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
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”
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 2: With trees, no accessory vegetation

District 3: With trees and 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**

**Time You Would Spend in this Place?**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 30 min</td>
<td>70</td>
</tr>
<tr>
<td>30 to 59 min</td>
<td>60</td>
</tr>
<tr>
<td>1-2 hours</td>
<td>50</td>
</tr>
<tr>
<td>&gt; 2 hours</td>
<td>40</td>
</tr>
</tbody>
</table>

Similar response patterns for other behaviors:
- time of travel
- distance of travel
- how often would return to place

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### 3. Product Pricing

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

**trees & consumer spending**
Product Pricing

Goods Categories

Mean Stated Price

- 50% -

- 39% -

- 35% -

convenience goods

shopping goods

specialty goods

No Trees

Trees

Trees/Access.

Athens GA Central Business District

Second Survey - Community Case Study
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 2:
Buffered Buildings
Mean 3.13

Category 3:
Green Streets
mean: 4.00

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 you are in one of the business areas like shown below. Please answer the questions below.

1. Are you interested in this idea? (Yes/No)
2. How much would you pay for the Athens Downtown District plan?
   - Less than $10 per month
   - $10 to $20 per month
   - $20 to $30 per month
   - $30 to $40 per month
   - More than $40 per month
3. Are you knowledgeable about the construction process?
   - Yes
   - No
4. Do you believe the district plan is feasible?
   - Yes
   - No
5. Do you believe the business area will benefit from this plan?
   - Yes
   - No
6. Are you interested in participating in the construction process?
   - Yes
   - No
7. Are you interested in other business areas?
   - Yes
   - No

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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

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

Spending Behavior

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

Reported Spending
Small City Business Districts

Third Survey - Residents & Visitors

Image Categories (sorted by ratings)

Pocket Parks
mean 3.72
(highest)

Full Canopy
mean 3.63

Scale: 1=not at all, 5=like very much, 26 images
Intermittent Trees 2.78

Enclosed Sidewalk 3.32

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
Planning Guidelines for Trees and Retail Business

Pacific Northwest Chapter
International Society of Arboriculture