



The Impact of Statewide Urban Forestry Programs: A Survey of Cities in Oregon, U.S.

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Abstract. All 50 U.S. states have a state urban forestry program that provides assistance to cities. Statewide surveys of city urban forestry leaders are a common tool for assessing urban forestry needs and accomplishments. Oregon has conducted two such comprehensive surveys, in 1992 and 2004. The 2004 survey was designed to gain insight into the scope and extent of the urban forest resource in Oregon to measure local program accomplishment since 1992 and to measure the impact of a statewide urban forestry assistance program. The survey had a return rate of 51%, and the results show differences among small, medium, and large communities. Results show that Oregon cities have made significant gains in urban forest management over the last 12 years. The data reveal insights of local urban foresters relative to tree-related issues and outcomes of local efforts. This research illustrates the impact a state urban forestry assistance program can have on local program accomplishment. Oregon cities that have received state assistance are more likely to have urban forestry program components such as tree ordinances and inventories, are more likely to be Tree City USA communities, and are more likely to be investing in urban forestry activities.

Key Words. Performance measurement; program assessment; program impact; small communities; urban and community forestry; urban forestry planning.

Many municipal urban forestry programs date back many decades, or in the case of older United States cities, more than 100 years. The practice of planting and managing trees in cities began as a local initiative in most of the United States, but in the past 25 years, it has grown to also become a coordinated state effort with a growing set of comprehensive goals and contributions to human welfare. State urban forestry programs provide a valuable service to local urban forestry programs through technology transfer, targeted grant funding, technical advice, and networking opportunities.

Federal support for state-level urban forestry programs originated with passage of the 1978 Cooperative Forest Management Act that authorized urban forestry cooperation between the United States Forest Service and state forestry agencies. At that time, a handful of states created state-level urban forestry programs and more followed suit in later years. However, the most significant amount of growth in urban forestry program delivery has occurred since 1990, the year the United States Congress inserted an urban forestry titled “America the Beautiful” in its reauthorization of the federal Farm Bill legislation.

Oregon was one of more than 24 states that created an urban forestry program as a result of the 1990 federal legislation. The Oregon Department of Forestry’s Urban and Community Forestry Assistance Program (hereinafter cited as

ODF U&CF) was created in 1991 to help Oregonians improve their quality of life by promoting community investment in our urban forests. ODF U&CF provides technical, financial, and educational assistance to help Oregon cities capitalize on the economic, environmental, and social benefits that trees provide. In partnership with the United States Department of Agriculture Forest Service, ODF has a small staff of urban foresters working directly with communities providing a wide array of urban forestry services.

A primary concern and early priority of states with new urban forestry efforts was assessing the scope of the urban forest resource and gauging the opinions of local urban forestry decision-makers. Many states thus began conducting needs assessments, municipal program analyses, and community leader opinion surveys in an effort to measure various facets of local and state urban forestry program needs, accomplishments, and resource status. The nature of these studies varied with state needs and situations and, although rarely do they share a common methodology or scope, they do provide a basis for helping the state urban forestry program make strategic decisions about program delivery.

The scope and results of other urban forestry assessments are germane to this study. A national (U.S.) study (Tschantz and Sacamano 1994) funded by the United States Department of Agriculture Forest Service and the International Society of

Arboriculture Research Trust documented the scope of municipal urban forestry programs, including analysis on program budgets, expenditures, personnel, and management activities. At the state level, Pennsylvania's study (Reeder and Gerhold 1993) was designed to determine the number and scope of local tree programs. A follow-up study in that same state (Elemdorf et al. 2003) looked at trends in urban forestry practices and a measure of sustainability. Missouri conducted a survey of urban forest resource data as a follow up to a previous study 10 years earlier (Gartner et al. 2002). Illinois conducted two surveys to assess program needs specifically in small communities (Schroeder et al. 2003). Many other state urban forestry programs have conducted formal or informal unpublished assessments. These assessments all provide a foundation for states to use when conducting their own analysis of urban forestry issues, program needs, and delivery. Studies such as these can also illustrate the cost-effectiveness of investing state and federal funds in urban forestry assistance programs.

Because Oregon built a new urban forestry program from scratch, one of the first tasks was to conduct a needs assessment (Reichenbach 1992) by surveying the state's incorporated cities to determine the extent of their urban forest resources and the perceived needs for management assistance. This report provided a wealth of data and conclusions to help guide the new program. Within the next 12 years, Oregon developed a high-performing program that averaged nearly 400 technical assists per year. In 2004, another strategic planning effort was developed to examine the efficiency, effectiveness, and innovation of the ODF U&CF program delivery. This effort included a new survey of Oregon cities undertaken to obtain data, opinions, and perceptions from elected officials or city staff responsible for urban forestry decision-making. The purposes of conducting this survey included assessing the status of local urban forestry programs, helping ODF determine the most appropriate delivery systems for providing urban forestry services, and helping provide future program direction. The 2004 survey combined questions from the original 1992 survey with new inquiries about the impact of the state U&CF program.

This article analyzes the results of the 2004 survey and includes some longitudinal analysis based on the earlier survey. Of particular interest in this analysis are differences among cities of contrasting sizes where such comparisons can be made and measuring the performance of the state program in relation to its primary constituents, the cities it serves.

OREGON'S URBAN AND COMMUNITY FORESTRY ASSISTANCE PROGRAM SURVEY—METHODOLOGY AND RESPONDENTS

Oregon's 2004 state urban forestry survey was designed to collect demographic information about each of Oregon's 240

incorporated cities to gather data about each city's urban forestry program components and to determine each city's plans and needs related to urban forestry assistance. The earlier 1992 survey was used as a guide; many questions were repeated verbatim from that survey, whereas other new questions were developed to gauge other local urban forestry information not previously collected. The surveys used two sociologic methods of design: the Total Survey Design Method (Dillman 1978) and the Theory of Reasoned Action (Ajzen and Fishbein 1980). The survey instruments were tested with a small representative sample of potential respondents for the purposes of validity and reliability.

To accurately assess the status of municipal urban forestry programs in Oregon, 31 survey questions were organized around key themes of interest to the ODF U&CF staff such as program components present at the local level, current urban forestry issues of concern to cities, and cities' experience receiving state assistance. Although some questions used an open-ended response, the majority involved a defined list of choices that could provide data for quantitative analysis, including some that used a 5- or 7-point rating scale measuring the strength of agreement toward a set of options or statements. An Internet survey site (<http://www.surveymonkey.com>) was used as the data collection mechanism. The analysis of the resulting data involved calculating descriptive statistics for the numerous variables measured in the study.

The survey population was identified by developing a list of e-mail addresses for a known key urban forestry contact in each sampled city. For cities that have an existing established working relationship with the ODF U&CF program, the key contact was a city forester, city planner, parks manager, public works director, or other official known to be the primary decision-maker within that city's urban forestry program. For cities without an existing relationship with the ODF U&CF program, a key contact was chosen by ODF staff from a list of city officials found on the League of Oregon Cities web site. E-mail addresses were obtained for all but three of the 240 possible respondents. Those three cities were later mailed a printed version of the survey instrument.

Key contacts received an e-mail requesting that they complete the online survey and were provided a hyperlink directly to the survey instrument. E-mail recipients were given the option to refer the survey request to another city staff or elected official if they believed that they were not the most appropriate respondent for their city. Two follow-up e-mails were later sent to this same contact list in a successful effort to increase the response rate.

Descriptive statistics were used to make comparisons between the two studies. The data generated by this study was fairly straightforward—cities reported facts and opinions, which were tallied and compared. This analysis of frequency

and examination of comparisons and contrasts were used analyze the results. The data from 2004 was then compared with the data from 1992. No additional tests of significance were done.

From a land perspective, Oregon can be considered a rural state, but from a population perspective, its population distribution is actually 79% urban and 21% rural. Although Oregon is the ninth largest state in land area, it ranks 28th in population. Oregon has a population of 3.4 million people, 2.4 million (or 68%) of whom live in Oregon's 240 incorporated cities. The population distribution for Oregon cities ranges from fewer than a dozen to over 500,000 people. Demographically, 169 (70%) of Oregon cities can be classified as small cities with a population of 5,000 people or fewer, 55 cities (23%) are medium cities with populations ranging from 5,000 to 25,000 people, and 16 (7%) are large cities with more than 25,000 residents. The 2004 survey used the same city size classification for data analysis as the 1992 survey did. This method of stratifying cities by population size has been successfully used in other urban forestry surveys (Reeder and Gerhold 1993; Tschantz and Sacamano 1994) for comparative analysis.

Of Oregon's 240 incorporated cities, 123 completed the 2004 survey that forms the basis of this report for an overall response rate of 51%. The response rate for small cities was 41%; for medium cities, it was 71%; and for large cities, it was 94%. The total reported population for responding cities was 1,938,522, meaning that the responding cities encompass 80% of the total number of people living within the boundaries of Oregon cities. So although the survey response rate equates to roughly half of the incorporated cities, those cities that responded account for more than three-fourths of the population residing in municipalities. Response rates for the 2004 survey were comparable to the previous survey, except for small communities. Table 1 lists the response detail for the 2004 survey as compared with the 1992 survey.

Table 1 also reveals the urbanization of Oregon between these two survey intervals. The number of small cities has declined, whereas medium and large cities have increased in number. The state population has also increased during the interval between the two surveys, from 2.8 million in 1990 to the present 3.4 million. Most of the increase has been net migration to medium and large cities.

SURVEY FINDINGS

Scope of the Urban Forest Resource

A portion of the survey was designed to collect information about what common municipal urban forestry program elements were present in the responding community. Respondents were initially asked a question about whether they had a tree planting and tree care program in their city and about the specific program components present. The term "tree planting and care program" was used to replicate the language in previous survey, rather than the term "urban forestry," as a result of the fact that Oregon has a large percentage of smaller communities that may not relate to the term "urban" in this context. In the 2004 survey, 37% of the respondents reported that they had a tree planting or tree care program in their city. This figure is an increase over the 1992 survey, which found 26% of respondents had such a program.

Both of Oregon's surveys found that in general, when moving from small to large cities, the proportion of cities with urban forestry programs, and specific program elements, increases. This finding is consistent with other studies (Reeder and Gerhold 1993; Schroeder et al. 2003) and is also consistent with the field experiences of state urban foresters. In Oregon, programs are clearly more common in large cities (73%) in contrast to medium cities (53%) and small cities (20%). This finding is not unexpected given that many larger cities have more resources to maintain a tree planting or tree care program. As a result of their larger geographic size and more extensive road networks, larger populated cities will also have more trees to manage (in general) and therefore the need for a tree planting or tree care program may be more prominent. Because of this variation among city sizes, a majority of Oregon's incorporated population (63%) lives in cities that have a tree program, although the number of cities with programs is a smaller percentage.

Although only 37% of 2004 respondents reported the presence of a "program," 62% reported that they had a municipal tree ordinance or other codes related to trees, one of the foundational components to having a program. The discrepancy between these two figures may reflect an uncertainty about what actually constituted a program for the purposes of this survey. The higher percentage of cities with ordinances suggests that the percentage of cities with programs may

Table 1. Oregon city populations and survey response rates, 2004 and 1992.

	2004 Survey no. and percent of cities responding	2004 City size distribution	1992 Survey no. and percent of cities responding	1992 City size distribution
Small cities (less than 5,000 pop.)	69 (43%)	169 (70%)	113 (62%)	183 (76%)
Medium cities (5,000 to 25,000 pop.)	39 (71%)	55 (23%)	30 (67%)	45 (18%)
Large cities (over 25,000 pop.)	15 (94%)	16 (7%)	8 (67%)	12 (5%)
Totals	123 (51%)	240 (100%)	151 (63%)	240 (100%)

actually be higher. This is especially true for large city respondents, where 100% indicated the existence of an ordinance. The percentage of cities with ordinances has steadily increased since 1992.

Although most cities reported having a tree ordinance, fewer cities have tree advisory committees (38%) or community forest management plans (9%), two other common urban forestry program components. The proportion of cities reporting tree advisory committees in the 2004 survey (38%) constituted an increase from 27% in the previous survey. Tree inventories, another element of municipal programs, have been completed by 56% of the 2004 respondents. The data reveal an increase over the 1992 survey, which reported 46% of the cities with inventories.

Survey respondents were also asked about the financial scope of their tree planting and care efforts. The 123 respondents reported aggregate expenditures of \$7.8 million on urban forestry activities during 2003. This figure is a considerable increase over the \$1.2 million reported by communities in the 1992 survey. The 2004 total includes estimates from all cities, even those that reported that they did not have a tree planting or tree care program. Some small cities reported zero expenditure. For cities that reported some expenditure, Table 2 compares results based by city size and the overall average with the 1992 survey.

The large percentage of budget spent on removals by small cities may be a reflection of the lack of formal programs in these communities. The small percentage of budget spent by small communities on administration may reflect the lack of a formal "city forester" position in these size cities.

Respondents were asked about the role of volunteers in their urban forestry efforts. According to the 2004 survey results, citizens in the responding cities also donated a total of 33,906 volunteer hours during 2003. These hours included time spent in advisory roles, coordinating projects, and planting trees or conducting other urban forestry or tree care projects. At the nationally recognized valuation rate of \$17.19 per volunteer hour (Independent Sector 2003) this figure equates to \$582,844 worth of service to the improvement of local urban forests and programs.

Respondents in the 2004 survey were also asked if they had an International Society of Arboriculture (ISA)-Certified Arborist on staff or had the ability to contract with one, and 45% responded that they did. When comparing by city size, 26% of small cities had an ISA-Certified Arborist on staff or had the ability to contract with one. The percentages of medium and larger cities that had ISA-Certified Arborists were 57% and 100%, respectively. This trend is expected and reveals an opportunity to inform smaller cities about the value of and how to find an ISA-Certified Arborist in their area.

Issues, Concerns, and Opinions of Urban Forestry Decision-Makers

A series of survey questions were designed to obtain the respondents' opinions about their program status. Respondents were asked about their potential to start, expand, or reduce the scope of their tree planting and care efforts, a question that was also asked in the previous survey. Response choices ranged from "highly likely" to "highly unlikely." A significant data trend for 2004 appears to be a higher level of concern for the potential for municipal programs to be reduced. In 2004, 30% of the cities reported that they expected their program to be reduced in size or scope, up from 8% in 1992. This trend is consistent among all city sizes. Several factors may account for this pessimistic shift, including the overall state economic picture and continuing fiscal constraints at the local level.

A series of questions asked the respondents to provide opinions about various urban forestry issues and concerns. These questions involved selecting and ranking from a list of provided options. Although not included in the 1992 survey, comparative data for this line of questions is available through a related 1994 survey (Sutton 1994). Respondents were asked to rank their top three tree-related issues from a list of 11 choices. The three top-ranked issues were the same in the 2004 and 1994 surveys, although in a different order and with higher percentages. In 1994, survey respondents listed "tree preservation and protection" as their greatest concern (48%), whereas in 2004, respondents rated that issue in

Table 2. Comparison of tree program expenditures.

Municipal urban forestry program component	2004 Average percent of expenditures				1992 Average percent of expenditures
	Small cities	Medium cities	Large cities	All	All
Maintenance	37%	44%	42%	40%	33%
Planting	19%	31%	18%	22%	25%
Removal	32%	9%	20%	23%	8%
Administration	4%	11%	17%	8%	26%
Pest control	5%	2%	2%	4%	4%
Education	3%	3%	2%	3%	4%

third place but with a similar percentage (46%). The number three issue in the 1994 survey, “hazard trees,” selected by 48% of the respondents, leapt to first place in the 2004 survey as the choice of 73% of respondents. “Root conflicts or problems” took second place in both surveys with 43% in 1994 and 51% in 2004. The heightened interest in hazard trees may be a result of a significant snow and ice storm that struck much of Oregon in January 2004. Many cities reported considerable tree damage from this storm, which resulted in a federal disaster declaration, and at the time of the survey, those situations may have still been fresh in the minds of respondents. Hazard trees are also a factor in municipal risk and liability, which is a continual and growing concern for cities.

Regarding their city’s public trees (park trees, street trees, downtown streetscapes, and so on), respondents were asked how important it was for their city to realize a specific outcome from a list of possible urban forestry program outcomes on a 7-point scale of not important at all to very important. Table 3 lists these rankings for both the 1992 and 2004 surveys with the 2004 data broken down by city size.

Table 3 provides several implications for state urban forestry program direction. For example, small cities in the 2004 identified the outcome of promoting business development through urban forestry much lower (seventh ranked) than medium and large cities. Small cities are not making the connection between trees and business development like the larger and medium-sized cities have. The perspectives on hazard trees jumped considerably in the 2004 results compared with 1992. This could reflect an increased awareness of tree risk issues or it could again be related to the January 2004 severe storm that preceded the survey.

Of the 63% of the cities reporting in 2004 that they did not have a tree planting and care program, 51% reported that their city needed one. This figure reveals a continuing demand for making technical urban forestry services available to cities. The demand increases as the city size increases. This question was asked in the 1992 survey as well. Of the 74% of cities

that reported they had no program in 1992, 51% also responded that their city needed one.

Cities were also asked if they are aware of the Tree City USA program, the national recognition program awarded to cities with urban forestry programs. Oregon had 37 Tree City USA communities during 2003, up from 19 in 1992. The Tree City USA program has very high name recognition with 72% of 2004 respondents having heard of the program. This response is consistent with the two previous surveys, both of which found recognition in excess of 70%. In comparing responses by city size in the 2004 survey, smaller cities are below the average of 72% indicating that smaller cities are not getting the Tree City USA message.

State Urban and Community Forestry Assistance

The Oregon Department of Forestry is one of the primary sources of urban forestry technical advice and services for Oregon cities. The 2004 survey respondents were asked a series of questions about having received state urban forestry assistance. These questions were not asked in the previous survey as a result of the newness of the program (The 1992 survey asked cities what services they would like to receive.). Nearly 52% of 2004 respondents reported that they had received assistance from an ODF U&CF staff member. Analyzed by city size, 34% of small cities, 53% of medium cities, and 100% of the large cities had received assistance from an ODF U&CF staff member. Analyzed by frequency of assistance, 48% reported receiving assistance more than once per year, 18% once per year, 7% every other year, and 27% a couple of times in the last decade. The “more than once a year” frequency was the top selection for large (73%) and medium (53%) sized cities. The responses of smaller cities were widely dispersed among the categories. The respondents who received assistance were also asked to indicate what types of assistance they had received from a list of commonly requested services (Table 4).

Table 3. Perceived importance of tree-related outcomes.

2004 Rank				Tree-related value or outcome	1992 Rank
Small cities	Medium cities	Large cities	All		All
1	1	2	1	Improve community appearance	2
2	3	1	2	Decrease hazards from trees	9
7	2	3	3	Promote business development	1
3	7	5	4	Control soil erosion	6
4	5	4	5	Provide shade	8
6	6	4	6	Improve efficiency and staff effort	4
5	8	6	7	Increase community infrastructure value	3
9	4	2	8	Decrease broken curbs and sidewalks	5
8	9	5	9	Create habitat for wildlife	10
				Global warming (1992 only)	7

Table 4. Types of ODF U&CF assistance received.

Small cities	Medium cities	Large cities	All (<i>n</i> = 57)	Assistance results
74%	100%	93%	83%	Reported receiving a program newsletter or other printed materials
61%	79%	93%	72%	Reported receiving advice by telephone or electronic mail
70%	84%	33%	62%	Reported receiving an onsite technical assistance visit
48%	63%	67%	55%	Reported that they had visited the ODF web site to access urban forestry information
22%	74%	87%	53%	Reported that they had sent city staff to an ODF educational workshop
30%	58%	67%	47%	Reported receiving a grant
9%	26%	53%	25%	Reported sending city staff to the annual state urban forestry conference

The trends in the type of service delivery among city size classes reveal several implications. Lower percentages for small cities receiving advice via by or electronic mail and visiting the ODF web site to access urban forestry information may indicate that smaller cities may have less electronic access. The lower percentages for smaller cities sending city staff to an ODF educational workshop or to the annual state urban forestry conference is likely a reflection of the lack of dedicated urban forestry staff in smaller cities or lack of financial resources for training limited city staff. The lower percentage of large cities reporting receiving an onsite technical visit combined with a higher percentage seeking advice by telephone or e-mail may be the result of fact that larger cities general have ISA-Certified Arborists on staff and have less need for technical assistance but still have a need for technology transfer.

To assess the effects of cities having established a working relationship with the ODF U&CF program, respondents were sorted by this factor with regard to their responses on several other questions. The purpose of this analysis is to measure the performance of the state program in terms of what change the staff has been able to affect since the program was established. Table 5 reflects this impact with data in which responses significantly diverged based on the factor of having received ODF assistance.

The demarcation between cities that reported receiving ODF assistance and those that have not is significant for questions related to the extent of management cities under-

take. This is, in part, a measure of the program's effectiveness in reaching cities with the message of proper urban forest management. The cities that have received ODF assistance are clearly doing a better job of managing their urban forest resources than cities that have not received ODF assistance.

The success of the ODF U&CF efforts can also be gauged by comparing selected data from the 2004 survey with the 1992 survey. Because the 1992 survey was designed to provide an assessment of urban forestry needs for a new program, its data constitute a baseline from which the success of the program can be measured. Several of the questions in the 2004 survey that were replicated from the 1992 survey provide an opportunity to examine how urban forestry activities or opinions have changed in the state and to gauge the impact of ODF urban forestry program efforts. Additionally, the number of cities achieving the Tree City USA award between the 2 years provides another measure of success. Table 6 summarizes these observations.

A final measure of ODF's U&CF program impact is in its technical and financial assistance accomplishments as recorded in its annual performance measures, which record the number of assists provided, grant dollars leveraged, and assists per staff position. However, in this context, those accomplishments are more appropriately viewed as inputs into local program achievement (outcomes). The survey results are evidence that the investments of state technical, educational, and financial assistance have paid valuable dividends at the local level by resulting in a higher incidence of active

Table 5. Responses based on use of state UCF assistance.

Cities that have received state UCF assistance (<i>n</i> = 57)	Cities that reported they had not received state UCF assistance (<i>n</i> = 61)
67% said they had a tree planting and care program	12% said they had a tree planting and care program
81% that said they did not have a program said they needed one	35% that said they did not have a program said they needed one
81% have a tree ordinance or codes	57% have a tree ordinance or codes
63% have a tree advisory body	16% have a tree advisory body
63% had an ISA-Certified Arborist on staff or could contract with one	30% had an ISA-Certified Arborist on staff or could contract with one
89% are aware of the Tree City USA program	56% are aware of the Tree City USA program
61% observe Arbor Day or Arbor Week	24% observe Arbor Day or Arbor Week

Table 6. Measurement of ODF U&CF program impact, 1992 to 2004.

Indicator	2004	1992	Percent change
Cities with tree planting and care programs	37%	26%	+9%
Cities with tree ordinances or codes	62%	46%	+14%
Cities with tree inventories	56%	46%	+10%
Cities receiving Tree City USA award	15%	8%	+7%
Total local U&CF expenditures	\$7.8 Million	\$1.2 Million ^z	+550%

^zNot adjusted for inflation.

management of urban forest resources in cities that have received state assistance.

CONCLUSIONS

This study could easily be replicated in other states, providing a basis for comparative analysis and also providing proof of the impact of state urban forestry programs as they strive to compete for limited funding. For Oregon, the results of this 2004 survey have some significant implications for ODF's U&CF program in terms of the appropriate strategic program emphasis and delivery. As the primary clients for the ODF U&CF program, cities can provide a valuable feedback mechanism to program efficiency and effectiveness. Resource data from city agencies and opinions of city decision-makers are useful information elements in planning future program direction at the state level.

When compared with the 1992 responses, the 2004 data reveal the impact of ODF's three full-time-equivalent staff. As a result of ODF's efforts, there have been measurable increases in the number of cities with urban forestry programs and with program components such as inventories and ordinances and an increase in the amount of local investment in the health of urban forests. It is clear that the investment of federal assistance through the United States Department of Agriculture Forest Service has been leveraged many times over to help increase the livability of Oregon cities.

Some conclusions that can be drawn about the ODF U&CF program as a result of this survey include:

- Hazard tree management should remain a strong program focus, both from an operational and a policy perspective.
- A large percentage of Oregon cities, mostly smaller ones, do not have urban forestry programs and still need to be convinced of the benefits of managing their urban forest. The fact that over half the cities without programs be-

lieve they need a program shows continued demand for basic technical services.

- Cities that have received ODF assistance have achieved more urban forestry accomplishments and are more actively engaged in managing their urban forest than those that have not received assistance.
- Based on a comparison between 1992 and 2004, there is a direct correlation between receiving ODF U&CF assistance and an improvement in the extent of local urban forest management over this time period. This is a direct measure of the effectiveness of state urban forestry assistance.

The 2004 Oregon Urban Forestry Survey provides a wealth of insights into local urban forestry programs, the needs of municipalities, and potential ODF program delivery methods and strategies. It is evident that ODF has achieved some significant accomplishments in helping cities pursue active management of their urban forests and also has a clearer picture of the challenges before the agency as a result of conducting the 2004 survey. Oregon's 1992 survey report concluded with this observation: "The challenge faced by the Oregon Department of Forestry is to motivate communities to action." Based on the 2004 survey results, Oregon has made great strides in stimulating local investment in urban forestry, but much work remains to be done.

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Résumé. Tous les 50 états des États-Unis ont un programme de foresterie urbaine d'état afin de fournir de l'assistance aux villes. Les enquêtes à la grandeur de l'état auprès des leaders en foresterie urbaine des villes constituent un outil commun pour évaluer les besoins en foresterie urbaine et les réalisations. L'Oregon a mené deux de ces enquêtes en 1992 et en 2004. L'enquête de 2004 a été mise au point afin d'obtenir de l'information sur la portée et l'étendue des ressources en foresterie urbaine de l'Oregon, de mesurer les réalisations des programmes locaux depuis 1992 et de mesurer l'impact du programme d'assistance en foresterie urbaine de l'état. Le taux de réponse à l'enquête a été de 51% et les résultats ont permis de dégager des différences entre les petites, les moyennes et les grandes municipalités. Les résultats ont montré que les villes de l'Oregon ont fait des gains significatifs dans la gestion de la foresterie urbaine au cours des 12 dernières années. Les données ont révélé une perspicacité intéressante chez les forestiers urbains locaux quand il s'agit d'enjeux et d'efforts locaux pour les arbres.

Cette recherche illustre l'impact que peut avoir le programme d'assistance à la forêt urbaine de l'état en regard des réalisations locales. Les villes de l'Oregon qui ont reçu de l'assistance sont plus sujettes à avoir des composantes d'un programme de foresterie urbaine telles qu'une réglementation et un inventaire d'arbres, sont plus sujettes à être des villes partenaires du programme *Tree City USA* et sont plus sujettes à investir dans leurs activités en foresterie urbaine.

Zusammenfassung. Alle 50 Bundesstaaten der USA haben ein staatliches Forstprogramm, welches die Städte unterstützt. Bundesweite Umfragen unter urbanen Forstamtsleitern sind ein häufig verwendetes Mittel, um die Bedürfnisse und Durchführung von urbanen Forstanstalten zu untersuchen. Oregon hat zwei solche umfangreichen Umfragen in 1992 und 2004 durchgeführt. Die Umfrage von 2004 war darauf ausgelegt, Einsicht in die Reichweite und Ausdehnung der urbanen Forstressourcen in Oregon zu gewinnen, lokale Programmgestaltungen seit 1992 zu messen und den Einfluss eines bundesweiten Unterstützungsprogramms zu bewerten. Die Umfrage hatte einen Rücklauf von 51 % und die Ergebnisse zeigen Unterschiede zwischen kleinen, mittleren und großen Kommunen. Die Ergebnisse zeigen, dass die Städte in Oregon über die letzten 12 Jahre durch die Forstprogramme enorm dazu gewonnen haben. Die Daten gaben Einblicke in die Arbeit von urbanen Forstbeauftragten in Relation zu Themen mit Bäumen und dem Ergebnissen von lokalen Bemühungen. Die Forschung illustriert, welchen Einfluss ein staatliches Forstunterstützungsprogramm bei der Durchführung auf lokaler Ebene haben kann. Die Städte in Oregon, die diese Unterstützung erhalten haben, haben eher urbane Forstprogrammkomponenten, wie Baumkataster und Baumverordnungen und sind eher gelistet als Baum-Stadt der USA und sind eher in der Lage, in urbane Forstprojekte zu investieren.

Resumen. Todos los 50 estados de los Estados Unidos tienen un programa forestal urbano que proporciona asistencia a las ciudades en ese tema. Las encuestas a los líderes forestales urbanos son una herramienta común para evaluar las necesidades y actividades. Oregon ha llevado a cabo dos de tales evaluaciones, en 1992 y 2004. La evaluación de 2004 fue designada para tener idea de la amplitud y extensión del recurso forestal urbano en Oregon, para medir el programa local desde 1992, y para medir el impacto de un programa de asistencia forestal en todo el estado. El estudio tuvo una tasa de retorno del 51%, y los resultados muestran diferencias entre pequeñas, medianas y grandes comunidades. Los resultados muestran que las ciudades de Oregon han hecho logros significativos en manejo forestal urbano en los últimos doce años. Los datos revelan ideas de los forestales urbanos locales relativas al tema de los árboles y los resultados de los esfuerzos locales. Esta investigación ilustra el impacto que el programa de asistencia forestal urbano puede tener sobre los logros locales. Las ciudades de Oregon que han recibido asistencia estatal son más dadas a contar con componentes tales como ordenanzas e inventarios, son más parecidas a las comunidades del *Tree City USA*, y son más propensas a invertir en actividades con el bosque urbano.