

Trees are Good for Business Here's Why!

Research & Design

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Social and Cultural Values Across the Landscape Spectrum





meaning and value of . . .

- individual trees
- small groves
- remnant native forests
- public & private

www.cfr.washington.edu/research.envmind

Center for Urban Horticulture, College of Forest Resources, University of Washington

Human Dimensions of Urban Forestry and Urban Greening

featuring research on peoples' perceptions and behaviors regarding nature in cities

Nature and Consumer Environments
Research about how the urban forest influences business district visitors.

Trees and Transportation
Studies on the value of having quality landscapes in urban roadsides.

Civic Ecology
Studies of human behaviors and benefits when people are active in the environment.

International Urban Greening
Scientific explorations of people and urban nature in other nations.

Urban Forestry and Human Benefits
More resources, studies and links . . .

Research Director
Kathleen L. Wolf, Ph.D.



Research Settings:

big city - neighborhood districts
mid size - Athens CBD
small city - Main Streets
arterial strip mall

Sponsors:

NUCFAC - USDA Forest Service
Georgia Forestry Commission
Athens/Clarke County Consolidated Govt
National Scenic Byways Research Center
many local partners!



trees & merchants - Love/Hate!



visibility = customer appeal?



“low maintenance”



aesthetics?
(me or we?)



Research Question:

What is the response of
consumers/shoppers to
trees in CBD streetscapes?

Measures:

Visual preference
Place perceptions
Patronage behavior
Product pricing

Inner-City Revitalizing Districts

First Survey - Patronage & Pricing

Shopping District Settings



District 1:
No trees or
accessory
vegetation



District 3: With
trees and accessory
vegetation



District 2:
With trees, no
accessory
vegetation

1. Place Perceptions

- Amenity and Comfort
- Interaction with Merchants
- Quality of Products
- Maintenance and Upkeep

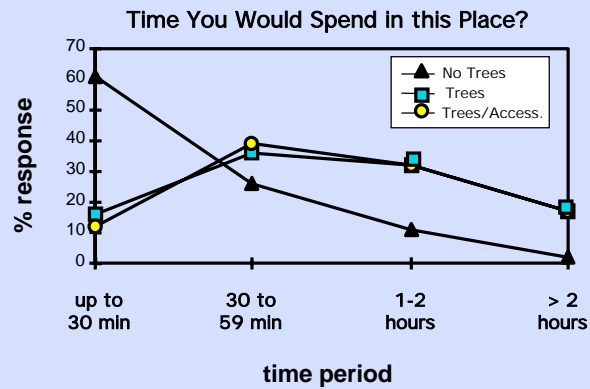
trees as cues of caring & quality

2. Patronage Behavior

- travel time, travel distance
- duration of visits, frequency of visits
- willingness to pay for parking

increased market base & trade area

Patronage Behavior



Similar response patterns for other behaviors:

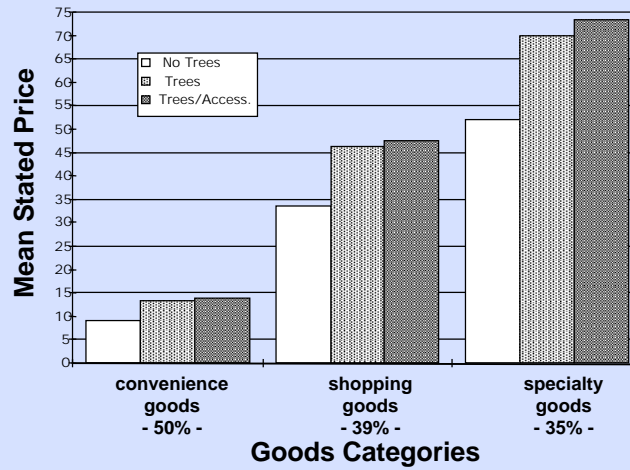
- time of travel
- distance of travel
- how often would return to place

3. Product Pricing

- higher willingness to pay for all types of goods
- higher in districts with trees

trees & consumer spending

Product Pricing



Athens GA Central Business District

**Second Survey -
Community Case Study**



**Survey on
Nature and Commerce
in the
Downtown Athens
Business District**

Spring 2002

Sponsored by: USDA Forest Service, Georgia Forestry Commission,
Athens-Clarke County, Athens Downtown Development Authority

**-Methods -
survey research**

**on-street
sampling**



**-Methods -
person-to-person
contact**

**random locations
& times**



UGA students

365 respondents

Results: Visual Preference

Mean Scene Ratings

lowest rated scene
mean 1.34



Scale :
1=not at all
5=like very much

20 images

highest rated scene
mean 4.67



Three Preference Categories

descriptions & mean ratings



Category 1:
Dominant
Buildings
mean: 1.98



Category 3:
Green Streets
mean: 4.00



Category 2:
Buffered Buildings
Mean 3.13

Visual Preferences

- lower without trees
higher with big trees
- little difference in
response based on visitor
demographics

Trees & Visual Quality

Contingent Behavior

- ◆ Respondents report likely behavior in hypothetical situations
- ◆ Survey methods
- ◆ Visual scenarios

Part Three

The streets and sidewalks of Athens are being upgraded and improved. Different design options have been proposed. Imagine that in time most of the business district looks like these images. Please answer the questions below.



If the entire district looked like this, how often would you visit the Athens business district per month?
 less than once a month once a month 2-3 times per month
 about once a week 4 to 7 times per month once a week or more (8 or more times per month)

Would you spend more or less time during your visits to the district if it looked like this? Please check "more" or "less." Then estimate how much time on average you think you would spend doing any of the following activities during visits to the proposed version of the district.

Would you spend more or less time doing these activities in the Athens business district?	LESS Time	MORE Time	Average Time Spent					
			0 min.	15 min.	30 min.	45 min.	1 hr.	more than 1 hr.
Attend a concert, show or performance								
Go to a club or bar								
Socialize with friends, colleagues or family								
Take a work or study break								
Shopping for specific products or services I know that I can find in the district								
Browsing and window shopping in the district, then buying what interests me								

Part Three

The streets and sidewalks of Athens are being upgraded and improved. Different design options have been proposed. Imagine that in time most of the business district looks like these images. Please answer the questions below.



If the entire district looked like this, how often would you visit the Athens business district per month?
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Would you spend more or less time doing these activities in the Athens business district?	LESS Time	MORE Time	that 1.5 hr?						more than 2 hrs
			0 min.	15 min.	30 min.	45 min.	60 min.	90 min.	
Attend a concert, show or performance									
Go to a club or bar									
Socialize with friends, colleagues or family									
Take a work or study break									
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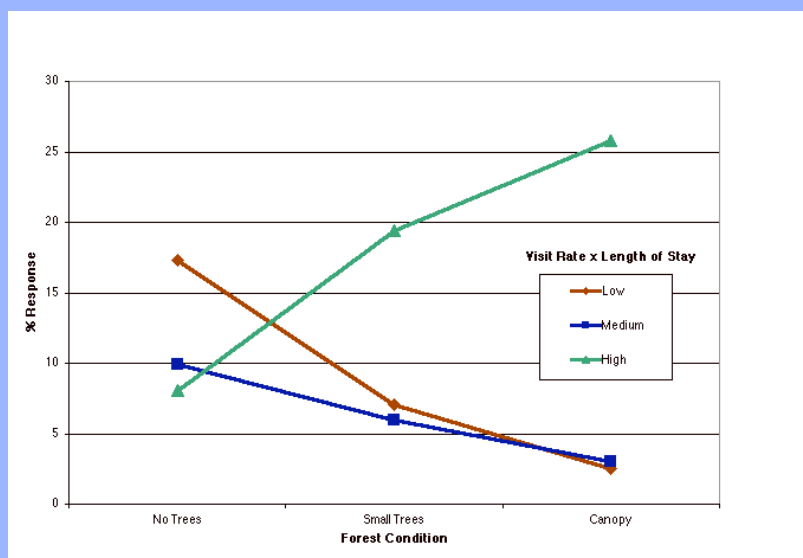
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Results: Visitor Patronage

Frequency x Stay Length

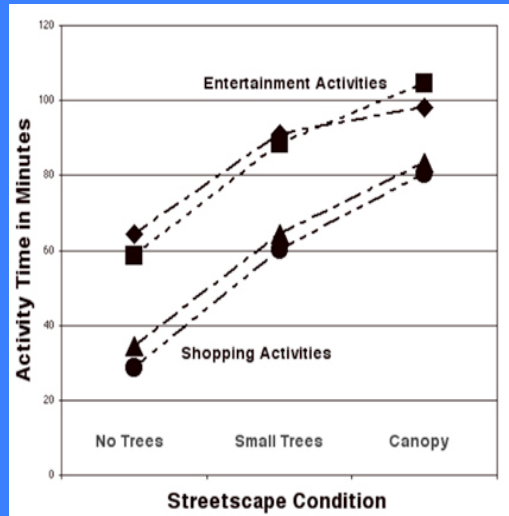


Visitor
Patronage

- both visit frequency & visit length positively affected by trees
- existing forest condition is a positive experience

Results:
Product Pricing

Time Spent on Activity



Spending Behavior

- entertainment & shopping time increased with trees
- canopy boosts time spent by up to 50%

Reported Spending

Activity	minimum	maximum	mean
concert, show or performance	5	60	22.48
trip to club or bar	5	60	22.03
take a work or study break	1	15	6.30
have dinner out	5	100	27.23
shopping for specific products	5	100	32.93
recreational shopping, browsing	5	100	26.57

Small City Business Districts

**Third Survey -
Residents & Visitors**

Image Categories (sorted by ratings)

**Pocket Parks
mean 3.72
(highest)**



Scale : 1=not at all,
5=like very much,
26 Images

**Full Canopy
mean 3.63**

Enclosed
Sidewalk
3.32



Intermittent
Trees
2.78



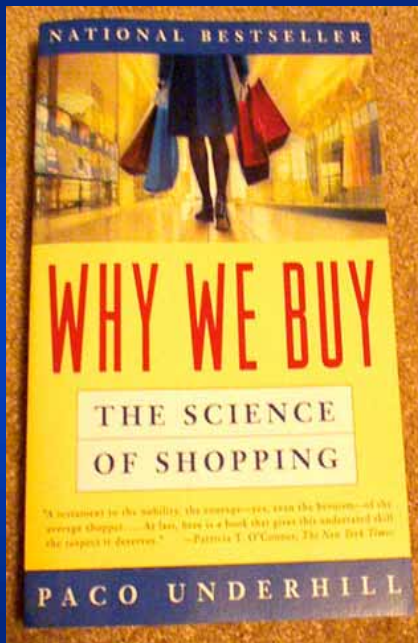
No Trees
mean 1.65
(lowest)
(high - 3.72)





Consumer Benefits!

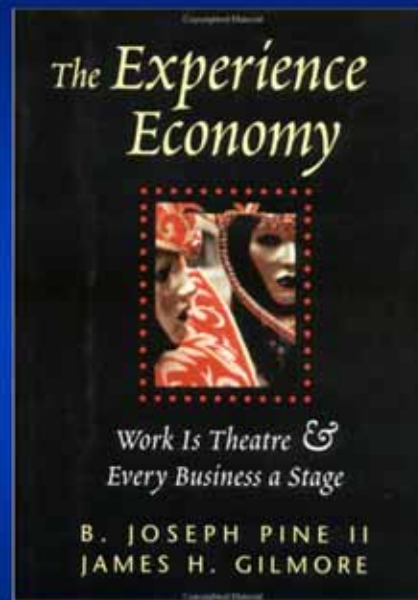
- ◆ **Consumer Preferences**
 - ◆ lower without trees, higher with (large) trees
- ◆ **Place Perceptions**
 - ◆ comfort, upkeep, product quality, merchant caring, business quality
- ◆ **Patronage Behavior**
 - ◆ travel time & distance, visit frequency/length
- ◆ **Product Pricing**
 - ◆ willingness to pay, 9-12% higher with trees



anthropology of
consumer
behavior

retail & place
marketing

“Companies stage
an experience when
they engage
customers in a
memorable way.”



Results Discussion

- ◆ **Trees make a retail “experience”**
- ◆ **Place Marketing**
 - ◆ More expensive to recruit new customer than to retain established customer
 - ◆ Trust, quality, loyalty
- ◆ **Trees & District Image**
 - ◆ Product and business quality
 - ◆ Higher price willingness-to-pay

Design Details

Trees in Retail Business Districts

**Bell Town
District,
Seattle, WA**





Double row trees,
Conifer plantings



Edmonds,
Washington



Seaside, Oregon





Centralia, WA





Claremont, CA





Winslow, WA







Austin, TX





Planning Guidelines for Trees and Retail Business

*Pacific Northwest Chapter
International Society of Arboriculture*

Info@pnwisa.org



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