



ICI/Self-Haul Sub-Committee

April 21, 2021

Agenda



01. Welcome and Call to Order

02. Approval of March 17, 2021 Minutes

03. Action Items

1. Discuss the recoverability of materials in Self Haul.
2. Select other ICI/Self-Haul recommendations to discuss.

04. Public Input

1. Any wishing to be heard on items to pertaining to the agenda.

05. Announcements

1. Next ICI/Self-Haul Sub-Committee Meeting: May 19, 2021, 3:15-4:15 via WebEx.

06. Adjournment

Note: Per Bylaws audience members will have the opportunity to comment after each agenda item and before every votes. Comments must be limited to agenda item topic or vote. Each commenter is limited to four minutes. See bylaws for further details.

Approval of the Minutes

Approval of March 17, 2021 Minutes



Definition of Self-Haul



EXECUTIVE SUMMARY

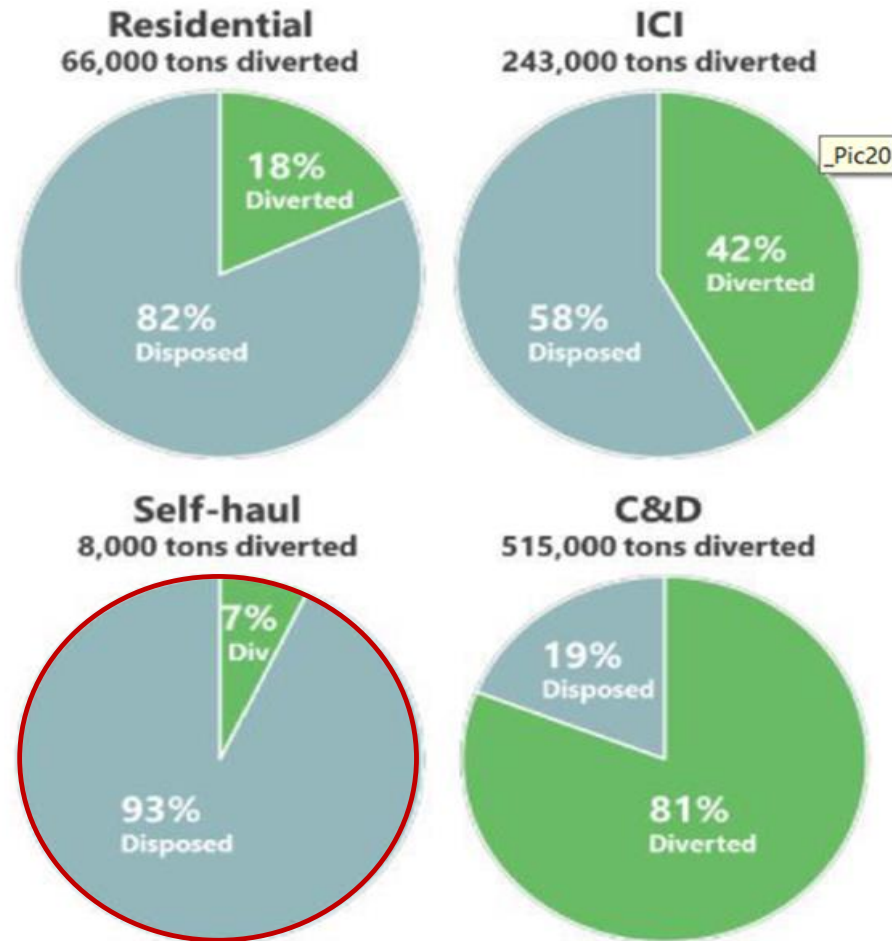
- ◆ **Non-C&D Bulky Waste**, defined as bulky-type materials from sources other than C&D projects, such as warehouse, retail, and other industrial/commercial operations, that are commonly classified as C&D debris at disposal facilities.
- ◆ **Self-haul Waste**, defined as primarily residential material delivered directly to disposal facilities by the original generator in a car, van or small trucks.
- ◆ **Residential Bulky Waste**, defined as material collected by the Louisville Metro Government (LMG) from the USD bulky waste collection service. These materials are delivered in both open bed and compacting type collection vehicles. Because most of this material arrives at the landfill via transfer from the WRC, these materials are also categorized as “C&D” on disposal reports.

Waste Generators

Table ES-2 2015 Jefferson County Waste Disposal Summary

Generator Sector	Tons	Percent: All Solid Waste
Residential up to 8 Units	260,196	29.6%
Multi-Family 9+ Units	48,748	5.5%
ICI	335,514	38.2%
Non-C&D Bulky	75,116	8.5%
Self-Haul	35,034	4.0%
C&D	124,017	14.1%
Total	878,625	100.0%

Self-Haul Materials



Current Diversion Rate

Table 3-13 Detailed Self Haul Waste Composition

Material Category	Conf.			Material Category	Conf.		
	Average	Int (+/-)	Tons		Average	Int (+/-)	Tons
● Paper	0.9%	0.5%	300	● Glass	2.1%	2.1%	752
Corrugated Cardboard/Kraft Paper	0.8%	0.5%	291	All Glass	2.1%	2.1%	752
Remainder Composite Paper	0.0%	0.0%	8	● C&D Materials	40.2%	13.7%	14,099
● Plastic	0.8%	0.7%	264	● Carpet	1.3%	0.9%	449
HDPE (#2) Buckets	0.0%	0.1%	16	● Carpet Padding	0.1%	0.1%	22
Clean Recoverable Film	Not found			● Concrete/Block/Brick/Stone/Tile	8.4%	8.1%	2,929
Remainder/Composite/Other Plastic	0.7%	0.7%	248	Asphalt Paving	Not found		
● Metal	1.7%	1.2%	599	● Roofing Material	11.9%	13.1%	4,155
Appliances	0.6%	0.7%	211	Ceiling Tiles	Not found		
Other Ferrous Metal	1.0%	0.8%	365	● Clean Gypsum Board	7.2%	8.2%	2,511
Other Non-Ferrous Metal	0.1%	0.1%	23	● Painted Gypsum Board	7.1%	5.9%	2,503
● Organics	11.0%	6.9%	3,858	● Dirt/Sand/Gravel	1.6%	2.7%	572
Yard Waste	11.0%	6.9%	3,858	Insulation	0.1%	0.0%	21
Remainder/Composite/Other Organics	Not found			Remainder/Composite/Other C&D	2.7%	2.7%	937
● Wood	29.0%	9.1%	10,168	● Electronics	1.5%	1.3%	513
● Pallets and Crates	0.7%	0.5%	235	Electronics	1.1%	1.2%	368
● Untreated/Unpainted Lumber	8.3%	4.8%	2,904	Items with CRTs	0.4%	0.5%	145
Treated/Painted/Processed Wood	13.3%	8.1%	4,670	● Other Wastes	12.8%	5.9%	4,483
Engineered Wood	2.4%	1.9%	836	Bulky Wastes/Furniture	7.8%	4.2%	2,723
Wood Furniture	3.5%	1.9%	1,239	Tire	Not found		
Other Wood	0.8%	0.7%	284	● All HHW	0.2%	0.2%	59
				Fines/Mixed Residue	0.0%	0.0%	3
				Mixed MSW	4.8%	2.4%	1,698
				Grand Total	100%		35,034
				No. of Samples	54		

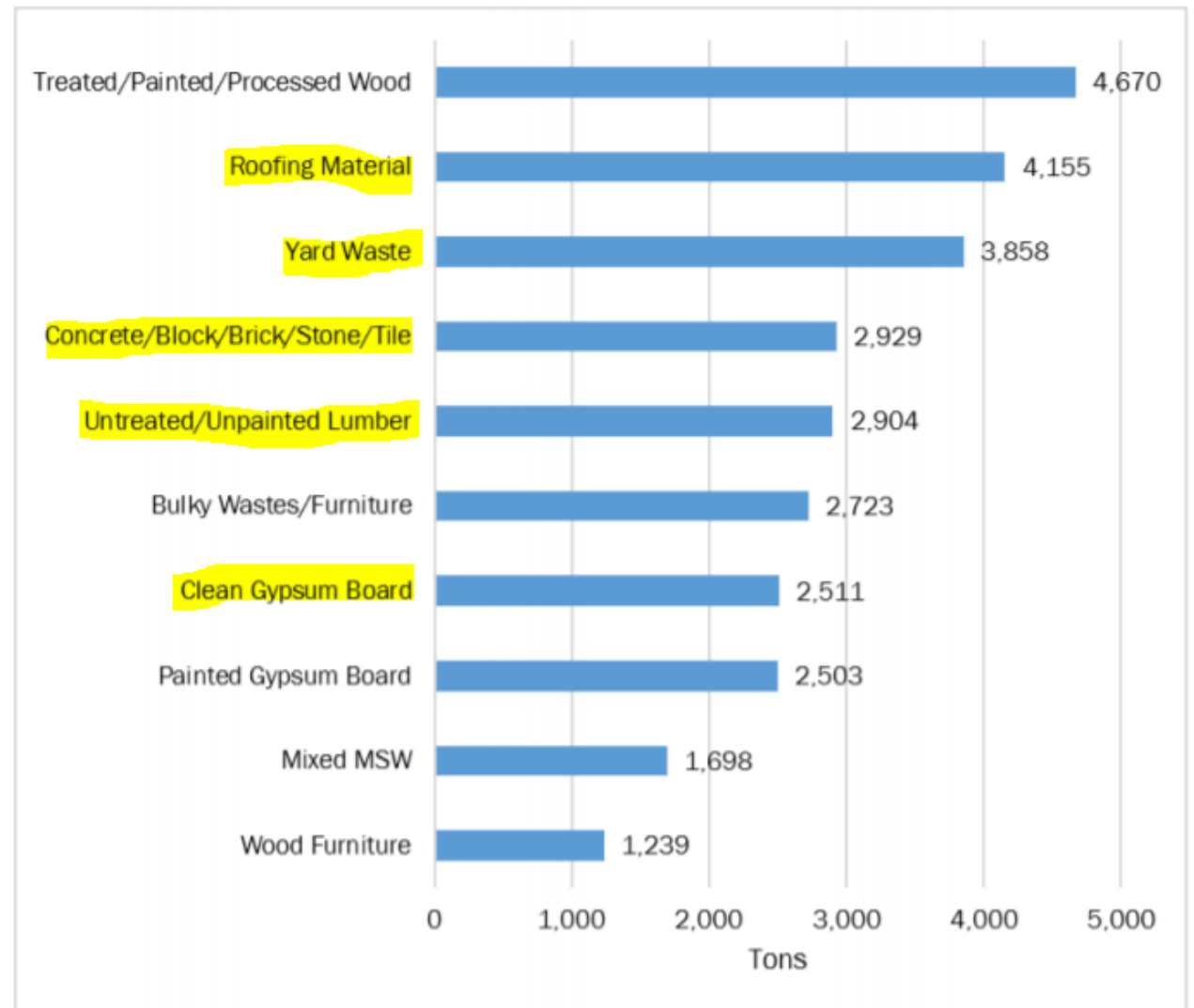
Self-Haul Waste

Defined as: primarily residential materials delivered directly to a disposal facility by the original generator in a car, van or small truck.

Estimated 35,000 tons generated per year.

Self-Haul Materials

Figure 3-25 Top 10 Materials in Self Haul Waste (Annual Tons)



Potential Diversion

Color coded into potential bin categories.

Estimated Generated Per Year

35,000

Paper	300
Plastic	248
Glass	752
Ferrous Metal	576
Non-Ferrous	23
Organics	3,858
Pallets and Creates	235
Untreated/Unpainted Wood	2,904
Roofing Materials	4,155
Electronics	513
Total Diverted	13,564
Diversion Rate	39%

Other Potentially Divertible Materials

Carpet	449
Carpet Padding	22
Concrete/Block, Brick/Stone/Tile	2,929
Clean Gypsum Board	2,511
Painted Gypsum Board (?)	2,503
Dirt/Rock/Sand	572
Total (including current materials)	22,550
Diversion Rate	64%

Study Self-Haul Recommendations

Self-Haul Separation Requirement

- Require self-haul customers to separate materials for recycling at all transfer and disposal sites works in tandem with the establishment of county-wide service level standards for recycling at self-haul facilities. The requirement, once supported by adequate infrastructure and standardized signage and gently enforced by city and county staff, is projected to divert 24,900 tons annually by 2026.

County-wide Service Level Standard for Self-Haul Facilities

- Strategy and experience elsewhere suggests that developing and requiring a uniform set of county-wide standards to ensure recycling and yard waste composting are available at every transfer and disposal facility throughout the county will result in a highly cost-effective increase in tons recovered.
- These standards would require disposal sites that accept self-haul garbage have adequate recycling infrastructure and accept common recyclables (such as cans, bottles, and paper), yard waste, clean wood, metals, and bulky/durable/textile items for recycling and composting at fees less than the fee for garbage disposal.

Private Haulers



WestRock MRF

- Mixed Recycling
- Source Separated



Recycling Management Resources

- Mixed Recycling
- Source Separated



Innovative Crushing

- Concrete



Louisville WRC

- Metal
- Electronics
- Yard Waste
- Tires

Private Haulers



Household Hazardous Waste

- Louisville Haz Bin
- Veolia



Recycling Management Resources

- Mixed Recycling
- Source Separated



Metal Recyclers

- Rusty Rooster
- Grade A Allstate
- Freedom Metals
- River Metals
- ELG Metals Inc.
- Dixie Scrap Metals
- Repak Recycling

Natural Products

- Asphalt
- Concrete
- Dirt/Rock & Masonry

Tire Shredding & Recycling

- Waste Tires

River Road & Roof to Road

- Shingle Recycling

Private Haulers



Outer Loop Recycling & Disposal Facility

- Disposal
- Yard Waste
- Pallets



Smith Creek

- Pallets
- Yard & Tree Debris
- Food Waste



Tree Care Inc.

- Disposal

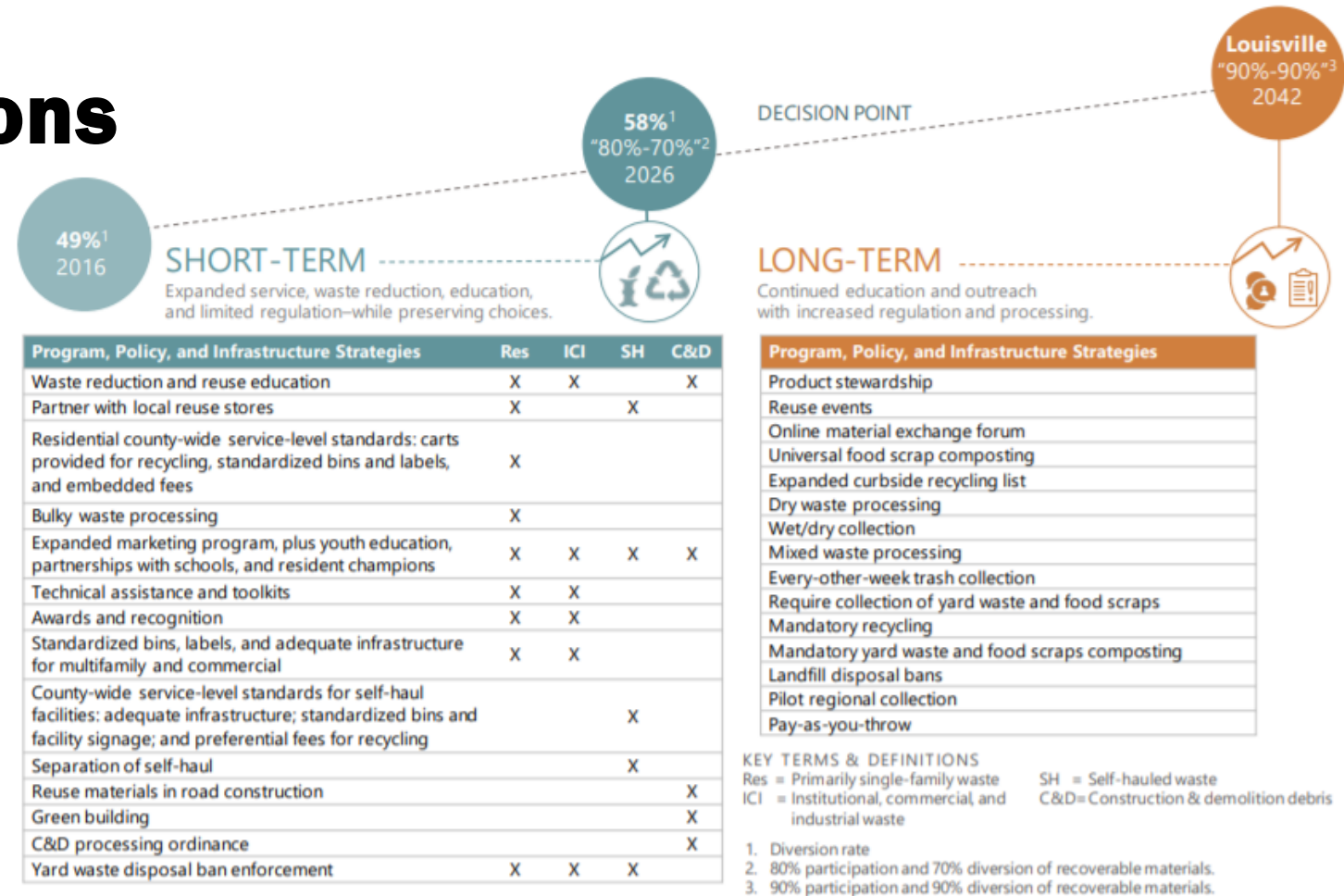


Innovative Crushing

- Concrete

90%-90% Recommendations

Figure 6. Jefferson County's "90%-90%" Trajectory
90 percent of customers participating in recovery programs that divert 90 percent of recoverable materials by 2042



Outline of Recommendations for ICI and Shelf-Haul

1. Standards for Signage and Adequate Infrastructure (ICI)-COMPLETED PROPOSAL

2. Technical Assistance and Standards for Signage & Adequate Infrastructure (Multi-Family Residential) discussed in Jan. 2020

3. Enhanced Enforcement of Yard Waste Disposal Ban (ICI) discussed in Jan. 2020

4. Waste Reduction and Reuse Campaign (ICI)

5. Technical Assistance (ICI)

6. Expanded Awards and Recognition Program (ICI)

7. Expanded Marketing Campaign for Recycling and Composting (ICI)

1. County-wide Service Level Standards (SH) discussed in Jan. 2020

2. Separation Requirement at (SH) discussed in Jan. 2020

3. Expanded Recycling Marketing Campaign and Partnerships with Reuse Retailers (SH)

4. Enhanced Enforcement of Yard Waste Disposal Ban (SH)

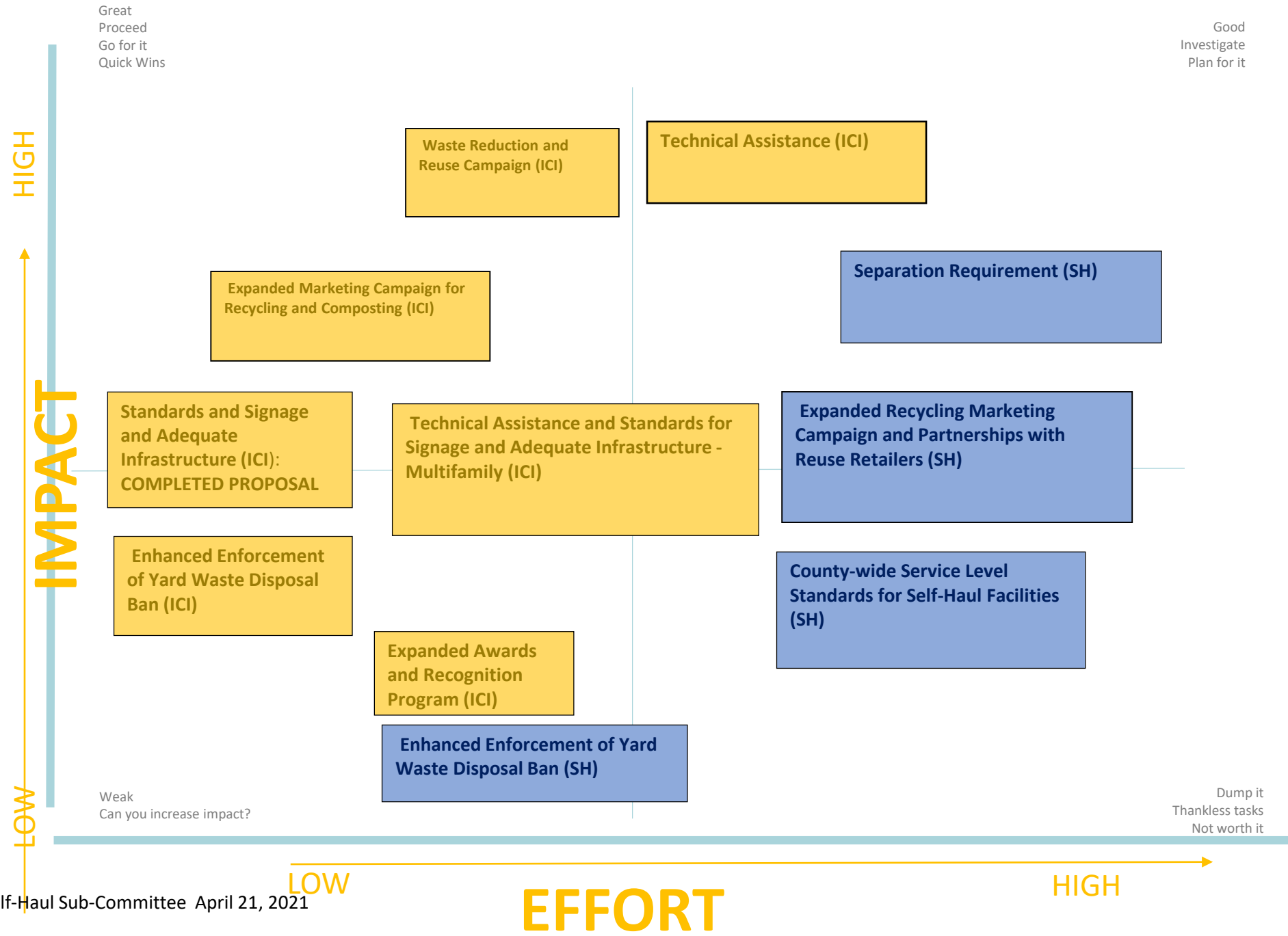
ICI & Self-Haul Recommendations

Industrial, Commercial and Institutional

1. **Standards for Signage and Adequate Infrastructure (ICI)-COMPLETED PROPOSAL**
2. **Technical Assistance and Standards for Signage and Adequate Infrastructure (Multi-Family Residential) discussed in Jan. 2020**
3. **Enhanced Enforcement of Yard Waste Disposal Ban (ICI) discussed in Jan. 2020**
4. Waste Reduction and Reuse Campaign (ICI)
5. Technical Assistance (ICI)
6. Expanded Awards and Recognition Program (ICI)
7. Expanded Marketing Campaign for Recycling and Composting (ICI)

Self-Haul

1. **County-wide Service Level Standards (SH) discussed in Jan. 2020**
2. **Separation Requirement at (SH) discussed in Jan. 2020**
3. Expanded Recycling Marketing Campaign and Partnerships with Reuse Retailers (SH)
4. Enhanced Enforcement of Yard Waste Disposal Ban (SH)



ICI Recommendations

1

Standards for Signage and Adequate Infrastructure (ICI)-COMPLETED PROPOSAL

Establishing standards and guidelines for signage, containers, and adequate recycling infrastructure for businesses is expected to make it much easier to recycle and compost, increasing participation and recovery levels and resulting in a projected 1,600 additional tons diverted annually by 2026.

2

Technical Assistance and Standards for Signage & Adequate Infrastructure (Multi-Family Residential)

Technical assistance combined with standardized signage and adequate recycling infrastructure for the multifamily sector will result in an estimated 2,000 tons of additional diversion annually in 2026. Technical assistance includes outreach to help property managers “right-size” their recycling service and door-to-door outreach to residents.

3

Enhanced Enforcement of Yard Waste Disposal Ban (ICI) discussed in Jan. 2020

Enforcing the yard waste ban for all customers, including those in the ICI sector, will divert an estimated 7,900 additional tons per year by 2026.

ICI Recommendations

4

Waste Reduction and Reuse Campaign (ICI)

A robust waste reduction and reuse targeted education campaign for businesses, including businesses that self-haul waste, would focus on food waste prevention and on electronics, bulky wastes, and related materials. Two separate marketing campaigns are recommended over the study period, resulting in 2,000 additional tons of source reduction annually by 2026.

5

Technical Assistance (ICI)

Providing comprehensive on-site technical assistance to businesses generators is estimated to divert 4,100 additional tons annually by 2026. This one-on-one service would be focused initially on helping customers obtain containers and set up new collection services, train employees, and provide other assistance as needed to managers and employees.

6

Expanded Awards and Recognition Program (ICI)

Expanding the current awards and recognition program to all Jefferson County businesses-beyond the current program for food-generating businesses in the Central Business District-is projected to divert 600 tons annually by 2026.

Cont. ICI Recommendations

7

Expanded Marketing Campaign for Recycling and Composting (ICI)

Expansion *and* improvement of the county's business marketing program consists of two major campaigns: one to promote food scrap collection and the other to promote general recycling. This effort includes new signage, a consistent use of recycling images and terminology, application of social marketing approaches, and development and distribution

of toolkits to business owners. By 2026, this measure is expected to divert 8,900 additional tons annually.

Self-Haul Recommendations

1

County-wide Service Level Standards (SH) discussed in Jan. 2020

As with residential strategy, experience elsewhere suggests that developing and requiring a uniform set of county-wide standards to ensure recycling and yard waste composting are available at every transfer and disposal facility throughout the county will result in a highly cost-effective increase in tons recovered. These standards would require that disposal sites that accept self-haul garbage have adequate recycling infrastructure and accept common recyclables (such as cans, bottles, and paper), yard waste, clean wood, metal, and bulky/durable/textiles items for recycling and composting at fees less than the fee for garbage disposal. The materials would then be sent to recycling and processing facilities, including dry waste processing for bulky items. These standards would be combined with standardized signage and containers to divert 17,100 tons annually by 2026.

2

Separation Requirement at (SH) discussed in Jan. 2020

Self-Haul Separation Requirement: Requiring self-haul customers to separate materials for recycling at all transfer and disposal sites works in tandem with the establishment of county-wide service level standards for recycling at self-haul facilities. The requirement, once supported by adequate infrastructure and standardized signage and gently enforced by city and county staff, is projected to divert 24,900 tons annually by 2026. the success of the County's yard waste disposal ban demonstrates the efficacy of this approach as well as its acceptability to the public with the proper level of education and outreach.

Self-Haul Recommendations

3

Expanded Recycling Marketing Campaign and Partnerships with Reuse Retailers (SH)

Expanded Recycling Marketing Campaign and Partnerships with Reuse Retailers: Creating partnerships with local reuse organizations and expanding the marketing efforts at self-haul facilities is projected to source-reduce 400 tons of waste annually by 2026.

4

Enhanced Enforcement of Yard Waste Disposal Ban (SH)

Enhanced Enforcement of yard Waste Disposal Ban: Enforcing the yard waste disposal ban at self-haul facilities is projected to result in an additional 4,500 tons diverted annually by 2026.

Summary



Next Weeks Discussion Points