ABSTRACT. Small city central business districts undergoing revitalization must carefully weigh their choices for improvements, given limited resources. One option, an urban forest and streetscape program, should include planning for both tree and human factors. This qualitative research specifies the human dynamics of successful programs. Forest professionals assisting communities should consider civic process as well as arboricultural choices and practices. Planning, implementation and ongoing maintenance strategies often involve public and private partnerships. Each program contributor has different capacities for tree installation and care. Appropriate technical choices must be accompanied by personal commitment. Finally, implementation of the tree program must acknowledge the needs of all interests in the district.

KEY WORDS. urban forestry, business districts, streetscape trees, urban forest planning

Retail business districts in small cities and towns face increasing challenges as they strive to attract new shoppers and retain customer loyalty. Big box retailers lure customers with extensive product diversity and hyper-competitive prices made possible by the economies of franchise scale. Internet retailing, while still a small percentage of America's total consumer spending, offers consumers the opportunity to shop conveniently in the comfort of their homes.

Yet the central business district has historically been the hub of civic life in many small cities and towns. Essential goods and services were offered in a walkable setting. Shoppers conducted their business and in so doing the social networks and economic vitality of a community were established and strengthened. Oldenburg (1989), a sociologist, notes that Main Street districts have been "great good places" in many towns and cities.

Yet, Kunstler (1993) laments the loss of the places that give towns their character and provide a sense of identity for residents. Many communities, recognizing the loss of the centers that bridged economic and community life are making attempts at revival. Needs for physical improvements are many, as business communities reckon with the physical decline brought on by years of inadequate maintenance. Building facades, streets, sidewalks, and infrastructure need attention.

An urban forestry program is one streetscape improvement often contemplated by district revitalization planners. While the shopper amenities associated with a full tree canopy may be recognized, the means to achieve that end are often uncertain or controversial. Initial costs are substantial, but even greater costs may be incurred over time if streetscape trees are not carefully planned and implemented.
A multi-phase research project is being conducted to learn more about the costs and benefits of the urban forest in small city central business districts. Research issues include:

- better understanding of small business owners' attitudes and perceptions of trees and commerce
- evaluation of business district users' (shoppers and tourists) preferences and values regarding the urban forest.
- assessment of the economic values and benefits associated with streetscape improvements in Main Street business districts.

The research will generate knowledge that will enable communities to most effectively employ the urban forest in their efforts to revitalize and redevelop business zones. Foresters and landscape professionals will be better prepared to collaborate with business people and organizations to create a consumer environment that attracts visitors and generates amenities not available in other retail experiences. Presented here are preliminary findings of the first phase of research.

RESEARCH METHODS

In attempting to study impacts of trees in human communities, researchers are first confronted with the choice between a qualitative, interpretive design or a positivist survey approach. Each research approach offers a unique set of advantages and disadvantages (Guba, 1990) and each has been employed in relevant studies. Although mindful of the benefits of quantitative designs, qualitative interviews were used in the present study to explore the descriptive dimensions of the human relationship of people to their community forest. Qualitative data and analysis generate an inductive comprehension of meaning. Results are being used to prepare a survey that will allow examination of a large number of individuals using a specified instrument.

Qualitative interviews were conducted in Fall 2000 to identify the issues and opportunities associated with having street trees in the central business districts of small cities (10-20K population). Interviews were conducted in the following communities using an informal protocol:

- Idaho: Jerome, Mountain Home
- Oregon: Hermiston, La Grande
- Washington: Ellensburg, Moses Lake

Some of these communities have established streetscape trees; others have pending plans that await funding. Interviews were conducted with people representing the following interests and organizations:

- Small business owner or proprietor - 19 interviews
- Business association or Chamber of Commerce - 7 interviews
- Municipal agency or professional (e.g. urban forester) - 10 interviews
In addition, focus groups were conducted with the Washington, Oregon and Idaho state urban and community forestry councils.

Many respondents provided supplemental data and background information during the interview. Documents included streetscape design plans, local newspaper accounts of community concerns or support regarding trees and marketing analyses of districts prepared by consultants. Many respondents also invited the interviewer on a walkabout to locations in their district to better illustrate comments and concerns.

**DATA ANALYSIS**

All interviews and meetings were transcribed. Content analysis was conducted in an iterative sequence during the interview process and at the completion of data collection to inductively interpret key themes from the data set. Emerging themes from the earliest interviews were presented to subsequent interviewees for refinement and elaboration. Coding of transcriptions accompanied interpretation to "saturate" themes through constant comparison (Strauss and Corbin, 1990).

**RESULTS**

The purpose of the research is to generate general guidance for communities that are developing a tree program, rather than being an in-depth analysis of programs in specific communities. Also, the analytic themes presented here do not address the specifics of plant selection, urban forest best practices or arboriculture. Considerations of the municipal operations and organizational dynamics associated with a successful tree program are described.

**Planning and Program Start-Up**

In some communities trees have been planted on a voluntary basis, scattered throughout the business district in front of occasional storefronts. In others, a district-wide plan and planting program was done, often in conjunction with other street improvements (e.g. sidewalk paving, curb bulbs at intersections). There are advantages in having a planned approach. A cohesive collection of trees provides an image and character for the business district. One business association staffer observed, "it gives us a sense of unity. It's given us a central point . . . You can see that it's definitely a district." As new businesses rotate through buildings new proprietors can see the full effect of the trees and may be more likely to support them, while long-term businesses appear to take pride in their retail forest.

**Fiscal resources.** Assembling the fiscal resources to do a district wide planting is a challenge. Funding strategies include monies provided by the city, special assessments of businesses within the district, and grants from county or state agencies (e.g. community development or transportation). Often, there are not enough funds to do the entire district. One option is to do a portion of the district well versus doing fewer improvements over a larger area. One district improvements planner described a process of "copying the template," that is, doing a full complement of quality improvements (i.e. larger trees, tree grates, sidewalk paving, planters) in several blocks, and incrementally adding more area as funds become available.

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Planning participants. Planning for a tree program requires involvement of many contributors. No surprise, involvement of business proprietors is absolutely necessary, for their concerns and interests must be addressed. Input from someone with technical knowledge about street trees is also important. Some communities have a knowledgeable person in the community (e.g. city staff) while others must rely on advice from a state or federal forester, or a consultant. Several interviewees described dissatisfaction with the advice of local nursery people on tree selection, reporting that the advice reflected current stock on-hand rather than a broad knowledge about street tree options.

Participants that can help a plan go beyond the basics should be invited, such as artists or town history experts. The most successful planting projects capture the essence of something that is culturally or historically unique about the community. An owner of a clothing shop, reflecting on his role in planning a sidewalk planting done a decade earlier, commented, "Now that I look back on it I wish we would have done a little more."

Tree Plan Implementation
This study reveals the importance of planning how street improvements will be implemented and anticipating the consequences. While construction of new sidewalks and tree planting may only take months, the quality of the experience can taint business attitudes about trees for some time. For instance, a florist endorsed her local tree program but expressed bitter feelings about the loss of business during construction, "It needed to be done . . . . But it devastated our business because of the lack of access during construction. The good at the end does not justify the means."

Coordination of both the construction process and public communications is absolutely necessary to alleviate business impacts during implementation. On the construction side, respondents mentioned block by block phasing, daily and weekly update meetings with contractors, and clear traffic rerouting instructions. On the business side actions included ongoing communications with customers (e.g. newspaper articles, shop window posters) and flexible business hours so patrons could avoid construction activity.

Tree Maintenance and Stewardship
A tree planting is only the beginning of a successful tree program. Maintenance agreements determine the future health and quality of the urban forest in a business district. Maintenance responsibilities in the selected communities spanned from businesses having all responsibility for upkeep of trees fronting their businesses (with or without technical guidance provided by the city) to full city responsibility for right-of-way trees. Whatever blend of government or business responsibility is determined, it must be mutually understood.

An important issue is the capacity of respective parties. Few businesses have the equipment or knowledge to prune large trees. Expecting each business to hire a contractor is not cost-effective and pruning practices are inconsistent within the district. On the other hand, business owners can incorporate leaf pick-up and planting of annuals into their routine storefront upkeep. Those most willing to do these activities reported satisfaction with how the city was handling the "big
things." Mutually accepted maintenance standards and provisions builds a retail environment where, "The greenery just makes it friendly and a place where people want to be."

**Tree Champions**

A significant dynamic that appeared in most communities was the role of a community forest "champion." Two phases of this champion role were expressed. In the planning stage of a tree program a civic or business leader (sometimes a team of people) communicate a vision for improvements. They launch an idea, build momentum and support, and provide continuity as various people enter and exit the planning process.

In the post-planting phase the champion is often a person(s) who is technically knowledgeable about arboriculture, consults on tree issues, and offers flexible and innovative solutions in the face of limited funding. Be they in the private or public sector, one municipal employee observed that, "What you really need is someone who cares. If someone cares they can find lots of information. But it all depends on someone to carry through."

**CONCLUSIONS AND RECOMMENDATIONS**

A vital, healthy urban forest is present in "great places" of cities and towns. Many communities recognize the economic benefits that accrue from conservation, establishment and stewardship of urban green. From individual trees dispersed on private and public lands to forest systems, the presence of urban green boosts property values, creates livable communities that attract corporations with quality employees, and provides environmental service benefits that can offset public infrastructure costs.

Living plants face extreme challenges to growth and survival in the intense hardscape of central business districts. Compacted soils, lack of water, insufficient root volume and constrained canopy space limit tree growth and contribute to short life spans. These circumstances are often manifested as tree annoyances or conditions that entail direct costs for businesses - including buckled sidewalks or utility line interference. In addition, the physical presence of trees in the pedestrian zone and near cars causes additional concerns for business people - such as sidewalk debris or personal security (Wolf, 1998).

Often, first inclinations are to address these challenges from a plant science or arboricultural perspective. "Right tree, right place" species selection, maintenance plans and professional technical response to emerging problems is crucial for tree vitality in streetscapes.

In addition attention to the human dimensions of the urban forest is needed. Tree planning in situations where many stakeholders have diverse, sometimes conflicting, interests is a civic process. Rational planning approaches can address tangible needs and concerns; additional efforts should be addressed to intangible interests of individual and organizational players.

Private and public partnerships are essential for all aspects of economic revitalization. Each entity brings specific resources and capacities, creating a value-added approach to problem solving. Often small communities have meager resources for improvements. The private sector may be very important in the planning and implementation of a tree program, while the public
sector may have better capacity to address needs of an established forest. It is essential that partners' respective responsibilities and obligations be clearly articulated during tree program planning.

In addition, the role of key individuals is important. Within many business districts are long-term business owners, personally invested in local enterprise and passionately committed to the survival of the business environment. Some of these individuals often take on urban forest improvements as a cause. Such people should be identified and supported in their interests. Trees are living things, requiring ongoing stewardship and care. A committed individual or small group of people will often optimize available resources on behalf of trees and provide the oversight and continuity that is essential as a district forest changes and evolves.

Individual business people and business organizations (e.g. Chambers of Commerce) often display great pride and resolve in their revitalization efforts. They work to enhance revenue and boost the bottom line but are often interested in maintaining the civic center and social core of their community. They contribute to informal public life, as shoppers interact during daytime shopping for goods and services, followed by evening dining and entertainment.

Urban forest improvements in small city business centers can improve the social fabric of communities. Urban forest programs are far more likely to be successful if the social dimensions of program participants receive as much attention as matters of tree science and technical practices.

LITERATURE CITED

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