Trees in Business Districts: Comparing Values of Consumers and Business

Do business people and shoppers share an appreciation for trees? This was one of several questions in a recent national survey about the urban forest in business districts. Revitalizing business communities face many competitive challenges, and have limited resources to address many needs. Despite their costs, trees provide many indirect benefits to businesses, and communicate positive messages that can attract visitors and shoppers.

Recent research, done by social scientists at University of Washington, helps us to better understand the values of trees in a business community. Revitalizing districts were identified in eight cities around the United States. Both business people and nearby residents were asked to complete a survey. The project outcomes, based on analysis of responses, helps us to plan and manage urban forests that better meet business needs in America's cities.

Public Preferences

Preference surveys are a tool used to assess public values for different landscape settings. In this study people were asked to rate 32 scenes for how much they liked the scenes (scale of 1=not at all to 5=very much). While the ratings express an aesthetic judgment, the basis of the judgment is very important - the capacity of a place to meet the needs and concerns of a person.

The scenes show retail settings with different amounts and quality of vegetation. Analysis of the ratings helps us to understand the characteristics of streetscapes that are judged to have high visual quality. We can also statistically compare the ratings of business people and the general public to better understand how their values for the urban forest may differ.

LOW AND HIGH RATINGS – Ratings were averaged for each of 32 scenes. Scenes with the lowest and highest mean ratings differ significantly in visual content. While they differ somewhat architecturally, their difference in appearance is influenced by the presence of trees and accessory vegetation, including light and shade

**Lowest rated scene
Mean 1.38**

**Highest rated scene
Mean 4.35**

patterns associated with the plants. A three point difference in means (on a scale of 5) is a striking example of how plants affect consumer's judgments of place. Across many studies, of diverse landscapes, the presence of trees enhances public judgment of visual quality.

Category 1:
Little/No Vegetation
Visitor Mean: 1.95
Business Mean: 2.17

Category 2
Naturalistic
Visitor Mean: 3.17
Business Mean: 2.70

Category 3
High, Open Canopy
Visitor Mean: 3.59
Business Mean: 3.42

Category 4
Low, Dense Canopy
Visitor Mean: 3.68
Business Mean: 3.42

Category 5
Formal Foliage
Visitor Mean: 3.70
Business Mean: 3.57

Perception Categories

Analysis also reveals categories of images based on similar patterns of response. Typically, differences in the categories can be attributed to both the content of the images and how the image elements are arranged. Five visual categories were identified in this study.

MEAN RATINGS – Preference ratings increase with the presence of trees in the streetscape. Category 1 was rated lower, by far, than than the other categories even though its images contain some vegetation. Category 2 images contain the most complex landscape plant blend, yet were valued least of the image categories containing trees. Meanwhile, larger trees are associated with higher preference, as in Categories 3, 4 and 5. Both open and dense canopied trees are valued. Finally, the latter three categories also appear more ordered; both trees and accessory vegetation are placed and managed to create distinct visual patterns.

COMPARING BUSINESS AND VISITORS – Both business and consumer survey groups gave higher ratings to scenes with trees. Yet, within all but one category (number 5) business respondents significantly differed from visitors in their assessment of visual quality (t-tests, $p < .05$). Business ratings of Category 1 scenes were higher than visitor ratings, despite the grim, hard-featured character of the street setting. Meanwhile, business people consistently rated landscaped scenes on Categories 2 through 4 lower than visitors, suggesting that merchants have less appreciation for trees than the people they wish to welcome to their shops.

Design and Planning

Results suggest that consumers enjoy having trees in retail shopping districts! An orderly and well maintained planting scheme, of both trees and accessory vegetation, produces highest visual quality ratings. The public prefers both dense and more open canopied trees, thus careful pruning can be used to thin and open up a tree canopy. This permits more visibility of signs and store-fronts while providing the forest amenities that consumers appreciate.