

A.2 Construction and Demolition Debris Combined Composition Analysis and Projections

Step 1. Planning Unit and Planning Period Selection

Please, select from the drop-down-list the name of your planning unit and the planning period of your LSWMP. Be aware that a LSWMP must be developed for a 10-year period, and that your selection will be replicated on each one of the following tabs.

Planning Unit	Chautauqua County
Planning Period	2024-2033

Step 2. Construction & Demolition (C&D) Debris Material Composition Analysis

In order to Identify the Materials Composition of the C&D Debris waste stream, it is necessary to define the sources of the waste first.

Construction and demolition (C&D) Debris consists of waste that is generated during renovation, demolition or new construction of residential and non residential properties. It also includes the new construction and/or renovation of municipal infrastructure, such as roadways, park facilities, bike trails, bridges, etc. The user should estimate these values and enter them in the **purple cells**.

The results are presented on the last right column under C&D Debris Waste Stream Composition. Be aware of color changes on the cells, whenever a category represents over 15% of the total generation, the cell will turn **red** to easy identify key categories on the waste stream. It will also aid with the selection of isolated initiatives, programs, and infrastructure for the solid waste management system.

Note:

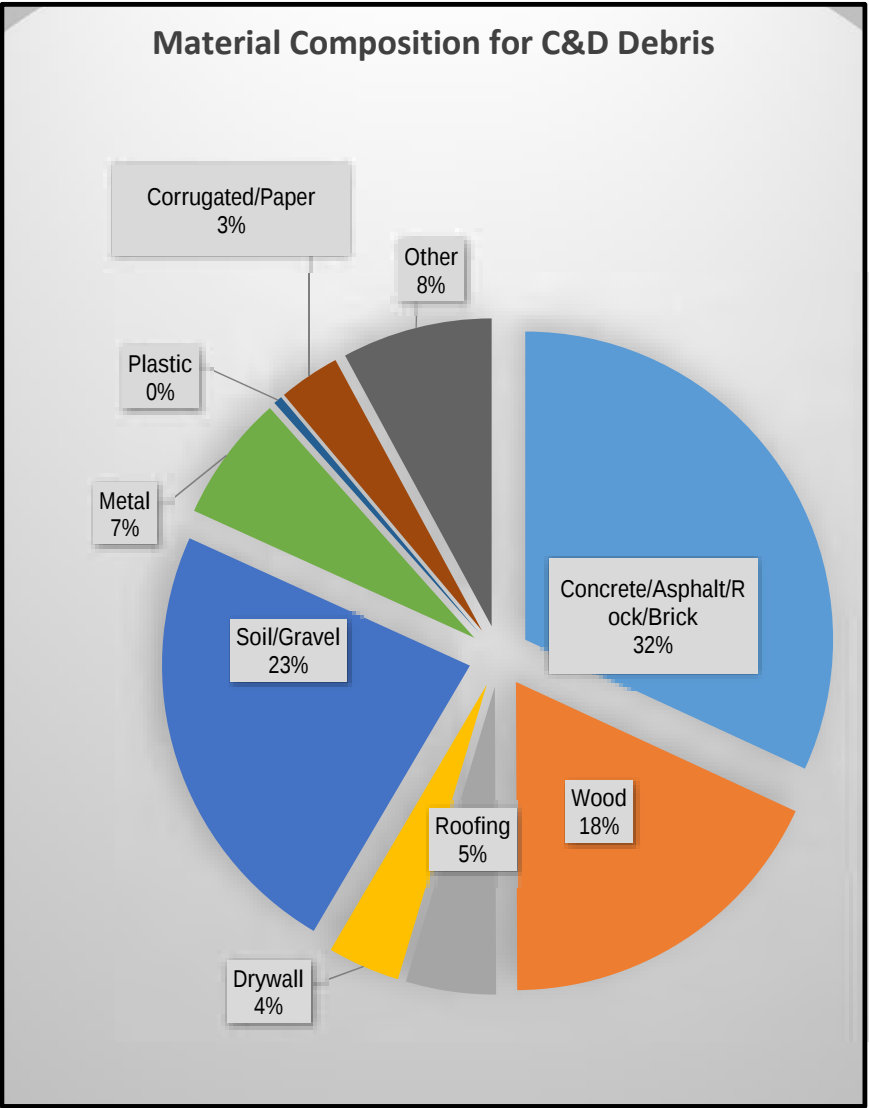
- The graphic displays the planning unit's C&D Debris generation data by material categories. It has been designed to help visualize the more representative categories of the waste stream.

Chautauqua County

2024-2033

		Generation source								
		Residential				Non- Residential (commercial-institutional)				Other Municipal Infras- tructure
		30.00%				30.00%				40.00%
		New Construction	Renovation	Demolition	Combined Residential	New Construction	Renovation	Demolition	Combined Non- Residential	Renovation
		20.00%	20.00%	60.00%	100.00%	60.00%	20.00%	20.00%	100.00%	100.00%
Materials	Concrete/ Asphalt /Rock/Brick	9.80%	16.10%	21.50%	18.08%	30.70%	19.10%	23.10%	26.86%	46.00%
	Wood	29.90%	19.10%	25.70%	25.22%	22.70%	12.40%	24.20%	20.94%	10.50%
	Roofing	6.00%	22.00%	6.10%	9.26%	2.10%	21.20%	5.10%	6.52%	0.00%
	Drywall	15.60%	7.90%	5.10%	7.76%	4.60%	6.40%	4.30%	4.90%	0.00%
	Soil/Gravel	11.30%	7.10%	18.50%	14.78%	13.10%	6.50%	15.60%	12.28%	38.00%
	Metal	5.30%	11.30%	5.20%	6.44%	12.00%	15.50%	11.10%	12.52%	2.40%
	Plastic	1.50%	0.70%	0.30%	0.62%	0.50%	0.70%	0.30%	0.50%	0.30%
	Corrugated cardboard/ Paper	9.30%	2.90%	3.10%	4.30%	7.10%	4.60%	4.20%	6.02%	0.30%
	Other	11.30%	12.90%	14.50%	13.54%	7.20%	13.60%	12.10%	9.46%	2.50%
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

C&D Debris Materials Composition (%)
100.00%
31.88%
18.05%
4.73%
3.80%
23.32%
6.65%
0.46%
3.22%
7.90%
100.00%



Step 3. Construction & Demolition (C&D) Debris Generation Projections

This step will estimate the amount of waste generated for each material based on the total amount of waste generated in that year. In the purple cells enter the amount of waste generated in the Planning Unit. It will be a known amount for the first year, 2023 and an estimate of what will be generated for each year of the planning period, 2024-2033

Chautauqua County

2024-2033

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
			C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	
Materials	Concrete/Asphalt /Rock/Brick	67.2%	69,692.3	68,995.4	68,305.5	67,622.4	66,946.2	66,276.7	65,613.9	64,957.8	64,308.2	63,665.1	63,028.5	
	Wood	8.7%	9,012.3	8,922.1	8,832.9	8,744.6	8,657.1	8,570.6	8,484.9	8,400.0	8,316.0	8,232.9	8,150.5	
	Roofing	2.3%	2,363.9	2,340.3	2,316.9	2,293.7	2,270.8	2,248.1	2,225.6	2,203.3	2,181.3	2,159.5	2,137.9	
	Drywall	1.8%	1,896.5	1,877.6	1,858.8	1,840.2	1,821.8	1,803.6	1,785.5	1,767.7	1,750.0	1,732.5	1,715.2	
	Soil/Gravel	11.2%	11,643.8	11,527.4	11,412.1	11,298.0	11,185.0	11,073.2	10,962.4	10,852.8	10,744.3	10,636.9	10,530.5	
	Metal	3.2%	3,319.7	3,286.5	3,253.6	3,221.1	3,188.9	3,157.0	3,125.4	3,094.2	3,063.2	3,032.6	3,002.3	
	Plastic	0.2%	227.7	225.4	223.2	220.9	218.7	216.5	214.4	212.2	210.1	208.0	205.9	
	Corrugated cardboard/Paper	1.5%	1,605.9	1,589.9	1,574.0	1,558.2	1,542.6	1,527.2	1,511.9	1,496.8	1,481.8	1,467.0	1,452.4	
	Other	3.8%	3,944.9	3,905.4	3,866.4	3,827.7	3,789.4	3,751.5	3,714.0	3,676.9	3,640.1	3,603.7	3,567.7	
Total			100.0%	103,707.1	102,670.0	101,643.3	100,626.8	99,620.6	98,624.4	97,638.1	96,661.7	95,695.1	94,738.2	93,790.8

* Due to the large quantity of concrete/asphalt/rock/brick diverted, the C&D debris materials composition was modified to ensure no diversion percentage over 100% would be calculated.

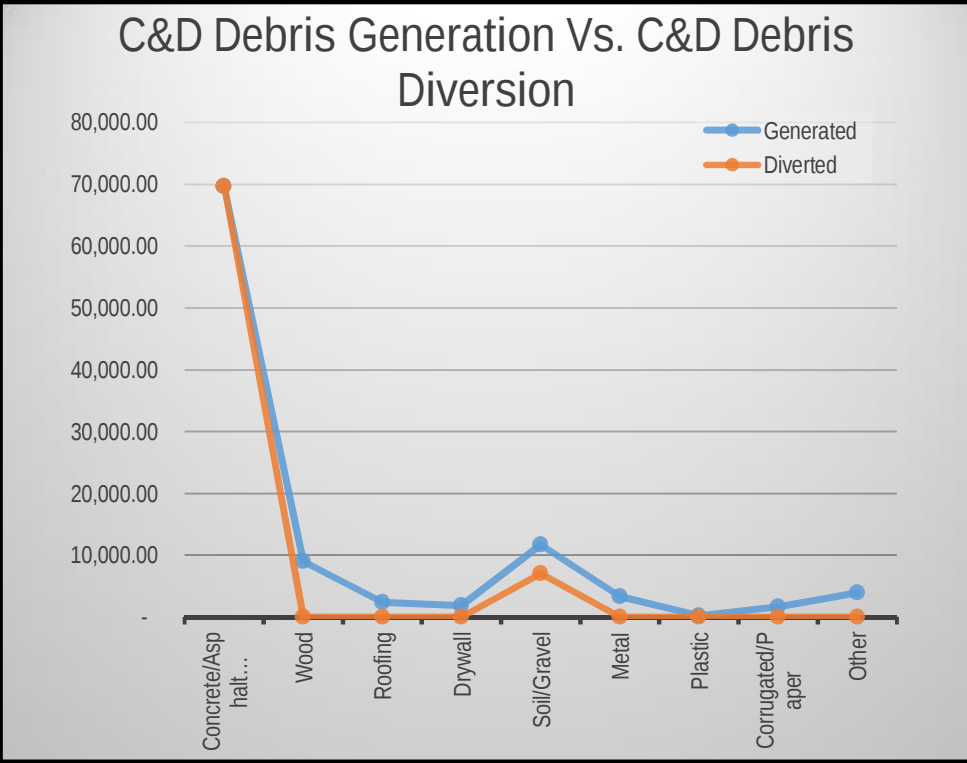
Step 4. Construction & Demolition (C&D) Debris Diversion Projections

Based on the total amount of C&D debris generated in the Planning Unit, which was entered in Step 3, this step will be used to calculate the % of this material that is diverted from the C&D debris waste stream. For this step, enter the amount of waste diverted for each material in the purple cells.

Chautauqua County

2024-2033

		2023			
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Diverted (Tons)	% C&D Diverted
Materials	Concrete/Asphalt /Rock/Brick	67.2%	69,692.3	69,692.3	100.0%
	Wood	8.7%	9,012.3	40.0	0.4%
	Roofing	2.3%	2,363.9	0.0	0.0%
	Drywall	1.8%	1,896.5	0.0	0.0%
	Soil/Gravel	11.2%	11,643.8	7,020.0	60.3%
	Metal	3.2%	3,319.7	46.5	1.4%
	Plastic	0.2%	227.7	0.0	0.0%
	Corrugated cardboard/Paper	1.5%	1,605.9	0.0	0.0%
	Other	3.8%	3,944.9	0.0	0.0%
Total		100.0%	103,707.1	76,798.8	74.1%



* Due to the large quantity of concrete/asphalt/rock/brick diverted, the C&D debris materials composition was modified to ensure no diversion percentage over 100% would be calculated.

Step 5. Construction and Demolition (C&D) Debris Generation and Diversion Projections

This tab will be used to create goals for the amount of C&D debris the planning unit will divert for each year of the planning period. These goals will be entered as percentages, based on how much of the material generated that will be diverted for recycling or beneficial use. The diversion goal percentages will be entered in the purple cells for each material and each year of the planning period.

Chautauqua County																			2024-2033		
			2023			2024			2025			2026			2027			2028			
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	
Materials	Concrete/Asphalt /Rock/Brick	67.2%	69,692.3	69,692.3	100.0%	68,995.4	68,995.4	100.0%	68,305.5	68,305.5	100.0%	67,622.4	67,622.4	100.0%	66,946.2	66,946.2	100.0%	66276.7	66276.7	100.0%	
	Wood	8.7%	9,012.3	40.0	0.4%	8,922.1	128.8	1.4%	8,832.9	215.9	2.4%	8,744.6	301.1	3.4%	8,657.1	384.7	4.4%	8570.6	466.6	5.4%	
	Roofing	2.3%	2,363.9	0.0	0.0%	2,340.3	0.0	0.0%	2,316.9	0.0	0.0%	2,293.7	0.0	0.0%	2,270.8	0.0	0.0%	2248.1	0.0	0.0%	
	Drywall	1.8%	1,896.5	0.0	0.0%	1,877.6	0.0	0.0%	1,858.8	0.0	0.0%	1,840.2	0.0	0.0%	1,821.8	0.0	0.0%	1803.6	0.0	0.0%	
	Soil/Gravel	11.2%	11,643.8	7,020.0	60.3%	11,527.4	7,065.1	61.3%	11,412.1	7,108.5	62.3%	11,298.0	7,150.4	63.3%	11,185.0	7,190.8	64.3%	11073.2	7229.6	65.3%	
	Metal	3.2%	3,319.7	46.5	1.4%	3,286.5	78.9	2.4%	3,253.6	110.6	3.4%	3,221.1	141.7	4.4%	3,188.9	172.2	5.4%	3157.0	202.0	6.4%	
	Plastic	0.2%	227.7	0.0	0.0%	225.4	0.0	0.0%	223.2	0.0	0.0%	220.9	0.0	0.0%	218.7	0.0	0.0%	216.5	0.0	0.0%	
	Corrugated /Paper	1.5%	1,605.9	0.0	0.0%	1,589.9	0.0	0.0%	1,574.0	0.0	0.0%	1,558.2	0.0	0.0%	1,542.6	0.0	0.0%	1527.2	0.0	0.0%	
	Other	3.8%	3,944.9	0.0	0.0%	3,905.4	0.0	0.0%	3,866.4	0.0	0.0%	3,827.7	0.0	0.0%	3,789.4	0.0	0.0%	3751.5	0.0	0.0%	
Total		100.0%	103,707.1	76,798.8	74.1%	102,670.0	76,268.2	74.3%	101,643.3	75,740.5	74.5%	100,626.8	75,215.7	74.7%	99,620.6	74,693.8	75.0%	98,624.4	74,174.9	75.2%	
			2029			2030			2031			2032			2033						
			C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted				
			65,613.9	65,613.9	100.0%	64,957.8	64,957.8	100.0%	64,308.2	64,308.2	100.0%	63,665.1	63,665.1	100.0%	63,028.5	63,028.5	100.0%				
			8,484.9	546.8	6.4%	8,400.0	625.3	7.4%	8,316.0	702.2	8.4%	8,232.9	777.5	9.4%	8,150.5	851.2	10.4%				
			2,225.6	0.0	0.0%	2,203.3	0.0	0.0%	2,181.3	0.0	0.0%	2,159.5	0.0	0.0%	2,137.9	0.0	0.0%				
			1,785.5	0.0	0.0%	1,767.7	0.0	0.0%	1,750.0	0.0	0.0%	1,732.5	0.0	0.0%	1,715.2	0.0	0.0%				
			10,962.4	7,266.9	66.3%	10,852.8	7,302.8	67.3%	10,744.3	7,337.2	68.3%	10,636.9	7,370.2	69.3%	10,530.5	7,401.8	70.3%				
			3,125.4	231.3	7.4%	3,094.2	259.9	8.4%	3,063.2	287.9	9.4%	3,032.6	315.4	10.4%	3,002.3	342.2	11.4%				
			214.4	0.0	0.0%	212.2	0.0	0.0%	210.1	0.0	0.0%	208.0	0.0	0.0%	205.9	0.0	0.0%				
			1,511.9	0.0	0.0%	1,496.8	0.0	0.0%	1,481.8	0.0	0.0%	1,467.0	0.0	0.0%	1,452.4	0.0	0.0%				
			3,714.0	0.0	0.0%	3,676.9	0.0	0.0%	3,640.1	0.0	0.0%	3,603.7	0.0	0.0%	3,567.7	0.0	0.0%				
			97,638.1	73,658.9	75.4%	96,661.7	73,145.8	75.7%	95,695.1	72,635.5	75.9%	94,738.2	72,128.2	76.1%	93,790.8	71,623.8	76.4%				