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# Nature And Commerce: Human Ecology In Business Districts

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**Abstract:** Research about the role of urban forestry in urban business districts reveals multiple benefits for retail environments. Both consumer attitudes about place and business social capital can be enhanced by streetscape improvements.

Since the beginning of history people have gathered to exchange goods and services. Places of commerce are not only market centers but are also the sites of multiple, daily interpersonal contacts that are a part of the social fabric of any city or town.

Studies of human ecology tell us about certain social phenomena and the conditions that give rise to events and relationships. Commerce is a unique situation of human ecology, and one that has rarely been explored in studies of urban forest benefits.

A healthy, thriving urban forest contributes to the human ecology of retail and commercial districts in two major ways. First, trees help create welcoming consumer environments. Urban forest amenities attract shoppers and provide perceptual cues about the quality and character of a retail setting.

In addition, the urban forest can facilitate positive relationships among business people within a district. Planning and planting of trees often serves to unify a group of independent business people. Trees become a catalyst for collaborative activities, generating extensive collective benefits.

It has been said that the "business of America is business." A research project, reported here, suggests that trees and nature can play an important role in America's many habitats of commerce.

## Research and Understanding

There are many anecdotes about the positive interactions of people and trees in urban environments. Yet policy and budget decisions rely on more formal evi-

dence. The role of the urban and community forest in human ecology is complex yet can be investigated empirically, providing the evidence for public decision-making arenas.

A two phase research project, employing both qualitative interview and quantitative survey methods, was conducted to explore the costs and benefits of trees in revitalizing business districts. The interview phase was conducted in urban neighborhoods of the Pacific Northwest. The survey phase compared business peoples' and consumers' perceptions regarding trees in revitalizing business districts. Data was collected in cities of the Pacific Northwest, Austin, Los Angeles, Chicago, Pittsburgh and Washington DC.

## Inviting Others – The Consumer Environment

Marketers have studied the influence of product packaging, store layout and store "atmospherics," such as lighting and music, on the behavior of shoppers. While business people are keenly interested in the presentation of their product and store they often overlook "macro" level settings - the district that surrounds their shop or office.

The research survey evaluated several facets of public response to trees in retail settings. In one section respondents were asked to rate various streetscape scenes for their visual quality. The scenes showed retail settings with different amounts and arrangements of vegetation. The survey also con-

tained sections of questions about shopper perceptions of places that have or don't have trees. Finally, respondents were asked to express what they were willing to pay for goods in three different retail settings, each having a different streetscape character.

Trees make a difference! From ratings of visual preference, to perceptions about the character and quality of businesses represented by the scenes, and including reports of product pricing - the presence of trees positively influenced all categories of response.

### ***Place Perceptions***

Respondents' answers about the qualities of shopping places statistically sorted into four categories: *Amenity and Comfort, Interaction with Merchants, Quality of Products, Maintenance and Upkeep.* Consumers' ratings on each of the perceptual categories was significantly higher for districts that had street trees and other landscape improvements! For instance, *Amenity and Comfort* ratings were about 80% higher for a tree lined sidewalk compared to a non-shaded street. Also, *Quality of Products* ratings were 30% higher in districts having trees over those with barren sidewalks. *Interaction with Merchants* items included customer service issues; ratings were about 15% higher for districts with trees.

### ***Shopper Patronage***

Actions follow our impressions of a place. Respondents were asked to give opinions of their behavior within the three shopping districts, including travel time, travel distance, duration of a visit, frequency of visits and willingness-to-pay for parking. Again, trees make a difference! On ALL behaviors, higher measures were reported in the districts having trees. For instance, respondents claimed they would be willing to pay more for parking in a well landscaped business district. This suggests greater revenues from shaded parking could offset the costs of parking space loss, a frequent objection to trees by merchants.

### ***Public Preference***

Statistical sorting of ratings for visual quality produced five visual categories. Categories containing scenes with no vegetation or scattered small plants

are valued the least. Meanwhile, larger trees are associated with higher preference; both open and dense tree canopies are valued. Finally, categories with the highest visual ratings have vegetation and are more ordered—both trees and accessory vegetation are placed and managed to create distinct visual patterns within the streetscape.

There are differences in how consumers and business people react to the appearance of business settings. First, business ratings of districts *without trees* are higher than visitor ratings, despite the grim, hard-featured character of the street setting. Then, in response to places with trees, business people consistently rated such places lower than visitors. Are merchants aware that they have less appreciation for trees than consumers, the people they wish to welcome to their shops?

### ***Product Pricing***

The bottom line is the top interest of most business people. Do trees influence how much people are willing to pay for goods? Contingent valuation methods were used to assess how amenity values relate to customers' price valuations. Respondents' stated prices were, on average, about 12% higher for products in the landscaped compared to the no-tree district. This was true of low-price, impulse-buy convenience goods (e.g. lunch sandwich, flower bouquet), as well as bigger ticket items (e.g. sports shoes, new glasses). Given the low profit margins of most retail businesses, trees provide a significant "amenity margin."

It has been said that "perception is reality." Physical elements of a consumer environment send cues to people that influence their attitudes and behavior. Neighborhood business districts, to be successful, must comprehensively plan their image and character to attract and retain consumers. A healthy, vital urban forest helps shape positive perceptions of place.

### ***Working Together – District Dynamics***

Small business owners are a distinct expression of American individualism. A self-reliant, can-do attitude is needed to take on the challenges of business start-up and growth. Nonetheless, to face the com-

petitive challenges of retail malls and volume-selling "box stores," neighborhood and small community business districts must recognize that their greatest competition comes not from their business neighbors, but from retailers beyond.

How can businesses build the cross-district coalition needed for competitive survival? Tree and streetscape programs may be the necessary catalyst.

### *Planning and Process*

A planning process introduces district improvements in a programmed way, rather than as ad hoc, piecemeal changes. While focusing on trees, a streetscape plan may be the first step in a community-based process of identifying needs, assessing solutions and acquiring resources for implementation. Stakeholders come together to share perspectives and create—from their shared needs and goals—a vision of their future and the place they hope to become.

Planning is a process tool for addressing physical needs. It also is an opportunity to nurture entrepreneurial solidarity. Research participants frequently reported that landscape programs have become springboards for relationship building among businesses. Through shared activities professional alliances emerge and trust building can begin.

### *Social Capital and Commerce*

Coleman (1988) used the term social capital to describe the benefits of collective action. Social capital includes many kinds of resources gained from interpersonal relationships for the pursuit of an individual's interests. Social capital also refers to features of social organization—such as networks, norms, and trust—that enhance coordination and cooperation for mutual benefit. As groups of people work on shared goals, social capital produces tools and resources that enhance each individual's productivity.

Theory of social capital can be applied to community development in a pragmatic way. Flora (1998) promotes the idea of *entrepreneurial social infrastructure* (ESI) as a "format for developing organizational forms that encourage collective action to achieve tangible goals." ESI is an inclusive process and assumes that community and economic development are best carried out when there is involvement of a broad

spectrum of citizens. Actions and intentions can be collectively planned, guided by desires for community betterment.

### *Bottom Line Benefits*

Business owners and managers live by the bottom line. Social capital theorists note that individual involvement in collective goals is often not a conviction of values but is based on expected benefits and utilities that will come with association. What fiscal advantages might business people obtain through collaborative effort and planning?

First, a plan can help a community to resolve important issues before they become expensive mistakes. An example is plant selection; "right tree, right place" decisions can be fully considered before any soil is moved, preventing the direct costs of utilities or sidewalk damage. A plan is an opportunity to avoid the costs of "plant now, think later."

Cost efficiencies are gained as urban forest services and materials are accessed for a shared project. Economies of scale occur as businesses collectively contract for various streetscape upgrades needs, such as sanitation, tree maintenance and sidewalk cleaning.

Aesthetic concerns can also be addressed. Acting individually, business people may do plantings that are visually incompatible. The planning process can address diverse visual standards, generating a plant palette that optimizes the beautification benefits of plant investments.

Once a plan is in place fiscal and technical resources are needed. A successful streetscape campaign, and the underlying decision-making structure it represents, becomes a powerful tool for future action. Working from a plan, a district can respond immediately to grant programs and technical resource opportunities without having to reconvene district members for each new effort. A plan creates an environment of opportunity; resources are awarded to communities that display the promise of success.

A collective project helps make the most of technical resources, assuring that good ideas become good actions. Some tasks can be carried out by volunteers—a weekend planting—while some require professional assistance—an arborist for major prun-

ing. Advance planning can help a community to determine where additional professional guidance is needed and maximize the benefits of those services.

Finally, a successful program can be an effective tool for recruiting new businesses. To successfully compete with planned shopping centers, business associations must assess the range of goods and services within their district then actively recruit to address consumer needs. A successful tree program can indicate a district's capacity for future improvements and its ability to support new businesses.

### **Conclusions – Trees and Entrepreneurial Ecology**

Economists theorize about market forces and dynamics. Underlying all market activity is human ecology, the interaction of people, product and place. Research suggests that the urban forest is important to entrepreneurial ecology.

Urban forest planning can rally individual participation in collective activity to achieve trans-business goals and objectives. Streetscape improvements leave community participants with a sense of achievement.

Do trees have an effect on business revenue? Research suggests that trees, if well managed and maintained, have positive impacts on consumers' perceptions of a business district—of its sense of place, merchants, and products.

How can we encourage business leaders to become advocates for trees? Let's talk about the bottom line! Business people often focus on the direct, tangible costs of the urban forest. Meanwhile, they overlook significant intangible, indirect benefits that can enhance revenues. The community forest is an asset for entire retail communities, as well as each business owner. A tree program is an important part of any business improvements campaign!

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