school, a shopping facility, unusual house, landscape element or landmark of any another sort. Nor did respondents express a strong sense of architectural and typological distinctiveness for various neighborhoods: few areas had house types that were so memorable that people could describe them in clear detail (the Hallcraft homes south of downtown were most memorable in this regard). Yet these are the characteristics, such as a memorable landmark, an important community element, or a particular building type, that contribute to neighborhood identity in community after community elsewhere in the U.S.

Aside from master-planned communities, respondents did not know the names of many neighborhoods.

### *C. Memorable areas*

We asked respondents to describe in detail the visual character of the places they found most memorable or the places they would take visitors.

The descriptions of many areas and places usually focused on general characteristics. For example, a description of McCormick Ranch noted its "domesticated landscape" and "California style"; a description of the Borgata shopping center noted its "old world feel, cobblestones, shops, places to linger" and that it was "not dominated by parking." A

description of the McDowell Mountains mentioned their "unique shape," adding that "you can recognize them in a picture," without actually describing the shape.

What is missing from many of the descriptions we were offered are the details—details of innumerable general characteristics that people are responding to, such as colors, materials, landscape elements or palettes, light and shadow, architectural type and style, or even the shape of the McDowell Mountains.

#### *D. Landmarks*

In his book *Image of the City*, Kevin Lynch argues that one of the basic elements of urban form is a "landmark." He does not use the conventional historic preservation definition of "landmark"; rather, he describes a landmark as a visual point reference, important for their external appearance, not because they can be entered or because of what happens inside. A landmark is a visual element that can be singled out from many things, and can be regional, such as a skyscraper or a mountain, or local, such as a steeple or a monument.

Of all the elements of city form that Lynch describes, respondents remarked upon landmarks least frequently in the course of the interviews, to a degree that seems to make Scottsdale unusual.<sup>7</sup>

Several elements of the city did appear frequently enough on maps, or in descriptions, that they could be considered to be widely agreed upon landmarks—Camelback Mountain (in Paradise Valley, but visible from Scottsdale) and Pinnacle Peak are the primary examples. Other elements of Scottsdale's natural landscape, such as Papago Buttes and Saddleback Mountain, might also be considered landmarks, although respondents

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<sup>7</sup>. This is a general statement made by the research team. We have not undertaken to compare our findings to those of other studies; indeed, because of the variation of research methods from study to study, it might be very difficult to do so.

identified them mostly during street identification questions, not in the maps they drew.

Several buildings might qualify as landmarks, as well, most notably City Hall, the Civic Center Library and the Center for the Arts. These buildings were both mapped and mentioned frequently, though most often because of the activities that occur inside them or the institutions they represent, rather than their visual appearance or prominence—leading us to question their function as landmarks in the sense that Lynch suggests.

Fashion Square was mentioned frequently, but at the time of the interviews it had less of a visual presence than the civic buildings; as noted above the Fashion Square office tower at the intersection of Scottsdale and Camelback roads was used as a landmark to help identify that intersection in photo recognition questions. (With the completion of the Fashion Square bridge over Camelback Road, the mall may in fact become one of the city's most familiar visual landmarks).

Still, the paucity of places or elements remarked upon as landmarks was surprising. Some indications of this, also discussed elsewhere in this report, are:

- While Main–Marshall pedestrian corridor downtown was clearly an understood element of downtown's structure, the sculptures and elements that have been placed at strategic along it were rarely identified. The Yearlings, the cowboy at the Scottsdale–Main intersection, the Jack Knife sculpture at West Main and Marshall, and the fountain at Fifth and Marshall each mark prominent intersections, sightlines or transitions in character; yet each was each mentioned only a handful of times throughout the course of all our conversations.
- In discussions of downtown, intersections are used as reference points to mark the center of the city or the



center of downtown much more frequently than specific landmarks were.

- Respondents rarely identified visual landmarks when describing routes they commonly traveled through the city; either as benchmarks to help them measure the distance they have come, or as signals to turn at certain intersections.

- Respondents rarely identified neighborhoods by associating them with either visual landmarks or specific centers of community activity.

Finding #5. Respondents generally considered it easy to find their way around the city, although they considered it more difficult to get around specific neighborhoods.

Asked whether Scottsdale is an easy city to find one's way around, nearly every respondent said yes. Asked to explain what made finding one's way around Scottsdale, nearly every respondent mentioned the arterial grid. Further discussion elicited particular qualities of the arterial grid that were especially important for orientation:

- The grid is oriented north-south and east-west.
- The grid is scaled, with major streets occurring every mile or, occasionally, every half mile (and lesser streets every quarter mile or eighth mile). Some respondents demonstrated confusion with the location of half-mile streets, such as Camelback, Jackrabbit, Lincoln and Mountain View, in the map-making exercises, drawing them at the same intervals as they drew mile streets.
- Arterial streets generally have the same name for much of their length in Scottsdale, and even across municipal boundaries. Name changes, such as Bell Rd. and Frank Lloyd Wright Blvd., Hayden/Greenway or Via de Ventura and Doubletree Ranch Rd., were sometimes mentioned as cause for confusion.
- Properties along streets are numbered consistently, based on their position in the metropolitan grid, regardless of where the particular street on which they are located starts or stops. Thus the 8000 block of Shea and the 8000 block of Cactus are both just east of Hayden Road.

Moreover, the numbering is scaled in a relatively understandable way. Addresses are related to the numbering of north-south streets (thus the 7500 block is between

75th and 76th streets); and addresses advance 800 numbers each mile (making it easy to calculate addresses in relation to streets occurring at mile, half-mile, quarter-mile and eighth-mile intervals).

Despite the general ease people said they had getting around the city at large, they nevertheless pointed to several confusing aspects of the city's layout.

- Most often mentioned was the confusing layout of streets in McCormick Ranch. Several issues were mentioned:

Streets in that community were regarded as difficult to navigate because of their curvy pattern, with some streets looping back and intersecting themselves (this problem might be exacerbated by the lack of local visual landmarks, although the point was not raised by respondents)

The use of non-English street names, which some respondents considered more difficult to remember, and the similarity among street names, which made street difficult to differentiate.

There are exceptions to the general rules about address numbering; some 8000-numbered properties are located west of Hayden Road.

- In a general sense, the lack of continuity among local streets made for much confusion. While experienced residents might know the relative position of minor streets like Gary, Marilyn or Rose Lane to the arterial grid, it is not immediately clear how to connect to the particular block one is seeking because streets like these stop and start from neighborhood to neighborhood.
- Conversely, respondents mentioned the confusing nature of roadways that are continuous but which change their name along the way. The prime example of this is Mountain View Road; at its western end, it leads into the 70th St.,

Saguaro, 74th St., Gold Dust loop around the Shea/Scottsdale commercial area; beyond McCormick Ranch, it loops north into 92nd Street, sidles into 94th Street, then connects into Thompson Peak Parkway.

- Curving arterials also make for confusion. Via Linda, an east-west street that runs parallel to Shea for much of its length, confuses residents because of a short north-south section that crosses Shea at right angles. Mountain View, which also generally runs east-west and parallel to Via Linda and Shea, nevertheless crosses Via Linda at right angles. And just south of Via Linda, Pima Road swings east to become 90th Street. While any one of these anomalies might be enough to confuse drivers, the confluence of these anomalies within a mile or two of each other, generally in the Shea Blvd. commercial corridor, seemed to increase respondents' confusion about the layout of that part of the city.

In discussing their orientation in the city, respondents seldom referred to Scottsdale's signage policies, in terms of its impact on their ability to find commercial areas or neighborhoods; nor did they comment on the entry features that often designate the entrances to residential developments. It may be that the ease of orienting oneself on the arterial network has made it easy for people, with the help of basic directions, to find the entrances to neighborhoods or shopping areas—withstanding the difficulty they have navigating within those areas once they arrive.

Finding #6. Scottsdale's structure is changing, it is becoming a city of multiple parts.

Residents of Scottsdale often remark that Scottsdale is becoming two cities, north and south. In fact, Scottsdale is becoming many cities, with areas north of the historic center assuming more and more prominence. This evolution will be critical in considering the city's future form and politics.

The emerging diverse, multi-centered structure of the city was reflected in the interviews in many ways.

*A. We asked respondents to describe the city, in a physical sense.* Many respondents, without being specifically asked, noted the differences in the north and south part of the city, most often describing several segments of the city that reflected an evolution in neighborhood design.

A typical response noted that "The mature part is a tract ranch approach; McCormick Ranch brought in California popular styles; there are larger, gated communities north and further north, and more open desert." Other responses noted that the physical differences might be linked to social differences, such as "more minorities in the southern part of the city," or "middle Scottsdale is for worker-bee families, two-income, a little money" and "wealthy, north Scottsdale, newcomers."

Less evident in the discussions was the sense that Scottsdale is a city with multiple economies, as described in recent visioning plans—arts and culture, western tourism, health care—which are woven throughout the city. These different functions are expressed to some degree in the form of the city, in that certain areas or districts (Old Town, the Resort Corridor, the Arts District) are identified with one or another of these activities.

*B. We asked respondents to tell us what they thought the center of the city was.* The vast majority of respondents said

it was downtown, or some particular area of downtown. Typical answers were: "Civic Center, because that's where government is"; "Fashion Square, because that's the most intense commercial center"; "Old Town, because that's where Scottsdale started"; "Fifth Avenue, because that's Scottsdale's traditional retail center."

But the discussion of this point was more complex. Respondents tended to answer the question in two ways. Some asked if we meant the geographic center or the activity center, commenting that the geographic center (or the population center) is far from the major activity center (downtown). Some mentioned downtown, or a part of downtown, but qualified their answer by indicating that there are other centers that are more important from an employment point of view, or in terms of satisfying ordinary shopping or service needs, than downtown.

*C. We asked respondents to tell us where they thought the boundary between north and south Scottsdale was. The answers varied, from McDowell Road to Deer Valley Road, with major clusters of responses falling along Shea Boulevard or Frank Lloyd Wright Boulevard and the Hayden-Rhodes Aqueduct, and with the median and mode responses being Shea Boulevard. In many cases, respondents named two or three division lines, suggesting that the north-south dichotomy was not that simple.*

What characterizes the answers? There are a combination of recurring factors:

- Some of the lines conform to clear breaks in development character. Indian Bend Road is clearly the south end of McCormick Ranch, an important symbolic development: it is the southernmost and first large master-planned community in the city, and the area that carries imported, oasis-style landscaping to the extreme.
- Some of the lines conform to major elements of city structure—elements people tend to remember and use to orient themselves, such as canals and major roads. Shea

Boulevard or the Hayden-Rhodes Aqueduct could fall into this category.

- For many respondents, the dividing point was a matter of personal perception; they said it marks the point to which Scottsdale had been developed when they moved to the city.

*D. We noted this shift in anecdotal responses to other questions, or in some of the other findings from the mapping data.*

- Many respondents who live in south part of the city told us they do not get north, and vice versa. Or the maps they draw will reflect only a certain part of the city.

- Many respondents said their lives tend to be organized along east-west lines into Phoenix (along the Indian School, Camelback, Lincoln, Shea, Cactus and Bell corridors) as much as they are along north-south lines.

- In the city mapping question, the Mayo Clinic and Scottsdale Healthcare's north campus were mentioned more frequently, and generally earlier in the mapping, than Scottsdale Healthcare's south campus was.

- The Scottsdale Road resort corridor was described frequently on maps, but the individual resorts along it were not. The resorts described most often on maps were the Hyatt Gainey Ranch, at the northern end of the corridor, and the Princess and the Boulders, both of which are north of the Hayden-Rhodes Aqueduct. This parallels responses to the "where would you take people" question, in that respondents said would drive along the resort corridor but go to those three resorts (with the Gainey the most popular). This indicates that the resorts in the south end of the city aren't as popular, imageable or well-known individually as the resorts to the north.

This increased identification with institutions and facilities in the north part of the city did not hold in

other cases. For example, the Civic Center library was mentioned far more frequently than the branches. Nor does this seem to be the case for galleries or high-end retail shops, which have been migrating north along the Scottsdale Road resort corridor, to the Pinnacle Peak area, and to El Pedregal; this may be that the shopping districts north of downtown have not yet attained the critical mass necessary to register with a strong visual identity, or that the way they are designed in relation to the street prevents them from registering so strongly in people's visual image of the city.



Finding #7. Downtown is regarded as important to Scottsdale for the cultural, tourist and political activities that occur there, and its layout and image are generally clear to people. However, it is no longer a part of most respondents' everyday lives.

Downtown still has a strong, and rather clear, position in the respondents' understanding of the layout and function of the city. Respondents noted, in various ways, that it has been transforming from the sole center of a small town, the focal point of commerce and community institutions, to a specialized cultural, political, regional retail and tourist area.

*A. Describing downtown.* In describing the area that downtown comprises, about 40 percent of the respondents used streets to delineate the boundaries of downtown, and about 60 percent of the respondents described the districts that downtown included. A small number of respondents used both methods, and a very small number named landmarks that comprised the points on along the boundaries of downtown.

- *The edges of downtown.* The edges remarked upon with the most consistency were Osborn Road, 68th Street and Miller Road to the south, west and east of downtown; a smaller number of respondents mentioned the couplet streets (Civic Center and Goldwater boulevards) as the edges of downtown. Respondents' sense of the north edge of downtown was fragmented, with Camelback Road, Fashion Square/Highland, and Chaparral mentioned with equal frequency.

The mapping question provided different results regarding the east and west boundaries of downtown. More respondents drew the couplets than drew any one of the other streets mentioned above, but they tended to draw the couplet after they drew Scottsdale Road, Indian School Road and grid streets that mark downtown's boundaries.

The contrast in responses could be interpreted in several ways. The couplets may be more important to people as through streets than as perceptual edges. Or, the couplets, which were completed just a few years ago, might still be emerging as new perceptual markers for the edge of downtown or for a newly defined downtown core.

- *The areas within downtown.* Respondents who described downtown in terms of the areas that it comprises most frequently mentioned Old Town and Civic Center Mall, with Fashion Square and Fifth Avenue mentioned about two thirds as often, and most other districts of downtown mentioned just a handful of times. These findings overlap strongly with the findings from questions about areas that are most vivid in Scottsdale, or from questions about where respondents might take visitors.

Areas outside the couplets, and areas within the entire quadrant northeast of Scottsdale and Indian School Roads, were mapped with far less frequency and clarity.

- *The center of downtown.* The place mentioned most frequently as the center of downtown was Civic Center Mall, which was often mentioned in conjunction with City Hall, the Civic Center Library, or the Center for the Arts.

Road intersections were mentioned just as often as Civic Center Mall and more often than specific landmarks; although respondents suggested several different intersections could be considered downtown's center, Scottsdale-Indian School Road was mentioned most frequently, and the most common way of starting a downtown map was by drawing Scottsdale and Indian School roads, then the boundaries of downtown, then filling in the details, quadrant by quadrant.

*B. A lack of landmarks.* Few specific landmarks, such as sculptures or buildings, were mentioned in conversations or

mapping; City Hall and the Civic Center Library were mentioned most frequently, and the Center for the Arts, Loloma Station and the Galleria also received some mention. Beyond that, few sculptures or streetscape elements, such as The Yearlings, Jack Knife, and the fountain at Fifth and Marshall, and few prominent buildings, such as the church at First and Brown streets, the taller commercial buildings at Scottsdale and Main or Scottsdale and First Avenue, were mentioned as visual markers in people's descriptions of downtown.

*C. When do people go downtown, and what do they do there?* In describing places they would take visitors to show them "what Scottsdale is really like," respondents most often mentioned downtown or places within it: Civic Center Mall, Old Town, Fashion Square, Fifth Avenue and the arts districts.

But asked when they visited these places themselves, respondents generally described special occasions related to downtown's emergence as a ceremonial, civic and entertainment area. Some of these events occur rather frequently, such as the weekly art walks, but others occur only once a year, such as the Parada del Sol or certain arts festivals. A smaller number of people reported visiting downtown every few weeks to go to the library, shop or watch movies at Fashion Square, or eat at restaurants.

Finding #8. Respondents regarded the Sonoran landscape as a very important aspect of the city's visual character. But respondents who have lived in the city for a long time feel increasingly remote from the desert as a place that is part of their everyday lives.

A century ago, a Harvard geographer, Frederick Jackson Turner proclaimed that the American frontier was gone—this before Arizona even became a state.

The same may be true of Scottsdale's desert. The desert landscape is one of the most valued qualities of the city, but a numerous respondents who have lived in Scottsdale for several decades or more said there are fewer places . The relationship Scottsdale residents and visitors have to the desert is changing fundamentally.

Respondents ranked the desert highly in terms of places that they considered to be vivid, or in terms of visual characteristics that they think are most emblematic of the city. But desert itself, or places that are characterized by a desert landscape, did not rank highly in terms of places that people would take visitors.

Respondents described memories of going to the desert to take part in activities like campfires, parties, hunting and horseback riding. Very few respondents described taking part in activities like that now. Whereas a ride up Scottsdale Road north of Shea may have sufficed for people to reach open desert landscape not long ago, that same experience might require a trip on Dynamite east of the McDowells, respondents said.

Remarkably, respondents rarely indicated "desert" specifically on maps they drew of the city. Virtually every other element that respondents people described to us as vivid also showed up frequently on maps. In fact, the north area of the city was

as likely to be mapped as "golf course communities" as it was "desert."

It is interesting to speculate why this might be. One reason might be related to the contours of the terrain. The flatness of the valley landscape (which is often what is referred to as "desert") make the expanse of the valley hard to grasp. One's eye skips over miles of gently sloping valley floor to the mountain backdrops, which are much more vivid and uniquely memorable.

Another reason is that most of the visually accessible land in Scottsdale (which is to say land that can be seen from a roadway) is inhabited by people, to some degree or another. There is concern and lack of consensus on this point; some respondents wondered whether the city had spread so far as to destroy the functioning of the Sonoran landscape anywhere within the city's boundaries; others argued that desert-landscaped golf courses (in communities like Desert Mountain) did not affect the functioning of the ecosystem.

Conversely, most of the desert landscapes people experience everyday—streetscapes, xeriscaped yards, setbacks in front of commercial buildings, are every bit as cultivated as the non-native landscapes of McCormick Ranch. They are visual creations, not living examples of Sonoran ecosystems.

In a sense, the public landscapes of the city may be lagging the private landscapes in terms of their adaptation to the Sonoran ecosystem. Communities like Desert Mountain, Troon North and D.C. Ranch boast open space systems that are related to patterns of the terrain and landscape; in rural communities and some of the newest master-planned communities, houses (and even golf courses) have been built by disturbing as little of the landscape as possible. Within newly developed areas, design features (house colors and materials, yard landscaping, community identity features) attempt to blend with the Sonoran landscape. Conversely, many parks (even newer parks like

Cactus and Horizon Park) and older streetscapes do not reflect that sophistication.

## V. Recommendations

Scottsdale is a city whose visual character is especially important to its residents, and where the sense of landscape and openness in the city are valued. This research project suggests several principles of visual planning, and several land-use approaches, that could help strengthen the identity of Scottsdale's civic framework.

### *A. Reconnect with the Sonoran landscape.*

While Scottsdale residents strongly value the city's desert character, there are few specific places, especially public places, where people can experience the Sonoran landscape in their ordinary lives. For many respondents we spoke to, this disconnection has created a deep sense of loss.

The mountain and desert preserves will be an unparalleled municipal accomplishment and remarkable civic legacy; but for most people, these will be distant places, encountered mainly when seen from afar (usually from within a car) or on special excursions. Many everyday places, such as streetscapes, yards and gardens, are full of desert plants; but these are mostly cultivated landscapes, arranged and managed, not living pieces of the land.

There are various ways of establishing a stronger connections with the landscape:

1. Living Sonoran landscape should permeate more of Scottsdale's public face; the same sensitive attitudes towards designing within the terrain and landscape that permeate planning and development in the northern reaches of the city should be re-interpreted in the more established sections of the city.

Ecologists, conservation biologists and landscape designers should be enlisted to identify appropriate

opportunities for establishing regenerative Sonoran landscapes in the city—along streets, trails and drainage corridors; in parks and community places—so that encountering natural, functioning habitat becomes a normal part of being in the city. They should also help generate public conversation on the impact of different development patterns and practices on the sustainability of the Sonoran landscape ecosystem, and on the habitat of various species in the ecosystem.

2. The dynamic processes of climate and landscape should be incorporated into the public face of the city. The sky, the sun, light and shadow, rain and wind are characteristics that were remarked upon repeatedly and vividly by respondents.

3. Architects, engineers, artists and other designers should be challenged to explore languages, forms and systems that address in a more organic manner the nature of the climate and the landscape. This is particularly important in the design of public and quasi-public elements of the city, such as community and civic facilities and shopping areas. Similarly, everyday infrastructure, such as park structures, bus stops, city directional signs and traffic signals, should be designed with colors, material and scale that conveys a stronger sensibility of the land.

*B. Strengthen the design of the arterial grid.*

After the landscape, the arterial street grid is Scottsdale's main public realm, the primary space of shared experience. The arterial grid comprises a remarkably strong perceptual and functional framework that people consciously use to determine their location in the city and to find their way around.

While Scottsdale has great fortune in strong signage and landscape policies that enhance the attractiveness of its streets, the city could do much more to make its streets



positive, memorable elements of the civic structure. The strong control exerted over the visual character of private development creates a special opportunity for the public environment to be designed in a distinctive, memorable manner.

- Intersections are the prime candidate for civic attention. They are focal points for traffic, thus seen by many people; they are important reference points in people's mental maps of the city; and places from which views are especially important because people often are required to wait at intersections for traffic signals to change. Intersections could be marked in civic and artistic ways:

The design of basic infrastructure, like traffic signals, light poles and utility boxes, could improved, through collaborative efforts of industrial designers, traffic engineers, artists and operational personnel.

Site-specific public art projects could mark major intersections and help make them visually distinct from each other.

Development policies could be fine-tuned to enhance the views from each intersection. In some cases, it might be appropriate to allow memorable landmark buildings to predominate. In other cases, it may be appropriate to configure adjacent development with deeper setbacks or lower-scale buildings to maintain important views of the mountains or landscape.

- The segments between major intersections are a second candidate for improvement. More specific streetscape and urban design policies could make the characteristics of different segments of the main streets more differentiated, more distinct. For example, the two miles of Hayden Road between Indian Bend Road and Shea Boulevard is one of the most recognizable roadways in the city

because of the way the road design and landscape relates to the character of McCormick Ranch. Phoenix has used public art and landscape policies to differentiate the identity of two sections of its main street, Central Avenue. Not surprisingly, in our research, Central Avenue turns out to be one of the two most desirable streets in the region.

An important issue to consider is the degree to which adjacent development addresses or enfronts the street. In some places, relating development more coherently to the street (instead of simply setting it back or screening it) could strengthen the identity of certain areas. In other places, maintaining deep setbacks or parallel scenic or greenway corridors could strengthen visual relationships with the landscape or park system.

- Gateways, points where major streets enter the city, are also candidates for special treatment, a strategy already proposed in Scottsdale's general plan. Currently, the city marks most of its entries with barely visible monuments. The sense of entering the city should be heightened.

For example; two of the most prominent routes into the city run across mountain passes, which could be identified with individually designed markers, perhaps made out of native material, that celebrate the summits. There might be viewing towers or overlooks that people could visit to pause and take in a view of the city.

- Scottsdale Road should be a world-class street. People regard Scottsdale Road as the city's most important street, but they don't take much pride in its landscaping, streetscape elements, road design or development patterns, which convey a fragmented, utilitarian image.

Making Scottsdale Road a signature element in the city's identity will require long-term, focused, incremental action. The Scottsdale Road charrette suggested creating a

citizen task force, backed up with planning and consulting design expertise, to spearhead the effort.<sup>8</sup> The task force would monitor plans and projects, identify short- and long-term opportunities for improvement, recommend new design approaches and guidelines, sponsor public forums and rally public interest in Scottsdale Road's design.

*C. Make the park, path and trail system the next great element of Scottsdale's civic framework.*

Except for Indian Bend Wash, Scottsdale's parks, paths and trails barely register on people's mental image of the city. These places already have great popularity as recreation resources, as features that make Scottsdale unique, and as elements that unite people from various parts of the city; they should also become important frames of reference that help people understand the organization of the city, and whose design is so distinct and memorable that it contributes to people's conscious image of the city.

- Indian Bend Wash, the one element of the park system that registers strongly on people's sense of Scottsdale's structure, could be extended in ways that mesh with other elements of the city structure or community activity. For example, arterials that cross the wash could be designed with linear pedestrian and recreation greenways that extend the park into the city; the landscaping and design language could offer a gradual transition between oasis and urban form. Lateral greenway connections could reach strategically into commercial centers, such as shopping plazas at Osborn, Thomas, McDonald and Indian Bend Roads;

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<sup>8</sup>. The Scottsdale Road charrette was held at the Redevelopment and Urban Design Studio on August 27 and 28, 1998. It assembled about 30 citizens, city staff and professional designers, who debated a range of issues regarding the design of the road as a significant piece of civic infrastructure and made a series of general observations about possible design and management strategies for the road.

the most exciting possibility could occur at the Los Arcos redevelopment site, where greenways and gardens could be designed to create a seamless string of public spaces from the wash to Scottsdale Road.

- Finishing the system of paths and trails, filling in the missing links, should be a major capital and political priority. Just as important is improving the design: paths and trails should be more visible and accessible as they pass through the city; celebrated where they connect with major parks, canals or roads; and linked better to parking.

The visual character of the path-trail system should reflect Scottsdale's Sonoran landscape setting and its artistic spirit: bridges, signage and lighting could demonstrate more inventiveness. This is an important opportunity for artist-engineer-industrial designer-landscape architect collaborations.

The legibility of the system should be improved: there should be one map that shows the entire, interconnected path and trail system, and places where paths and trails intersect with other elements of the civic structure (such as arterials, canals and public preserves) should be marked ceremonially and with appropriate visual language. A new set of informational and directional signage, unique to the system, should be designed.

The accessibility of the path-trail system should be improved. Directional signage should indicate how to drive from major arterials to parking areas.

- Canals might be considered an element of the park, path and trail system. They should be clearly connected to and accessible from other open spaces and marked more memorably where they intersect with other elements of the civic framework or important areas of the city.

*D. Recognize the importance of the pedestrian scale of Scottsdale's civic framework.*

While Scottsdale is and will remain a city where automobiles are the primary mode of movement around the city, this research project has clearly demonstrated the importance of pedestrian-scale design in creating places that have a strong character and are valued by residents. The pedestrian-scaled areas of downtown, particularly those located along the pedestrian corridor set out in the downtown plan, were among the most memorable districts of the city. Commercial developments that paid strong attention to the pedestrian environment, such as Fashion Square, the Borgata and El Pedregal, were more memorable to respondents than other commercial areas.

Wherever possible and reasonable, from a land-use and circulation point of view, the city should consider the possibility of fostering the evolution of pedestrian districts that link together a range of activities or facilities. Such pedestrian overlays, when combined with architectural and urban design responses at the pedestrian scale, can strengthen the identity of local districts and can sustain places for community interaction. In other research, we have examined how such districts might occur in the Shea–Scottsdale area, the Mountain View–92nd St. area, and the Airpark.<sup>9</sup>

*E. Celebrate the places that make Scottsdale great.*

It is always good for a city to remind itself about the architectural accomplishments and landscape qualities that create its sense of place. This is especially important in a city like Scottsdale, whose face is changing so dramatically and which has many new residents who are still learning about the city.

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<sup>9</sup> A report on this research is forthcoming.

The Scottsdale Places program, which was organized through the city's Urban Design Studio last year, was a first step in doing this. After accepting suggestions from citizens, a jury of designers, artists and historians in Scottsdale chose some twenty buildings, landscapes, design elements and special events that contribute most to Scottsdale's special quality.

These places are part of Scottsdale's civic inheritance, part of the design and landscape culture that everyone shares and important guideposts in considering how future design decisions should be made. The places the jury chose should become conscious part of everyone's image of the city, and that revealing and celebrating these places will be an act of civic affirmation and education that will enable Scottsdale to demand the most from the design of new places.

*F. Reinforce the character planning process.*

Scottsdale has become a city of many parts, an increasingly diverse collection of communities and landscapes. Scottsdale will benefit from recognizing and enhancing those distinctions, providing a range of settings for living and working, allowing each part of the city to do what it does best and clarifying the identity of each area through specific development, design and management policies.

An example of this has occurred in the city's street design policies. Our research found that respondents, shown pictures of various streets, were able to determine what part of the city they were located in, based on the design of the street and the streetscape. This is a direct result of policies in the Environmental Design Element of the city's general plan.

Character-area planning, which grew out of Scottsdale's visioning efforts, can be a useful next step in refining the general plan on an area-by-area basis. The design of public, community and infrastructure elements, such as streets, open spaces, drainage systems, paths and trails, signage,

commercial areas and community facilities, could help give each area of the city a more distinctive character.

In doing so, the process should resolve a potential conflict between the natural landscape systems that underlie the city and its cultural landscape. Scottsdale's general plan recognizes distinctions between the lower desert, upper desert and mountainside areas of the city; it also recognizes distinctions between urban, suburban and rural areas of the city. This allows for a potentially rich matrix of settings, but may cause some confusion in people's minds about the city's overall pattern of development.

*G. Make downtown an everyday place.*

We feel that while downtown is strongly valued because of its historic importance as a central place for community and commercial activity, its future success will depend on its ability to reclaim its status as an everyday place, and to serve a number of specialized functions in an integrated way. This can be accomplished through several strategies:

- Strengthen the sense of Scottsdale's history through recognition and active reuse of structures that have played an important role in the development of the community, such as the Little Red Schoolhouse, the former Bank of Arizona, the church at Brown and Second, Cavaliere's Blacksmith Shop, etc. These places should have as strong an identity as the tourist shop component of Old Town.
- Encourage more residential development, and more retail, food and service establishments that provide for the needs of downtown residents and workers. These uses should be developed in buildings that are lodged within the existing grid framework and that relate to the street, instead of as isolated, suburban-style, commercial and residential complexes, like those at the intersection of Scottsdale and

Indian School roads, or like those that ring the downtown core.

- The downtown linkage strategy along the Marshall–Main corridor has provided extraordinary guidance for public and private development and for downtown management programs. This corridor anchors several districts that stand out from all the commercial areas of the city. As areas in the quadrant northeast of the Scottsdale/Indian School intersection develop, this strategy should be extended along the Brown–Buckboard–Wells Fargo and Fifth–Stetson corridor to create a downtown linkage loop.
- Effective legible pedestrian crossings should be made at points, along the couplets in order to link the downtown core to secondary downtown areas and nearby neighborhoods. Prime candidates for connections across Goldwater Boulevard include Second Street, Main Street and Fifth Avenue/Arizona Canal. Candidates for connection across Civic Center Boulevard are Second Street, Third Avenue and someplace in the Galleria/Fifth Avenue area, if Civic Center Boulevard is realigned in conjunction with waterfront development.



## Appendix I

### The Interview Questions

- What is the first thing that comes to mind when you think of Scottsdale? What makes you think that?
- How would you describe Scottsdale, in a physical sense? How would you describe its appearance or layout?
- Suppose I were visiting Scottsdale from out of town, and had never been here before. What one place would you take me to show me what you think the real Scottsdale is like? Can you describe what that place is like in a physical sense? When do you typically go there? What other places would you take me?
- What elements of Scottsdale do you think are most distinctive or vivid—places that are easiest for you to describe and remember?
- Now I would like you to make a quick map of Scottsdale. Make it just as if you were describing Scottsdale to someone who wasn't very familiar with the city, putting on it all the important places, important parts of the city, important ways to get around.
- What area or place do you consider to be the center of the city? What makes it the center?
- Could you tell me what area you consider to be downtown Scottsdale?
- Now I would like you to make a quick map of downtown. Make it just as if you were describing downtown to someone who wasn't very familiar with the city, putting on it all the important places, important parts of the city, important ways to get around.
- There's a lot of talk about north and south Scottsdale. If you had to draw a line between the two, where would it be? How

would you describe the difference between the two, in terms of their layout or appearance?

- Please give me complete directions for the route you normally take from home to where you work. Can you describe the sequence of things that you would see, hear or smell along the way, including the pathmarkers that would be important to you, or the clues you would use to give a stranger directions? How many miles is that trip? How do you know that?

- What elements of Scottsdale do you think are most distinctive or vivid, places that are easiest for you to remember and describe?

- Would you describe [answer to previous question] to me? Suppose you were taken there blindfolded, and the blindfold was taken off. What clues would you use to positively identify the place? Are there any sounds or smells that you particularly associate with [answer to previous question]? What feelings do you associate with being in [answer to previous question]?

- When you moved to Scottsdale, what qualities of place were you seeking?

- Where would you go now in Scottsdale to find places with those qualities?

- Do you find Scottsdale an easy city to find your way around? What makes it easy/difficult?

- If you think Scottsdale is easy to find your way around, are there areas in which you feel it is particularly difficult to find your way around, or in which the layout of the city is confusing? What makes you feel that way about that area? Are there other areas of the city that are confusing in the same way? or If you think Scottsdale is difficult to find your way around, are there areas in which you feel it is particularly easy to find your way around, or in which the layout of the city is clear? What makes you feel that way about that area?

- What is the last place in Scottsdale in which you got lost? Why do you think you got lost there?
- Can you think of another city in which your orientation is clear? What makes the orientation clear in that place?
- Do you find it easy to recognize the different parts of Scottsdale? What makes it easy/difficult?
- Thinking about the entire metropolitan area, all the cities in the valley, what would you say your favorite street is? How would you describe that street? How would you describe its physical character, its appearance or layout? How do you feel when you are on that street? Do you ever walk along that street? What street is the most like the street you named, in terms of the qualities you mentioned?
- Think about all the different streets that lead into Scottsdale from outside the city. What is your favorite route for entering the city? Can you describe the place along that route where you enter Scottsdale? How do you feel when you are entering the city there?
- What places in Scottsdale—in your neighborhood or anywhere in the city—give you a sense of community? Can you describe the sense of community you have in that place?
- Can you list the places in or near Scottsdale where you have been more than once in the past month? Do any of the places you just listed give you a sense of community?
- Could you please draw a map of your neighborhood or community, including all the important places within it?
- *The respondent is shown nine photos of streetscapes, organized randomly.* We're interested in what kinds of streets people like best. Can you put these in order, from the street you like best to the street you like least? Can you tell me what streets are shown in these pictures? Can you tell me about anything in the images that you responded to positively

or negatively? Can you tell me how you would feel if you were on this street?

- *The respondent is shown nine photos of streetscapes, organized randomly.* We're interested in finding out if people can recognize common streets in Scottsdale. Can you tell me what streets are shown in these pictures? Can you tell me about anything that you saw in the images that helped you identify these streets? Can you tell me where along those streets these pictures were taken?

- *The respondent is shown seven photos of northbound Scottsdale Road, organized randomly.* Could you please put these in the proper sequence, in terms of the order you would experience them if you were driving from south to north?

## Appendix II

### Summary of Selected Interview Data

Following is a brief summary of the responses to the main questions of the interview. Since the interview format generally consisted of open-ended questions, rather than rankings or multiple choice questions, this summary is somewhat subjective.

#### 1. Demographic information

For this project we interviewed 119 respondents during the spring, summer and fall of 1998. Sixty respondents were men, fifty-nine were women. The totals for other categories are less than 119 because complete information was not obtained for all respondents.

#### Residence

The majority of those respondents, 98, lived in Scottsdale. The remaining respondents worked in Scottsdale and lived elsewhere in the Valley.

The distribution of residences is shown on an accompanying map. In summary, interviewees were drawn from:

North and east of CAP canal:	16
Shea Boulevard/Pima to CAP canal:	17
Indian Bend Road to Shea:	17
Indian School to Indian Bend:	16
South boundary to Indian School:	23
Phoenix:	14
Tempe:	4
Chandler, Gilbert, Glendale, Mesa:	1 each

### Age of respondent

We asked respondents to tell us to identify their age within a series of ranges, rather than telling us their specific age. Following is the distribution of ages:

0-19 years old:	0
20-29 years old:	6
30-39 years old:	25
40-49 years old:	40
50-59 years old:	34
60+ years old:	14

### Length of residence or employment in the city

The mean length of residence or employment in Scottsdale for the respondents was 16.5 years. The median length was 15 years. Following is the distribution:

0-3 years	20
4-9 years	20
10-16 years	19
17-24 years	23
25-30 years	16
31+	19

2. Responses to question, "What is the first place you would take somebody?"

Following are the most frequently given answers. The total does not add up to the total number of interviewees because we tallied multiple answers.

Civic Center Mall	38
Old Town	29
Fashion Square	25
Downtown, general	23
McDowells	17
Indian Bend Wash	17
Greasewood Flats	13
Fifth Avenue	12
Hyatt Gainey Ranch	12
Rawhide	12
Carefree/Cave Creek	11

We then recounted the responses, grouping similar answers into categories. The category downtown may exaggerate the number of people who mentioned downtown spaces, since people tended to mention multiple places downtown.

Downtown places 119

(Art Walk, Center for the Arts, Civic Center Mall, downtown, Fashion Square, Fifth Avenue, galleries, Los Olivos, Main Street, Old Town, Sugar Bowl, stadium, waterfront).

Western places 72

(Cave Creek, Carefree, Greasewood Flats, Horse Places, McDonald's Farm, Old Town, Parada del Sol, Rawhide, Reata Pass Steakhouse, Rusty Spur)

Resort places 26

(Hyatt Gainey, resorts, Princess/Hyatt, Phoenician, Princess)

Mountain places 26

(Camelback, McDowells, mountains, Pinnacle Peak)

Desert Places 24

(Desert, Desert Botanical Garden, desert/Dynamite, driving,

Shea/Dynamite, Galvin Parkway, Happy Valley, Papago Park, Pima Rd., Scottsdale Rd.)



3. Responses to question, "What place in Scottsdale is most vivid to you?"

Following are the most frequently given answers. The total does not add up to the total number of interviewees because we tallied multiple answers.

Civic Center Mall	39
Indian Bend Wash	39
Mountains (all mentions)	39
Downtown	20
Fashion Square	19
Old Town	18
Desert (all mentions)	14
Fifth Avenue	9

4. Responses to question, "What is your favorite street?"

Of the 82 responses to this question, 25 responses were streets in Scottsdale. The streets mentioned most frequently were:

Mill Avenue, Tempe	13
N. Central Avenue, Phoenix	11
Hayden Road, Scottsdale	11
Camelback Road, Phoenix	7
Scottsdale Road	4
Lincoln Road	4
Galvin Parkway, Phoenix	3
Via Linda	3

Other Scottsdale streets mentioned:

Civic Center Boulevard, Doubletree Ranch Road, Frank Lloyd Wright Boulevard, Main Street, Mountain View, Pima (north of Frank Lloyd Wright), Via de Ventura

5. Responses to question, "What is your favorite route for entering the city?"

We received 35 responses to this question. The gateways mentioned most frequently were:

McDowell Road, from Phoenix	6
Camelback Road, from Phoenix	6
Indian School Road, from Phoenix	4
Galvin Parkway, from Phoenix	4
Shea Boulevard, from Fountain Hills	3
Scottsdale Road, from Carefree	3
Pima Road, from Carefree	2
Scottsdale Road, from Tempe	2

6. Responses to question, "Describe downtown Scottsdale."

Almost all of the respondents chose one of two strategies for describing downtown, naming its boundaries or naming specific districts or areas that describe downtown.

The districts or places mentioned most frequently as parts of downtown were:

Old Town	25
Civic Center Mall	19
Fashion Square	16
Fifth Avenue	12
Main Street	6
Arts districts	4

The boundaries mentioned most frequently were:

North: Camelback, Highland and Chaparral

West: 68th Street

South: Osborn Road

East: Miller Road

7. Responses to question, "What is the center of downtown?"

We asked 63 respondents to tell us what the center of downtown was. The figures below may total more than 63 because they account for multiple responses.

Respondents listed specific districts, point reference landmarks, or activity areas as the center of downtown. Following are the most frequent responses:

Civic Center Mall	18
Scottsdale Road	14
(This includes the mention of intersections with Camelback, First Street, Indian School Road and Main Street)	
Fashion Square	11

Several downtown shopping districts received a handful of mentions:

Old Town	4
Fifth Avenue	3
Main Street	3

Several public facilities received a handful of mentions:

City Hall	5
Civic Center Library	4

Several art and streetscape elements were mentioned:

Fifth and Marshall Fountain	1
"Jack Knife," Main and Marshall	1
"Yearlings," Civic Center Mall/Brown	1
Cowboy sign, First and Scottsdale	1

## Appendix III

### Sample Comments on Selected Places

#### McDowell Mountains

Majestic; not far away, but right here. One has a sense of quiet relaxation there. They don't have foothills, they're steep, abrupt; jagged tops, prominent points are intriguing.

They are open and untouched; a lot of visible open space in an area that's relatively built up. Almost an icon for what living here is supposed to be all about.

The backside is intriguing; as you hike in you get a lush feel; the south side is drier. The mountainsides bloom at different times of year.

You notice their color—from afar they are purple, yet when you get close to them, into them, they are green. Gorgeous light effects when the sun sets. Ever changing clouds and sun.

Love them in that purple state; generally purple at sunset; driving home, a left is sunset, at right is McDowells.

Untouched, lots of open desert, gorgeous light effects when the sun sets. Sound of birds.

Rich with flora and fauna that you don't find anywhere else.

Not really mountains, compared to other places, but a good backdrop to the city.

Mesquite, saguaro, rock outcrops. Sky changes—blue, clouds, mist—changes what the mountains look like.

## Sonoran Desert

Not "Lawrence of Arabia," unique; lush, it blooms.

Awesome, breathtaking, peaceful, tranquil; I'm struck by the complexity of the ecosystem, the fragility, the calm.

Greener than anyone imagines; a huge diversity of plant life and wildlife.

Hilly; punctuated by incredible wash systems where vegetation tends to grow.

Lush, colorful; there is an endless variety of color in the blooming flowers.

The soil is reddish brown; the vegetation is many varieties of green.

There's a sense of quiet, if you listen you hear the bushes blowing in the wind.

Smells different at different times, like after a rain; otherwise smell can be dusty.

Oasis, very green and lush. Water features keep you cool and make you feel good. Trees provide shade; flowers are fragrant. There is a palette of colors from the plants and trees, an overwhelming variety of hues of white.

In Scottsdale I don't feel like I'm in the desert at all. I'm in a metropolis, and if it had more banana plants, I'd assume I were in Los Angeles.

Light is different; things appear to be larger and clearer than in places that have more humidity.

Unique smell to the rain; creosote.

When I moved here the desert was foreign to me, a drive-by experience. It looked inhospitable. But it's been one of the most unifying forces this city has had.

You can go out Dynamite Road, out to the country lands, you can see the expanse, you can get fantastic views from the back roads.

Open air, sounds of animals and sky/stars.

After a rain, the smell of wet desert is pleasant and memorable.

Threatened.

### Civic Center Mall

Pedestrian friendly. A pleasant walk with water fountains, variety of art. It's peaceful, quiet. Intimate.

Intimate, calming, flexible in terms of use. Cultural. Community destination; unifying place.

It denotes a sense of civic order, and the role that beauty can play in calming you down.

Flexible in terms of use, well maintained. Small private spaces as well as large active spaces.

You can see all walks of life there.

Very pleasant even though it's next to the road.

Green, lush, attractive, calming; lots of trees. You can see in any direction for at least a mile.

Flowers and fountain sounds. Peaceful, quiet with swans.

Colorful flowers and plants, peaceful.

Peaceful, quiet, spiritual.

### Indian Bend Wash

Lots of recreational facilities and parks. Used as a wildlife corridor by birds. Sounds of traffic, and sounds of people having a good time.

Large greenbelt. Beautiful and populated. Green, water, not cluttered.

Sounds of rollerblades, bikes, kids laughing, ducks quacking, traffic. Healthy, family oriented. Relaxing, calm, fun.

North is green, south is brown, because perimeters of McCormick Ranch are all landscaped in turf.

You see people in boats, canoes, sailboats.

Dry river bed; full of parks, ball fields.

Backbone of city.



## Old Town

Shops are close together, you can do it all without moving your car, a pedestrian area.

Quaint, like any old town. Has almost a frontier feeling, as opposed to the desert architecture of arches.

Pretty, could be expanded to provide more variety.

It's an old streetfront town, with hitching posts and dirt roads, that is now commercialized.

Lots of wood architecture with arcades, little bars and restaurants; streets feel narrow because buildings are close to one another.

Like it or not, it is what it is. Kitschy, touristy. Rinky dink. Honky tonk. Distinctive but not attractive.

Ecclectic. You'll have a Hawaiian shirt shop next to an Indian jeweller.

Takes on a nicer character on other side of Scottsdale Road, with galleries. Walkways and benches are more attractive there.

Fakey, contrived; it wasn't that way because everyone was doing it, it was done to make it a tourist attraction

Old, broken down

There used to be more character, Lulubells, old trading post, discount movie theatre, places you had to go

Hokey.

A little bit of Santa Fe look. Tacky, tawdry. Color is varied, even bright colors don't bother me because the rest blends it out.

Kitschy, touristy, eclectic. Shops are close together. You can do it all without moving your car.

Broken down, lots of wood, streets feel narrow

On-street parking, pedestrian area, Western ambiance, each building has an individual look.

Sidewalks narrow, move in and out.

### Fifth Avenue

Serpentine plan, winding streets, arcades; pedestrian friendly, a good place to walk around or hang out. Large sidewalks, most of them covered.

Not corporate, human scale. Older, but interesting, buildings. Interesting shops, cafes, restaurants, bars.

Effort to make it attractive, not run down.

It's a relaxed, quiet place to be, like being on vacation.

Touristy, not a place I go often. I get lost—is it first street or first avenue? Fiesta Bowl artwork.

It seems like it was the first part of downtown built to lure tourists, though not a tourist trap.

Cars play too big a role, would be better as a pedestrian mall. Needs more eating places, fewer jewelry stores.

Shops not as quaint as they used to be.

### Fashion Square

Narrow; several levels to look up better as a pedestrian mall. Needs more eating places, fewer jewelry stores.

It feels three dimensional, multi-use, dynamic; it's a people place, getting to sense of Soleri's Arcology.

Big and boxy, internally focused. Accessible parking, tons of cars.

Bright and busy; lots of light coming in from skylights, which can open.

Best shopping.

All you see is a parking garage.

You hear people talking, the sounds of water features; you smell food.

### Gallery area

Red carpets, brass doorways, finest of things. Detailed to the street to let you see in.

Very walkable, appealing storefronts, places of repose.

Wide sidewalks, pleasant.

Pedestrian oriented, shade trees, art places.

### City Hall

Does a good job of melding culture—Indian Heritage, desert climate.

Sculptural quality, adobe-like structure with thick walls, insulating value.

### Downtown in general

Fine grained quality, arcades, grid. Series of spaces, patios, courtyards that are pedestrian friendly and that you remember well.

Signage in different neighborhoods makes each area distinctive. Pedestrian friendly for the most part. Buildings are different.

Southwestern style; adobe colors, wood, fountains, shops close to each other; streets easy to cross.

Lots of boutiques, galleries within walking distance; pleasant to walk; landscaping, shaded.

## North Scottsdale

Primarily made up of people who have lived here five to ten year, largely second homes, development that is extremely dense.

Largely planned developments. Extremely upper class.

More northern part has more desert vegetation, virtually no eucalyptus or oleanders.

North part of city has walls, developments all have big walls. Larger lots, larger houses, much more variety in design of the houses.

More upscale, faster paced, prices are higher.

Red tile roofs.

It all comes back to how rapidly it's growing--the north is out of control. In some respects it doesn't even seem like the same city.

More rural. Not as much green grass.

North of CAP canal is really high Sonoran desert.

There is a sense it's more affluent. More desert, more mountains, more wide open.

Planned communities, sameness. Streets are short and cul de sac. Designed for privacy.

More tile roofs, more walls. Housing looks similar; three-car garages.

More open space, new housing, higher income, less racially mixed.

Xerispaced, more in touch with the environment in the colors, landscaping, design of buildings.

More ranch style, open, desert, horse properties.

East of Pima, more dense housing stock, houses small and close until way; large lots and open properties again.

Desert environments, horse properties and large lots with high-end development sprinkled in.

### South Scottsdale

More urban environment, middle-income homewes. Individually built homes?

Older parts of the city tend to have citrus trees, lawns, less desert vegetation.

Older and more poor. Things seem to be declining. Whole shopping centers are closing up. Strip malls, Los Arcos.

It will continue to be the city's economic engine.

More carports.

More multifamily housing.

Hodgepodge.

Businesses not kept up well, and neighborhoods aren't kept up quite as well. Quality drops in type of business.

More green, more mature trees, smaller, older styles of southwestern architecture.

Almost impossible to find a two-story house.

Older, more established, typified as red brick, Hallcraft houses; small homes, nice yards.

Smell of orange blossoms after rain.

Extension of Phoenix; looks, acts, functions the same. Mostly blue collar.

### Arizona Canal

Above-ground irrigation ditch that cuts through city.

Calming. Breaks up the grid. Brings visitors.

Unique object that lets you see the history of the city. One of the best amenities the city has. Feels ignored. Few places face on it. It's a funny garbage pit.

I think about the water, where it comes from, where it goes, and just that cools me off.

I like the way wind whips along it; birds are there.

Wide, off the grid, water has a life of its own.

### Cross-cut canal

Smaller; I think of it more as a big pipe, a drainpipe, and all along it are huge electric towers. Feels like a utility.

### Central Arizona Project

Less inviting, more imposing: fenced off, higher banks, wider. You can't enjoy it.

### Villa Monterrey

Villa Monterrey, our first subdivision, is interesting. It's unique in its appearance, and in keeping with a southwestern feel. Fake little vegas on the front. Different use of color.

### Borgata

Old-world feel; cobblestones, places to linger, coffee shops, farmers' market. Not dominated by parking, by vehicles, the way Fashion Square is. They pipe in music, or have bands.

Cloistered collection of buildings with distinctive textural architecture. Inward oriented. Alcoves, nooks, every step there's a difference sense and feel. Old world, Medieval, early Renaissance.

### Janey Ellis's place

I've learned to love the way that house captures living with the desert. Obvious connection between outdoors and indoors, use of natural materials, natural landscaping. It's a time warp. We've isolated ourselves from outdoors too much.

### Hayden Road/McCormick Ranch

You see park areas, nice, nonlinear meandering sidewalks. You see people out rollerblading, jogging, just sitting. Well-maintained.

### Resorts

Refreshing to see water, even during the winter months. Five or six pools in the desert is mind-boggling. I feel relaxed, excited, like I'm in an amusement park.

### McCormick Ranch

The streets go in circles.

A very cohesive body of work.

Resort area, palm trees, golf courses. Amplifies resort and leisure aspect of city for me.

If you like greenness, this is the place to go!

Typical master planned community. Upscale, planned, green development. Almost too planned.

New, planned, suburban; no clutter, lack of pedestrian activity.

### Hyatt Gainey Ranch

Tastefully done, incorporating elements of the area, the desert, growth, golf course.

Intimacy, antiquity, modernist, desert.

Homes are beautiful. Looks like what you would consider a desert city to look like.

Wonderful to go in and out of buildings and see mountains.

Best early in day or near sunset; representative of what living in this area's about.

### Sonoran Village

Growth is so rampant, so fast, a suburban downtown. A glut of commercial development. No plan to it. A place I want to get through.

### Scottsdale Princess

Pink, green, lush, feels like Hawai'i.

### McDowell Mountain Ranch

Nice living environment, but clustered too much.

A city until itself. Houses too big in relation to lots. All you can see from a house is other houses. You could be anywhere, any neighborhood.

### DC Ranch, Greyhawk

Typical development that looks too dense.

### Taliesin

Architecture represents a possible future—responsive to the desert and climate in its materials and orientation.

### Rawhide

It's just like the Old West was.

Fake Old West, we're living a lie, this is not Scottsdale.

### Greasewood Flats

Outdoors, western, casual; smells like desert, organic.



### Pinnacle Peak

I wouldn't even describe it, I'd draw a picture of it. There's a cleft, a little grouping of mountains next to it. Houses along the bottom. It kind of glows, red-orange, at sunset.

### Boulders/Troon

Not as much vegetation; presence of boulders. Can't climb Troon Mountain.

### Scottsdale Road North

Relief! I'm in the desert.

### El Pedregal

You see the boulders configuration, water play, a rotunda. Soft, not squared off.

Colors, architecture from South Africa; totem poles; grass, trees, pedestrian oriented.

### Desert Mountain

Creosote bush after rain; quail and coyotes at night.

Very rural, well planned, houses designed to fit on land. Materials and colors blend in well. Wildlife: the chain starts with insects, rabbits, rodents, coyotes, bobcats, mountain lions, javelina.

Cool temperatures at night, more rainfall, more snow.

Rural, well planned, houses fit on land, materials and colors fit well; wildlife: insects, rabbits, coyotes.

## Appendix IV

### Critique of the methodology, future research

Research of this sort is iterative in nature. That is, once one study is conducted and the findings analyzed, new questions and methodologies for further investigation suggest themselves. We offer the following observations on the methods used in this research project and on potential future research project.

#### *Comments on the methods*

1. The photo surveys conducted in this research concentrated on people's recognition and valuation of streetscapes, specifically major arterials occurring at mile or half-mile points on the grid. This was related to the researcher's hypothesis that arterial street environments comprise the primary shared landscape of the city and the most frequently experienced public landscape of the city.

However, we were not able to test very strongly questions about people's perceptions and recognition of various visual landmarks in the city or of various neighborhood fabrics. Such testing, though not part of the original Lynch methodology, is clearly suggested in this context and would enrich our findings about people's perception of visual landmarks.

We experimented with the photo-grid approach to documenting downtown. We found that the resulting images were largely unidentifiable, even by the researchers who took them. More experimentation in the methods of making and presenting images would be needed.

2. Lynch's methods included conducting guided walks with research respondents and asking directional questions of people encountered on the street (can you give me directions

to ...). We did not use these methods because of the inhospitable summer climate, when this research was conducted, because the spread-out scale of the city require adaptations of these methods, and because the researchers themselves were not completely familiar with the city at the outset of the project.

#### *Future research steps*

1. The photo recognition and valuation surveys could be replicated with images from other types of environments in the city. First, surveys could test people's visual recognition of the elements and places mentioned most frequently in the responses to this research. Second, it could test people's recognition of building types and landscapes characteristic of different areas in the city.

2. Devise a strategy for replicating the pedestrian-based field research steps, such as interviewing respondents in the field and using informal directional queries.

3. Particular areas of the city could be studied in more depth. One clear candidate is downtown, another is the Airpark. In each case, a more focused sample of participants and a more focused survey should be used. Downtown, groups of tourists, workers/shop owners and nearby residents should be surveyed. For the Airpark, workers/business owners, shoppers and nearby residents should be surveyed.

4. Recent research in rural areas has suggested that visual experience is not as important to people's knowledge of the landscape as their haptic experience, or their knowledge gained from working the land, and the cultural experience passed on through storytelling.<sup>10</sup>

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<sup>10</sup>. See Maire O'Neill, "People, Memory and Haptic Experience: A Rural Way of Knowing," unpublished research study, Montana State University Department of Architecture.

In Scottsdale, the act of driving throughout the city might be a comparable haptic experience. Some of the findings regarding people's sense of the terrain or sense of visual landmarks may be affected by the fact that people frequently engage the city through driving. Methods of gauging people's "haptic" experience in cars would be a useful extension of this study.

5. Reviewers of this research have commented that the depth of respondents answers may have been limited due to the length of the interview. We do not agree that this is the case. Though the interview consisted of more than 30 questions, we did not ask every respondent every question. Instead, we attempted to probe certain questions more deeply to be certain we were eliciting a full response. For example, questions about people's visual memory of drives through the city sometimes elicited three or four follow-up questions to give respondents an opportunity to describe their journeys in different ways.

*Looking at image studies in a larger context*

1. Many of the findings of this study would be strengthened if they could be compared more easily to findings of other studies. For example, we noted that people drawing maps of the city frequently started by drawing the city's boundaries. It would be useful to compare this how residents of other cities map their cities, in order to understand better people's perceptions of the city's edges.