



THE URBAN WOOD TOOLKIT

BULLETIN #1: A GUIDE FOR CREATING URBAN WOOD UTILIZATION PLANS

WHAT IS THE URBAN WOOD TOOLKIT?

Urban wood utilization and marketing is increasingly recognized as an important component for quality urban forest management programs. Using wood from urban and community tree care residues is an effective way to reduce municipal forestry costs and waste, promote stronger linkages with the forest products industry, and produce new economic opportunities.

While it may seem challenging at first, finding value-added uses for wood generated through urban forestry practices can be a pragmatic way to provide benefits to your community. Most examples of successful urban wood projects share some features: they have dedicated leaders who prioritize the unique needs and capacities of their communities, and they depend on private partnerships. These models can provide useful information on other communities' solutions, but don't necessarily provide a blueprint for a program that will meet your specific needs.

This Urban Wood Toolkit was created to walk users through the process of building an urban wood use plan. While not every question may be relevant to your specific situation, each may help you reflect on the major issues, opportunities, and challenges that you are likely to encounter, while anchoring your decisions in what will be most meaningful to your own community.

PLANNING GUIDE OVERVIEW

This planning guide is divided into seven sections, each as a one-page worksheet to help you assess your current capabilities, identify the resources needed, and explore different potential opportunities. In order to help you track progress, a simplified list of the guide's components is shown in the left sidebar.

The Toolkit is designed to be used by municipal foresters, city managers, community volunteers, or students. Each worksheet offers a discrete snapshot of one part of the wood use planning process, making it easier to tackle the work in separate segments over time as scheduling allows. Additional bulletins are available in the Urban Wood Toolkit series and can provide further details on many of the ideas presented here.

Once you complete all of the sections, you will be armed with information to prioritize the most important goals and objectives for your community's wood, recognize the types of information or resources necessary to advance, and identify the types of services that you need from additional partners.



SECTION 1: GETTING STARTED

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- What are the basic structures of your current wood disposal handling system?
- Do you use outside contractors for tree removal? Or, do it in-house? Full or part-time?
- Where do logs and other wood residues go immediately after trees are removed?
 - Into your own collection yard or to a private collection yard
 - Landfill
 - Disposal via private contract
 - Used by contractors to produce specific products
 - Other (please explain)
- Do you already produce anything from this wood? And what do you do with it?
 - Firewood Use / Sell / Give away
 - Mulch Use / Sell / Give away
 - Fuel chips Use / Sell / Give away
 - Compost Use / Sell / Give away
 - Logs Use / Sell / Give away
 - Lumber Use / Sell / Give away
- Who has the authority to establish or authorize wood disposal protocols within your organization?
- Are there formal procedures in place for any wood that is sold or given away?

GATHER INFORMATION

- Regarding wood disposal, do your municipality’s records show:
 - How much you spend annually (including tipping fees, transportation, handling, etc.)?
 - How much wood you dispose of (by volume)?
 - How much staff time is used?
 - How much you spend on related expenses (chipping, grinding, equipment, etc.)?
 - How much (if any) you spend on purchases of wood products (mulch, compost, fuel, etc.)?
 - If you lose money? Make money? Break even?

EVALUATE OPPORTUNITIES

Provide a quick reaction to the following questions. These issues will be reviewed in more depth later on.

- How satisfied are you with your current wood disposal process? What is working well? What isn’t?
- How much flexibility do you have in your forestry planning and implementation?
- Does your department or community have any obvious wood product needs?
- Will your staff support a wood use initiative? Will your management? Will your community?
- What are your municipality’s goals? Cost reduction? Waste reduction? Sustainability? Something else?
- What are your biggest concerns about starting a new urban wood use plan?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 2: UNDERSTANDING YOUR WOOD RESOURCES

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Does your community already have an urban tree inventory?
 - If yes, does it include both street and park trees? Do you have data on planned removals?
 - If no, is your community planning an inventory soon? Is there still time to provide input?
- Does your community have a plan in place (formal or informal) for how and when tree removals occur?
- Do you have a plan that already dictates how wood handling will occur? Can you transport large logs?
- Do you already have logs from previous removals?
- How many trees do you expect to remove in the next year?
- Who else has a significant tree removal responsibility in your community (private operations, land conservancies, school campuses, utilities, etc.)? Could they act as partners to produce a larger wood supply? Do you know how they manage wood handling and disposal?

GATHER INFORMATION

- For existing stockpiled logs or for anticipated future removals, what do you know about the quality, quantity, and accessibility of the logs? What volume is in good condition vs. hollow or rotten?
- Can you collect information on the following for pending tree removals or stockpiled logs? (Knowing these characteristics will help with future planning.)
 - *Diameter* – Typically measured as DBH, or diameter at breast height (taken 4.5' from the ground), logs should be at least a 10-12" DBH to be millable. Some mills require even larger logs. How many trees or logs surpass this minimum standard?
 - *Height to first branching* – Typically, at least an 8' log is desirable for milling, but shorter logs may have value depending on the types of products planned.
 - *Accessibility* – Can the tree be felled safely without cutting the log into lengths shorter than 8 feet? Can the logs be hauled out easily? Is there room to navigate where logs are stockpiled?
 - *Quality* – Do trees have obvious damage, metal, or other issues that would restrict their use?
 - *Species* – What species are available? This may affect suitability for some products.

EVALUATE OPPORTUNITIES

- Do you have enough good quality logs available to explore higher-value wood use options?
- What do you know about your lower-value residues? Do you need to explore new options for these?
- A successful urban wood program can be developed, even when municipal staff have little knowledge of log grading. But, having the ability to describe the quantity and quality of your wood will help in developing partnerships. Do you feel that you know enough about your wood resources to discuss opportunities with producers and processors?
- Can partnering with another wood generator help supply enough wood to create more interest?
- As you learn more about identifying log quality, you may be better positioned to negotiate with potential buyers about the value of the wood you have available. What future steps could you take to better understand the quality and quantity of wood you generate?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 3: REVIEWING CAPACITY & PLANNING LOGISTICS

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- How much staff time do you have available for the additional handling, sorting, or processing that you may need to create products from your trees? Can some of this work be outsourced through partnerships?
- What role do private contractors currently play in your tree care and removal operations? Are they receptive to wood recovery and reuse activities?
- What kinds of training do staff members or contractors currently have that would be helpful?
- What kinds of equipment do you have available, especially regarding transporting and sorting logs, chipping or grinding, and other processing? Can you handle processing wood for a variety of products?
- Do you already have a yard with space for collecting, sorting, and/or processing wood residues?
- Do you have appropriate areas to store processed lumber, firewood, mulch, or other products?

GATHER INFORMATION

- Which skills do you most need to develop for your staff? While expertise is not necessary in every area, some knowledge about the following will make wood use efforts more effective:
 - Species identification and log evaluation
 - Safe tree removal and log bucking
 - Wood retrieval and transportation
 - Equipment usage (including chainsaw safety)
 - Wood handling and sorting
 - Collection and storage
 - Processing and sales
 - Marketing and communication
- If you do not have capability to transport or store logs, can you find local services for hire?
- Are there any quarantine regulations (such as for emerald ash borer) or other local ordinances that pose restrictions on the processing and/or movement of your wood residues?
- Are there local ordinances, zoning, or other regulations that will affect wood processing capability?

EVALUATE OPPORTUNITIES

- How will you build the necessary skills for your team?
- When would you prefer to use outside professionals to meet your needs?
- Do you have funds for any needed equipment purchases? Can you rent or lease equipment instead?
- How will you streamline log collection after future tree removals to make it more efficient?
- Could you improve efficiency and cost by sharing transportation and collection of wood materials with neighboring communities and/or private arborists?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 4: MANAGING INTERNAL COMMUNICATIONS

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Revisiting some earlier questions, how will your staff likely respond to a new wood use program, especially if you are already short-staffed or facing budget cuts? What about city management? Are you prepared to address their concerns?
- How does your community already handle private partnerships? What works and what could be improved?
- How does your community handle other surplus resource situations? Do these processes work well?
- What agreements or procedures will you need to review or create to enter into any partnerships?
 - Single comprehensive agreement vs. multiple agreements
 - Bid processes
 - **Insurance requirements**
 - Indemnification requirements
 - Liability requirements and waivers
 - Different handling for giveaways vs. sales
- Does your community already have a written urban forestry management plan? Does it include any mention of wood use planning?
- Who are the natural allies for this program among your staff and municipal management? How can you engage them in your planning process? Do you need to engage other departments?

GATHER INFORMATION

- Determine what information you will need to provide to get buy-in from staff and management. What elements of your plan will address their concerns?
- Build a list of the agreements, documentation, or plans that you will need to draw up and identify models for any that you still need to draft.
- Will you need to amend any plans or budgets before you can begin changing your wood use practices?
- What effect, if any, will changes in spending or cost reduction have on next year's budget? How will you handle this?

EVALUATE OPPORTUNITIES

- Could new regulatory structures, ordinances, or incentives help support wood recovery and reuse activities in your community?
- How will you include input from community leaders and the public as you develop your wood use plan? How will you encourage their input and feedback over time? How will you involve other departments?
- How will on-the-ground staff feedback influence the program's implementation?
- What evaluation and communications measures will you use to track progress toward goals, report your outcomes, and continue to build support?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 5: EXPLORING PRODUCT OPPORTUNITIES

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Does your department already use wood products? Do other parts of your municipal government use wood regularly? What do you or other community-based organizations (such as schools, green building projects, affordable housing, artist co-ops, etc.) need? Many wood products can benefit community operations, including, but not limited to:
 - Surfaced, kiln-dried lumber
 - Slabs
 - Rough-cut, air-dried lumber (such as utility boards for industrial use)
 - Burls (for woodworking)
 - Firewood
 - Mulch
 - Fuel chips
 - Animal bedding or playground cover
 - Compost
- How do the possible uses align with the types of wood resources you have available? Keep in mind that most municipal efforts produce a large quantity of low-value wood and a small volume of high-value logs, so plan accordingly.

GATHER INFORMATION

- Based on the information available, compile the following:
 - Expected characteristics, volume, and timeline for wood residue availability.
 - Desired products (if any) needed *within* your community, governmental or otherwise. (We'll talk about external markets in the next section.)
 - Expected processing capability needed beyond what your internal capacity allows.
- Research the various wood product options you identified to gain a better understanding about the wood quality and types of processing needed. (See Bulletin #3 in the Urban Wood Toolkit for ideas.)

EVALUATE OPPORTUNITIES

- Remember that communities rarely profit from wood use. Given that, revisit your goals: Do you hope to reduce disposal costs? Make products to meet municipal wood needs? Improve sustainability? Will the products you identified work toward those goals?
- How will you track outcomes and measure progress as you try new processing options? What metrics should you track from the start?
- Knowing that all tree removal operations produce wood of varying qualities, does your plan find the best use for your entire wood residue stream? For example, can you use good logs for lumber, smaller trees for firewood, branches for mulch, and stumps for compost?
- Compare your expected wood availability, desired products, and expected capacity for processing after researching product options. Are these realistic? Either reaffirm your plan or consider other options.

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 6: DEVELOPING WOOD INDUSTRY PARTNERSHIPS

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- Review your plans so far: where will you need outside help and what can you do in-house?
- Does your wood supply exceed what you can reasonably use within your own community?
- Do you need to contract out any removal, transportation, or processing activities?
- What services will you need from a partnership?
- What market demand already exists for urban wood in your region?
- Are there companies that would be interested in recovering and/or purchasing the material you have available?

GATHER INFORMATION

- Research existing wood industry members in your area, making sure to explore a variety of processors:
 - Services can vary greatly. Some companies offer processing for many different wood products in a single location (such as milling, firewood, mulch, kiln drying, and custom woodworking). Others specialize, offering fewer services. You may need a single provider or several.
 - Some may offer portable services, while others will require transportation for processing logs.
 - Be clear that you are looking for processors who handle urban logs. Not all forest products companies will work with urban logs, but some do specialize exclusively in urban wood.
- Develop a checklist of questions to ask about services, timelines, transportation, quality, volumes, etc. (See also Urban Wood Toolkit Bulletin #5 for more information.)
- Interview possible partners. In addition to reviewing their reputation and availability, document their capabilities, business practices, and product requirements.
- Recognize that the most successful public-private partnerships work when both parties benefit and build trust. Make sure that you each understand the needs of the other in this process.

EVALUATE OPPORTUNITIES

- Some first attempts at urban wood partnerships fail due to miscommunication and unmet expectations, especially when arborists and forest products professionals don't speak the same language regarding wood. How can you keep communication open, so that everyone is clear about specifications and services?
- Do any of the researched partners fit with your needs? Can they provide the services that you need from a partnership? Reach out to them to work out next steps together.
- Draft a formal agreement that articulates roles and responsibilities clearly. Review the needs you identified in your internal communications. What kinds of agreements or processes will need to take place before work can begin? Will your preferred partners qualify?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:



SECTION 7: BUILDING COMMUNITY SUPPORT

Get Started

Wood Resources

Capacity/Logistics

Internal Support

Product Options

Wood Partners

Community

FIND YOUR BASELINE

- How does your community already respond to urban forestry programs? Do you expect challenges or support?
- Which benefits of urban wood use are your local citizens most likely to value? Why?
- Is there community support for local and environmental initiatives (such as farmers’ markets, green building programs, recycling, etc.)? How can you use existing interests to promote urban wood use?

GATHER INFORMATION

- Who are the natural allies for this program among public figures or local organizations? Can you work with them to produce messages that will resonate with your community? Some common themes or messages have proven successful with diverse audiences, such as showing how urban wood:
 - Is an important part of a “full circle” approach to good urban forest management,
 - Can lower wood disposal costs for communities,
 - Connects urban and suburban populations with forests and nature,
 - Supports the local economy and local job growth,
 - Produces sustainable “green” products that have been reclaimed, and
 - Reduces waste and prevents wood from entering landfills.
- Do any newsletters, mailing lists, events, survey tools, or other instruments already exist and hold potential for helping you to gauge public sentiment or spread positive messaging about urban wood?

EVALUATE OPPORTUNITIES

- Should you consider building a public relations plan for your wood use program? Careful, deliberate communications can make operations transparent, build support, and engage the community. How will you tell the story?
- How can you best leverage your champions and promote your message as you move forward? Are there natural opportunities that would be a perfect fit? (Such as citizen forestry programs.) Use those first!
- What kinds of events or promotions would involve or speak to your community? Demonstration projects or events? Creative signage? Media coverage? Public meetings? Social media outreach? Programs with schools? Collaborations with others?
- Are there others in your community who can help with promoting your wood use efforts?
 - Are there retail operations (especially reuse outlets) willing to carry local urban wood products?
 - Will local galleries, artist clubs, or woodworking groups showcase finished works?
 - Could environmental or recycling organizations endorse the green message of these products?
 - Might neighborhood associations rally around this as a way to improve urban forestry efforts?
- How will you continue to promote your wood use programming over time in a meaningful way?

FOLLOW UP

- Information or resources needed:
- People to contact:
- Key strengths:
- Anticipated challenges:
- Next steps:

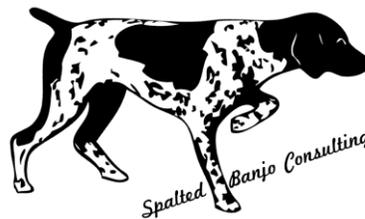


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