

Exploring the Relationship Between Municipal Characteristics and Urban Forest Management Grant Success in New York State, USA

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Abstract. Background: Grants for urban forest management are vital to many municipalities and are known to help communities achieve their management targets. Municipalities have varying grant-writing and execution resources and differing community characteristics, which may affect grant application success. This study evaluated the characteristics of municipalities that were successful, unsuccessful, or did not apply for 4 rounds of the New York State Department of Environmental Conservation Urban and Community Forestry Grant (NYSDEC UCF Grant) to identify trends, scoring advantages, and barriers. Methods: Responses to a survey inquiring about municipalities' interactions with the NYSDEC UCF Grant program were paired with US Census and New York State (NYS) data and analyzed for significance and trends. Results: Successful applicants had higher rates of Arbor Day celebration, formally educated or certified employees, and tree advisory boards. Surprisingly, successful and unsuccessful applicants had equal access to grant writers, and few municipalities listed political or public support as barriers. Municipalities that did not apply cited a lack of awareness, low capacity, and a need for technical support. Applications were awarded points for Tree City USA recognition, documented economic need, and projects in disadvantaged areas. Tree City USA recognition was statistically correlated with application success. The presence of a state-designated disadvantaged area did not equate to an increased likelihood of success in each grant round. Conclusion: Municipalities with existing urban forestry management infrastructure and documented needs were more likely to be awarded a NYSDEC UCF Grant. Municipal participation in the application process may be encouraged and improved with increased technical assistance and support.

Keywords. Disadvantaged Communities; Municipal Characteristics; Municipal Grants; Municipal Urban Forest Management.

INTRODUCTION

Urban forests are part of the public good. They provide environmental, social, and economic benefits (Coleman et al. 2022), and unlike most other infrastructure, they appreciate as they age. Many municipalities are tasked with planting and maintaining the trees in their rights-of-way (Zhang et al. 2009), as they are for installing and maintaining streets, water and sewer systems, and other public infrastructure. In many municipalities, the management of trees and urban green spaces falls well behind other funding priorities, such as social services, streets, and water infrastructure (Warren et al. 2023). As such, municipalities often do not have sufficient funds to allocate towards improving their urban forest, even though the benefits of these forests significantly outweigh the costs (Hauer and Peterson 2016).

Local urban forest management programs vary greatly from one community to another due to differences in municipal resources and characteristics (Treiman and Gartner 2004, 2005; Harper et al. 2017). While some municipalities have relatively comprehensive programs that include formal management plans, tree inventories, staff, volunteers, and ordinances, as well as provide proactive services, other municipalities may only engage with trees reactively, such as after a storm or natural disaster (Ries et al. 2007; Rines et al. 2011; Koeser et al. 2016). Funding has been identified as a barrier to effective urban forest management in numerous studies conducted in the United States and globally (Grado et al. 2013; Hargrave et al. 2024). Wirtz et al. (2021) found that financial resources were ranked as the top urban forest governance success factor among urban forestry, planning,

and greening experts in Canada. In South Africa, 70% of municipal survey respondents expressed dissatisfaction with the amount of funds allocated for their urban tree and green space budget (Chishaleshale et al. 2015). In Norway, 61% of surveyed municipalities reported seeking outside funds to support their green-space management (Fongar et al. 2019).

A community's financial resources may derive from multiple sources, including taxes and user charges (e.g., water and sewer), fees, bonds, donations, and grants (GFOA 2025). Municipalities in the USA rely on grants to fund a spectrum of operations from essential services (Levin 2025) to special projects (Hendrick 1998), as well as a range of activities that may include urban forest management (Gibbons and Ryan 2015). Grants may be an important and effective means of support at the local level (Mehiriz 2016).

Grants may originate from a variety of sources, such as nonprofits, foundations, and the government (Hauer et al. 2011), and they are often competitive. Federal and state agencies are a substantial source of grant funding for urban forestry-related projects, including planting, tree maintenance and removal, pest management, the initiation and maintenance of an urban tree inventory, management plans, and public education (Hauer and Johnson 2008; Cambell et al. 2017). According to a 2014 national survey, 30% of communities utilized a state or federal grant (Hauer and Peterson 2016). Additionally, research has found that municipal urban forest management capacity is directly correlated with federal and state funding (Hauer and Johnson 2008; Hauer et al. 2011).

While numerous municipalities across the USA have received grants, disparities exist in relation to urban forests and greenspaces among municipalities based on a number of municipal characteristics. Evidence from several studies suggests a positive correlation between affluence and urban canopy cover (Gerrish and Watkins 2018) and the presence of race-based inequity and public urban canopy cover (Watkins and Gerrish 2018). Additionally, smaller and medium-sized communities often have fewer administrative and contract management resources, which Collins et al. (2015) identified as a barrier to successfully obtaining urban forestry-related grants. Surveys of municipalities in New York, Oregon, and Utah found that the likelihood of receiving a grant increased with municipal size (Kuhns et al. 2005; Ries et al. 2007; Hargrave et al. 2024). Since urban forest management grants

are widely regarded as substantially affecting urban forestry program budgets at the local level (Hauer and Peterson 2016), states like California, Minnesota, and New York designed grant criteria to help improve the odds that disadvantaged municipalities will receive them, and the 2023 US Inflation Reduction Act Urban and Community Forestry Grants program instructed states to apportion funding to disadvantaged communities (CAL FIRE 2021; MN DNR 2023; NYSDEC 2023; USDA Forest Service 2023).

Urban Forestry in New York State

New York State (NYS) occupies an area of 141,306 km² (54,559 mi²) and has a population of more than 20 million individuals (US Census Bureau 2025). There are 1,527 municipalities in NYS, and about half are believed to have incorporated areas with public urban forests that may be managed (e.g., planted or maintained). This includes municipalities from New York City, with a population of 8.8 million people, to villages with populations of less than 200 people (DiNapoli 2021). The state has over 264 million urban trees which provide over \$1 billion in annual ecosystem benefits and values (Nowak and Greenfield 2018). The economic impact of urban forests in NYS in 2018 was estimated to be \$3,515,000,000, accounting for 33,913 full- and part-time jobs (Parajuli et al. 2022).

The NYS Department of Environmental Conservation Urban and Community Forestry Program (NYSDEC UCF) facilitates both pass through grants funded by the USDA Forest Service Urban and Community Forestry Program as well as state-funded and hybrid-funded grants (NYSDEC 2025). One of NYSDEC's state-funded grants is the Urban and Community Forestry Grant (NYSDEC UCF Grant), underwritten by the Environmental Protection Fund, which aims to "help start, plan and advance strong, self-sustainable UCF programs which enhance the quality of life for all New Yorkers" (NYSDEC 2023). Typically, the grant funds tree planting, tree maintenance, inventories, management plans, and occasionally public education. Municipalities, nonprofit partners, and agencies that advance urban forest management are eligible to apply. In relation to the application, municipalities are divided into two groups (large and small), as the funding legislation requires at least \$500,000 to be allocated to projects in large municipalities (population 65,000 or more) (NYS Assembly 2023). The 26 large municipalities are identified in each round's Request

for Applications (RFA). A breakdown of applications and awards for the 4 most recent rounds is included in Table S1 in the Appendix.

Requests for Applications are released alongside workshops that provide technical assistance to guide municipalities through the process and answer questions. Project requirements and scoring guides are included in the RFAs to ensure that applicants understand how they can earn points on their submissions (NYSDEC 2025). Applications are scored and rank-ordered by a panel of NYSDEC employees. Funds are disseminated according to the ranked order until they are exhausted, with worthy projects routinely going unfunded due to resource limitations (G. Van-Duyne, personal communication, March 2023).

To advantage municipalities with projects in or benefiting state-designated disadvantaged municipalities, applications were awarded additional points (5% to 7% of the total score, depending on the year) compared to those without. These state designations are either “potential environmental justice area” (PEJA, census blocks, pre-2023) or a “disadvantaged community” (DAC, census tracts, post-2023). Also, applicants who documented environmental, social, or economic need were awarded additional points in some rounds (4% to 8% of the total score, depending on the year).

In addition to supporting disadvantaged municipalities, these grants also supported those that exhibited a commitment to urban forest management by awarding points for criteria that demonstrated that commitment. This included being recognized as a Tree City USA (TCUSA) community (2% or 3%, depending on the year) and receiving application guidance from an International Society of Arboriculture (ISA) Certified Arborist® (up to 5% depending on the year).

This study aims to illuminate the differences in characteristics and approaches between municipalities that were successful versus unsuccessful in their applications for NYSDEC UCF Grants over the past several rounds. Similarly, attributes of municipalities that applied for NYSDEC UCF Grants will be compared to those that did not apply. In particular, this paper seeks to address the following 3 research questions:

- (1) How do NYS municipalities that receive NYSDEC UCF Grant funding differ from those that apply unsuccessfully and from those that do not apply?

- (2) Is the UCF scoring criteria effective at increasing access to funding for municipalities with target characteristics?
- (3) What barriers prevent NYS municipalities from applying for NYSDEC UCF Grants?

METHODS

New York State Municipalities that applied to a NYSDEC UCF Grant in 2016 (Round 13), 2018 (Round 14), 2019 (Round 15), and/or 2023 (Round 16), as well as a control group of nonapplicant municipalities, were selected for inclusion in this two-part analysis. First, we conducted an online survey based on municipality grantee data from 2016, 2018, and 2019 to gather information about urban forest management resources, grant experiences, and opinions. Second, we analyzed US Census data and NYS municipal categorization for success rate trends for all the grant rounds (2016, 2018, 2019, and 2023).

Survey—Part 1

To identify municipalities for the online survey examining municipal resources and experiences with the periodic NYSDEC UCF Grant, in 2022 we obtained grant application records from 2016 (Round 13), 2018 (Round 14), and 2019 (Round 15) and identified all Successful and Unsuccessful municipal applicants (see Table S1 in the Appendix for a breakdown of applications). Although NYSDEC allows other agencies and nonprofits to apply for the NYSDEC UCF Grants, we were only interested in municipalities and removed nonmunicipal applications from this study. Over the 3 rounds, the applicant’s status was categorized as either Successful or Unsuccessful. The total number of Successful or Unsuccessful proposals from an individual municipality was not used in Part 1. Instead, municipalities were categorized as Successful if they had at least one funded application in any of the 3 grant rounds ($n = 85$) and Unsuccessful if they applied in at least one round but had no funded applications ($n = 94$).

To compare the municipalities that applied to one or more of the studied NYSDEC UCF Grants rounds, a group of municipalities that applied to none of the studied rounds was constructed. This ‘Did Not Apply’ group is made up of 91 municipalities which were randomly selected from a list of municipalities that reported having managed urban forests in a 2021 NYS urban forest program management survey but

didn't appear in the applicant lists for the NYSDEC UCF Grant in 2016, 2018, or 2019 (Hargrave et al. 2024).

In May 2023, all 270 municipalities in the study sample were sent surveys requesting details regarding their experiences with the NYSDEC UCF Grant program over the 2016, 2018, and 2019 grant years. The timing was intentional as applications for the next round were due later in 2023, and we wanted to capture the applicants' thoughts on their previous application(s) while they were working on their current application.

The three electronic surveys (Successful, Unsuccessful, and Did Not Apply) were deployed through Qualtrics (Qualtrics 2023) via email, one to each group. In accordance with Dillman et al. (2014), a reminder email was sent 9 days after the initial email, and a final reminder was sent 7 days later.

The surveys employed skip logic, whereby respondents were directed to different sets of questions based on their responses. The Successful survey had up to 36 questions; the Unsuccessful survey had up to 20 questions; and the Did Not Apply survey had up to 16 questions (see Appendix). The NYSDEC provided email contacts for the Successful and Unsuccessful groups. Emails for the Did Not Apply group were obtained from the aforementioned survey. The emails for all 3 groups were verified via municipal websites and other public records.

The surveys inquired about staffing, tree board, and partner organization status; the use of a grant writer; whether they celebrated Arbor Day; whether they were recognized as a TCUSA; and about their municipal tree-related budget. Municipalities that applied were asked to provide information on the application's author(s). Successful municipalities were asked a series of questions about the execution and success of their funded projects and why they believed they had been successful. Unsuccessful applicants were asked why they thought they were unsuccessful, whether they met with NYSDEC staff to debrief, and if they were able to conduct the project without the grant funding. Municipalities in the Unsuccessful and Did Not Apply groups were asked what resources they thought they needed in order to be Successful. Did Not Apply municipalities were also asked if they were aware of the grant program and why they did not apply. All municipalities were asked about their future NYSDEC application plans. We calculated

each municipality's per capita tree-related budget using the 2022 budgeted amount they provided and 2022 US Census population figures (US Census Bureau 2022a, 2022b). Median household income (MHI) was also gleaned from the 2022 US Census. The response rates were: 34 of 94 (36%) Successful applicants; 28 of 85 (33%) Unsuccessful applicants; and 31 of 91 (34%) Did Not Apply municipalities.

Municipal Characteristics—Part 2

To assess the relationship between municipal characteristics and the ability to secure a NYSDEC UCF Grant, we analyzed US Census data and the presence of a PEJA census block or DAC census track for our 3 municipal categories (Successful, Unsuccessful, Did Not Apply). To augment the data, the 2023 NYSDEC UCF Grant (Round 16) applicants were collated in the same manner as outlined in Part 1 and included in the analysis. Subsequently, all municipalities identified as applicants in 2016, 2018, 2019, and 2023 as well as those in the Did Not Apply (2016 to 2019) group, regardless of their response to the survey, were included in the Part 2 analysis. Four of the Did Not Apply municipalities applied for a 2023 grant; thus, that sample size dropped to 87. Successful had 104 municipalities and Unsuccessful had 96, resulting in a combined total of 287. The breakdown of Successful and Unsuccessful applications by year is in Table S1 in the Appendix.

Data regarding municipal characteristics that included population and MHI were obtained from the US Census 5-Year Estimates for 2016, 2018, 2019, and 2023 (US Census Bureau 2016a, 2016b, 2018a, 2018b, 2019a, 2019b, 2023a, 2023b). A shapefile containing NYS PEJA census tracks was downloaded from the NYS GIS Clearinghouse (NYSDEC 2021) and overlaid on shapefiles containing NYS towns, villages, and cities. Municipalities included in this research that contained a portion of a PEJA within their boundaries were marked as PEJA communities in our dataset. The RFAs in 2016, 2018, and 2019 inquired whether the project would impact or benefit a PEJA. In 2023, NYS switched to the DAC designation. The DAC list was obtained from NYS, and municipalities containing a DAC track were recorded (NYS 2024). Metrics were calculated for each round as well as the combination of all 4 rounds.

For both Part 1 and Part 2, summary statistics (e.g., mean, frequency) and statistical significance tests were

calculated in R (R Core Team 2025). For nominal data, Chi-square using Fisher's exact test was used to evaluate the statistical significance of results by municipal characteristics between each pair (i.e., Successful and Unsuccessful, Successful and Did Not Apply, and Unsuccessful and Did Not Apply). Linear regression analyses were used to evaluate the statistical significance of the numerical data. An alpha value of 0.05 and two-sided hypothesis tests are used for assessing statistical significance throughout. For qualitative analyses, the open-ended answers were coded and tallied using Excel (Microsoft, Redmond, WA, USA).

RESULTS

Survey—Part 1

The Successful group had a greater mean population, a higher percentage with a PEJA, a lower MHI, and a lower 2022 per capita budget than the Unsuccessful group, though none of these differences are statistically significant (Table 1). Successful had a significantly higher Population mean (P -value = 0.004) and percentage with a PEJA (P -value = 0.008) than Did Not Apply municipalities. In addition to the lowest population and PEJA, Did Not Apply also had the lowest MHI and per capita tree budgets. Unsuccessful applicants

Table 1. Community characteristics, services, and resources for responding municipalities by category. Part 1: 2016, 2018, and 2019 UCF [Urban and Community Forestry] Rounds. PEJA (potential environmental justice area); NYS (New York State); NYSDEC (NYS Department of Environmental Conservation).

Community characteristic	Successful (<i>n</i> = 34)	Unsuccessful (<i>n</i> = 28)	Did Not Apply (<i>n</i> = 31)
Population mean (median)	30,950 ^a (11,276)	18,518 ^{ab} (4,947)	4,072 ^b (2,243)
Median household income	\$71,635 ^a	\$73,842 ^a	\$68,284 ^a
Percent with PEJA	69% ^a	54% ^{ab}	36% ^b
Average municipal tree care related budget in 2022	\$6.26 ^a	\$8.56 ^a	\$5.80 ^a
Question	Successful (%)	Unsuccessful (%)	Did Not Apply (%)
Has your community celebrated Arbor Day in the 5 five years?	97 ^a	76 ^b	47 ^c
Has your community been recognized as a Tree City USA in the past 5 years?	91 ^a	58 ^b	34 ^b
Is there at least one municipal employee with a degree in a tree care related field (arboriculture, urban forestry, horticulture, forestry, etc.)?	36 ^a	16 ^{ab}	7 ^b
Is there at least one municipal employee with an International Society of Arboriculture (ISA) or Tree Care Industry Association (TCIA) certification?	32 ^a	20 ^{ab}	7 ^b
Does your municipality have a tree board, advisory committee, or similar municipal committee that assists with tree oversight?	78 ^a	72 ^a	40 ^b
Does your municipality partner with a nonprofit on tree-related issues?	39 ^a	23 ^{ab}	14 ^b
Does your municipality employ or contract with a grant writer?	56 ^a	56 ^a	47 ^a
Has your municipality applied for a NYS Urban Forestry Council Grant in the last 5 years?	46 ^a	60 ^a	0 ^b
Do you plan to apply for a NYSDEC Urban and Community Forestry Grant in the future?	90 ^a	58 ^b	41 ^b
Do you plan to apply for this coming round (summer of 2023) of NYSDEC Urban and Community Forestry grants?	60 ^a	42 ^b	21 ^a

Note: Superscripts indicate groups of statistical significance, $P < 0.05$ (Chi-square using Fisher's Exact Test).

had the highest per capita tree-related budget at \$8.56 per person.

Successful municipalities were statistically more likely to celebrate Arbor Day and have been recognized as a TCUSA (91%) than both Unsuccessful (P -value = 0.035 and < 0.009 respectively) and Did Not Apply (P -value < 0.001 and < 0.001 respectively)(Table 1). They were also more likely to have one or more employees with a tree care related degree (36%) or an industry-certified employee (32%), which was statistically different from Did Not Apply (P -value = 0.01 and 0.022, respectively) but not from Unsuccessful. Successful municipalities were more likely to have a tree board than Unsuccessful, although the difference was not significant. However, both groups of applicants, Successful (P -value = 0.004) and Unsuccessful (P -value = 0.03), were significantly more likely to have a tree board than Did Not Apply. There was no difference in the use of a grant writer between Successful and Unsuccessful municipalities.

Successful and Unsuccessful applicants were asked to select the type of person who authored their grant application from a list of possibilities, or to write-in a response, and they could select more than one choice (Table 2). While none of the options were selected at rates which were significantly different between the groups, Successful applicants were more likely to report having used a municipal grant writer and/or an ISA Certified Arborist.

Successful applicants were asked, “How significant or insignificant of an impact do urban forest grants have on your municipal urban forestry program during the years you have had grant funding?”

Of respondents, 94% responded that grant funding was “extremely significant” or “somewhat significant” (57% and 37%, respectively). Only 3% reported “neither significant nor insignificant”, and 3% reported “somewhat insignificant”.

Successful applicants were also asked two open-ended questions: “Why do you think your municipality was successful in obtaining a grant?” and “What municipal resources did your municipality have that may have given it an advantage?” Communities attributed their success to having good projects (24%), well-written applications (21%), excellent staff (14%), and being a high-needs community (14%). They considered grant writing staff (26%), good staff support (26%), dedicated volunteers (14%), good political support (11%), and past project success (11%) to be beneficial.

Unsuccessful applicants were asked to select the reason(s) they thought their project was unsuccessful from a list of options or to provide their own response. Of respondents, 54% indicated they did not know why they were unsuccessful; 15% thought it might be because their project lacked sufficient quality; and 12% indicated a lack of TCUSA status. Four percent felt their unsuccess was due to not having an ISA Certified Arborist review their application. “Other” responses referenced a lack of staff or grant writers and issues preparing or submitting the application.

Applicants who were not funded were offered a meeting with the NYSDEC UCF staff to review their proposals. Of the Unsuccessful respondents, 35% took advantage of that review, 35% did not, and the remaining were unsure. All of those who met with NYSDEC staff found it helpful.

Table 2. Grant application author(s) for Successful and Unsuccessful applicants (%).

Applicant author(s)	Successful (%)	Unsuccessful (%)
Municipal grant writer	21 ^a	12 ^a
Other municipal employee	33 ^a	38 ^a
Contract professional grant writer	9 ^a	12 ^a
Contract arborist	0 ^a	0 ^a
ISA Certified Arborist	15 ^a	4 ^a
Volunteer	21 ^a	19 ^a
Elected official	12 ^a	12 ^a
Other	6 ^a	8 ^a

Note: Superscripts indicate groups of statistical significance, $P < 0.05$ (Chi-square using Fisher’s Exact Test).

Even though their NYSDEC UCF Grant application was unfunded, 23% were still able to complete their project. These municipalities indicated they used internal funds instead of additional outside dollars, and 67% were able to execute the project at its original scale, while the other 33% scaled their projects down.

Did Not Apply municipalities were asked if they were aware of the NYSDEC UCF Grants program before receiving notice of the survey; only 43% responded affirmatively (Table 3). They were then asked why they hadn't applied for a NYSDEC UCF Grant in the past; their top responses were that they "didn't have someone to write the grant"; "didn't know where to get help with the application"; and "didn't have staff to manage the grant" (Table 3). Unlike the Successful and Unsuccessful groups, this group did indicate the need for political and/or public support, albeit at low rates (6% and 3%, respectively). "Other" responses included a lack of time and a lack of matching dollars (as required by some of the project types), while others indicated that they had access to other sources of funds. One respondent stated that they didn't apply since they were not part of a DAC, and they did not think it was worth the time to apply.

Unsuccessful and Did Not Apply municipalities were asked which resources they felt they would need in order to successfully apply for a NYSDEC UCF Grant in the future (Table 4). Both groups' highest response was that they needed technical assistance. Additional highly rated responses for Unsuccessful

municipalities were employee training and staff to implement the project. Did Not Apply municipalities reported needing assistance identifying a project and a grants manager. Political support, volunteer training, and public support had the lowest average response rates among these groups. "Other" responses echoed the need for staff and for more substantial projects.

Table 3. Reasons Did Not Apply municipalities selected for not applying (%). NYS (New York State).

Reason	Percent
Unaware of the grants program	57%
I don't know	23%
Didn't have someone to write the grant	23%
Didn't know where to get help with the application	19%
Didn't have staff to manage the grant	16%
Didn't have a worthy tree project	13%
Didn't have employees to implement the grant	13%
Didn't have the political support necessary to do the project	6%
Didn't have the topical expertise	3%
A lack of local tree experts/contractors who could help	3%
Didn't have the public support necessary to do the project	3%
Didn't want to use the NYS grant portal	0%

Table 4. Resources needed to successfully receive a New York State Department of Environmental Conservation Urban and Community Forestry Grant by group (%).

Resource	Unsuccessful (%)	Did Not Apply (%)	Combined average (%)
Technical assistance	46% ^a	35% ^a	40%
Staff to implement the project	27% ^a	35% ^a	32%
Assistance in identifying a worthy project	19% ^a	32% ^a	26%
Grants manager	23% ^a	26% ^a	25%
Educational assistance for employees to ensure quality grant outcomes	31% ^a	19% ^a	25%
Local tree care expertise to assist with our project	19% ^a	23% ^a	21%
Political support	8% ^a	16% ^a	12%
Educational assistance for volunteers to ensure quality grant outcomes	12% ^a	10% ^a	11%
Public support	0% ^a	10% ^a	5%

Note: Superscripts indicate groups of statistical significance, $P < 0.05$ (Chi-square using Fisher's Exact Test).

Scoring Points

The New York State Department of Environmental Conservation UCF attempts to elevate application scores for projects benefiting disadvantaged communities by awarding them extra scoring points for projects benefiting a PEJA. More Successful municipalities contained a PEJA than Unsuccessful ones, although the difference was not significant. Data on MHI and per-capita tree budgets were used to evaluate a municipality's connection to "documented economic need". While Unsuccessful municipalities had both a higher MHI and per-capita tree budget, these differences are not significant.

Municipalities could also receive points for having TCUSA recognition or by having an ISA Certified Arborist provide professional guidance on the proposal. To infer the impact of these categories for extra points on success, we analyzed responses to related questions. Successful municipalities were significantly more likely to be recognized by TCUSA than Unsuccessful municipalities (P -value < 0.009). However, while Successful respondents indicated higher rates of ISA- or TCIA-certified employees (as well as access to an ISA Certified Arborist when authoring their applications) compared to Unsuccessful, neither of these differences was significant.

Successful Grant Project Outcomes

Successful applicants were asked a series of questions about the success of their projects based on the type of project they conducted: tree planting (36%), tree inventory (39%), management plan (33%), or maintenance project (24%); one-third of the municipalities had combination projects, and as such the percentages sum to over 100%. All applicants reported completing their projects on time, with 87% meeting all their goals and 13% meeting most of them. When asked who carried out the projects, 79% used municipal staff, 55% used community volunteers, 52% used professional contractors, 52% used ISA Certified Arborist (required for the tree inventory and management plan projects), 36% used community partners, and 18% used elected officials.

Of the municipalities that planted trees, 83% reported that those trees were cared for (watered, mulched, etc.) after the project. Additionally, all relayed a survival rate of at least 75%, and 80% reported a survival rate of at least 90%.

Of the municipalities that conducted an inventory, 92% agreed that it had been useful, and 8% replied

that the inventory was "somewhat" useful. In addition to the municipalities that conducted an inventory, those that conducted tree maintenance were also asked if they had updated their inventory since the project's completion. In total, 67% indicated that the inventory had been kept up to date. Those without updated inventories selected "lack of staff time" (85%), "lack of staff training" (57%), and "no funds to subscribe to the software" (42%) as the reasons.

Management plans were reported to be useful by 82% of the municipalities that wrote one, with the other 18% reporting they were somewhat useful; none reported that the plans were not useful. Of those that elaborated on the usefulness of their plans, 50% obtained additional grants, 38% conducted successful planting efforts, 38% improved maintenance and reduced risk, and 25% improved their tree-related budget and budget planning.

Municipalities were asked about the obstacles they encountered while executing their projects. Responses varied by the type of project, but emergent themes of importance related to limitations on public gatherings during COVID-19 (i.e., volunteer events or public meetings) (27%), a lack of contractors (15%), a lack of staff time to dedicate to the project (12%), and a lack of employee skills or equipment (6%). Many indicated they had no obstacles, and interestingly, none chose "lack of political support" or noted that it was an obstacle.

Municipal Characteristics—Part 2

The community characteristics data for the municipalities that were Successful at least once across the 2016, 2018, 2019, and 2023 NYSDEC UCF Grant rounds, those that were never successful (Unsuccessful), and the remaining Did Not Apply are compiled in Table 5 along with the pairwise statistical comparisons between groups. Successful municipalities were, on average, larger and more likely to contain a PEJA (71%) or DAC (42%) than Unsuccessful and Did Not Apply. Did Not Apply municipalities were significantly less likely to contain a PEJA (33%) or DAC (25%) than Successful (P -value < 0.001, P -value = 0.013, respectively) and significantly less likely to contain a PEJA than Unsuccessful (P -value < 0.001).

After the cross-round aggregates were analyzed, we examined population size, MHI, and PEJA/DAC for each round separately, including only the municipalities that specifically applied to the round. The Did

Table 5. Community characteristics for all Successful, Unsuccessful, and Did Not Apply municipalities. Part 2: 2016, 2018, 2019, and 2023 Urban and Community Forestry Rounds Combined. PEJA (potential environmental justice area); DAC (disadvantaged community).

Community characteristic	All (<i>n</i> = 287)	Successful (<i>n</i> = 104)	Unsuccessful (<i>n</i> = 96)	Did Not Apply (<i>n</i> = 87)
Population mean (median)*	51,327 (6,713)	106,783 ^a (13,088)	33,960 ^a (9,674)	4,199 ^a (1,930)
Median household income*	\$61,572	\$64,292 ^{ab}	\$69,561 ^a	\$56,241 ^b
Percentage that contains a PEJA (DAC)	55% (33%)	71% ^a (42%) ^a	59% ^a (30%) ^{ab}	33% (25%) ^b

*Population means and medians and median household incomes are the averages of the 2016, 2018, 2019, and 2023 values.

Note: Superscripts indicate groups of statistical significance, $P < 0.05$ (Chi-square using Fisher's Exact Test).

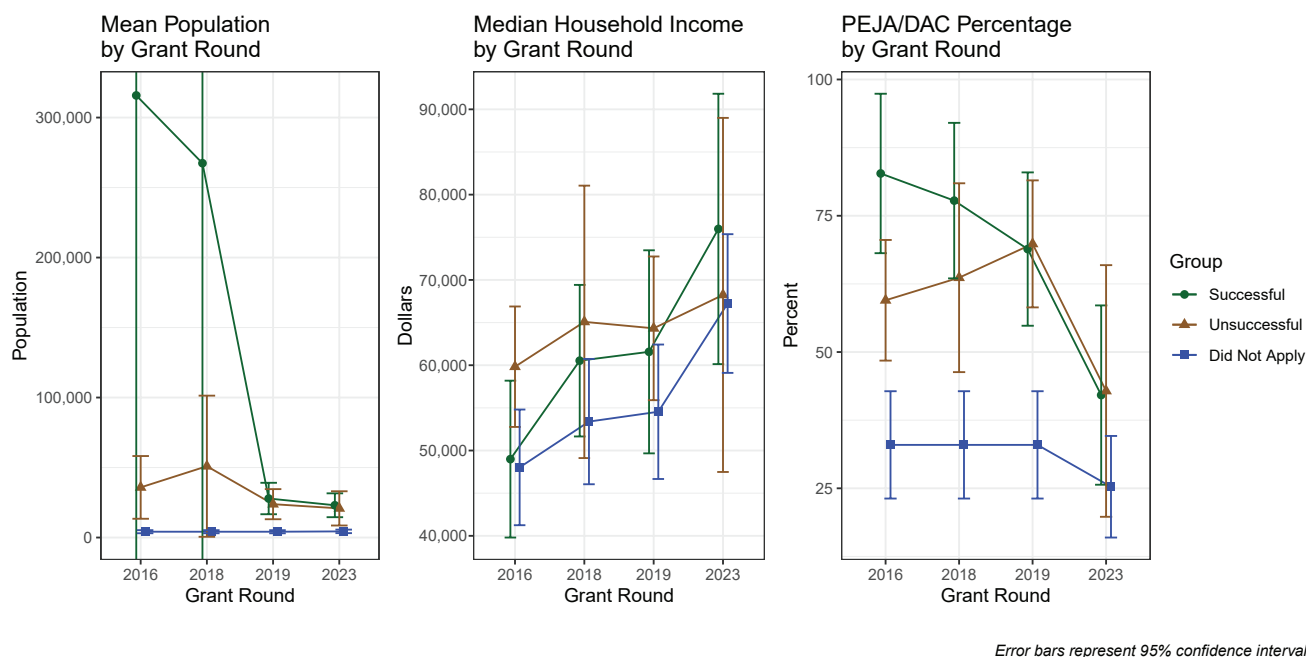


Figure 1. Community characteristics of mean population, median household income, and PEJA/DAC percentage by grant round year for Successful, Unsuccessful, and Did Not Apply municipalities.

Not Apply municipalities remained constant through the 4 rounds, but the contemporaneous population size, MHI, and PEJA/DAC status changed across rounds. These single-round analyses revealed unexpected results (Figure 1).

In 2016, the population of Successful municipalities was significantly larger than Unsuccessful (P -value = 0.032) and Did Not Apply (P -value = 0.015) and significantly more likely than Unsuccessful (P -value = 0.024) and Did Not Apply (P -value < 0.001) to contain a PEJA. Unsuccessful was also significantly more likely to contain a PEJA than Did Not Apply

(P -value < 0.001). There were no statistical differences in MHI values between groups.

In 2018, Successful municipalities were significantly larger than Did Not Apply (P -value = 0.046). Unsuccessful municipalities had an MHI that was significantly higher than Successful (P -value = 0.046) and Did Not Apply (P -value = 0.013). Both Successful and Unsuccessful were significantly more likely to contain a PEJA than Did Not Apply (P -value < 0.001 and P -value = 0.001, respectively).

In 2019, the Did Not Apply population and PEJA percentage were significantly lower than those of

both the Successful (P -value < 0.001 and P -value < 0.001 , respectively) and Unsuccessful (P -value < 0.001 and P -value < 0.001 , respectively) groups. There were no significant differences between the groups' MHI. Interestingly, although not statistically significant, in 2019 the percentage of Successful municipalities with a PEJA (69%) is slightly lower than that of Unsuccessful municipalities (70%).

Lastly, in 2023, we observe the same pattern for the DAC percentage as we did for PEJA in 2019, with Unsuccessful having the highest rate at 43% and Successful slightly lower at 42%, although there is no statistically significant difference among the groups. Additionally, as in 2019, the population of Did Not Apply was significantly lower than Successful and Unsuccessful (P -value < 0.001 and P -value < 0.001 , respectively), and there was no significant difference among MHI.

A point of note: the DAC qualifying criteria differ from those used to determine PEJA status. Of the 159 municipalities in this study with a PEJA, only 83 contained a DAC. Furthermore, 12 additional municipalities without a PEJA contained a DAC, for a total of 95.

DISCUSSION

Although Successful and Unsuccessful were not significantly different from each other for most variables, each respondent group emerged with its own distinct profile. Successful had the highest population and PEJA rates. Unsuccessful had the highest MHI and per capita tree budgets. Did Not Apply had the lowest MHI and per capita tree budgets, and its size and rates of PEJA were statistically lower than those of Unsuccessful (Table 1).

When examining the percentages of the combined rounds, awarding points for project PEJA/DAC status appeared effective, although the effect was only statistically significant for Did Not Apply compared with Successful (responding and all applicants) and Unsuccessful (all applicants) (Table 5). However, when inspecting the municipal data over each of the 4 grant rounds, the significance varied. A statistical significance was noted between Successful and Unsuccessful in 2016, as well as between Successful and Unsuccessful and Successful and Did Not Apply in 2016, 2018, and 2019. However, no differences were observed in 2023 (Figure 1). The presence of a PEJA likely conferred an advantage to Successful municipalities, but the Successful and Unsuccessful percentages of

PEJA and DAC converge in 2019, and no advantage was observed for 2019 or 2023. There were other federal and state grants aimed at disadvantaged communities in 2023, which might have affected application rates of municipalities with a DAC in that year, but not for PEJA in 2019. Regardless, this suggests that if NYS wishes to continue previous levels of emphasis on awarding grants to disadvantaged communities, the point level would need to be modified to further favor DAC applications.

While Unsuccessful municipalities were more affluent in the 2016, 2018, and 2019 rounds, affluence shifted in the 2023 grant round, where we found that Successful municipalities had a higher MHI (Figure 1). The additional points for demonstrated economic need were dropped in 2023; previously, they had been 8% (2016 and 2018) or 4% (2019) of the total score. This indicates that these additional points may impact which municipalities receive funds.

The New York State Department of Environmental Conservation provides scoring guides that furnish the point value of each criterion, helping applicants understand how their proposals will be evaluated. The scoring guides can encourage or discourage municipalities from applying, depending on whether they see themselves and their potential project(s) reflected in the criteria (i.e., a project in a PEJA/DAC). Some municipalities responded that they did not apply because they felt they could not compete since their municipalities were not disadvantaged. However, the maximum point benefit for that criterion was 5% to 7% of the total score in each round. Although fewer of the Did Not Apply municipalities contained a PEJA (36%), not all of the Successful municipalities did either (69%), indicating that it is possible for municipalities without projects benefiting PEJA/DACs to be funded.

The scoring rubrics may also motivate municipalities to participate in programs (i.e., becoming a TCUSA). Tree City USA recognition appears to be correlated with NYSDEC UFC grant application success. Some Unsuccessful municipalities noted that the lack of TCUSA recognition or review from an ISA Certified Arborist may have contributed to their outcome. Being recognized as a TCUSA community requires the municipality to meet 4 urban forest management standards (celebrating Arbor Day, establishing a tree committee/board, composing a tree ordinance, and a tree-related budget of at least \$2 per resident) (Arbor

Day Foundation 2024) and is known to correlate with urban forest management comprehensiveness (Stevenson et al. 2008; Hargrave et al. 2024). Therefore, TCUSA recognition may convey grant writing success due to the urban forest management conducted by those municipalities, in addition to any extra points awarded in the scoring process.

Similarly, Did Not Apply municipalities were significantly less likely (40%) to have a tree board than both Successful (78%) and Unsuccessful (72%). This would suggest that these municipalities have less robust urban forest management programs. They also had less grant writing capacity and either less interest in submitting an application or less awareness of tree-related grants (Table 1 and Table 3) than both Successful and Unsuccessful municipalities. Still et al. (1996) found a similar correlation, in that applicant communities in Pennsylvania (both funded and unfunded) were more likely to have an ordinance, inventory, or tree management plan than non-applicants, and 85% of funded communities had at least one of those components, compared with 20% of non-applicants. Additional technical and educational support from the NYSDEC or other partner agencies on the importance of foundational urban forest management activities, such as celebrating Arbor Day, being recognized as a TCUSA, or having a tree advisory board, may help municipalities be more competitive in the application process.

Unsuccessful applicants reported that they felt they were unsuccessful due to a lack of a grant writer, while Successful applicants felt that having a grant writer assisted them in obtaining a grant successfully. However, it is important to note that both Successful and Unsuccessful municipalities reported having equal grant writer access (56% each). The Did Not Apply municipalities had only slightly lower rates (47%). Additionally, no one category of authors of the NYSDEC UCF applications stood out among the others. Some Unsuccessful applicants recognized they lacked ISA Certified Arborist guidance on their proposal and that it might have contributed to their poor performance. However, given the lack of statistical significance, the lack of a grant writer or a specific type of grant writer may be perceived as a barrier, but not an actual one, and thus should not keep municipalities from applying.

Municipal calls for political and public support are often highlighted in statewide need assessment surveys

(Treiman and Gartner 2004, 2005). However, in this survey, none of the Successful respondents listed the lack of political or public support as an obstacle to completing their grant projects. Additionally, only 12% of Unsuccessful and Did Not Apply municipalities indicated needing political support in order to have a successful application, and only 5% of that combined group reported public support for success (Table 4). This may suggest that elected officials and the public are supportive of their municipalities seeking grants for tree-related projects, but that their support is necessary for other facets of urban forest management.

There were a few common barriers reported by Unsuccessful and Did Not Apply municipalities. Technical and educational assistance was touted as a needed resource by both groups. These critical resources were also identified in other needs assessments (Zhang and Zheng 2012; Driscoll et al. 2015; Harper et al. 2017; Hargrave et al. 2023). Both groups also expressed a desire for increased capacity, explicitly for staff to manage grants and carry out tree-related projects. Additionally, 26% reported that they wanted assistance identifying worthy grant projects. This may be related to both the need for educational assistance and the need for staff—someone with knowledge of the trees and the capacity to translate it into a suitable project. The primary reason the Did Not Apply group gave for not applying was that they were unaware of the grants, suggesting there is an outreach opportunity for the NYSDEC. Secondary reasons referred to grant writing and capacity. The Did Not Apply municipalities were the smallest and least affluent, which suggests they have less capacity than larger municipalities and may be less connected to urban forest management support. Partnerships with other urban forestry support or community agencies on collaborative applications, which were permitted in some grant rounds, may enable these municipalities to access some of the benefits this grant program provides.

Whether grant success for municipalities in NYS is due to the points they can accrue or the theoretically more robust urban forest management that is already in place is unknown. We did not have access to the more refined aspects of each applicant's score and could not test whether a change in the score for these criteria would have changed the outcome of the application. This would be an interesting topic for future research. Another limitation of this study was that some municipalities had incomplete recollections of

their applications and executed projects. Collecting additional data at the time of application and when submitting project reports may help identify differences between Successful and Unsuccessful applicants.

Additionally, given the apparent low level of awareness of the grants program among Did Not Apply municipalities, it would be of benefit to better understand how connected municipalities in all 3 groups are with other NYSDEC UCF programs, such as attendance at educational programs, participation on regional support committees, or interactions with their local NYSDEC urban forester.

Lastly, over the 4 rounds of the NYSDEC UCF Grants studied here, there were only 200 municipal applicants, with only 104 being Successful in obtaining a grant (Table S2 in the Appendix). The New York State Department of Environmental Conservation UCF believes there are approximately 750 municipalities with a managed urban forest. Outreach and support by NYSDEC staff and partner agencies may increase awareness, municipal capacity, and lead to more applications.

CONCLUSION

This study provides valuable insights into the attributes that contribute to successful NYSDEC UCF Grant applications. Municipalities with established urban forest management practices are more likely to receive a grant than those without such practices. Being recognized as a TCUSA community, celebrating Arbor Day, and having a tree board demonstrate, at a minimum, a basic commitment to urban forest management correlates with NYSDEC UCF application success.

New York State's efforts to reward municipalities in need and those with a documented commitment to urban forest management with additional points in the scoring process appear to aid in making communities more competitive overall for NYSDEC UCF Grant dollars. However, when parsing the data by grant year, we found mixed results for disadvantaged and lower-MHI municipalities. This suggests that the scoring system may need to be adjusted if the state wants to continue to elevate scores for municipalities that meet these criteria.

Access to grant writers was reported as a barrier by all 3 categories, although the rates of grant writers were the same for both Successful and Unsuccessful applicants. Surprisingly, public and political support were not listed as barriers, which is encouraging. Still,

municipalities expressed the need for more technical and educational support. Enhancing support for municipalities without robust urban forestry programs may increase access to these grants.

Grants are an important portion of municipal tree budgets in NYS. The NYSDEC UCF Grants are being awarded to municipalities with documented urban forest management practices and, historically, to those with lower MHIs and projects that benefit environmental justice areas. Nevertheless, many municipalities were unable to successfully obtain one of these grants. Enhancing current educational and technical assistance levels may increase the likelihood of additional municipalities receiving grants and lead to improved urban forest management outcomes across the state.

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Résumé. Contexte: Les subventions destinées à la gestion des forêts urbaines sont cruciales pour de nombreuses municipalités et contribuent significativement à aider les collectivités à atteindre leurs objectifs en matière de gestion. Les municipalités disposent de ressources variables en matière de rédaction et d'application pour les demandes de subvention, incluant des caractéristiques communautaires distinctes, ce qui peut avoir un impact sur le succès de ces demandes. Cette étude a évalué les caractéristiques de municipalités qui ont obtenu ou non, ou qui ne se sont pas portées candidates à l'une des quatre appels de financement pour la foresterie urbaine et communautaire du Département de la conservation environnementale de l'État de New York (subvention UCF du NYSDEC), afin d'identifier les tendances, les facteurs favorisant l'obtention de subvention et les obstacles rencontrés. Méthodes: Les réponses à un sondage portant sur les interactions des municipalités avec le programme de subventions UCF du NYSDEC ont été recoupées avec les données du recensement américain et celles de l'État de New York (NYS), puis analysées afin d'en dégager l'importance et les tendances. Résultats: Les candidatures retenues affichaient des taux plus élevés de participation pour la Journée de l'arbre, comptaient davantage d'employés ayant suivi une formation officielle ou étaient titulaires d'une certification, et disposaient de comités consultatifs sur les arbres. Étonnamment, les candidatures retenues et celles ne l'ayant pas été, ont bénéficié d'un accès similaire aux rédacteurs de demandes de subventions et peu de municipalités ont mentionné le manque de soutien politique ou public comme étant un obstacle. Les communautés n'ayant pas déposé de candidature ont invoqué un manque de sensibilisation, des capacités insuffisantes et la nécessité d'une assistance technique. Les candidatures se sont vu attribuer des points en fonction de la certification "Tree City USA" (TCUSA), des besoins économiques avérés et des projets menés dans des zones défavorisées. La distinction "Tree City USA" présentait une corrélation statistique avec le succès des candidatures. Le fait qu'une zone soit classée comme défavorisée par l'État ne signifiait pas pour autant que ses chances de succès étaient plus élevées à chaque appel de financement. Conclusion: Les municipalités disposant d'une structure existante en gestion de la forêt urbaine et ayant des besoins avérés avaient plus de chances de se voir attribuer une subvention UCF du NYSDEC. La participation des municipalités au processus de candidature pourrait être encouragée et améliorée grâce à un renforcement de l'assistance technique et du soutien.

Zusammenfassung. Hintergrund: Fördermittel für die städtische Waldbewirtschaftung sind für viele Gemeinden von entscheidender Bedeutung und tragen bekanntermaßen dazu bei, dass Gemeinden ihre Bewirtschaftungsziele erreichen. Die

Gemeinden verfügen über unterschiedliche Ressourcen für die Beantragung und Umsetzung von Fördermitteln und weisen unterschiedliche kommunale Merkmale auf, was sich auf den Erfolg von Förderanträgen auswirken kann. Diese Studie bewertete die Merkmale von Kommunen, die in vier Förderrunden des New York State Department of Environmental Conservation Urban and Community Forestry Grant (NYSDEC UCF Grant) erfolgreich waren, erfolglos blieben oder gar keinen Antrag stellten, um Trends, Bewertungsvorteile und Hindernisse zu identifizieren. Methoden: Die Antworten auf eine Umfrage zu den Interaktionen der Kommunen mit dem NYSDEC UCF Grant-Programm wurden mit Daten der US-Volkszählung und des Staates New York (NYS) abgeglichen und auf Signifikanz und Trends hin analysiert. Ergebnisse: Erfolgreiche Antragsteller wiesen eine höhere Quote an Feierlichkeiten zum Tag des Baumes, an formal ausgebildeten oder zertifizierten Mitarbeitern sowie an Baumbeiräten auf. Überraschenderweise hatten erfolgreiche und erfolglose Antragsteller gleichen Zugang zu Fördermittelberatern, und nur wenige Gemeinden nannten politische oder öffentliche Unterstützung als Hindernis. Gemeinden, die keinen Antrag stellten, führten mangelndes Bewusstsein, geringe Kapazitäten und den Bedarf an technischer Unterstützung an. Anträge erhielten Punkte für die Anerkennung als "Tree City USA" (TCUSA), nachgewiesenen wirtschaftlichen Bedarf und Projekte in benachteiligten Gebieten. Die Anerkennung als "Tree City USA" korrelierte statistisch mit dem Erfolg des Antrags. Das Vorhandensein eines staatlich ausgewiesenen benachteiligten Gebiets führte nicht in jeder Förderrunde zu einer erhöhten Erfolgswahrscheinlichkeit. Schlussfolgerung: Kommunen mit bestehender Infrastruktur für die städtische Baumpflege und dokumentiertem Bedarf erhielten mit höherer Wahrscheinlichkeit einen NYSDEC-UCF-Zuschuss. Die Beteiligung der Kommunen am Antragsverfahren könnte durch verstärkte technische Hilfe und Unterstützung gefördert und verbessert werden.

Resumen. Antecedentes: Las subvenciones para la gestión de bosques urbanos son vitales para muchos municipios y se sabe

que ayudan a las comunidades a alcanzar sus objetivos de gestión. Los municipios tienen recursos variables para la redacción y ejecución de subvenciones y características comunitarias diferentes, lo que puede afectar el éxito de la solicitud de subvención. Este estudio evaluó las características de los municipios que tuvieron éxito, no tuvieron éxito o no solicitaron en 4 rondas de la Subvención para Silvicultura Urbana y Comunitaria del Departamento de Conservación Ambiental del Estado de Nueva York (Subvención NYSDEC UCF) para identificar tendencias, ventajas de puntuación y barreras. Métodos: Las respuestas a una encuesta que indagaba sobre las interacciones de los municipios con el programa de Subvenciones NYSDEC UCF se combinaron con datos del Censo de EE. UU. y del Estado de Nueva York (NYS) y se analizaron para determinar su significancia y tendencias. Resultados: Los solicitantes exitosos tenían mayores tasas de celebración del Día del Árbol, empleados con formación académica o certificación formal y juntas asesoras de árboles. Sorprendentemente, los solicitantes exitosos y no exitosos tuvieron el mismo acceso a los redactores de subvenciones, y pocos municipios mencionaron el apoyo político o público como barreras. Los municipios que no solicitaron citaron la falta de conocimiento, la baja capacidad y la necesidad de apoyo técnico. Se otorgaron puntos a las solicitudes por el reconocimiento de Tree City USA (TCUSA), la necesidad económica documentada y los proyectos en áreas desfavorecidas. El reconocimiento de Tree City USA se correlacionó estadísticamente con el éxito de la solicitud. La presencia de un área desfavorecida designada por el estado no se tradujo en una mayor probabilidad de éxito en cada ronda de subvenciones. Conclusión: Los municipios con infraestructura existente para la gestión forestal urbana y necesidades documentadas tuvieron mayor probabilidad de recibir una subvención UCF del NYSDEC. La participación municipal en el proceso de solicitud puede fomentarse y mejorarse con mayor asistencia y apoyo técnico.

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Appendix

Table S1. Breakdown of applications and awards for the previous 4 rounds (all municipal and nonmunicipal applicants).

Year	2016	2018	2019	2023
Total awarded	\$2,225,000	\$2,240,000	\$2,033,000	\$3,020,000
Maximum request (large/small municipalities)	\$75,000/\$50,000	\$75,000/\$50,000	\$75,000/\$50,000	\$100,000/\$75,000
Total funded	50	54	48	50
Total applicants	157	103	114	75
Percentage funded	32%	52%	42%	67%
Number of funded projects in large municipalities (all applicants)	18	20	6	15
Award for projects in large municipalities (all applicants)	\$1,074,950	\$1,125,523	\$853,069	\$1,304,133
Number of funded projects in small municipalities (all applicants)	32	34	42	35
Award for projects in small municipalities (all applicants)	\$1,150,000	\$1,114,477	\$1,179,810	\$1,715,528
Number of large municipal applicants funded*	3	7	6	5
Award for large municipal applicants#	\$249,999	\$462,300	\$853,069	\$423,600
Number of small municipal applicants funded*	26	29	39	33
Award for small municipal applicants#	\$1,100,100	\$948,815	\$1,179,810	\$1,592,574
Number of large/small municipal applicants not funded*	6/73	4/29	6/57	1/20

*Without duplication (some years, awardees could submit multiple applications).

#With duplication (some years, awardees could submit multiple applications).

Table S2. Municipal application rates over the 4 grant rounds*.

Municipal application rates					
Total	Freq.	Successful[#]	Freq.	Unsuccessful[#]	Freq.
Once	104	Once	70	Once	98
Twice	56	Twice	24	Twice	37
Thrice	32	Thrice	10	Thrice	8
Four times	8	Four times	0	Four times	0
Total	200	Total	104	Total	143
Application outcome breakdown					
Only Successful	Freq.	Mixed success	Freq.	Only Unsuccessful	Freq.
Successful once	39	Successful once & Unsuccessful once	19	Unsuccessful once	65
Successful twice	12	Successful once & Unsuccessful twice	10	Unsuccessful twice	25
Successful thrice	6	Successful once & Unsuccessful thrice	2	Unsuccessful thrice	6
		Successful twice & Unsuccessful once	10		
		Successful twice & Unsuccessful twice	2		
		Successful thrice & Unsuccessful once	4		
Total	57	Total	47	Total	96

*As described in Survey—Part 1.

[#]Includes duplication, see Mixed success column.*Appendix continued on next page*

SURVEY QUESTIONS

All Surveys

Beginning of Survey Questions:

Has your community celebrated Arbor Day in the past 5 years?

☐ Yes ☐ No ☐ I don't know

Has your community been recognized as a Tree City USA in the past 5 years?

☐ Yes ☐ No ☐ I don't know

Is there at least one municipal employee with a degree in a tree care related field (arboriculture, urban forestry, horticulture, forestry, etc.)?

☐ Yes ☐ No ☐ I don't know

Is there at least one municipal employee with an International Society of Arboriculture (ISA) or Tree Care Industry Association (TCIA) certification?

☐ Yes ☐ No ☐ I don't know

Does your municipality have a tree board, advisory committee, or similar municipal committee that assists with tree oversight?

☐ Yes ☐ No ☐ I don't know

Does your municipality employ or contract with a grants writer?

☐ Yes ☐ No ☐ I don't know

Has your municipality applied for a NYS Urban Forestry Council Grant (to assist with becoming a Tree City USA community or to augment Tree City USA status) in the last 5 years?

☐ Yes ☐ No ☐ I don't know

What was your municipal tree care related budget in 2022? _____

End of Survey Questions:

Do you plan to apply for a NYSDEC Urban and Community Forestry Grant in the future?

☐ Yes ☐ No ☐ I don't know

Do you plan to apply for this coming round (summer of 2023) of NYSDEC Urban and Community Forestry Grants?

☐ Yes ☐ No ☐ I don't know

Successful Municipality Survey Questions

Who wrote your municipality's most recent NYSDEC Urban and Community Forestry Grant application? Select all that apply.

- ☐ Municipal grant writer
- ☐ Municipal employee
- ☐ Contract professional grant writer
- ☐ Contract arborist
- ☐ ISA Certified Arborist®
- ☐ Volunteer
- ☐ Elected official
- ☐ Other _____

Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.

- ☐ Tree Planting
- ☐ Tree Inventory
- ☐ Management Plan
- ☐ Tree Maintenance

Did you complete the project in the grant allotted timeframe?

- ☐ No – We did not complete the project
- ☐ No – We needed an extension to complete the project
- ☐ Yes – We completed the project on time

How successful or unsuccessful were you at meeting the goals of your project?

- ☐ Unsuccessful – We did not meet any of our project goals
- ☐ Somewhat successful – We met a few of our project goals
- ☐ Somewhat successful – We met most of our project goals
- ☐ Successful – We met all our project goals

Did your local NYSDEC urban forester require remediation or corrections before signing off on the completion of the grant?

- ☐ Yes ☐ No ☐ I don't know

Who carried out the tasks specified in the grant application? Select all that apply.

- ☐ Municipal staff
- ☐ Community volunteers
- ☐ Professional contractors
- ☐ Elected officials
- ☐ Community partners
- ☐ ISA Certified Arborists
- ☐ Other _____

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Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Planting”

What obstacles did you encounter when completing the planting project? Select all that apply.

- ☐ There was limited availability of suitable planting stock
- ☐ The cost of planting stock increased between proposal and implementation
- ☐ There were few planting contractors in the area
- ☐ We did not have enough volunteers to execute the plantings as planned
- ☐ The weather did not cooperate (either too dry or too wet)
- ☐ There were COVID restrictions on public gatherings/interactions
- ☐ We had COVID-related materials shortages
- ☐ We had COVID-related staffing shortages
- ☐ The quality of planting stock caused survivability issues
- ☐ There was a lack of political support to implement the project
- ☐ There was a lack of public support to implement the project
- ☐ Other _____
- ☐ None – Everything went as planned

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Inventory”

What obstacles did you encounter when completing the inventory? Select all that apply.

- ☐ There were few professional contractors available to implement the inventory
- ☐ Municipal staff were unable to spend enough time on the project
- ☐ We had technical issues with inventory software or data
- ☐ There were COVID-related barriers to holding outreach or press events
- ☐ There was a lack of political support to implement the project
- ☐ There was a lack of public support to implement the project
- ☐ Other _____
- ☐ None – Everything went as planned

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Management Plan”

What obstacles did you encounter when completing the management plan? Select all that apply.

- ☐ There were few professional contractors available to develop the management plan
- ☐ Municipal staff were unable to spend enough time on the project
- ☐ There were COVID-related barriers to holding outreach or press events
- ☐ There was a lack of political support to implement the project
- ☐ There was a lack of public support to implement the project
- ☐ Other _____
- ☐ None – Everything went as planned

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Maintenance”

What obstacles did you encounter when completing the maintenance project? Select all that apply.

- ☐ There was a lack of trained arboriculture professionals/contractors available to do the work
- ☐ There was a lack of volunteers available to do the work
- ☐ Our municipal employees lacked pruning and maintenance skills
- ☐ The municipality lacked the proper pruning and maintenance equipment
- ☐ The municipality experienced significant equipment breakdowns or lack of availability (to rent)

- ☐ We were unable to schedule maintenance tasks efficiently
☐ There were COVID-related barriers to holding outreach or press events
☐ There was a lack of political support to implement the project
☐ There was a lack of public support to implement the project
☐ Other _____
☐ None – Everything went as planned

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Planting”

After the completion of the planting project, were the planted trees cared for (watered, mulched, and stakes removed)?

☐ Yes ☐ Somewhat ☐ No

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Planting”

Approximately what percentage of the trees you planted are still alive? _____

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Inventory”

Has the inventory been useful?

☐ Yes ☐ Somewhat ☐ No

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Inventory”

Has the inventory been kept up to date?

☐ Yes ☐ Somewhat ☐ No

Display this question: If “Has the inventory been kept up to date?” != “Yes” and “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Inventory”

If not yes, why not? Select all that apply.

- ☐ Lack of staff or staff time
☐ Lack of staff training
☐ No funds to subscribe to the software
☐ Other _____

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Management Plan”

Has the management plan been useful?

☐ Yes ☐ Somewhat ☐ No

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Management Plan”

Please elaborate on your municipality’s use of the management plan. _____

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Maintenance”

After your maintenance grant, was your tree inventory updated?

☐ Yes ☐ No

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Display this question: If “After your maintenance grant, was your tree inventory updated?” = “No” and “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Maintenance”

If no, why not?

- ☐ Lack of staff or staff time
- ☐ Lack of staff training
- ☐ No funds to subscribe to the inventory software
- ☐ Other _____

Display this question: If “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Inventory” or “Thinking of your most recent successful application: What type of grant did you obtain? Select all that apply.” = “Tree Maintenance”

What software do you use to manage your inventory? _____

How significant or insignificant of an impact do urban forest grants have on your municipal urban forestry program during the years you had grant funding?

- ☐ Extremely Significant
- ☐ Significant
- ☐ Neither Significant nor Insignificant
- ☐ Insignificant
- ☐ Extremely Insignificant

Why do you think your municipality was successful in obtaining a NYSDEC Urban and Community Forestry Grant? _____

What municipal resources did your municipality have that may have given it an advantage over communities that didn't receive a grant? _____

Unsuccessful Municipality Survey Questions

Who wrote your municipality's most recent NYSDEC Urban and Community Forestry Grant application? Select all that apply.

- ☐ Municipal grant writer
- ☐ Municipal employee
- ☐ Contract professional grant writer
- ☐ Contract arborist
- ☐ ISA Certified Arborist
- ☐ Volunteer
- ☐ Elected official
- ☐ Other _____

Why do you think your municipality was unsuccessful? Select all that apply.

- ☐ The scale of the project was too large
- ☐ The scale of the project was too small
- ☐ There was a lack of qualified contractors to execute the project
- ☐ There was a lack of qualified staff to execute the project

- ☐ We were not a Tree City USA
☐ We did not have an ISA Arborist participate in the project
☐ We did not have an ISA Arborist review our project
☐ The proposal wasn't of high enough quality
☐ I don't know
☐ Other _____

After the rejection, did someone from your municipality meet with NYSDEC Urban and Community Forestry staff to learn how to improve your proposal?

- ☐ Yes ☐ No ☐ I don't know

Display this question: If "After the rejection, did someone from your municipality meet with NYSDEC Urban and Community Forestry staff to learn how to improve your proposal?" = "Yes"

If yes, did they find it helpful?

- ☐ Yes ☐ No

Did you complete the project even though you didn't get a grant?

- ☐ No
☐ Yes, we applied for funds from another entity
☐ Yes, we figured out how to do it on our own

Display this question: If "Did you complete the project even though you didn't get a grant?" != "No"

If yes, was it at the original scale?

- ☐ No, we had to scale it down
☐ No, we were able to expand it
☐ Yes, it was at the original scale

Which of these resources do you think your municipality needs to have in order to successfully apply for a NYSDEC Urban and Community Forestry Grant in the future? Select all that apply.

- ☐ Grants manager
☐ Technical assistance on implementing a tree planting, inventory, management plan or maintenance project
☐ Staff to implement the tree project
☐ Assistance identifying a worthy tree project
☐ Educational assistance for employees to ensure quality grant outcomes
☐ Educational assistance for volunteers to ensure quality grant outcomes
☐ Political support
☐ Public support
☐ Local tree care expertise to assist with our project

Did Not Apply Municipality Survey Questions

Before receiving this survey request, were you aware of the NYSDEC Urban and Community Forestry Grant program?

- ☐ Yes ☐ No

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Why didn't your municipality apply for a NYSDEC Urban and Community Forestry Grant in the past? Select all that apply.

- ☐ The municipality was unaware of the grants program
- ☐ The municipality didn't know where to get help with the application
- ☐ The municipality didn't have someone to write the grant
- ☐ The municipality didn't want to use the NYS Grants Gateway
- ☐ The municipality didn't have a worthy tree project
- ☐ The municipality didn't have staff to manage the grant
- ☐ The municipality didn't have the topical expertise
- ☐ The municipality didn't have employees to implement the grant
- ☐ There were no local tree experts/contractors who could help us
- ☐ The municipality didn't have the political support necessary to do the project
- ☐ The municipality didn't have the public support necessary to do the project
- ☐ I don't know
- ☐ Other _____

Which of these resources do you think your municipality needs in order to successfully apply for a NYSDEC Urban and Community Forestry Grant in the future? Select all that apply.

- ☐ Grants manager
- ☐ Technical assistance on implementing a tree planting, inventory, management plan or maintenance project
- ☐ Staff to implement the tree project
- ☐ Assistance identifying a worthy tree project
- ☐ Educational assistance for employees to ensure quality grant outcomes
- ☐ Educational assistance for volunteers to ensure quality grant outcomes
- ☐ Political support
- ☐ Public support
- ☐ Local tree care expertise to assist with our project
- ☐ Other _____