

Construction/ Demolition Debris Market Research and Bid Specifications

Allegheny County
542 Forbes Avenue, Room 10
Pittsburgh, PA 15219
(412) 350-5963

SCS ENGINEERS

02223021.00 – Task 4 | April 8, 2024

1881 Campus Commons Drive
Reston, VA 20191
703-471-6150

Table of Contents

Section	Page
1 Background.....	3
2 Project Description	4
3 Results/Findings.....	6
Material Markets.....	6
Draft Bid Language	8
4 Conclusion	11

Appendices

Appendix A – CDD Recycling Facilities Research

Appendix B – CDD Recycling Requirements by Municipality

1 BACKGROUND

Allegheny County is located in Southwest Pennsylvania and is the second largest county in the state with a population of about 1.3 million¹. Recycling programs in Allegheny County are well-established. Nearly 100 municipal programs throughout the county provide curbside or drop-off recycling services to residents. The County's support of recycling goes beyond traditional recyclable materials such as bottles, cans, and paper to include the recycling and diversion of other materials. The county publishes a Resource Recovery Directory that provides updated information on diverting hard-to-recycle items such as cooking oil/grease, fluorescent bulbs, mercury-containing items, propane tanks, and expanded polystyrene just to name a few. Additionally, the county plans and implements programs to divert special materials such as household hazardous waste, tires, and electronics. The county prioritizes education and outreach and provides materials and presentations to groups in the county on the importance of recycling.

In expanding waste diversion programs, the county is exploring options for increasing the recycling and diversion of construction and demolition debris (CDD). The county has taken steps to foster and encourage the diversion of CDD materials from internal county projects and would like to expand on these efforts to further reduce the disposal of this waste. The following materials have been the focus of existing county efforts to recycle waste from construction/demolition projects sponsored by the county:

- **Metal** – Scrap metal is to be separated from waste and placed in a location or container to facilitate recycling. The county takes responsibility for collection and transportation of the separated scrap metal to a recycling facility.
- **Corrugated Cardboard** – Cardboard boxes are to be flattened and transported to the County Office Building loading dock and placed in the blue-colored collection containers.
- **Plastic Bottles, Aluminum Cans, and Mixed Paper** – These materials are to be transported to the County Office Building and placed in the recycling containers.
- **Other Materials** - The county encourages contractors to recycle and reuse other materials such as concrete, wood waste, and bricks. Contractors are asked to contact County staff for assistance with identifying markets for these materials.

The specific requirements the county has promoted are listed in the call-out box below. These requirements have been included in the county's most recent bid specifications for construction/demolition contractor services.

¹ Allegheny County [Allegheny County | Always Inspiring](#)

Allegheny County Waste Diversion requirements:

Items expected to be recycled during all phases of this project:

- *Cardboard boxes, broken down and flattened, can be placed in Allegheny County Blue Cardboard dumpsters located in the County Office Building loading dock*
- *Plastic Bottles, Aluminum Cans and Mixed Paper should be placed in Recycling Stations located in the hallways of the County Office Building*
- *Scrap metals accumulated during demolition, will be placed in a location TBD for Allegheny County to send to a scrap yard for recycling*

Additional items that can be diverted from landfills but are not required include concrete, wood waste, and bricks from demolition process, as well as plastic packaging and films such as bubble wrap and plastic wrap as part of shipped materials. Should the contractor wish to divert these items from the landfill and need assistance in identifying an outlet, please contact Allegheny County's Department of Sustainability.

As part of the Waste Diversion requirements, to ensure that adequate time and space for proper disposal is available, the contractors should be in communication with the Allegheny County Department of Sustainability when large amounts of materials will need to be recycled, specifically cardboard and scrap metals.

The county requested recycling technical assistance to build on their existing efforts to encourage the recycling and reuse of CDD. Specifically, the county sought guidance on the establishment standard bid specifications that require the diversion and recycling of CDD materials originating from county-sponsored projects. The county anticipates the policy and bid specifications may be used by other entities to facilitate CDD diversion. Additionally, assistance was provided to research and identify potential partners for the recycling of select CDD.

2 PROJECT DESCRIPTION

This section summarizes the work activities performed as part of this recycling technical assistance project.

Task #1: Research CDD Recycling Requirements

The SCS Team, with the support of Allegheny County intern, Memuna Bayoh², researched existing municipal recycling policies and requirements for CDD materials. This research included looking at municipal purchasing policies, bid specifications, and sample contract language to understand typical requirements and terms. CDD requirements from jurisdictions throughout the Mid-Atlantic region and the country were considered for this task. Key aspects of these policies that were

² Ms. Bayoh was an Allegheny County intern from September to December 2023.

documented, when available, included project types, materials impacted, reporting requirements, and hardship requests.

Task #2: Market Research

The SCS project team researched potential markets for select CDD materials generated in the county. This research included consulting sources to identify companies that accept CDD materials for recycling with direct follow-up with each company/entity identified to understand the scope of services provided and confirm CDD materials were recycled and/or reused. Materials researched as part of this task included: bricks and masonry, concrete, flooring, gypsum board, roofing materials, treated wood, untreated wood. Sources researched to identify recycling markets included the internet, Pennsylvania Resources Council, Construction and Demolition Recycling Association, and contacts/leads from Allegheny County staff.

Task #3: Draft Bid Specifications for CDD Recycling

Task 3 included drafting sample bid specifications for inclusion in building construction/demolition procurements the county may issue in the future. The sample bid specifications were based on the research completed as part of tasks 1 and 2 and the county's existing efforts to promote and encourage CDD recycling and diversion.

Task #4: Final Report

This report represents the final task of this project and includes our findings and recommendations.

3 RESULTS/FINDINGS

MATERIAL MARKETS

For this task the SCS team researched potential markets for seven (7) materials that are often generated during construction and/or demolition projects. These materials include bricks and masonry, concrete, flooring, gypsum board, roofing materials, treated wood, and untreated wood. Our team first identified possible markets for each material type using a variety of sources including the Pennsylvania Recycling Markets Database³. Using these resources, the team identified companies or facilities that may accept CDD materials for recycling for further screening.

Upon identifying potential markets for recyclable materials, the SCS Team directly contacted each company and/or entity via phone or email to confirm the scope of services they provide and affirm material management activities involving the recycling and/or reuse of CDD materials. These personal contacts significantly reduced the number of companies originally identified. Many companies contacted indicated they do not in fact accept waste materials. Many other companies contacted confirmed they accept CDD materials, but stated the materials accepted are disposed and not recycled or reused. This section describes the findings/results of our market research by material type.

- **Bricks and Masonry** - Research from this project resulted in the identification of six (6) companies that accept and recycle bricks and masonry from construction/demolition projects. Three (3) of these companies are located in the greater Pittsburgh area. These companies appear to be the most viable and convenience entities for the diversion of bricks and masonry. The remaining three (3) companies are located either in Northeast Ohio or central and western Pennsylvania. The distance required to haul materials to these recycling facilities are expected to be costly and not practical in most cases.
- **Concrete** - Two (2) local companies were identified and verified as accepting concrete for recycling and/or reuse. These companies provide the best opportunities for recycling concrete locally in Allegheny County. Tipping fees for concrete at these facilities range from \$75 to \$90 per ton. Each company has restricted requirements that the concrete not be contaminated with other materials. Several other companies were identified as providing concrete recycling services in Pennsylvania, but their locations are not likely to be feasible for construction and/or demolition projects in Allegheny County to utilize.
- **Flooring** - Opportunities for the diversion of flooring materials in Allegheny County are through second-hand outlets such as Habitat for Humanity and Construction Junction. Both organizations have facilities in the county that accept flooring materials for resale and reuse. These organizations also have specific requirements for the types of flooring accepted. Construction Junction only accepts hardwood flooring such as solid wood, wood strip, and engineered hardwood floors. Carpet is also accepted for reuse, but it must be clean with no stains or holes. They do not accept laminate and vinyl flooring. Habitat for Humanity of Greater Pittsburgh accepts tile, laminate plank, roll linoleum, carpet tile, and hardwood flooring

³ [Pennsylvania Recycling Markets Database \(pennrmc.org\)](http://pennrmc.org)

materials. As flooring materials are sold for reuse, projects that generate these must carefully deconstruct the flooring materials so as to not damage it for reuse.

- **Treated Wood** – Treated wood includes wood materials that have been painted, stained, or otherwise treated with some chemical. Wood is treated to preserve it and oftentimes for aesthetics. The treatment of wood makes it hard for it to be recycled and recovered. The research completed for this project did not yield entities or organizations that accepted treated wood materials and reused or recycled them. All companies identified as accepting treated wood confirmed the material is disposed.
- **Gypsum Board** – Research completed for this project identified two (2) companies in or near Allegheny County that may accept select types and quantities of gypsum board for reuse and recycling. Each identified company makes a distinction between pre- and post-industrial gypsum board and only accepts certain kinds of materials in limited quantities. Although these markets appear to exist, they are unlikely to provide for all sufficient capacity for the recycling and reuse of large quantities of gypsum board.
- **Roofing Materials** – Research completed for this project resulted in the identification of three (3) companies that accept and reuse and/or recycle roofing materials, particularly asphalt shingles. Two (2) identified companies are local to Allegheny County, while one is located in State College (Centre County). Habitat for Humanity accepts roofing materials for donation and resells the materials. Other identified companies' process roofing materials for recycling as part of landscaping and road construction projects. Overall, the reuse and recycling markets for roofing materials is limited, but some options might exist to expand the diversion of this material.
- **Clean or Untreated Wood** – Perhaps the largest reuse/recycle market for construction/demolition debris other than scrap metal is for clean/untreated wood. Five (5) local companies were identified and confirmed as accepting untreated wood materials for reuse and/or recycling. Research indicated that this material is typically ground-up and used for landscaping projects. Companies identified as part of the research often require a tipping fee for the materials and have requirements the wood materials not be contaminated with other materials, including treated, painted, or stained wood.

The results of the research, including the name, contact information, and select information on each company, are presented in **Appendix A**.

EXAMPLE REQUIREMENTS

Many communities throughout the United States have implemented requirements for the reuse and/or recycling of construction and demolition debris. The project team completed internet research to identify communities that have adopted construction and demolition debris diversion requirements from projects within their jurisdiction. Many communities that implement construction/demolition debris recycling requirements do so as part of a broader effort to reduce waste in all waste generating sectors. This section provides a brief description of select identified communities that have adopted CDD waste diversion policies.

- **City of Austin, Texas** - The City of Austin passed an ordinance that select construction and demolition projects must divert at least 50 percent of their waste from disposal or dispose no more than 2.5 pounds of material per square foot of permitted facility floor area. Projects subject to this requirement include commercial properties, including multi-family properties, construction/demolition projects of all sizes and residential properties with construction/demolition projects involving more than 5,000 square feet of new, added, or remodeled floor area. Contractors are required to keep logs and/or weight tickets showing which materials and how much was diverted. Contractors also must submit a construction recycling report when the final building inspection is requested. If contractors do not comply with these recycling requirements, they can be subject to a Class C misdemeanor, punishable by fines up to \$500 per day, per offense.
- **Los Angeles, California** - Los Angeles requires select construction and demolition projects to divert at least 65 percent of waste or dispose less than 2 pounds per square foot of material relative to the project size. Projects subject to this requirement include newly constructed buildings and large commercial additions. Some projects that are located a significant distance from material reuse and/or recycling facilities are exempt from this requirement. Contractors seeking an exemption from the requirement must be approved prior to project commencement. Contractors must submit a Construction Waste Management Plan prior to starting a project and submit waste hauler invoices, receipts from recycling facilities, landfills, or a reuse certification at the end of the project. Failure to submit weight tickets associated with the project may result in a penalty fee up to \$50,000.
- **Seattle, Washington** - The City of Seattle passed an ordinance that requires all construction and demolition projects to divert select nonhazardous waste materials. Materials required for diversion include asphalt paving, bricks, concrete, and clean wood. Materials must be delivered and processed at a City approved CDD recycling facility. Some materials, including painted materials, hazardous materials, or those materials present in very small quantities are excluded from the requirement for recycling. However, other hazardous or special waste laws may require a contractor to provide special management for these materials. All demolition and remodeling projects that are 750 square feet or more or more than \$75,000 in value must complete a salvage assessment before they can obtain a building permit. They also must submit a waste diversion report upon completion of the project. A civil fine of \$250 plus statutory assessments may be applied if a waste diversion report is not submitted.

Research on CDD recycling requirements implemented by other municipalities is included in **Appendix B**.

DRAFT BID LANGUAGE

The SCS Team prepared draft request for proposals (RFP) bid language the county might consider incorporating into future procurements for construction and/or demolition services. The draft bid language prepared is based on the research completed as part of this project as well as the County's priorities for CDD reuse and recycling. The draft bid language includes four (4) key parts that comprise the full requirement for CDD reuse and recycling as follows:

- **Overview and Goals** – This part of the bid specification establishes the county’s goal with CDD waste diversion. It provides rationale for the requirement and its alignment with the County’s overall goal to reduce and recycle waste.
- **Requirements** – This portion of the specification lists the requirements of the contractor. This includes requirements to comply with applicable waste management laws and the acceptable methods of diversion in order to achieve the established diversion requirement. It also specifies the requirement for submittal of a Waste Management Plan to demonstrate the contractor’s methods and plan for diverting CDD.
- **Reporting** – This section of the bid specifications details the reporting requirements for contractors to comply with the CDD diversion requirements. It specifies what information must be reported to the County and the timeframe for which reporting must occur.

Allegheny County Sample Bid Requirements for CDD Diversion

Waste Management Requirements

Overview and Goals

Building materials and construction site waste must be properly managed to reduce the risk of pollution to the environment and protection of public health. Allegheny County prioritizes waste reduction and diversion measures in their operations to facilitate a sustainable community. The county has established several programs to divert waste materials from disposal through reduction, reuse, and recycling. The county requires contractors to use all means available to divert the greatest practical and economically feasible construction and demolition waste from disposal in landfills or incineration.

Requirements

To divert waste materials generated from contracted activities, Allegheny County requires the following of the selected contractor:

- Knowledge and compliance with regulatory requirements, including but not limited to Federal, State, and local requirements for the legal disposal and recycling of construction and demolition waste.
- Implementation of waste reduction and separation practices.
- Diversion of Act 101 mandated recyclable materials generated from contracted activities, including corrugated paper, aluminum, plastics, and steel and bimetallic cans

Allegheny County Sample Bid Requirements for CDD Diversion (continued)

- Diversion of at least 50 percent of the construction and demolition waste generated by the contracted activities. Construction and demolition waste includes, but is not limited to, scrap metal, clean lumber and pallets, roofing materials, concrete, brick and masonry, and Gypsum board/wallboard. Acceptable methods of diversion include:
 - Recycling, reuse, and salvage
 - Donation to nonprofit organizations
 - Removal from jobsite by staff or subcontractors for use (not disposal)
 - Return to supplier
 - Sale to organizations or individuals

- A Waste Management Plan for the project upon contract award that details the methods used to comply with this requirement. The Waste Management Plan shall include the material types and estimated quantities generated and expected to be diverted along with how the contractor will divert the materials. The Waste Management Plan must be submitted to and approved by the county prior to demolition or construction activities taking place.

Contractors unable to meet the requirements of this section must submit a report to the county detailing efforts and activities taken to meet these requirements and why those efforts and activities have been deemed to not be successful. Evidence must be submitted as part of this report. The county reserves the right to reject the report.

Reporting

Within 60 days of completion of contracted activities, the contractor must submit a report to the county detailing the contractor's performance in meeting the waste management requirements of this section. The report must include the following:

- Types and quantities of each waste material generated and diverted from contracted activities, including both Act 101 materials and construction and demolition debris
- Methods/activities employed to divert each material type (i.e. recycling, reuse, return to supplier, etc.) and material quantity by method/activity
- The company names and addresses utilized to meet the diversion requirements

4 CONCLUSION

Implementation of an internal County policy that requires the diversion and reuse/recycling of CDD materials from county-sponsored projects will aid in the county's goal to create a sustainable community. Properly managing building debris is important for ensuring public safety and protecting the environment.

Appendix A
CDD Recycling Facilities Research

Bricks and Masonry - Potential Recycling Opportunities

Distance to Allegheny County (mi)	Feasible Market?	Company/Organization	Address	Phone Number	Email	Website	Transportation of Materials	Contamination policy	Rates/tipping fees	Payment type (billed,account, cash, etc)
5	Yes	Habitat for Humanity	6435 Frankstown, Ave Suite 100 Pittsburgh, PA 15206	(412) 244-7100	--	https://www.habitatpittsburgh.org/	--	--	--	--
10	Yes	Michael Brothers Companies	910 Horning Rd Pittsburgh, PA 15236	(412) 835-6428	--	--	Contracted hauler or self-haul	No contamination allowed	\$90/ton, 1 ton minimum	Credit card
20	Yes	Woehler Landscape Supply	202 Buckeye St McMurray, PA 15317	(724) 941-6363	supply@woehlerlandscapessupply.com	--	--	--	--	--
125	Potential	Baumann's Recycling Center	4801 Chaincraft Rd Cleveland, OH 44125	(216) 823-2244	deanna@baumann-enterprises.com	--	--	--	--	--
280	No	Huckleberry Associates	4359 Huckleberry Rd Allentown, PA 18104	(610) 398-8666	--	https://www.hkgroup.com/companies/huckleberry-associates-inc	--	--	--	Check or credit card
320	No	Revolution Recovery LLC (Construction Waste Management)	7333 Milnor St Philadelphia, PA	(215) 333-6505	--	--	--	--	--	--

Concrete - Potential Recycling Opportunities

Distance to Allegheny County (mi)	Feasible Market	Company/Organization	Address	Phone Number	Website	Markets/Uses	Transportation of Materials	Contamination policy	Rates/tipping fees	Payment type (billed,account, cash, etc)
10	Yes	Michael Brothers Companies	910 Horning Rd Pittsburgh, PA 15236	(412) 835-6428	--	--	Contracted hauler or self-haul	No contamination allowed	\$90/ton, 1 ton minimum	Credit card
20	Yes	Iron City Express	1306 Main St Crescent, PA 15046	--	https://ironcityexpress.com/c%26d-disposal	Reuse/Recycling	Contracted hauler	No contamination allowed	\$78.20/ton, 1 ton minimum	Bill, account, or credit card
270	No	Zwicky Processing & Recycling, Inc.	220 Buena Vista Rd Fleetwood, PA 19522	(482) 248-5300	http://zwickyrecycles.com/	Biomass fuel	--	--	--	--
280	No	Huckleberry Associates	4359 Huckleberry Rd Allentown, PA 18104	(610) 398-8666	https://www.hkgroup.com/companies/huckleberry-associates-inc	--	--	--	--	Check or credit card
285	No	Revolution Recovery LLC (Construction Waste Management)	644 S 10th St Allentown, PA 18103	(484) 416-6505	--	--	--	--	--	--
285	No	Total Recycling Corp	1820 North Dauphin St Allentown, PA 18109	(610) 266-0907	--	--	--	--	--	--
290	No	Crushcrete Recycling	1965 Silvex Rd Bethlehem, PA 18015	--	https://www.crushcrete.com/	--	--	--	--	--
300	No	Philadelphia Recycling Company	3022 N 16th St Philadelphia, PA 19127	(215) 990-4350	https://www.philadelphiarecycling.co/materials	--	--	--	--	--
305	No	Richard S. Burns And Company Inc	4300 Rising Sun Ave Philadelphia, PA 19140	(215) 324-6377	--	--	--	--	--	--
310	No	A.H. Cornell & Son, Inc.	2362 York Rd Jarnison, PA 18929	(215) 343-1830	--	--	--	--	--	--
310	No	Delaware Valley Recycling, Inc.	3107 South 61st St Philadelphia, PA 19153	(610) 865-1898	https://www.hkgroup.com/companies/delaware-valley-recycling-inc	--	--	--	--	--
320	No	Colony Materials, LLC	7144 Danboro-Point Pleasant Pike Point Pleasant, PA 18950	(610) 584-8500	--	--	--	--	--	--

Flooring - Potential Recycling Opportunities

Distance to Allegheny County (mi)	Feasible Market?	Company/Organization	Address	Phone Number	Email	Website	Markets/Uses	Restrictions	Transportation of Materials	Contamination policy	Rates/tipping fees	Payment type (billed,account, cash, etc)
5	Yes	Habitat for Humanity of Greater Pittsburgh	6435 Frankstown Ave, Ste 100 Pittsburgh, PA 15206	(412) 450-8520	--	--	--	--	--	--	--	--
10	Yes	Construction Junction	214 North Lexington St Pittsburgh, PA 15208	--	mgable@cjreuse.org	--	Resell	Must be in suitable conditions	Company offers free hauling	Minimum contamination	--	--
320	No	Revolution Recovery LLC (Construction Waste Management)	7333 Milnor St Philadelphia, PA 19136	(215) 333-6505	--	--	Hauled to Processor	--	--	--	--	--

Gypsum Board - Potential Recycling Opportunities

Distance to Allegheny County (mi)	Feasible Market?	Company/Organization	Address	Phone Number	Email	Website
0	Yes	Agrecycle, Inc	335 North Braddock Ave Pittsburgh, PA	(412) 767-7645	info@agrecycle.com	www.agrecycle.com
5	Yes	Recycle Source, LLC	50 Vespuccius St Pittsburgh, PA	(412) 421-6000	info@recyclesourcellc.com	www.recyclesourcellc.com

Roofing Materials - Potential Recycling Opportunities


Distance to Allegheny County (mi)	Feasible Market?	Company/Organization	Address	Phone Number	Email	Website	Markets/Uses
5	Yes	Habitat for Humanity	6435 Frankstown Ave, Suite 100, Pittsburgh, PA 15206	(412) 244-7100	--	https://www.habitatpittsburgh.org/	Resell
15	Yes	Woehler Landscape Supply & Recycling Yard	202 Buckeye St McMurray, PA 15317	(724) 941-6965	--	--	Recycle
130	Potential	Glenn O. Hawbaker Recycling Center	110 Hawbaker Industrial Drive St State College, PA	(814) 272-0008	recycle@goh-inc.com	--	Asphalt paving

Treated, Painted, & Stained Wood - Potential Recycling Opportunities

Distance to Allegheny County (mi)	Feasible Market?	Company/Organization	Address	Phone Number	Email	Website	Markets/Uses	Restrictions	Transportation of Materials	Contamination policy	Rates/tipping fees	Payment type (billed,account, cash, etc)
35	Yes	McCutcheon Enterprises	250 Park Rd Apollo, PA 51613	(724) 568-3623	--	--	--	Act 90 Certification required in select scenarios	Contracted hauler	Railroad ties not accepted	First 500 lbs is \$50 (1,000 lbs minimum), every lb after is \$0.50	Credit card

Clean and Untreated Wood - Potential Recycling Opportunities

Distance to Allegheny County (mi)	Feasible Market?	Company/Organization	Address	Phone Number	Email	Website	Markets/Uses	Restrictions	Transportation of Materials	Contamination policy	Rates/tipping fees	Payment type (billed,account, cash, etc)
5	Yes	Boyd Roll-Off Services, Inc.	1200 Railroad Pl McKees Rocks, PA	(412) 331-6830	--	www.boydrolloff.com	Recycle	--	Company hauls	No contamination allowed	Scenario dependent	Scenario dependent
5	Yes	Recycle Source, LLC	50 Vespuccius St Pittsburgh, PA	(412) 421-6000	info@recyclesourcecell.com	www.recyclesourcecell.com	--	--	--	--	--	--
10	Yes	Michael Brothers Companies	910 Horning Rd Pittsburgh, PA 15236	(412) 835-6428	--	--	--	--	Contracted hauler or self-haul	No contamination allowed	\$90/ton, 1 ton minimum	Credit card
15	Yes	Diamond Mulch	1 Hershey Rd Indianola, PA 15051	(412) 767-8834	--	--	Mulch	--	--	--	--	--
20	Yes	JA Rutter Co.	4917 Old William Penn Hwy Monroeville, PA 15146	(724) 327-1101	--	--	Landscaping	Limited capacity	Contracted hauler, self-haul, or company hauls	No contamination allowed	Scenario dependent	Cash, checks, or credit card



Appendix B
CDD Recycling Requirements by Municipality

Municipality	Ordinance	Project Types	Material Requirements	Reporting Requirements	Books and Records Requirements	Penalties	Reference
City of Chicago, Illinois	[11-4-1905] Construction and Demolition Site Waste Recycling Ordinance	1. Construction or demolition of a new residential building with four or more units (includes the demolition of at least one side wall) 2. Construction or demolition of a new non-residential building, other than projects for which the total square footage is 4,000 square feet or less 3. Any rehabilitation of a building that will require a certificate of occupancy issue from the department of buildings 4. Demolition of a residential building with four or more units that includes the demolition of at least one side wall	Must be recyclable at least 50% of recyclable debris generated	Must submit a Recycling Compliance Form to the Department of Public Health within 30 days of completion of a project, along with an affidavit from the waste hauler or recycler	Contractors must maintain copies of the C&D Debris Recycling Compliance Forms submitted to the Department, and the original documentation that supports the weight of recycled, reused, and disposed of C&D debris reported on these forms, for at least 3 years after they were submitted	1. For construction projects or demolitions 10,000 square feet or more: \$1,000 for each percentage point of difference between the amount required to be recycled and the amount actually recycled 2. For construction projects or demolitions less than 10,000 square feet: \$500 for each percentage point of difference between the amount required to be recycled and the amount actually recycled	https://www.chicago.gov/city/en/depts/streets/supp_info/construction_anddemolitionsites.html
San Bernardino County, California	2019 CALGreen Code	Projects subject to this ordinance: 1. Newly constructed buildings 2. Commercial additions greater than 1,000 square feet 3. Alteration projects valued greater than \$200,000 Projects exempt from this ordinance (as permitted by the enforcing agency): 1. Excavated soil and land-clearing debris 2. Alternate waste reduction methods if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite 3. Isolated jobsites that are located in areas beyond the haul boundaries of the diversion facility	Must divert at least 65% of (nonhazardous) construction waste or dispose of less than 2 pounds per square foot of construction waste material relative to the project size.	Must submit a Construction Waste Management Plan prior to starting a project and submit waste hauler invoices, receipts from recycling facilities, landfills, or a reuse certification at the end of the project	Contractors must maintain a copy of their construction waste management plan and it shall be updated as necessary during construction	Contractors that do not comply will be subject to back charges or withholding of payment as deemed appropriate	Construction Waste Management – Public Works (sbounty.gov)
Lee County, Florida	Recycling Ordinance #07-25	1. "Covered" projects, which are defined as any project for which a building, demolition, or other similar permit is required by County Ordinance 2. Residential and Commercial construction greater than \$90,000 in value 3. Alterations greater than \$10,000 in value 4. Roofing projects requiring old roofing removal 5. Projects requiring only mechanical, electrical, or plumbing are excluded and can request an exemption 6. Demolition or Construction required to protect public health or safety in an emergency is exempt from the ordinance (subject to change)	Must divert at least 50% of all debris disposed by weight	Must submit a Recycling Certification Form, a Material Handling Worksheet, and copies of all disposal tickets		Contractors that do not comply are subject to Civil or Criminal Action by the County. 1. Civil: a violation of this Ordinance may subject the Permittee to a fine up to \$15,000 per violation. Each day a violation continues to exist constitutes a separate violation 2. Criminal: a violation of this Ordinance may constitute a second-degree misdemeanor punishable by: a \$500 fine, up to 10 days imprisonment or community service, both fine and imprisonment or community service	Construction & Demolition Debris Recycling (leegov.com)
Austin, Texas	Ordinance #20151119-08	1. Building permits for more than 5,000 square feet of new, added, or remolded floor area 2. Commercial and multifamily demolition projects of all sizes	Must divert at least 50% of the construction project debris from the landfill or dispose of no more than 2.5 pounds of material per square foot of permitted floor area in the landfill	Must submit the required construction recycling report when a final building inspection is requested	Contractors should track and log weight tickets throughout the project. A qualified processor should make its records available for audit by the department during regular business hours	Contractors that do not comply with the recycling requirements are subject to a Class C misdemeanor, punishable by fines up to \$500 per day, per offense	Construction and Demolition Recycling Ordinance AustinTexas.gov
Chittenden County, Vermont	Act 175 (state law), CSWD Ordinance (local law)	Some construction, deconstruction, or demolition projects are required to separate architectural waste (clean wood, asphalt shingles, scrap metal, drywall, plywood, oriented strand board) for the purpose of recycling if they meet all of the following conditions: 1. The project produces 40 cubic yards or more of architectural waste 2. The project site is within 20 miles of a solid waste facility that recycles architectural waste 3. The construction or demolition project is for a commercial building or a residential building with 2 or more units	Must divert "architectural waste materials" from the landfill to a recycling facility	Projects involving more than 5,000 square ft. of construction and/or demolition are required to submit a Construction Waste Management Plan	Keep records for materials recycled and disposed. At a minimum, contractors will want to keep weight tickets for the duration of the project.	Violators are subject to fines up to \$500 per incident	Construction and Demolition (C&D) Materials - CSWD
Seattle, Washington	Ordinance 123553 codified in Seattle Municipal Code 21.36.089	The ordinance prohibits the disposal of asphalt paving, bricks, concrete, metal, cardboard, new construction gypsum scrap, and clean wood in any type of garbage container at construction sites. Materials must be delivered to a qualified CDD recycling facilities. Exceptions to this ordinance include painted materials, those made with hazardous materials, or those present in very small quantities.	Must divert (nonhazardous) asphalt paving, bricks, concrete, metal, cardboard, new construction gypsum scrap, and clean wood from the landfill	All demolition and alteration projects of 750 square feet or greater than \$75,000 or more in value must complete a salvage assessment before they can obtain a building permit. They also must submit a waste diversion report upon completion of the project	Weight tickets need to be kept for at least a month after submittal of a project waste diversion report (Audits may take place within 30 days of their submittal)	A civil fine of \$250 plus statutory assessments may be applied if a waste diversion report is not submitted To enforce C&D debris recycling regulations, SPU periodically inspects construction sites and C & D processing facilities.	Chapter 8 (seattle.gov)
Orange County, North Carolina	Article III	1. All regulated recyclable material generated in Orange County unless it is hazardous, or the recyclable material is attached to other material in a way that it is not reasonably possible to separate the regulated recyclable material into its constituent parts. 2. All structures 500 square feet and larger that are demolished must be assessed by Solid Waste staff to determine the recyclability or reusability of materials in the structure prior to issuance of a demolition permit	Must divert recyclable construction and demolition material, ferrous and nonferrous scrap metal, pallets, corrugated cardboard and other materials (regardless of originating in municipal solid waste stream or construction and demolition waste stream).	Any person applying for a building permit and/or zoning compliance permits, shall apply for a Recyclable Material Management Permit before any construction activity starts.		1. Any person disposing of regulated recyclable material in violation of the article shall pay double the tip fee in effect at the time of disposal. 2. If any RM licensee has violated a condition of the license, the licensee shall receive a notice and if the violation is not corrected, their RM license will be revoked. 3. Any person violating this article shall be guilty of a misdemeanor punishable by a fine up to \$500 or up to 30 days in prison.	Article III Regulated Recyclable Materials and Licensing the Collection of Regulated Recyclable Material PDF (orangecountync.gov)
City of Madison, Wisconsin	Ordinance 10.185 (2)	Projects subject to this ordinance: 1. The construction or demolition of a multi-family dwelling constructed using concrete and steel supports 2. The construction or demolition of a commercial building where the total square footage of the space involved is over one thousand (1,000) square feet	The owner or contractor must recycle or reuse at least 70% of the construction and demolition debris produced on site, as measured by weight or volume.	The owner or contractor must submit documentation certifying compliance within 60 days of completing a project (must include documented weights of recyclables and where/how the debris were recycled or reused). The Street Superintendent may issue an audit up to two years after the submission of certification to verify compliance.	The owner or contractor must maintain documentation supporting compliance with this section for two years after submission of the certification form.	1. For construction or demolition projects involving ten thousand (10,000) square feet of newly constructed and/or demolished space, for each percentage point between the amount required to be recycled or reused and the actual amount recycled or reused is subject to a fine between \$50 and \$500 2. For construction or demolition projects involving less than ten thousand (10,000) square feet of newly constructed and/or demolished space, for each percentage point between the amount required to be recycled or reused and the actual amount recycled or reused is subject to a fine between \$25 and \$250	CHAPTER 10 - STREETS, ALLEYS, SIDEWALKS AND GUTTERS Code of Ordinances Madison, WI Municode Library
	Ordinance 10.185 (3)	Projects subject to this ordinance: 1. The construction or demolition of multi-family dwellings using wood frame construction 2. The construction or demolition of a single-family, two-family, or three-family dwelling 3. Except for roofing projects, the remodeling of a residential or commercial building where the total value of the project is twenty thousand dollars (\$20,000) or greater 4. Any roofing project that includes the tear-off of the existing roof materials Projects exempt from this ordinance: 1. A project that only required a plumbing permit, an electrical permit, or an HVAC mechanical permit 2. A project for which a building permit or demolition permit is not required 3. A project for which, due to changes in the markets for recycled material, the Street Superintendent waives the requirements of this section	Must recycle or reuse the following materials: clean wood, non-toxic metals, clean drywall scrap materials, corrugated cardboard, and shingles	The owner or contractor must submit documentation certifying compliance within 60 days of completing a project (must include documented weights of recyclables and where/how the debris were recycled or reused). The Street Superintendent may issue an audit up to two years after the submission of certification to verify compliance.	The owner or contractor must maintain documentation supporting compliance with this section for two years after submission of the certification form.	1. Any person who fails to comply with this section will be subject to a fine between \$50 and \$500 for the first estimated ton of construction or demolition debris not recycled or reused, and a fine between \$100 and \$1,000 for each subsequent ton of construction or demolition debris not recycled or reused	CHAPTER 10 - STREETS, ALLEYS, SIDEWALKS AND GUTTERS Code of Ordinances Madison, WI Municode Library

La Habra City, California	La Habra City Municipal Code 15.78.025	<u>Projects subject to this ordinance:</u> 1. Residential additions of 1,000 square feet or more of gross floor area 2. Tenant improvements of 3,000 square feet or more by gross floor area 3. New structures of 1,000 square feet or more of gross area 4. Demolition of 1,000 square feet or more of gross area 5. All city public works and city public construction projects, which are awarded pursuant to the competitive bidding procedure	Must recycle at least 50% of all construction and demolition waste	Must submit a waste management plan with the estimated volume/weight of each material going to be used as well as how much of each material is going to be diverted and how much is going to the landfill. They are also required to identify facilities that will collect the recycled waste. The contractor must also submit a final report with the same information after knowing the actual volumes/weights of materials.		1. A violation shall be prosecuted as a misdemeanor or infraction at the option of the city prosecutor with respect to penalties and administrative proceedings.	Chapter 15.78 WASTE MANAGEMENT PLAN FOR CERTAIN CONSTRUCTION AND DEMOLITION PROJECTS WITHIN THE CITY OF LA HABRA [rcode.us]
Los Angeles County, California	Los Angeles County Code, Chapter 20.87	<u>Projects subject to this ordinance:</u> 1. Newly constructed buildings 2. Commercial additions greater than 1,000 square feet 3. Alteration projects valued greater than \$200,000 <u>Projects exempt from this ordinance (as permitted by the enforcing agency):</u> 1. Excavated soil and land-clearing debris 2. Alternate waste reduction methods if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite 3. Isolated jobsites that are located in areas beyond the haul boundaries of the diversion facility	Must divert at least 65% of (nonhazardous) construction waste or dispose of less than 2 pounds per square foot of construction waste material relative to the project size.		Must submit a Construction Waste Management Plan prior to starting a project and submit waste hauler invoices, receipts from recycling facilities, landfills, or a reuse certification at the end of the project	Failure to submit weight tickets associated with the project may result in a penalty fee up to \$50,000.	c&d_ORD_final.pdf (lacounty.gov)