

# The Phoenix Area Social Survey (PASS): New Possibilities for LTER Cross-Disciplinary Research in the Social and Ecological Sciences

Darren Ruddell, Annie Gustafson, Jason Walker, and Sharon Harlan



## The PASS Research Team

Tony Brazel, Megha Budruk, Bill Edwards, Pat Gober, Corinna Gries, Nancy Grimm, Annie Gustafson, Ed Hackett, Sharon Harlan (Project Director), Pam Hunter, Larissa Larsen, Kelli Larson, Kitty Loese, Carol Palombo, Tom Rex, Darren Ruddell (Research Assistant), Kerry Smith, Jason Walker, Paige Warren, Dave White, Scott Yabiku.

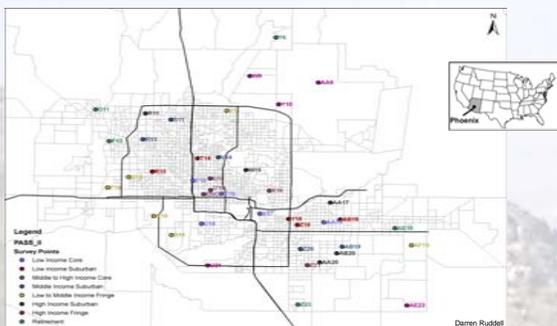
### Phoenix Area Social Survey (PASS) 2006 and Beyond

PASS is an interdisciplinary collaboration between researchers affiliated with the Central Arizona – Phoenix LTER (CAP LTER) and the Decision Center for a Desert City at Arizona State University. We use social surveys of individuals in selected neighborhoods as methodology to explain the choices and actions of households and communities that influence the biophysical environment and the feedbacks of the environment to the quality of human life. After a successful pilot study in 2001-2002, data gathering for a much larger survey of 800 households in 40 neighborhoods is nearly completed. PASS 2006 is the benchmark for planned long-term social monitoring that will complement ecological monitoring in the CAP LTER study region.

PASS creates opportunities for the incorporation of other methodological approaches from the social sciences, such as ethnographic studies, historical demographic analyses, cultural analyses, spatial analyses, and vulnerability assessments, into urban ecology. Social surveys at multiple LTER sites could serve as one basis for comparison and synthesis of socioeconomic changes across the LTER network that result from population growth, residential mobility, and socioeconomic inequalities.

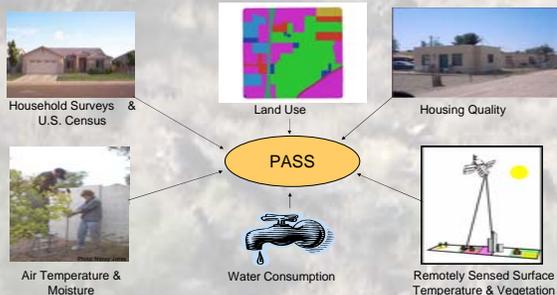
### PASS 2006 Neighborhoods

PASS 2006 targets 800 respondents from 40 neighborhoods located within CAP LTER's broader Survey 200 study sites. Criteria for selecting PASS neighborhoods was based on location—core, fringe, suburban—as well as median household income, ethnic composition, and age.



Darren Ruddell

PASS is the foundation for broadly interdisciplinary collaborative projects that will combine survey data with biophysical and other geo-referenced data streams in order to help us understand the socio-ecological systems of an arid rapidly urbanizing region. Examples of other CAP LTER data linked to PASS neighborhoods are remotely sensed images of vegetation and surface temperature, air quality, land cover classifications, environmental toxins, and bird surveys.



## PASS Questionnaire Topics

The survey content is aligned with CAP LTER's Integrated Project Areas listed below. The survey will measure people's perceptions of risk, attitudes, values, knowledge, and behaviors on each of these topics, thereby lending crucial insights about the preferences and actions of people that affect the environment as well as the impact of the socio-physical environment on the quality of human life in the Phoenix metropolitan area.

### Water Supply, Quality, and Conservation

Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree with these statements about water use in and around your home.

Household conservation does not make a difference for regional water availability.

In the last year, I have sought or read information to help reduce my household water use.

Using a lot of water at my home threatens the region's water supplies.



spinet.com

### Air Quality and Transportation

Are you very concerned, somewhat concerned, slightly concerned, or not at all concerned about air pollution in the Valley?

What about air pollution in your neighborhood?

How do you usually get to work?  
 Car, truck, van, bus, taxi cab, motorcycle, bicycle, walk, work at home.

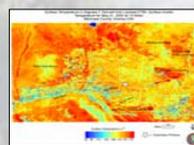


nicetutor.com

### Climate Change and Urban Heat Island

Do you think the Valley is or is not getting hotter over time?

During the summer of 2005 do you think your neighborhood was (much cooler, a little cooler, the same temperature, a little warmer, or much warmer) than most other neighborhoods in the Valley?



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### Land Use, Preservation, and Growth Management

Suppose you were offered a choice between two homes that are the same price but they differ in some other ways. Which home would you buy?

A small home with a 20 minute drive to work OR a large home with a 1 hour drive to work?

A home in a neighborhood that is a short walk to public transportation OR a home in a neighborhood that is a short drive to a freeway entrance?



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This poster reflects data collected from 710 completed surveys as of 9/13/06

### Description of Respondents

**Gender:** 56.8 percent of respondents were female, 42.1 percent were male

**Ethnicity:** 73 percent White, 20 percent Hispanic, 7 percent Other

**Median age:** 8 percent of respondents <25 years old, 18.2 percent 26-35, 17.6 percent 36-45, 21.5 percent 46-55, 16.4 percent 56-65, 18.3 percent >65

**Median Household Income:** 35.4 percent of households earn <\$40k, 27.9 percent between \$40k and \$80k, 36.8 percent >\$80k

**Education Level:** 24.7 percent of respondents high school graduates, 16.9 percent some college, 44.1 percent college graduates

**Median Years Lived in Valley:** 20 years

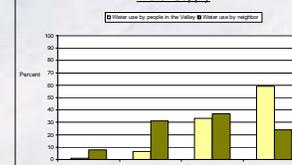
**Home Ownership:** 75.4 percent of respondents own their current residence. 73.8 percent of respondents live in a single family detached home and 15.4 percent live in an apartment

**Maricopa County Population (2004):** 3,501,001

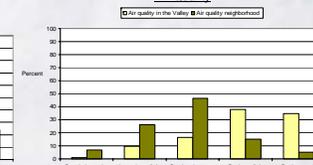
**Arizona Population (2004):** 5,743,834

### Some Preliminary Study Results

#### Water Supply



#### Air Quality



Summary:

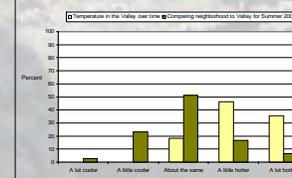
Respondents express concern about the future quality of the environment in Greater Phoenix which in known locally as the "Valley". The Valley encompasses an area of 1803 sq mi in central Arizona.

- 80% of respondents are very concerned about the amount of water used by people in the Valley
- 35% think air quality in the Valley is getting much worse
- 35% think the climate is getting much hotter

Respondents see their own neighborhoods as less threatened environments than the Valley.

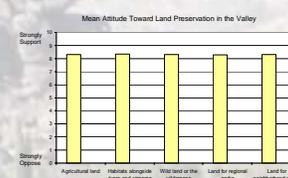
- 40% of respondents are not concerned about the amount of water their neighbors use
- 33% think that the air quality in their neighborhood is improving
- 24% think their neighborhood is cooler than others

#### Climate Change



\*Respondents were not asked whether they thought the Valley was getting cooler over time.

#### Land Use



Residents support the idea of preserving more land in the Valley; however, 32.5 percent of residents think homes in their neighborhood are spaced too close together.