

APPENDICES



APPENDIX A. ESTABLISHING TREE CANOPY GOALS

Implementation:

Management Policy: Action 1E.2, Action 1D.1, Action 1D.10, Action 1F.11

Funding and Authority: Action 3D.7

Inventories and Plans: Action 4C.4, Action 4C.8, Action 4D.10

Community Engagement: Action 6D.5, Action 6A.10

The following information summarizes the recommended approaches to achieve Tacoma's tree canopy goals.

Table 1. Assumptions and outcomes of canopy goal and tree planting targets

Category	Assumption/Outcome
Tacoma Land Acres	31,607 acres
Existing Tree Canopy	20%
Canopy Goal	30%
Timeframe	10-year goal
Number of Trees	104,264 or 10,426 trees per year
Tree Size at Maturity	<ul style="list-style-type: none"> Large tree at maturity with a 41-foot canopy spread (USFS PNW Community Tree Guide) 1,320.5 ft²
Tree Mortality	<ul style="list-style-type: none"> No mortality
Tree Replacement	<ul style="list-style-type: none"> No-net-loss
Estimated Benefits of Future Trees	<ul style="list-style-type: none"> 358,875,333 gallons of stormwater runoff prevented \$2,871,420 stormwater savings 53,038,896 pounds of carbon sequestered 9,279,461 kilowatt hours saved \$1,300,167 energy savings 320,714,853 kBtu in natural gas reductions \$4,747,122 in natural gas savings \$8,918,709 Total Benefits

Based on the total land area of Tacoma, the 30% tree canopy goal, and the recommendation to plant large-statured trees when possible, a total of 104,264 trees are needed over a 10-year timeframe. This assumes the City establishes a no-net-loss policy—replacing trees that are removed—and proper post-planting care and routine maintenance is conducted. If the City achieves this target of 30% tree canopy, it is estimated that these new trees would provide nearly \$9 million in additional annual benefits at maturity.

Table 2. Recommended tree canopy cover goals by NBD using the 2009/2011 assessment.

Neighborhood Business District (NBD)	Percentage of Right-of-Way (ROW) in NBD	Actual NBD Cover	NBD Cover Needed	Actual NBD ROW Cover	NBD ROW Cover Needed
Portland Avenue	42.2%	2.4%	12.6%	0%	30%
South Tacoma	39.7%	0%	15%	0%	30%
Stadium	49.6%	4.9%	10.1%	4.5%	25.5%
6th Ave	41.3%	2.1%	12.9%	2.3%	27.7%
Proctor	41.2%	4%	11%	7.3%	22.7%
Oakland/Madrona	41.3%	7.1%	7.9%	0.2%	29.8%
Fern Hill	34.4%	7.3%	7.7%	2.8%	27.2%
Lincoln	37.7%	0%	15%	0%	30%
McKinley	48.1%	1.1%	13.9%	1.2%	28.8%
Narrows	43.9%	3.3%	11.7%	2.7%	27.3%
Dome	36.1%	1.9%	13.1%	1.8%	28.2%
Hilltop	43%	0.9%	14.1%	1.1%	28.9%
Ruston/Pt. Defiance	41.2%	2.6%	12.4%	0%	30%
Old Town	44.8%	2.8%	12.2%	1.2%	28.8%
Pacific	40.7%	3.4%	11.6%	0.9%	29.1%

Table 3. Updated canopy cover and goals by land use using the 2018 tree canopy analysis

Land Use	Land Area (Acres)	Actual Tree Cover %	Vegetative Planting Area %	Goal Cover	# of Trees by 2030
Crossroads Mixed-Use Center	642	12%	9%	15%	635
Downtown Reg'l Growth Center	978	7%	6%	10%	968
General Commercial	817	7%	6%	10%	809
Heavy Industrial	4,002	4%	6%	6%	2,640
Light Industrial	538	6%	7%	10%	710
Major Institutional Campus	626	10%	11%	15%	1,033
Multi-Family (High Density)	389	14%	14%	20%	770
Multi-Family (Low Density)	1,478	15%	12%	20%	2,438
Neighborhood Commercial	597	10%	7%	15%	985
Neighborhood Mixed-Use Center	386	9%	6%	12%	382
Parks and Open Space	4,965	56%	16%	70%	22,930
Shoreline	1,014	21%	11%	28%	2,341
Single Family Residential	14,496	17%	16%	30%	62,164
Tacoma Mall Reg'l Growth Center	483	10%	7%	15%	797
TOTAL TREES					99,602
Total Trees to Achieve Land Use Canopy Goals					104,264
Remaining Trees Needed					4,662
Assumption	Existing tree canopy growth to account for difference				

Figure 1. 2018 tree canopy cover

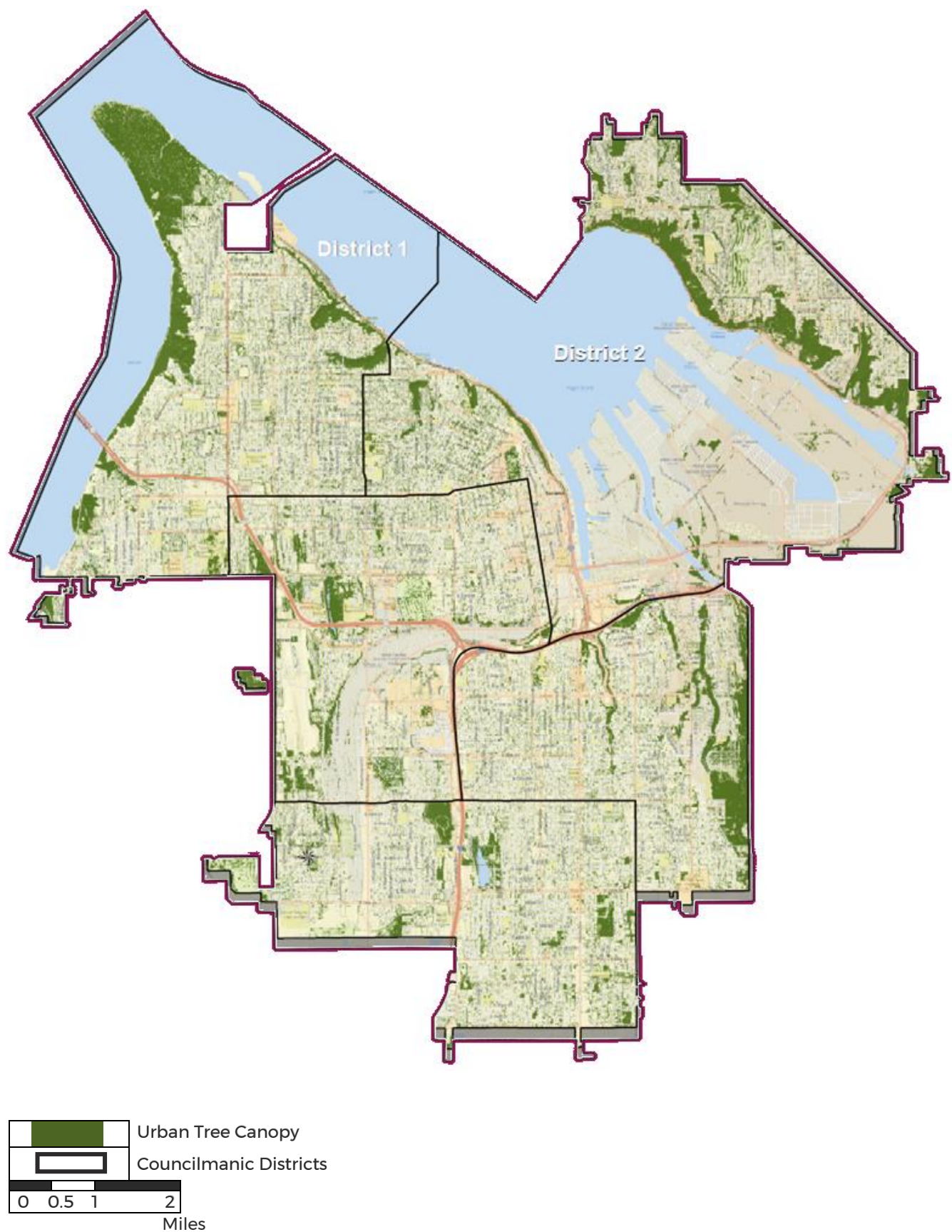


Figure 2. 2018 land use classifications

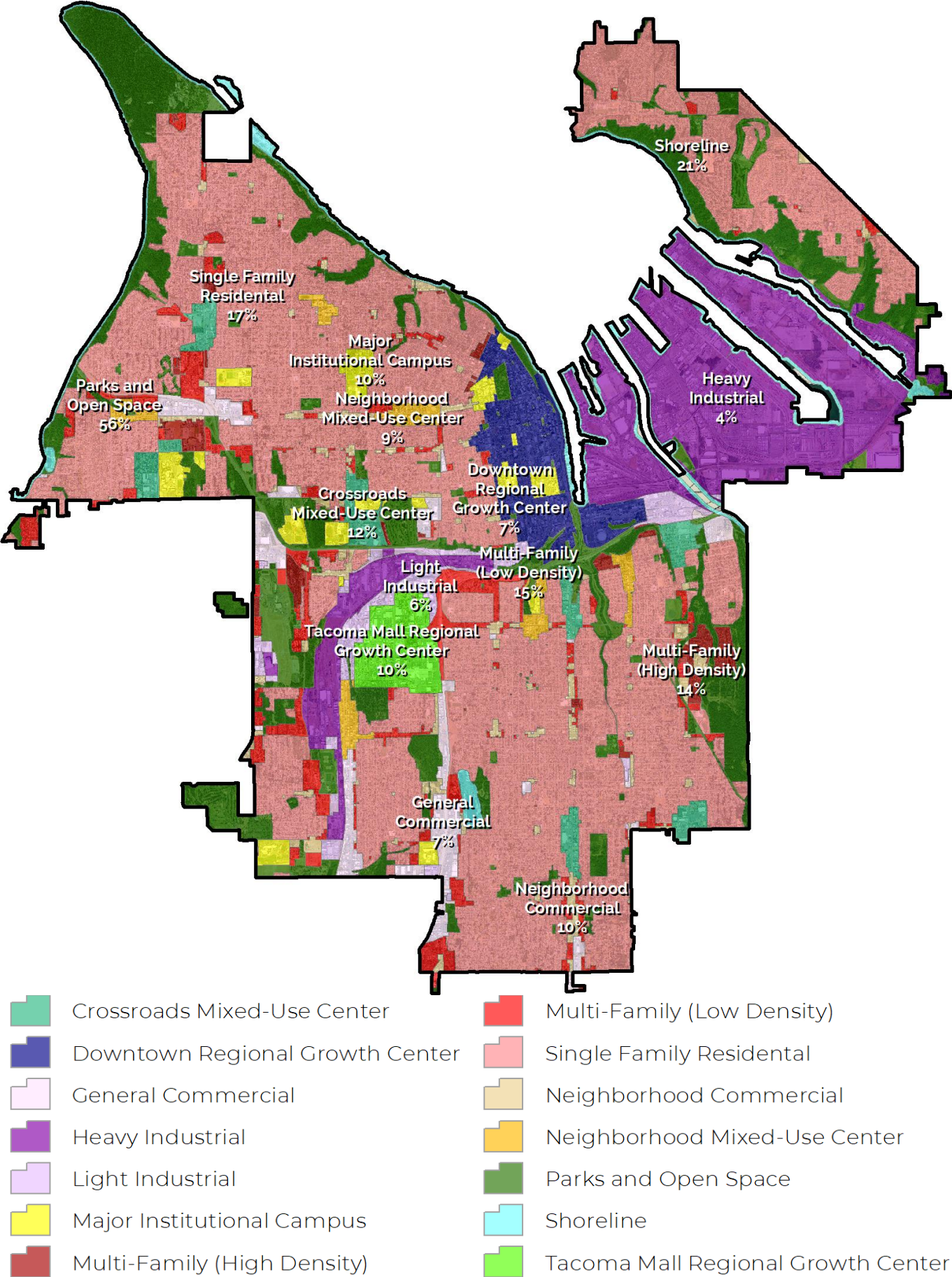


Figure 3. Tree canopy cover of Census Block Groups with less than half the median Washington household income

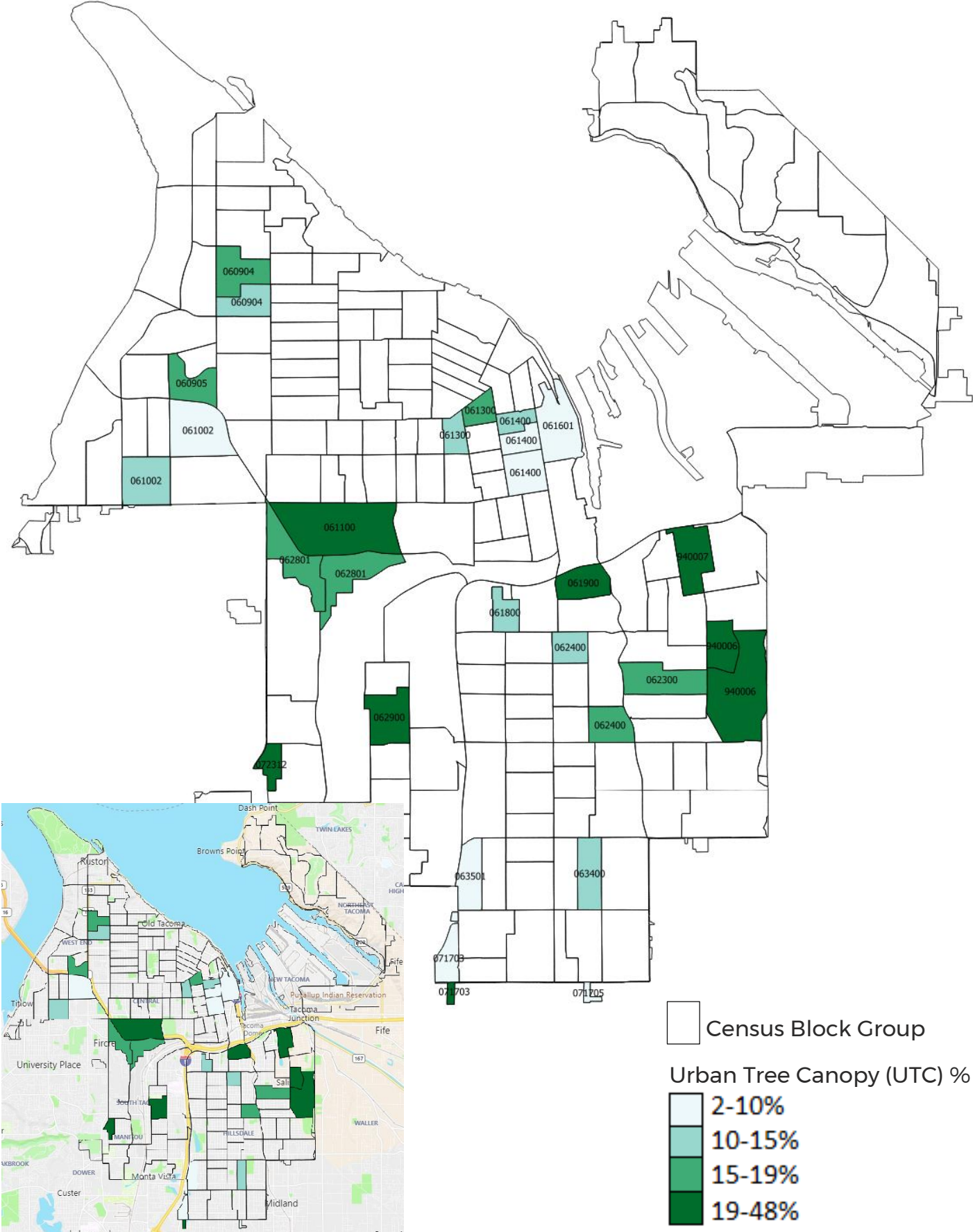


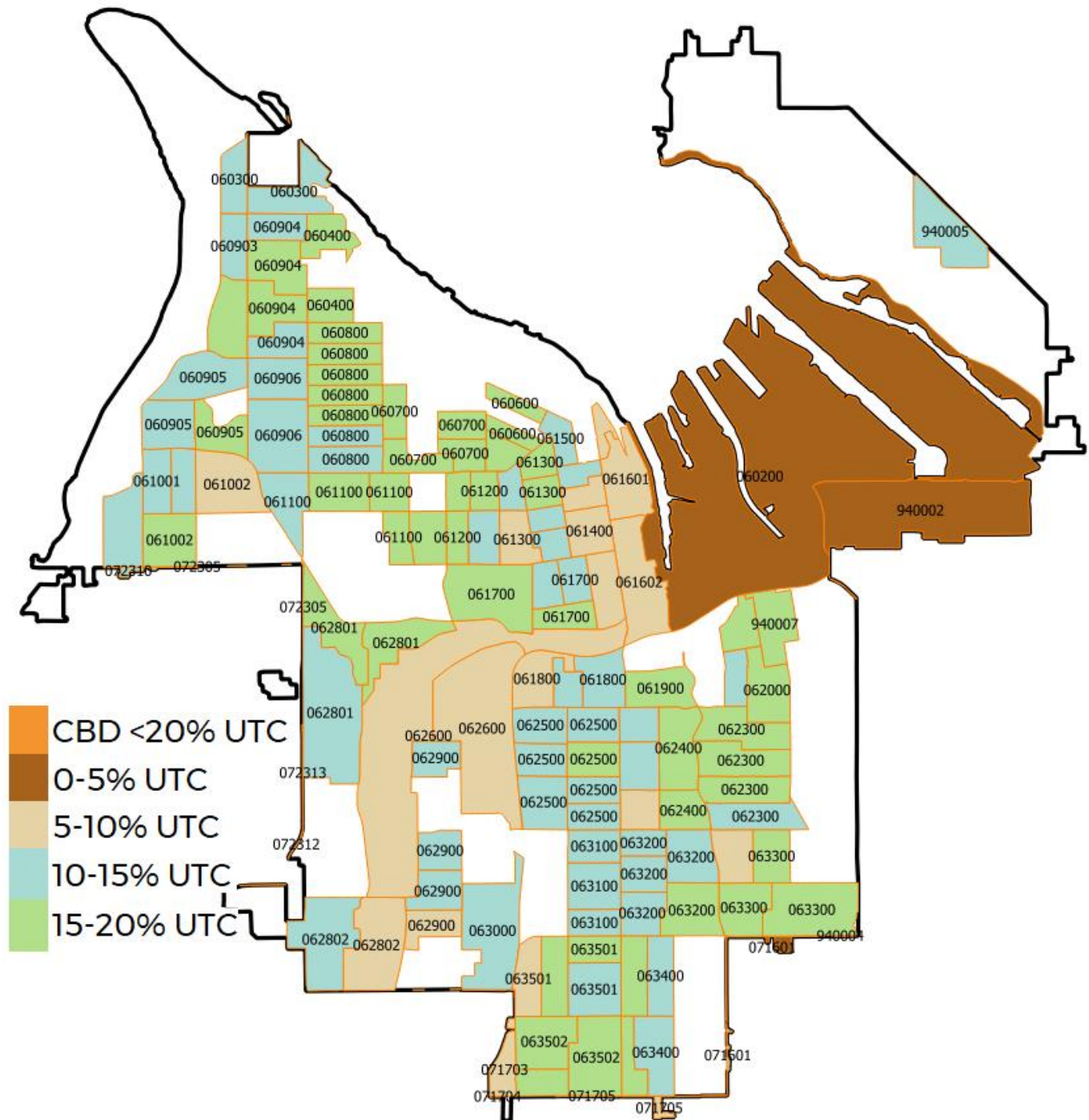
Table 4. Tree canopy metrics and suggested goals for Census Block Groups with less than half the median WA household income of \$70,979

CBG ID	Area (ac)	Actual Tree Cover %	Vegetative Planting Area %	Goal Cover	# of Trees by 2030
71704	0.6	2%	0%	2%	0
61601	188.0	6%	4%	8%	124
61400	63.7	7%	5%	10%	63
63501	112.6	8%	8%	12%	149
61002	214.1	8%	7%	12%	283
71703	77.3	10%	9%	15%	127
61400	114.5	10%	8%	15%	189
71705	14.3	10%	4%	12%	9
63400	119.5	11%	10%	15%	158
61800	68.3	12%	12%	20%	180
60904	100.2	13%	9%	18%	165
61400	50.6	14%	9%	18%	67
61300	60.0	14%	13%	20%	119
62400	77.2	15%	13%	20%	127
60905	114.0	15%	10%	20%	188
61002	157.7	16%	13%	20%	208
62801	166.5	16%	12%	20%	220
61300	58.9	16%	12%	20%	78
62300	164.1	17%	20%	22%	271
62400	105.3	17%	17%	25%	278
60904	137.2	18%	14%	22%	181
62801	166.7	19%	11%	25%	330
940007	145.1	19%	16%	25%	287
61900	108.9	21%	11%	26%	180
72312	55.5	24%	11%	30%	110
61100	392.2	29%	13%	35%	776
71703	12.8	29%	15%	35%	25
62900	145.4	32%	21%	40%	384
940006	99.5	39%	14%	45%	197
940006	349.8	48%	16%	55%	808
TOTAL TREES					6,281

Assumptions/Outcomes

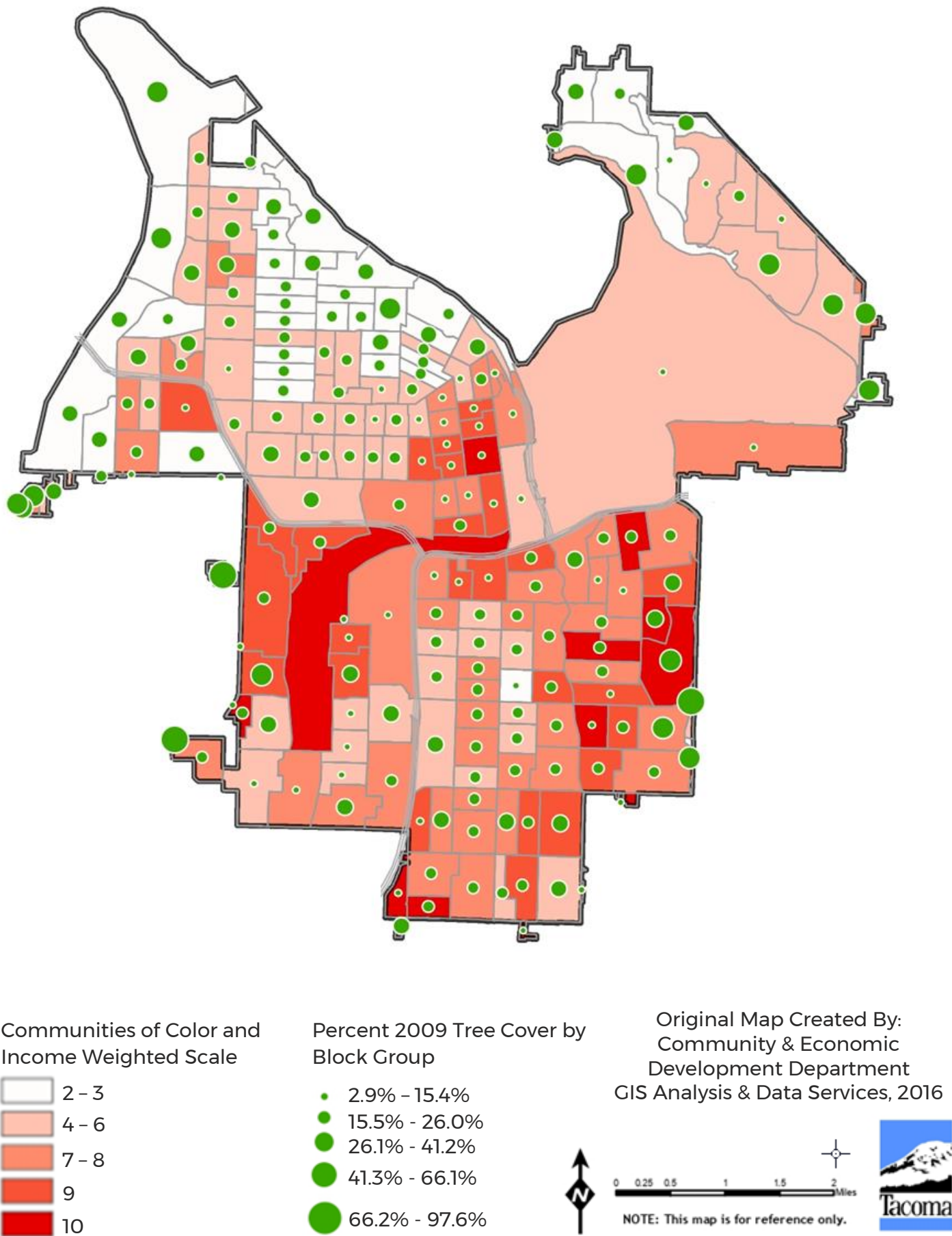
Tacoma Land Acres	31,607 acres
Existing Tree Canopy	20%
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Timeframe	10-year goal
Total Number of Trees	104,264 or 10,426 trees per year
Tree Size at Maturity	<ul style="list-style-type: none"> Large tree at maturity with a 41-foot canopy spread (USFS PNW Community Tree Guide) 1,320.5 ft²
Tree Mortality	<ul style="list-style-type: none"> No mortality
Tree Replacement	<ul style="list-style-type: none"> No-net-loss

Figure 4. Census Block Groups with less than the Citywide tree cover of 20% (139 CBGs)



139 Census Block Groups have less than 20% tree canopy cover

Figure 5. Tree planting priority areas based on canopy cover and demographic data.



Unimproved Right-of-Way Canopy Improvement Project

Programming public space for cross-functional and co-beneficial usage is important in urban places like Tacoma. For land use programming to influence canopy cover and the effects of climate change, stewardship of non-traditional open spaces must be encouraged. The *Unimproved Right-of-Way Canopy Improvement Project* aims at intelligently utilizing right-of-way to increase Citywide tree canopy.

Unimproved right-of-way (UROW) are areas platted for alleys, streets, and other transportation corridors, which are currently unpaved and potentially ungraded. UROW boundaries require geospatial identification as they often appear adjacent to private property and could be inaccessible due to shrubs.

These places are scattered throughout the City and may provide opportunities for Tacoma to create public green spaces or enhance the Citywide tree canopy rating. Community members can provide basic stewardship of unimproved ROW, including invasive species removal, tree planting and after care. Unimproved ROWs are often inundated with noxious and invasive plants, including Scotch broom, reed canary grass, English holly and English Ivy.

It should be noted that while the removal of noxious and invasive species, or the removal of trash and litter, are important for all land use designations including UROW, the goal of this land use characterization and prioritization is specifically to plant site-appropriate trees based on the City's Urban Forestry Program's approved tree species list. This policy could help the City reach its comprehensive plan goal of 30% canopy cover by 2030.

UROW spatial extent characterization

- Identify public right-of-way space in the City.
- Map locations of vegetative cover and pervious surface/soil through NDVI and LiDAR technology.
- Land identified in this manner must be vetted by Department of Community Economic Development to verify its infeasibility and inappropriateness for development.

Note: All unimproved right-of-way selected for canopy improvement should have no feasible or appropriate land use actions available to it. If land identified as UROW can realistically be developed, it does not meet the threshold for the Unimproved Right-of-Way Canopy Improvement Project.

Prioritization for UROW tree installations

- 1) Areas adjacent to City and State highway infrastructure.
- 2) Areas within historically low canopy.
- 3) Neighborhoods with relative lower opportunity as identified on the Tacoma Equity Index Map.
- 4) Areas within Tacoma Shoreline Management Program jurisdiction.
- 5) Areas within environmentally sensitive areas/critical areas.

Threshold for Plan Implementation

The Unimproved Right-of-Way Canopy Improvement Project will be measured by performance standards related to feasibility, significance and effectiveness.

Feasible:

Project is feasible if unimproved right-of-way land is determined to exist within the City of Tacoma using the characterization above.

Significant:

Project is Significant if the amount of land identified as unimproved right-of-way is:

- 1) capable of supporting trees, and
- 2) the total amount of land capable of supporting trees accumulates to a potential 0.5% increase in the City's current tree canopy coverage.

Effective:

Project is effective if expenditures remain controlled and focused on trees purchased, volunteer coordination, and well-planned implementation. Tree maintenance and tree risk management would not necessarily be budgeted into this policy. Appropriate land use programming and planned tree planting will reduce and avoid potential need for risk management.

Notes

- Tacoma's ROW Restoration Policy 2017 includes no comment on trees in developed or undeveloped ROWs.

APPENDIX B. HAZARD TREE COST-SHARE PROGRAM

The following is an example that can be referenced for implementing the Management Policy **Action Item 1B.3**.

EXAMPLE ONLY

The hazard tree cost-share program is a voluntary cost-share program designed to assist homeowners with street tree removal and replacement. A street tree is any tree that is located in the public right-of-way easement (utility strip) between the street and sidewalk.

Homeowners can qualify to receive matching funds for tree removal, stump grinding and new tree installation by submitting two written estimates from the enclosed list of participating vendors. The reimbursement amount is based upon the lower of the two estimates and is fifty percent (50%) of the total cost.

Homeowners are required to maintain street trees in front of their homes. This program is intended to help the homeowner comply with the street tree ordinance through financial assistance. If a street tree becomes extremely hazardous, it could result in a civil citation for the homeowner. This program is conducted on a first-come, first-served basis as long as matching funds are available. Reimbursement checks will be processed starting after MONTH, DAY, YEAR.

Recommended Deadlines:

MONTH, DAY, YEAR

Mail or hand-deliver: a signed application form. Two (2) written estimates from the enclosed list of participating vendors.

MONTH, DAY, YEAR

All work must be completed: tree removal, stump grinding and new tree installation. Mail or hand-deliver receipt(s) for all completed work. Reimbursement checks will be processed in four to six weeks.

Only homeowners who provide complete estimates for tree removal, stump grinding and new tree installation will be considered. The Urban Forestry Program office will promptly send a written authorization to proceed with the work upon receipt of the signed application form and two (2) written estimates.

Contact the ### Department with any additional questions about the program at (###) ###-####.

Recommended Application:

APPLICATION FORM HAZARD STREET TREE (COST-SHARE) PROGRAM

DATE:

I(we), the property owner(s) of (street address + zip code) wish to participate in the Hazard Street Tree (Cost-Share) Program.

Please return or hand-deliver a signed application form and copies of the two (2) written estimates from the enclosed list of participating vendors by MONTH, DAY, YEAR to the address below. Please make copies for your records. Deadline for the completion of all work is MONTH, DAY, YEAR which must include tree removal, stump grinding and tree planting. Please submit a copy of your paid invoice/receipt for payment processing. Please call (###) ###-#### if you are asking for assistance with five (5) or more street tree removals. The property owner is responsible for the selection, management and payment of all contractors and suppliers and abides by the program's guidelines. The City of XXXX does not recommend nor endorse contractors and suppliers of goods and services. Funds for this program are limited. This is a first-come, first-served basis program.

PLEASE WAIT FOR A RETURN PHONE CALL OR LETTER OF APPROVAL PRIOR TO
AUTHORIZING WORK TO

BEGIN.

SIGNED:

PROPERTY OWNER(S)

HOME PHONE:

WORK PHONE:

Please mail the completed form and estimates to:

DEPARTMENT, ADDRESS, CITY, STATE, ZIPCODE

EMAIL:

Guidelines for the Hazard Street Tree Cost-Share Program:

The CITY has established a Hazard Street Tree Cost-Share and Grant Program for property owners throughout the PRIORITY AREAS to remove and replace street trees that pose a threat to public safety. This is a voluntary program that provides financial assistance to residential property owners for street tree removal, including stump grinding and new street tree installation, in ACCORDANCE WITH MUNICIPAL CODE CHAPTER ##, ORDINANCE ##. The intent of these guidelines is to establish a fair and objective method to govern the award and use of funds budgeted for the Hazard Street Tree Cost-Share and Grant Program.

Eligible Properties

Only owner-occupied residential properties within the USA are eligible for participation.

Program Guidelines

1. This program provides matching monies to reimburse property owners 50% of the total cost of removal of hazardous street trees, stump grinding and replacement of the street tree being removed. In order to qualify for this program, the cost of the work being done cannot be subsidized by any other federal, state or CITY grant program.
2. Reimbursement amounts are based upon the lower of two (2) estimates.
3. Eligible property owners must have at least one hazardous street tree, as determined by the Urban Forester or his/her designee, abutting their property. If funds are available, property owners may replace more than one street tree.

4. Qualifying vendors must submit written documentation to the Urban Forester and agree to adhere to the specifications for tree removal and planting as provided by the Urban Forester. Vendors must provide a one-year guarantee on any replacement tree. The Urban Forester reserves the right to disqualify vendors based upon their prior non-compliance with the specifications of this program.
5. Property owner participation is strictly voluntary, and funding is limited to a first-come, first-served basis.
6. Property owners must replant with a tree at least XXXX inches in caliper, as required by Chapter XXXX. Property owners may replant a larger caliper tree, but reimbursement will be limited to a maximum of the cost of a two and a half-inch caliper tree.
7. The planting of a replacement tree in a location outside the area of the public right-of-way easement may be allowed, but only with prior approval by the Urban Forester or his/her designee.
8. Property owners who wish to perform the work themselves must submit two (2) complete sets of estimates from qualified vendors. The reimbursement will be based upon the lower of the two (2) estimates.

The Process

1. Any interested property owner should contact the Urban Forestry Program to receive program information, an application and to arrange for an on-site inspection. The Urban Forestry Program is located in the XXXXX, ADDRESS, CITY, STATE, ZIPCODE. The phone number is ###-###-####.
2. An eligible property owner shall receive a written acknowledgement of eligibility from the Urban Forestry Program.
3. The property owner shall submit the signed acknowledgement and copies of two (2) written estimates, including the scope of work to be completed, from two (2) separate vendors.
4. Following receipt of the signed acknowledgement and estimates, the Urban Forester or his designee shall provide the homeowner with a written approval to proceed. The written approval shall include a date by which the work must be completed and a date by which all paperwork must be submitted. The property owner can then contact either of the vendors from whom they received estimates and arrange to have the work completed; however, reimbursement will be based on the lower of the two (2) estimates. If the property owner fails to complete the work or submit the paperwork by the deadline dates, the funding may be reallocated to another property owner.
5. Upon completion of work by the vendor, the property owner shall submit a notice of work completed and a copy of the paid invoice (or unpaid invoice in the case of an income qualified property owner) to the Urban Forester, who shall then inspect the site for satisfactory performance as outlined in the vendor specifications.
6. Upon approval of the completed work by the Urban Forester, the request for reimbursement shall be processed. Processing of the reimbursement request can take six to eight weeks.
7. The property owner is solely responsible for managing the project, obtaining all necessary approvals and permits and paying all vendors.

Income Eligibility Qualifications for One Hundred Percent Grants

1. A qualified property owner means any person owning and occupying a residential property who meets the assets test and has an annual income equal to or less than one hundred twenty-five percent (125%) of the poverty guidelines chart established by the Community Services Administration, annually published in the Federal Register, in effect at the time of application. However, income itself shall be measured by the definition contained in subsection (2) of this section. Any person having a beneficial interest in benefited property may qualify for the Hazard Street Tree Cost-Share and Grant Program
2. Income means the total cash receipts to the residential property owner and spouse after taxes from all sources. These sources include money, wages and salaries after any deductions required by law, but not including food or rent in lieu of wages. They include receipts from self-employment or from one's own farm or business after deductions for business or farm expenses. They include regular payments from public assistance, social security, unemployment and workmen's compensation, strike benefits from union funds, veterans benefits, training stipends, alimony and military family allotments or other regular support from an absent family member or someone not living in the household; government employee pensions, private pensions and regular insurance or annuity payments; and income from dividends, interest, rents, royalties or income from estates and trusts. For eligibility purposes, income does not refer to the following money receipts: any assets drawn down as withdrawals from a bank, sale of property, house or car, tax refunds, gifts, one-time insurance payments or compensation for injury; also to be disregarded is noncash income, such as the bonus value of food and fuel produced and consumed on farms and the imputed value of rent from owner occupied farm or nonfarm housing.
3. Assets test means that any person having assets in excess of either:
 - a. Five thousand dollars (\$5,000.00) in liquid assets such as bank accounts, savings, certificates of deposits, stocks bonds, etc; or
 - b. Five thousand dollars (\$5,000.00) in equity in assessed value of nonhomestead property.

c. Shall be ineligible to participate in the Hazard Street Tree Cost-Share and Grant Program for a one hundred percent (100%) grant, notwithstanding that he meets the income level qualifications set forth in this section. However, motor vehicles for personal use, household furnishing and the benefited property itself, as well as buildings located thereon, shall not be included in computing assets.
4. Qualified owners may receive a grant for one hundred percent (100%) of the reasonable cost of removal and replacement of hazardous street trees. Those who are not income qualified may receive a grant for fifty percent (50%) of the reasonable cost of removal and replacement.
5. Twenty-five percent (25%) of the funds appropriated for the Hazardous Street Tree Cost-Share and Grant Program shall be made available for grants to qualified property owners with the remainder of the appropriated funds available for grants to all other property owners. The commissioners of the departments of streets and roads and social services shall be responsible for administration of the program consistent with all provisions of these Guidelines.

INCLUDE VENDOR SPECIFICATIONS FOLLOWING THIS DESCRIPTION

APPENDIX C. IN-HOUSE ARBORIST CREW GUIDANCE

The following provides an overview of the budget enhancement and framework for proposing the in-house arborist crew.

Implementation:

Capacity and Training: Action 2D.2, Action 2A.3, Action 2A.4

Funding and Authority: Action 3A.2

Recommended Right-of-Way Tree Maintenance Budget Enhancement

Table 5. Proposed budget enhancement to facilitate ROW tree maintenance

Position/Item	Notes	Annual Cost (Biennium Cost)
<u>Administrative</u>	• Hiring & supervisory	\$30,000
<u>Lead ROW Arborist</u>	• ISA Certified Arborist at time of hire	\$94,742
<u>Equipment Operator 1*</u>	• TRAQ within 6 months of hire • \$33.74/hr + 35% Benefit Package	(\$189,484)
<u>Tree Technician</u>	• ISA Certified Arborist or TCIA Certified Tree Care preferred	\$73,373
<u>Grounds Maintenance Worker 1*</u>	• \$26.13/hr + 35% Benefit Package	(\$146,746)
<u>Seasonal Tree Worker</u>	• ISA/TCIA Certifications recommended	\$19,810
<u>Seasonal O&M*</u>	• \$14.11/hr + 35% Benefit Package	(\$39,621)
<u>Municipal Forestry Truck</u>	• Altec 12 Yard w/ 40 foot lift • Lease from vendor (through Tacoma Fleet Management)	\$17,064 (\$34,128)
<u>Woodchipper</u>	• Bandit 6 inch chipper • Lease from vendor (through Tacoma Fleet Management) • Includes insurance & gas through TFM	\$7,221 (\$14,442)
<u>Parking</u>	• Assumed parking is through currently owned City location and does not accumulate cost.	\$0.00
<u>Annual Training</u>	• Annual PNW ISA or TCIA Conference or two CEU classes (For Lead ROW Arborist Only)	\$1,275 (\$2,550)
<u>Equipment Maintenance</u>	• Maintenance	\$1,000
<u>Equipment Purchase</u>	• One-time purchase	\$4,500
TOTAL ANNUAL COST		\$218,985
TOTAL ENHANCEMENT COST (2-years)		\$463,470

*Note: Wages are taken directly from City of Tacoma's Human Resources website. Exact wages for Equipment Operator 1, Ground Maintenance Worker 1, and seasonal labor may be different. 35% was added to each wage salary to represent benefits and insurance.

Table 6. Estimated 2020 per capita expenditures if Tacoma accepts budget enhancement

Rank	City	2018 Population	2018 U&CF Total Budget	Recommended Budget Enhancement	2018 Per Capita
1	Bellevue	139,014	\$7,287,080		\$52.42
2	Longview	36,740	\$858,720		\$23.37
3	Olympia	49,928	\$914,740		\$18.32
4	Kirkland	86,772	\$1,568,690		\$18.08
5	Renton	99,692	\$1,771,581		\$17.77
6	Seattle	724,764	\$10,168,821		\$14.03
7	Redmond	60,712	\$679,079		\$11.19
8	Vancouver	171,393	\$1,524,385		\$8.89
9	Tacoma	207,280	\$1,609,909	248,985	\$8.83
10	Bellingham	85,388	\$672,118		\$7.87
11	Spokane	212,982	\$894,620		\$4.20

Given the ROW Tree Maintenance Budget Enhancement, Tacoma would elevate spending to ninth rank per capita across the State.

Street Tree Maintenance Regime

The above Urban Forest budget enables the City to meet the goals of community members, stakeholders, and City staff—supported by the Infrastructure, Planning, and Sustainability subcommittee to City Council. This budget will be used to hire, lease machinery, purchase equipment, and supervise a team of 2.5 full-time employee (FTE) staff performing right-of-way tree care on critical and under-maintained street trees in Tacoma.

Pruning should be performed on a rotation of 5-7 years. TreePlotter, Tacoma's tree asset management software, should be used as the primary instrument in prioritizing trees, locating and identifying trees, and tracking maintenance and performance.

Street Tree Maintenance Objectives:

- Maintain tree health and safety through routine inspection and pruning of street trees in prescribed neighborhoods and street corridors.
- Maintenance will include American National Standard Institute (ANSI) A300 standard pruning practices.
- Removal of high-risk tree parts and whole trees, of small to moderate sized trees.
 - Large trees will likely continue to be contracted out to specialized tree services.

Table 7. Street tree maintenance regime outline

Type	Street tree pruning, risk identification and mitigation of prescribed and prioritized street tree corridors. May include occasional tree mulching and irrigation.
Who	Public Works > Right-of-Way Tree Care Crew
Intensity	Prune as needed to reach outlined Objectives.
Frequency	5 to 7-year pruning routine.
Duration	Tree installation through tree removal.
Extent	ANSI A300 specified pruning specifically to reduce long-term structural defects/features. To include structural pruning, removal of dead, diseased and decaying branches, redundant leader subordination, and clearance pruning for pedestrians, vehicles, transportation signs, and streetlights.

APPENDIX D. RIGHT-OF-WAY TREE MAINTENANCE

This Urban Forest Action Plan recommends the City share the responsibility of street tree maintenance with its residents. Based on multiple data layers, benchmarking research, community feedback, and City staff interviews, the following recommendations are provided.

Implementation:

Management Policy: Action 1B.3

Funding and Authority: Action 3B.4, Action 3D.8

Inventories and Plans: Action 4A.1, Action 4A.2

Risk and Disaster Management: Action 5A.1, Action 5A.3, Action 5B.5

Recommended Priority Tree Maintenance Corridors

The following maps and information provide an overview of the potential priority maintenance corridors recommended as part of this Urban Forest Action Plan. Final corridors will be approved by implementing Action 3B.3. The maintenance corridors are based on an analysis of data layers and indicators including the Tacoma Equity Index, the 2018 tree canopy assessment, U.S. Census Bureau's demographic data, and Tacoma's tree inventory database.

It is estimated that the City has over 46,000 public trees, many of which are in the public rights-of-way along streets. Currently, in most cases, it is the adjacent property owner's responsibility to maintain the trees. A permit system is in place for the planting, maintenance, and removal of trees in this public area. By implementing the actions in this Plan such as the budget enhancement request and the assessment of levels of service, an in-house arborist crew can be established for the City to acquire responsibility of tree maintenance in priority corridors.

Based on the Tacoma Equity Index, Census Block Groups (CBG) were identified that were low in opportunity. For more information on the Equity Index visit cityoftacoma.org/equityindex. Using the 2018 tree canopy assessment, CBGs that have a high existing tree canopy percent were overlaid with the low opportunity CBGs. In addition, the City's existing tree inventory data points were included to determine the potential density of street trees. Lastly, the streets were added to the analysis to develop a composite map of priority neighborhoods, CBGs, and roadways. A total of 14 roadway segments were identified that primarily transect the priority neighborhoods and CBGs.

This task addresses and supports the environmental justice and equity goals of this Urban Forest Action Plan. The following provides a series of maps and summaries to be utilized in the implementation of the Funding and Authority Action 3B.4 and supporting actions.

Figure 6. Map of “Low Equity” Census Block Groups and tree canopy percentages within Tacoma neighborhoods

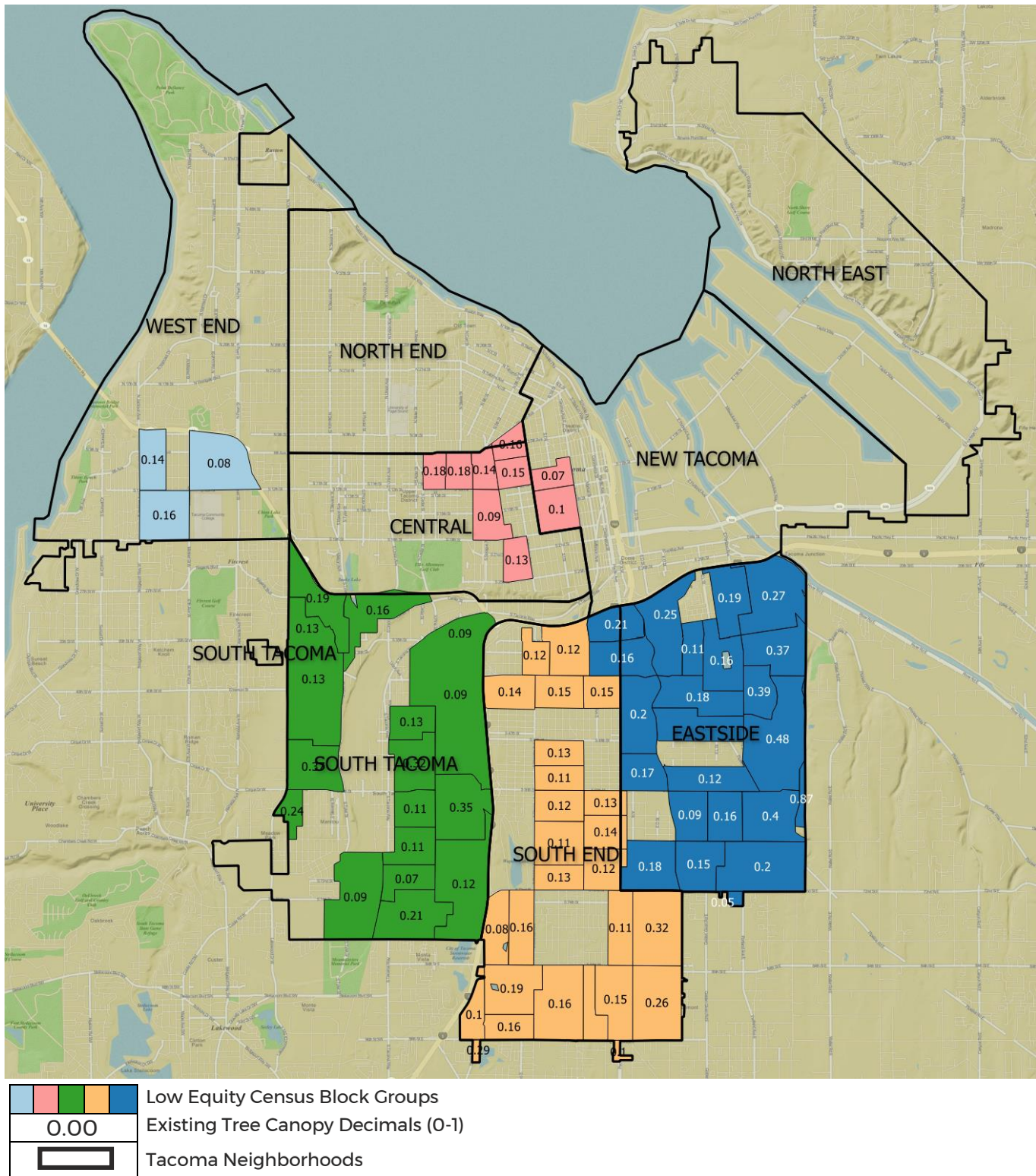
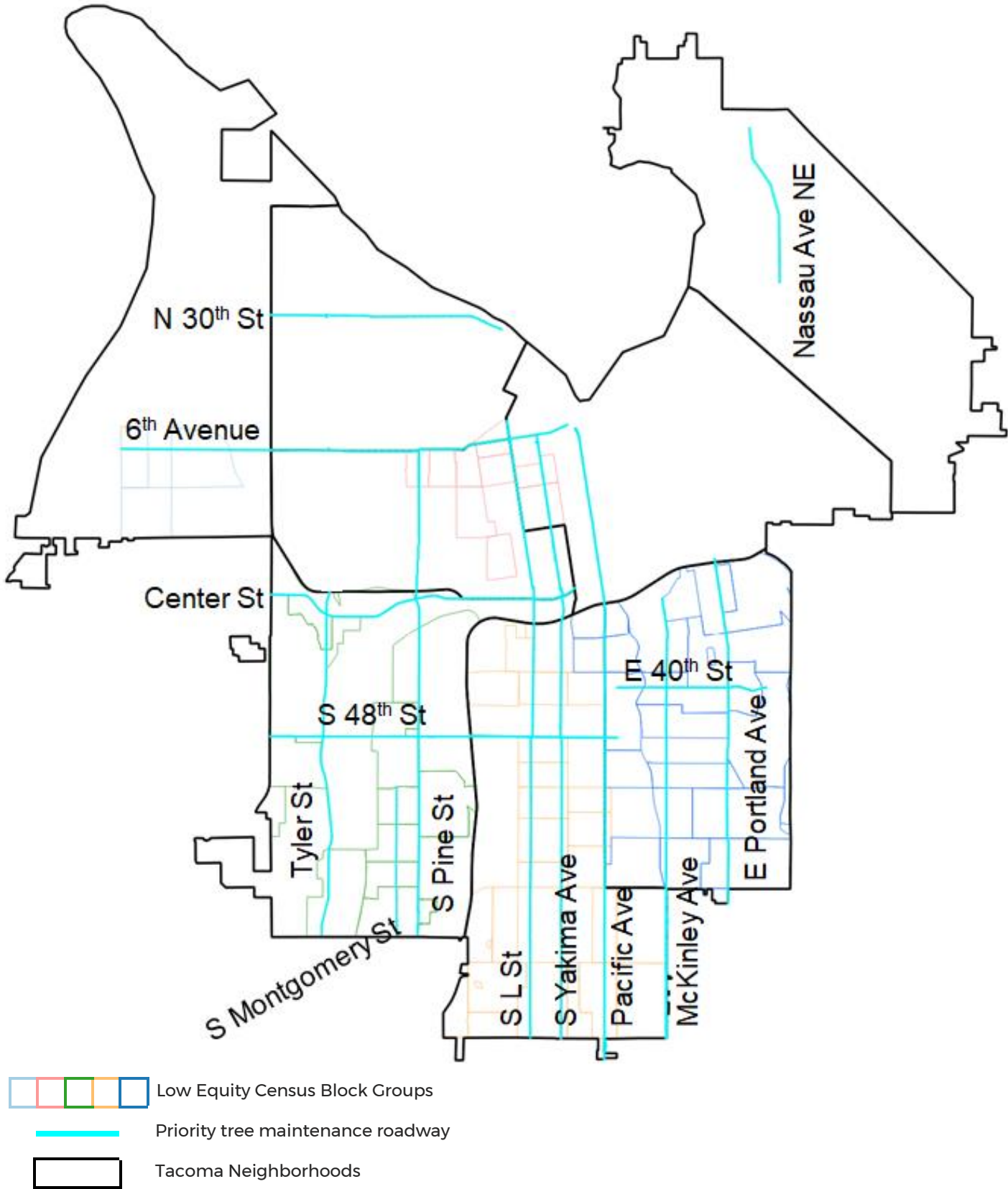


Figure 7. Map of proposed roadways for City street tree maintenance

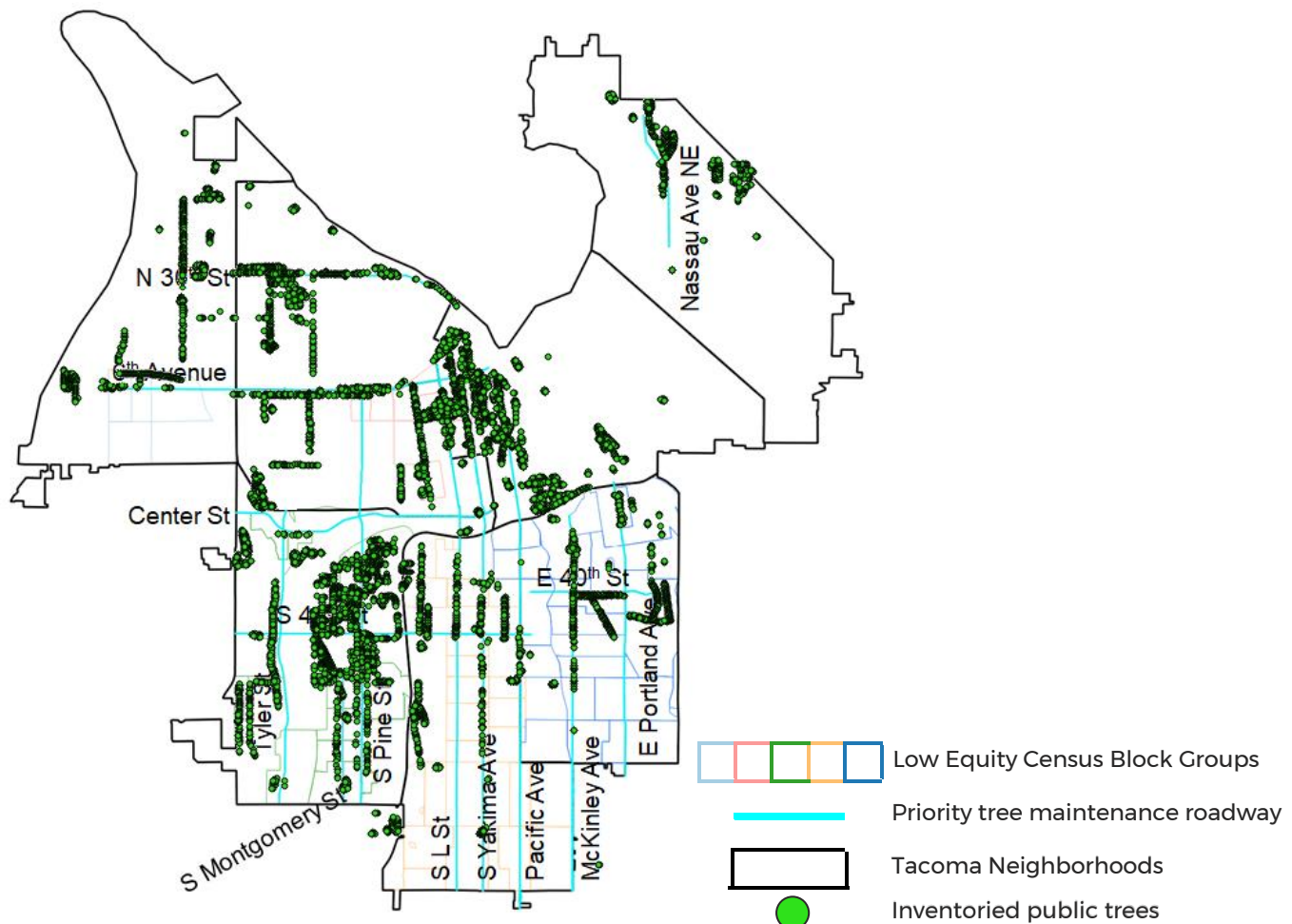


The following table provides a summary of the recommended priority maintenance corridors (roadways) based on the Tacoma Equity Index, existing tree canopy cover, and tree inventory data. Census Block Groups that have a lower opportunity were selected from the Equity Index and aligned with data informing the density of existing trees along roadways.

Table 8. Estimated tree counts for priority maintenance corridors by neighborhood

Priority Neighborhood	Roadway	Extent	Estimated Trees
South Tacoma	S Tyler St	South 74 th St to SR 16 Hwy W	400 trees
South Tacoma	Center St	S Orchard to South Pine St	100 trees
South Tacoma	S Pine St	S 80 th St to S Tacoma Way	400 trees
South Tacoma	S Montgomery St	S 77 th St to S 56 th St	120 trees
South Tacoma	S 48 th St	S Tacoma Way to I5 Hwy N	100 trees
South End	Yakima Ave	S 96 th St to S 48 th St	400 trees
South End	S L St	S 96 th St to S 35 th St	300 trees
South End	Pacific Ave	S 99 th St to S 56 th St	300 trees
East Side	McKinley Ave	E 72 nd St to Upper Park St	500 trees
East Side	E 40 th St	Pacific Ave to Portland Ave E	175 trees
East Side	E Portland Ave	74 th St C E to I5 Hwy N	500 trees
West End	6 th Ave	Bridgeport Way W to S Stadium Way	300 trees
North End	N 30 th St	N Pearl St to N Schuster Pkwy	350 trees
North East	Nassau Ave NE	Browns Point Blvd NE to Northshore Pkwy	150 trees
Total Tree Estimate			~4,000 trees

Figure 8. Map displaying the location of the inventoried public trees and the priority corridors



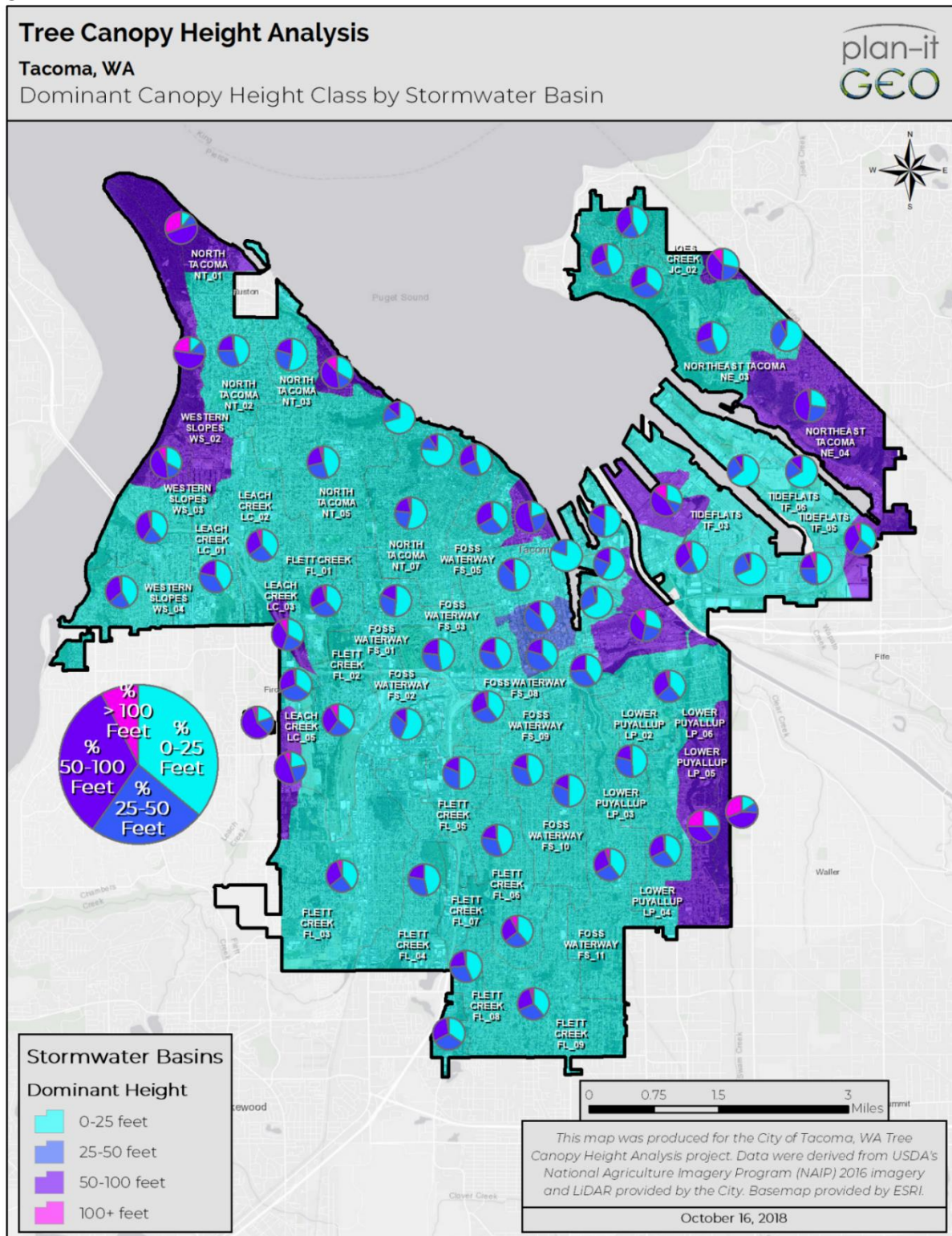
APPENDIX E. ESTABLISHING A HERITAGE TREE PROGRAM

Implementation: Overlay the height analysis from the 2018 tree canopy assessment with the tree inventory and right-of-way boundary to identify potential trees for the program.

Management Policy: Action 1C.7

Community Engagement: Action 6C.7

Figure 9. Tree canopy height analysis to be used for the first tier of identifying potential heritage trees



APPENDIX F. CODE RECOMMENDATION PROSPECTUS

To be provided in early 2020.



“Without a plan, the governments and individuals responsible for taking care of an urban forest will not be effective in meeting the true needs of the trees and the community. A plan establishes a clear set of priorities and objectives related to the goal of maintaining a productive and beneficial community forest.”

~American Public Works Association, 2007