#### **Urban Forest Sustainability & Management Review**

Controlling Authority: \_\_\_\_\_

Evaluated by: \_\_\_\_\_\_

	Category/Component Evaluated	Description or Criteria for Evaluation	Со
1	Policy and Ordinances		
1.00	Approved Policy Statements	Written policy statements approved by a governing body.	
1.01	Climate Change (Sustainability)	Also referred to as Sustainability. References to urban natural resources and trees. Addresses the long-term health and productivity of urban natural resources. Could also include Urban Heat Island (UHI) policies.	
1.02	No Net Loss	Can refer to trees, basal area, or canopy.	E
1.03	Risk Management	Should reference: ANSI A300 Part 9, ISA BMP, and prioritization funding mechanisms.	(
1.04	Tree Canopy Goals	Overall community/campus goal, or by designated "zone".	
1.05	Tree Protection	Construction and/or landscape maintenance.	
1.06	Utility	Utility pruning, planting, and installation policy (e.g. boring vs. trenching).	
1.07	Human Health – Physical & Psychological	Recognizes and addresses the human health benefits of the natural resource (e.g. exercise, air quality, stress management, shade). Could also include Urban Heat Island (UHI) policies.	A
1.08	Wildlife Diversity/Habitat/Protection	Mammals, birds, reptiles, or pollinators.	
1.09	Performance Monitoring	Recognizes the annual or biennial calculation of metrics (e.g. some component of ecosystem services) for the purpose of tracking management performance.	A
1.10	Ordinance (Private) <sup>3</sup>	Tree protection and management for trees on private property.	
1.11	Ordinance (Public)	Tree protection and management for public trees.	C
1.12	Development Standards	US Green Building Council's LEED® rating systems (or similar internationally) LEED v4 BD+C (Sustainable Sites) LEED 4 ND (Neighborhood Pattern & Design, Green Infrastructure) ASLA's SITES® Rating System by USGB	А
1.13	High-Conservation Value Forests	Programs or policies for identification, acquisition, and/or protection of groups of trees or forests that provide unique public benefits.	
1.14	Urban Interface (WUI)	Programs or policies that improve management of the urban interface for fire and/or invasive species.	А

For shaded cells, evaluate as 0) Not Practiced, 1) In Development, 2) Routinely Practiced, or 3) Exceeds Common Practice

**Review Team Notes – Category 1** 



Urban Forest Manager:			
Date:	/	//	/

#### **Comments & Resources**

	$\mathbf{N}$
Base Practices <sup>1</sup>	
One of these must be checked to meet Standard of Care (SOC) <sup>2</sup> .	
Also see 1.02.	
Also see 3.04, 5.02 and 5.07 and/or 5.12.	
One of these must be checked to meet Standard of Care.	
Also see 9.25 for sustainable management standards.	
Also see 7.09	

<sup>&</sup>lt;sup>1</sup> Base Practices (BP) elements (highlighted in light green) represent additional urban forest management activities or components that may effectively expand a program beyond the **SOC group** (see footnote 2). These elements are typically precursors to other "non-core" elements in the category. <sup>2</sup> These **Standard of Care** (SOC) elements (highlighted in yellow) represent the minimum group of urban forestry management "best practices" that a municipality/owner should consider for implementation. **Standard of Care** refers to the degree of prudence and caution required of an individual who is under a duty of care (i.e. legal obligation of the controlling authority, owner, or manager) to minimize risk. Neither state, regional, nor national minimum management components have been established for Standard of Care but these are interim recommendations for your consideration. <sup>3</sup> The 🛞 symbol indicates the element is NOT evaluated for Tree Campus USA® and other non-public urban forest management programs (e.g. corporate campuses).

# 2 Professional Capacity & Training

2.00	Professional management			
2.01	Certified Arborist - Staff	ISA or state certified arborist; or an individual with demonstrated credentials designated as "arborist".	С	
2.02	Certified Arborist - Contracted	ISA or state certified arborist serving in a consulting capacity.	С	
2.03	Certified Arborist - Other Resource	This could be a staff member or a consultant in advisory role, but not designated (e.g. may be member of an Advisory Committee or Tree Board).	С	
2.04	Other Professional – Advising/directing UF management	This could be a professional in an allied field like: LA.		
2.05	Municipal Forestry Institute	Graduate of Society of Municipal Arborist's MFI program.		
2.06	Urban Forestry Institute – Region 8 Only	Attendance at Region 8's UFI (biennial professional development).		
2.07	Campus/city arborist – ISA CA instructor for CEUs	Arborist routinely provides ISA CEU presentations/workshops.		
2.08	Tree Board University	On-line training modules from Oregon U&CF (Paul Ries) for Tree Board/Advisory Council.	н	
2.09	Organizational Communications	Process, procedures, and protocol for cross-professional communications within the organization (all departments "touching" trees).		

For shaded cells 🗹, evaluate as 0) Not Practiced, 1) In Development, 2) Routinely Practiced, or 3) Exceeds Common Practice

**Review Team Notes – Category 2** 

## 3 Funding & Accounting

3.00	Urban Forestry Budget		
3.01	Budgeted Annually	Budget authorized/required for tree board, tree maintenance, and/or tree planting.	0
3.02	Contingency Budget Process	A protocol is in place to prioritize urban forestry management activities during budget shortfalls; e.g. during times of limited funding for: <sup>1)</sup> risk management, <sup>2)</sup> young tree care, <sup>3)</sup> mulching.	0
3.03	Funding Calculated from Community Attribute	Budget in terms of per capita, per tree (i.e. Tree City USA®), or for performance (e.g. per tree weighted by size class or age.	
3.04	Funding Based on Performance Monitoring	Budget connected with/based on ecosystem service (ES) monitoring and performance.	A
3.05	Urban Forestry Line Item	Is the budget specific to urban forest management?	
3.06	Green Asset Accounting	Maintain green infrastructure data in the "unaudited supplementary disclosure of an entity's comprehensive annual financial report (CAFR)". GASB 34 implementation for municipalities.	Se h

For shaded cells 🗹, evaluate as 0) Not Practiced, 1) In Development, 2) Routinely Practiced, or 3) Exceeds Common Practice

**Review Team Notes – Category 3** 

# $\mathbf{\Lambda}$ One of these must be checked to meet Standard of Care. One of these must be checked to meet Standard of Care. One of these must be checked to meet Standard of Care. Hosted at Arbor Day Foundation.

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One of these must be checked to meet Standard of Care.	
One of these must be checked to meet Standard of Care.	
Also see 5.02 and 5.07 and/or 5.12.	
See WERF INFR6R12 Water Asset Accounting 2013. http://www.werf.org/	

4	Authority
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4.00	Authority (Decisions)		
4.01	Urban Forest Manager	Professional urban forest manager with authority over the program and day-to-day activity. Including designated budget line item.	С
4.02	Other Staff	Designated staff with authority over the program and day-to-day activity. Including designated line item.	С
4.03	Communication Protocol	Established protocol and mechanism(s) for communication among all members of the urban forest management "community" in your municipality or organization (e.g. manager, department under control, advisory board, finance, field operations, public, NGOs, business community, developers).	
4.04	Tree Board. Commission, or Advisory Council	Establishes a board for public participation (advisory or with authority).	S

Review Team Notes – Category 4

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One of these must be checked to meet Standard of Care.	
One of these must be checked to meet Standard of Care.	
See also 2.06.	

J Inventories	5	Inventories
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5.00	Inventories and Assessments	
5.01	Canopy Inventory (UTC)	Periodic (≤5 year) canopy inventory and assessment. Public & private.
5.02	Ecosystem Services	Is there a recent (≤5 year) ecosystem services (ES) inventory & assessment. Public: 100% or street trees; Public & Private: Sample; or Campus. Or, are ES calculated annually or biennially based on partial re-inventory and projected growth as a monitoring tool.
5.03	Public Trees	The publicly controlled urban forest.
5.04	Street Trees	Is there a recent (5 year) inventory?
5.05	Parks/Riparian Areas	Is there a recent (5 year) inventory?
5.06	Other Public Trees	Public facility landscaped areas, Industrial parks, green space.
5.07	Continuous inventory on a cycle (≤5 years; i.e. panel)	Partial re-inventory to support continuous forest inventory, growth projections, and the calculation of ecosystem services for the purpose of long-term monitoring of urban forest management performance (e.g. carbon or leaf surface). Urban FIA or i-Tree Eco on cycle.
5.08	Private Trees	
5.09	Campus (Educational)	Is there a recent (5 year) inventory?
5.10	Corporate	Is there a recent (5 year) inventory?
5.11	Other Private Property	Is there a recent (5 year) inventory?
5.12	Continuous inventory on a cycle (≤5 years; i.e. panel)	Partial re-inventory to support continuous forest inventory, growth projections, and the calculation of ecosystem services for the purpose of long-term monitoring of urban forest management performance (e.g. carbon or leaf surface). Urban FIA or i-Tree Eco on cycle.
5.13	Green Stormwater Infrastructure (GSI)	BMP stormwater mitigation practices and locations (e.g. Washington DC)
5.14	Spatial	Inventory data includes Lat/Long (i.e. GIS). Should address the spatial relationship between the natural resource and people (i.e. residents, visitors, activities) that would help manage the resource for benefits associated with proximity (air quality, recreation, stress mitigation, improved educational opportunity).
5.15	Maintenance and Planting Records Maintained	Planting details (nursery, species, size, cost, contractor, etc.) maintained with inventory or as separate database or recordkeeping system. Also pruning and removal histories.

Review Team Notes – Category 5

#### **Comments & Resources**

	$\mathbf{N}$
Also see 3.04 and 5.07 and/or 5.12.	
Any one of the following sub-elements.	
Also see 3.04 and 5.02. Also see 9.16 for data collection standards.	
Any one of the following sub-elements.	
Also see 3.04 and 5.02. Also see 9.16 for data collection standards.	

6 U	6 Urban Forest Management Plans			
6.00	Management Planning Activities			
6.01	Annual Maintenance Calendar	An annual calendar that defines typical activity by season.		
6.02	Public Trees	The publicly controlled urban forest.	Any one of the following sub-elements.	
6.03	Street Tree Management	Is there a recent (5 year) plan for street trees?		
6.04	Parks/Riparian Area Management	Is there a recent (5 year) plan ?		
6.05	Other Public Trees	Public facility landscaped areas, Industrial parks, green space.		
6.06	Private Trees		Any one of the following sub-elements.	
6.07	Campus (Educational)	Is there a recent (5 year) plan for Campus trees?		
6.08	Corporate	Is there a recent (5 year) plan?		
6.09	Other Private Property	Is there a recent (5 year) plan?		
6.10	Green Infrastructure (GI)	Is there a plan for green infrastructure (i.e. nodes & linkages)? Large-scale projects.	See also 9.15.	
6.11	Other Written Plans	Other plans (e.g. tree canopy). May be a component of another plan.		
6.12	Tree Planting	Is there a recent (3 year) tree planting plan? ). May be a component of another plan.		
6.13	UF as Part of a Comprehensive Plan	Is any UF management plan referenced in the comprehensive plan (i.e. county or municipality) or master plan (i.e. Campus)?		
6.14	Urban Forest Planning and Management Criteria and Performance Indicators	Criteria and indicators based on A Model of Urban Forest Sustainability (Clark, J.R., Matheny, N.P., Cross, G., and Wake, V. 1997 Journal of Arboriculture.) or on work of W.A. Kenney, P.J.E. van Wassenaer, and A.L. Satel in Criteria and indicators for strategic urban forest planning and management. (2011)	See <u>City of Tampa</u> . Also see 9.27. Third-party forest products certification.	

**Review Team Notes – Category 6** 

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7	Risk Management					
7.00	Risk Management Activities					
7.01	TRAQ Attained	At least one staff or consultant is TRAQ.	Standard of Care.			
7.02	Annual Level 1 (ANSI A300 Part 9 & ISA BMP)	All trees in high occupancy areas visited annually.	Standard of Care.			
7.03	Mitigation Prioritization	A protocol for prioritizing mitigation following Level 1 and Level 2 assessments. Reflects the controlling agency's threshold for risk.	Standard of Care.			
7.04	Occupancy Areas Mapped	Has TRAQ staff/consultant discussed/mapped occupancy levels with controlling authority?				
7.05	Recordkeeping, Reporting, and Communications	A process has been put in place to maintain records on requests, inspections, evaluations, and mitigation of risk; and on the communications among the managers related to those risk assessments. May include link to 311 system and/or capture of e-mail communication (internal and external),	Standard of Care.			
7.06	Standard of Care Adopted	Controlling authority has adopted a Standard of Care (SOC) or risk management policy.	Standard of Care.			
7.07	Tree Risk Specification	Is there a written specification that meets requirements of ANSI A300 (Part 9)? And, has it been discussed with the controlling authority with relevance to the controlling authority's threshold for acceptable risk?	Standard of Care.			
7.08	Urban Tree Risk Management	The community has prepared and follows a comprehensive program for urban tree risk management.	See Pokorny et. al. 2003			
7.09	Invasive Management	Plan to address and manage invasive: plants, insects, and disease.				

For shaded cells 🗹, evaluate as 0) Not Practiced, 1) In Development, 2) Routinely Practiced, or 3) Exceeds Common Practice

**Review Team Notes – Category 7** 

### 8 Disaster Planning

8.00	Disaster Planning Activities		
8.01	Response/Recovery Mechanism	Staff knowledge of the municipality's protocol for requesting disaster resources through the county or state with access to mutual aid and EMAC.	
8.02	Urban Forestry as part of the County Disaster Plan $\otimes$	The UF plan (8.3) is incorporated into the county/municipal disaster plan; specifically in reference to debris management and risk mitigation.	
8.03	Urban Forestry Disaster Plan	A separate/specific plan within the urban forestry management program (i.e. who to call, priorities).	See <u>Con</u> <u>Ope</u>
8.04	Pre-disaster Contracts	Contracts are in place for critical needs.	
8.05	Mitigation Plan	A mitigation plan has been developed for pre-disaster, recovery, and post-disaster.	Also
8.06	EMAC Mission Ready Packages (MRP)	Municipality has published disaster resources with state EM and participates in inter-state Mutual Aid to support Urban Forest Strike Teams (UFST).	
8.07	Urban Forest Strike Team	Participation in the UFST project.	Also

For shaded cells 🗹, evaluate as 0) Not Practiced, 1) In Development, 2) Routinely Practiced, or 3) Exceeds Common Practice

**Review Team Notes – Category 8** 

#### **Comments & Resources**

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ee <u>Community Forest Storm Mitigation Planning for Georgia</u> Communities, <u>VRMP-UTRI</u> , or <u>Urban Forestry Emergency</u> Operations Planning Guide for Storm Response.	
lso see 9.08 (e.g. pruning).	
lso see 8.01	

# 9 Practices (Standards & BMPS)

9.00	ANSI Standards and BMP Activities		
9.01	ANSI Standards	Reference and adherence to ANSI Standards for arboricultural practices (A300), safety (Z133), or Nursery Stock (ANSI Z60.1) (any or all).	St
9.02	Ages/Diameter Distribution	Specific management for the development of an age-diverse tree population	
9.03	Arborist Standards	Standards of practice for arborists (i.e. Certification).	
9.04	Best Management Practices (BMPs)	Establishes or references tree maintenance BMPs (i.e. written comprehensive standards & standards).	A
9.05	Fertilization and Mulching	Fertilization or mulching standards required for conserved & planted trees.	
9.06	Lightning Protection Systems	BMP written to the ANSI A300 Standard.	
9.07	Planting	Planting and transplanting standards required/specified.	
9.08	Pruning	Pruning standards required for conserved & planted trees.	
9.09	Removal	Infrastructure damage, stump grinding, etc.	
9.10	Support Systems (Guying and Bracing)	BMP written to the ANSI A300 Standard.	
9.11	Tree Risk	Tree risk assessment procedures; ISA BMP or equivalent.	S
9.12	Construction Management Standards	Written standards for: tree protection, trenching/boring in CRZs, pre-construction mulching, root or limb pruning, watering (any or all).	
9.13	Design Standards	Standards for design that specifically require trees; standards for tree placement (i.e. location), soil treatment, and/or drainage.	
9.14	Genus/Species Diversity	Suggests or requires diversity of plant material.	
9.15	Green Stormwater Infrastructure (GSI)	BMPs for site level practices like rain gardens and swales. Small-scale projects. Not to be confused with GI (Nodes & linkages).	S
9.16	Inventory Data Collection	<ul> <li>Community has adopted or developed applicable (written) standards for local urban tree inventory data collection to support QA/QC. Currently, there is no identified national standard. But, the following have components and elements worth noting.</li> <li>i-Tree Eco Manual Version 5.0, 2014, USDA FS</li> <li>IUFRO: Standards for Urban Forestry Data Collection Draft 2.0, August 20, 2010 (Update 2013)</li> <li>Planted Tree Re-Inventory Protocol Version 1.1. BUFRG &amp; CIPEC, Bloomington, IN</li> <li>Urban FIA Field Guide Version 6.1, March 2015, USDA FS</li> <li>Azavea &amp; Pennsylvania Horticultural Society Data Management for Urban Tree Monitoring</li> </ul>	L i- <u>h</u> II <u>h</u> C B <u>h</u> U A <u>h</u> <u>h</u>
9.17	Minimum Planting Volume	Minimum required root zone volume.	
9.18	Minimum Tree Size	Minimum caliper for tree replacements, and/or minimum size of existing trees to receive tree density or canopy credit.	
9.19	Root Protection Zone (CRZ)	Defines adequate root protection zone; Critical Root Zone (CRZ).	
9.20	Safety	Staff, equipment, and protocol safety; Job Hazard Analysis's (JHA).	
9.21	Topping	Prohibits topping or other internodal cuts (public & private).	
9.22	Tree Species List	Identifies and publishes a list of the most desirable, recommended, and/or preferred species (may include native and non-native species); alternatively, a list of species prohibited.	
9.23	Tree Quality Standards	Written standards for tree selection at nursery in addition to Z60.1.	
9.24	Utility Right-of-Way ( ROW) Management	Requirements for planting, pruning, and/or removal of trees within a utility ROW.	

	M
Standard of Care. See also 9.3 and 9.5 – 9.11.	
	1
All of the following sub-elements.	
	l
Standard of Care.	
See also 5.13 & 6.10.	
Link (as of 280ct15)	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php	
i-Tree Eco: <u>https://www.itreetools.org/resources/manuals.php</u> IUFRO: <u>http://www.unri.org/standards/wp-</u>	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php IUFRO:	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php IUFRO: http://www.unri.org/standards/wp- content/uploads/2010/08/Version-2.0-082010.pdf BUFRG: http://www.indiana.edu/~cipec/research/bufrg_protocol.php	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php IUFRO: http://www.unri.org/standards/wp- content/uploads/2010/08/Version-2.0-082010.pdf BUFRG: http://www.indiana.edu/~cipec/research/bufrg_protocol.php Urban FIA: http://www.nrs.fs.fed.us/fia/urban/ Azavea:	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php IUFRO: http://www.unri.org/standards/wp- content/uploads/2010/08/Version-2.0-082010.pdf BUFRG: http://www.indiana.edu/~cipec/research/bufrg_protocol.php Urban FIA: <u>http://www.nrs.fs.fed.us/fia/urban/</u> Azavea: http://www.azavea.com/files/4314/6290/6898/urbantreemo nitoringsoftwarereport-2.pdf or	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php IUFRO: http://www.unri.org/standards/wp- content/uploads/2010/08/Version-2.0-082010.pdf BUFRG: http://www.indiana.edu/~cipec/research/bufrg_protocol.php Urban FIA: http://www.nrs.fs.fed.us/fia/urban/ Azavea: http://www.azavea.com/files/4314/6290/6898/urbantreemo	
i-Tree Eco: https://www.itreetools.org/resources/manuals.php IUFRO: http://www.unri.org/standards/wp- content/uploads/2010/08/Version-2.0-082010.pdf BUFRG: http://www.indiana.edu/~cipec/research/bufrg_protocol.php Urban FIA: <u>http://www.nrs.fs.fed.us/fia/urban/</u> Azavea: http://www.azavea.com/files/4314/6290/6898/urbantreemo nitoringsoftwarereport-2.pdf or	

# 9 Practices (Standards & BMPS)

9.25	Urban Agriculture	Enabled urban food forestry practices.	See Clark and Nicholas, Landscape Ecology 28:1649-1669, 2013.	
9.26	Wood Utilization	Larger diameter material is processed for wood products.	Chipped material should be included in Energy (see 9.28) or the composting item (see 9.29). Also see 9.27 certification item.	
9.27	Third-party forest products certification compliance	<ul> <li>Adoption of one of the international standards for production of wood products (for example):</li> <li>American Tree Farm System (ATFS)</li> <li>Forest Stewardship Council<sup>™</sup> (FSC<sup>®</sup>)</li> <li>Programme for the Endorsement of Forest Certification (PEFC)</li> <li>Sustainable Forestry Initiative (SFI)</li> <li>Sustainable Forest Management Standard (Canada)</li> <li>Standards can apply to any/all publicly owned and managed trees; parks, street trees, and/or community forests.</li> </ul>	Also see 1.13 for development standards that may include on-site utilization.	
9.28	Energy generation	Local or regional use of chips or other woody debris for co-generation facilities.		
9.29	Composting of Leaf and/or Other Woody Debris	Leaves and small woody debris are captured and used on-site or processed by someone by composting for reuse.	See also 9.26 (large diameter material).	

For shaded cells 🗹, evaluate as 0) Not Practiced, 1) In Development, 2) Routinely Practiced, or 3) Exceeds Common Practice

Review Team Notes – Category 9

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10	Community	
10.00	Activities That Build Community	
10.01	American Grove	Does your community/campus use American Grove to document and publicize your urban forestry program, activity, or events?
10.02	Education	The urban forest is used as an educational laboratory for class activity; Kids in the Woods, PLT, high school, or college level.
10.03	NeighborWoods® Program 🛞	Does your community sponsor this program locally?
10.04	Open Tree Map	Public access to the community tree resource via an on-line mapping program (i.e. any Web Map Service; WMS).
10.05	Public Perception	Is public management consistent with private property requirements for tree protections and care? Does the Campus/public tree management reflect neighborhood norms?
10.06	Recognition Programs	Programs that raise awareness of trees or that use trees to connect the community to significant events or activities.
10.07	Arbor Day Celebration	Whether or not associated with Tree City USA.
10.08	Arboretum designation	Internal or third party arboretum designation.
10.09	Significant trees	For example: size, history.
10.10	Memorial/Honorarium	Tree planting or tree care programs than honor/memorialize individuals, organizations, or events.
10.11	Social Media	Does your community/campus make use of Twitter, Facebook, Blogs for internal or external outreach?
10.12	Active Communications	Press releases, regular news articles (print), "State of the Urban Forest" reports, periodic analysis of threats and opportunities.
10.13	Tree Care	Are volunteers trained and used for basic tree care (e.g. mulching, pruning, planting).
10.14	Tree Campus USA <sup>®</sup> , Tree City USA <sup>®</sup> , Tree Line USA <sup>®</sup>	Community/campus meets current qualifications for any of these programs.
10.15	Volunteer Opportunities	Ad hoc or scheduled. Any/all age groups. Tree Campus USA student activities.

Review team Notes – Category 10

	$\mathbf{N}$
See also 10.11 for other Social Media.	
From Alliance for Community Trees.	
Also see 5. Inventories.	
A "good neighbor" policy.	
See also 10.01 and 10.12.	
See also 10.11.	
The Arbor Day Foundation	

11.00	UF Management vs. Performance			
11.01	Deadwood	Look for evidence of periodic or ad-hoc deadwood removal (i.e. lack of dead limbs ≥ 2" in the trees or on the ground).		
11.02	Genus Diversity	No genera exceed 20% of population; make specific observations for Acer, Quercus, and Ulmus.	See also 11.07. Substitute any number desired in place of <b>20%</b> .	
11.03	Mature Tree Care	Mature trees are retained in the landscape, and are of acceptable risk; i.e. veteran tree management.		
11.04	Mulching	Evidence of adequate (i.e. spatial extent, depth, and material) roots zone mulching for all age classes.		
11.05	Planting Site Volume Optimization	Are species & sites matched for optimization of above ground canopy; right tree in the right spot concept.		
11.06	Rooting Volume Optimization	Are species & sites matched for optimization for below ground rooting volume; right tree in the right spot concept.		
11.07	Species Diversity	No species/cultivars exceed 10% of population; make specific observations for Acer, Quercus, and Ulmus genera. Also evaluate the role of regionally local native species.	See also 11.02. Substitute any number desired in place of <b>10%</b> .	
11.08	Soil Compaction	Observe evidence of soil compaction by users or staff during maintenance. Include "desire" lines and construction activity at time of evaluation.		
11.09	Tree Health	Rate the overall tree health in all size (age) classes; look for crown dieback, decay, foliage density & color.		
11.10	Young Tree Pruning	Look for evidence of periodic (e.g. every 3 years to year 9) structural pruning (e.g. subordination cuts, dominant central leader, co-dominant stems lower that 20').		

For shaded cells 🗹, evaluate as 0) Deficient, 1) Minimal Attainment, 2) Common Practice, or 3) Exceeds Common Practice

**Review Team Notes – Green Asset Evaluation** 

<sup>&</sup>lt;sup>4</sup> See **Green Asset Checklist** for detailed evaluation criteria and elements.





#### **Urban Forest Sustainability & Management Review**

Controlling Authority:		Urban Forest Manager:			
Evaluated by:	(Review Lead)		_ (Team)	_/_/	(Date)

#### **Overall Urban Forest Management Evaluation**

Catagony		Sum of Evaluations			
Category	(Element Count: SOC, BP, Other)		Base	Other	Total
1. Policy and Ordinances	(1, 3, 9)				
2. Professional Capacity & Training	(1, 0, 6)				
3. Funding & Accounting	(1, 0, 4)				
4. Authority	(1, 1, 1)				
5. Inventories	(0, 8, 4)				
6. Urban Forest Management Plans	(0, 6, 6)				
7. Risk Management	(6, 1, 2)				
8. Disaster Planning	(0, 3, 4)				
9. Practices (Standards & BMPS)	(2, 7, 18)				
10. Community (Relationships)	(1, 0, 14)				
11. Green Asset Evaluation (Soil, Trees)	(0, 0, 10)				
Total	(14,29,78)				

Campuses – Baseline Evaluation Credit (i.e. Common Practice)	26	46	146	218
Communities - Baseline Evaluation Credit (i.e. Common Practice)	28	58	156	242

#### **Review Team Narrative Summary: Key Findings**





## **Urban Forest Sustainability & Management Review**

Urban Forestry Sustainability and Management Program Attainment<sup>5</sup>

Level	Description	Attainment
One	Meets prerequisites for classification as an urban forest management program. Needs improvement in multiple areas to achieve minimal overall competency.	Is operating with several "key" elements.
Two	Meets minimal level of overall competency, notwithstanding multiple opportunities for improvement within individual categories.	Base Practices at 80% attainment. Base: 37 Campuses & 46 Cities
Three	Exceeds minimal level of overall competency, with commendable performance in some individual categories. In addition, has adopted some elements beyond Base and SOC elements.	Base Practices (≥80%) and Standard of Care (≥80%) Base: >41 Campuses & >46 Cities SOC: >21 Campuses & >22 Cities
Four	Greatly exceeds minimal level of overall competency, with best-in-class performance in several individual categories. In addition, has adopted significant elements beyond Base and SOC elements.	Base Practices (≥90%) and Standard of Care (100%) Base: >40 Campuses & >52 Cities SOC: 26 Campuses & 28 Cities Includes "key" elements from non-Base and non-SOC.

#### Notes:

Scoring totals based on "Common Practice" level (i.e. 2).

No alternative credit given for "Other" components in any Category.

Get Excel spreadsheet version at: http://www.urbanforestrysouth.org/resources/files/UFS%20and%20ASC%20UF%20Audit%20Calc%20Tool%20-18Aug15%20v4.2beta.xlsx/view

Urban Forestry South

<sup>&</sup>lt;sup>5</sup> As developed by Agnes Scott College during the 2014 review process development test.