



**2021 US Scrap Tire Management Summary**  
**October 25, 2022**

# About the U.S. Tire Manufacturers Association

The U.S. Tire Manufacturers Association (USTMA) is the national trade association for tire manufacturers that produce tires in the U.S. U.S. tire manufacturing has an annual economic footprint of \$170.6 billion and is responsible for more than 291,000 U.S. jobs in manufacturing, distribution and retailing. The industry supports more than 510,000 additional U.S. jobs in supplier and induced activities, totaling more than 801,000 jobs nationwide. USTMA advances a sustainable tire manufacturing industry through thought leadership and a commitment to science-based public policy advocacy. Our member company tires make mobility possible. USTMA began its scrap tire program in 1990 under the auspices of the Scrap Tire Management Council. USTMA works with all stakeholders, including states, U.S. EPA and the industry to develop markets, reduce scrap tire stockpiles and implement state regulations that that foster sustainable scrap tire markets. USTMA supports sustainable and circular scrap tire markets.

The logo for Bridgestone, featuring the word "BRIDGESTONE" in a bold, italicized, black sans-serif font.The logo for Continental, featuring the word "Continental" in a blue, rounded sans-serif font with a small circular icon to the right.The logo for Giti, featuring the word "Giti" in a bold, black sans-serif font next to a yellow square containing a black silhouette of a horse's head.The logo for Goodyear, featuring the words "GOODYEAR" in a bold, yellow, italicized sans-serif font with a lightning bolt symbol, and the tagline "MORE DRIVEN" in a smaller, black sans-serif font below it.The logo for Hankook, featuring a stylized orange and black graphic to the left of the word "HANKOOK" in a bold, black sans-serif font, with the tagline "driving emotion" in a smaller, black sans-serif font below it.The logo for Kumho Tire, featuring the words "KUMHO TIRE" in a bold, black sans-serif font with a red number "7" to the right, and the tagline "Better. All-ways" in a smaller, black sans-serif font below it.The logo for Michelin, featuring a stylized white Michelin Man character above the word "MICHELIN" in a bold, blue sans-serif font, with the tagline "A BETTER WAY FORWARD" in a smaller, black sans-serif font below it.The logo for Nokian Tyres, featuring the words "nokian" and "TYRES" in a bold, white sans-serif font on a black rectangular background.The logo for Pirelli, featuring the word "PIRELLI" in a bold, red sans-serif font on a yellow rectangular background.The logo for Sumitomo Rubber Industries, featuring a blue diamond-shaped graphic to the left of the words "SUMITOMO" and "RUBBER INDUSTRIES" in a bold, black sans-serif font.The logo for Toyo Tires, featuring the words "TOYO TIRES" in a bold, blue sans-serif font with the tagline "driven to perform" in a smaller, black sans-serif font below it.The logo for Yokohama, featuring a stylized red and black graphic to the left of the word "YOKOHAMA" in a bold, black sans-serif font.

# USTMA Sustainability Vision

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- USTMA members share a common vision on sustainability which includes: Promoting tire safety; advancing worker safety; reducing greenhouse gas emissions throughout a tire's useful life; improving environmental footprints over time; minimizing the health, and environmental impacts of tire materials; and ensuring scrap tires enter sustainable markets.
- Specifically, ***USTMA members have the goal that all scrap tires enter sustainable and circular end use markets.***
- USTMA's 2021 scrap tire market summary report measures our progress towards meeting our sustainability vision.

# US Scrap Tire Generation 2021

Tire Class	Millions of Tires	Market %	Average Weight (lbs)	Weight (thousands of tons)
<b>Light Duty Tires</b>	<b>276</b>	<b>87.6%</b>	<b>25.0</b>	<b>3,454</b>
Passenger tire replacements	225	71.3%		
Light truck tire replacements	39	12.2%		
Tires from scrapped vehicles	13	4.1%		
<b>Commercial Tires</b>	<b>39</b>	<b>12.4%</b>	<b>120.0</b>	<b>2,342</b>
Medium, wide base, heavy truck replacement tires	23	7.3%		
Tires from scrapped trucks and buses	16	5.1%		
<b>Total tires hauled</b>	<b>315</b>	<b>100.0%</b>	<b>36.8</b>	<b>5,796</b>
<b>Used tires culled</b>	<b>42</b>	<b>13.2%</b>	<b>36.8</b>	<b>765</b>
<b>Net scrap tires</b>	<b>274</b>			<b>5,031</b>

<sup>2</sup> Earlier USTMA Scrap Tire Management Summary reports used Ward's Motor Vehicle Facts and Figures, scrapped vehicle data to calculate the number of scrapped vehicles. Ward's discontinued publishing this data in 2014 creating the need for a new approach. For the 2019 Scrap Tire Management Summary report, USTMA utilized the ratio of vehicles scrapped to vehicles sold for years 2000-2014 and applied that ratio to 2019 vehicle sales to produce the number of scrapped vehicles. USTMA estimated the split between cars and trucks/buses based on the average of split from Wards for 2002 -2012. This data assumes 2 tires scrapped from light duty vehicles and 2.5 tires scrapped from trucks and buses. Source of vehicle scrapped data, US DOT Bureau of Automotive Statistics, Table 4-58: Motor Vehicles Scrapped (May 21, 2017) [https://www.bts.gov/archive/publications/national\\_transportation\\_statistics/table\\_04\\_58](https://www.bts.gov/archive/publications/national_transportation_statistics/table_04_58). Source of vehicle retail sales in the United States from 1978 to 2019 data, Wards Motor Vehicle Facts and Figures .

# U.S. Scrap Tire Disposition 2021

Market or Disposition	Thousands of Tons	Millions of Tires	% change 2019 - 2021
Tire-Derived Fuel	1,394	76	-15.4%
Cement Kilns	682	37	-16.4%
Paper & Pulp	524	29	8.8%
Electric Utilities	187	10	-46.3%
Ground Rubber	1,407	77	29.2%
Civil Engineering	276	15	22.2%
Exported	87	5	-36.7%
Electric Arc Furnace	61	3	0.0%
Reclamation Projects	48	3	18.8%
Agricultural	0	0	-100.0%
Baled Tires/ Market	0	0	-100.0%
Punched/ Stamped	0	0	-100.0%
Other	306	17	121.1%
Total to Market	3,579	195	5.9%
Generated	5,031	274	12.7%
% to Market/ Utilized	71%	71%	-6.0%
Land Disposed	733	40	7.7%
<b>% Managed (includes Market, Baled, and Landfill)</b>	<b>86%</b>	<b>86%</b>	<b>-5.8%</b>

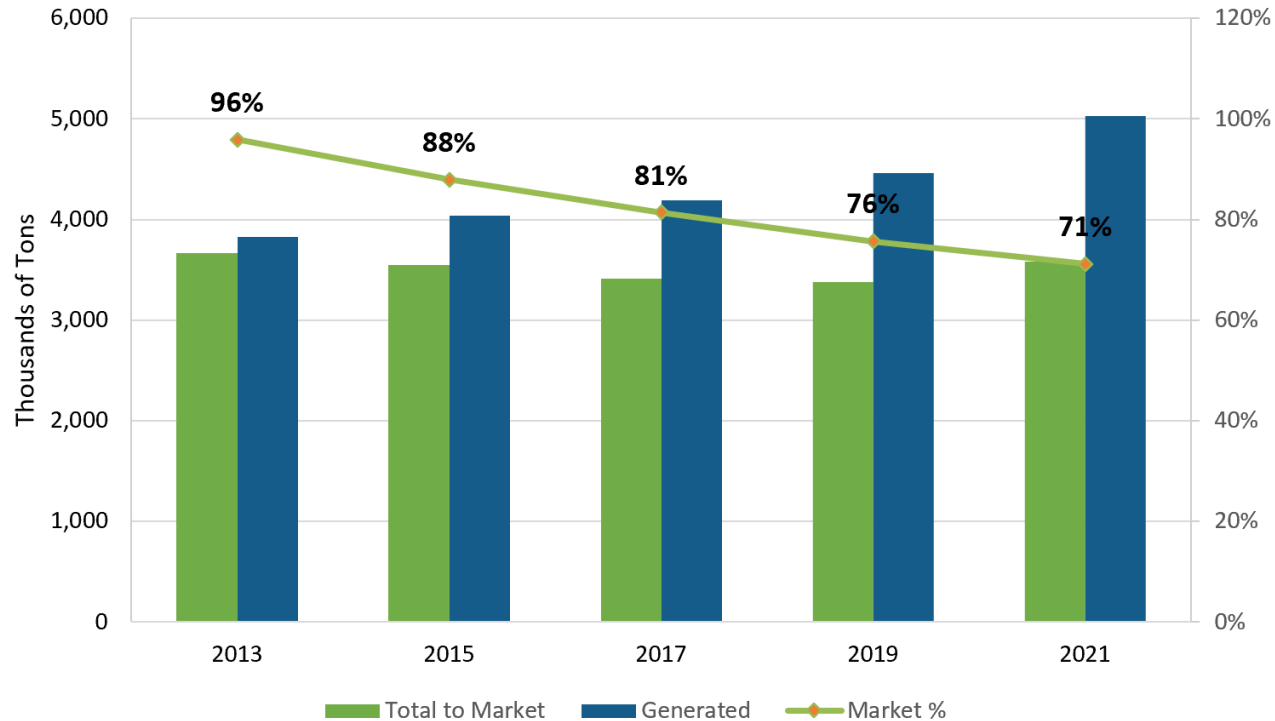
# U.S. Scrap Tire Market Summary 2013 – 2021

Market or Disposition (thousands of tons)	2013	2015	2017	2019	2021
Tire Derived Fuel	2,120	1,923	1,736	1,647	1,394
Ground Rubber	975	1,021	1,013	1,089	1,407
Land Disposed	328	451	647	680	733
Civil Engineering	172	275	316	226	276
Exported	246	102	110	138	87
Reclamation Projects	49	53	44	40	48
Electric Arc Furnace	66	26	39	61	61
Baled Tires/ Market	30	9	15	10	0
Punched/ Stamped	2	41	23	10	0
Agricultural	7	7	7	20	0
Other	0	95	108	138	306
Total to Market	3,667	3,551	3,411	3,379	3,579
Generated	3,824	4,039	4,189	4,464	5,031
% to Market/ Utilized	96%	88%	81%	76%	71%
% Managed (incl. baled and landfilled tires)	104%	99%	97%	91%	86%

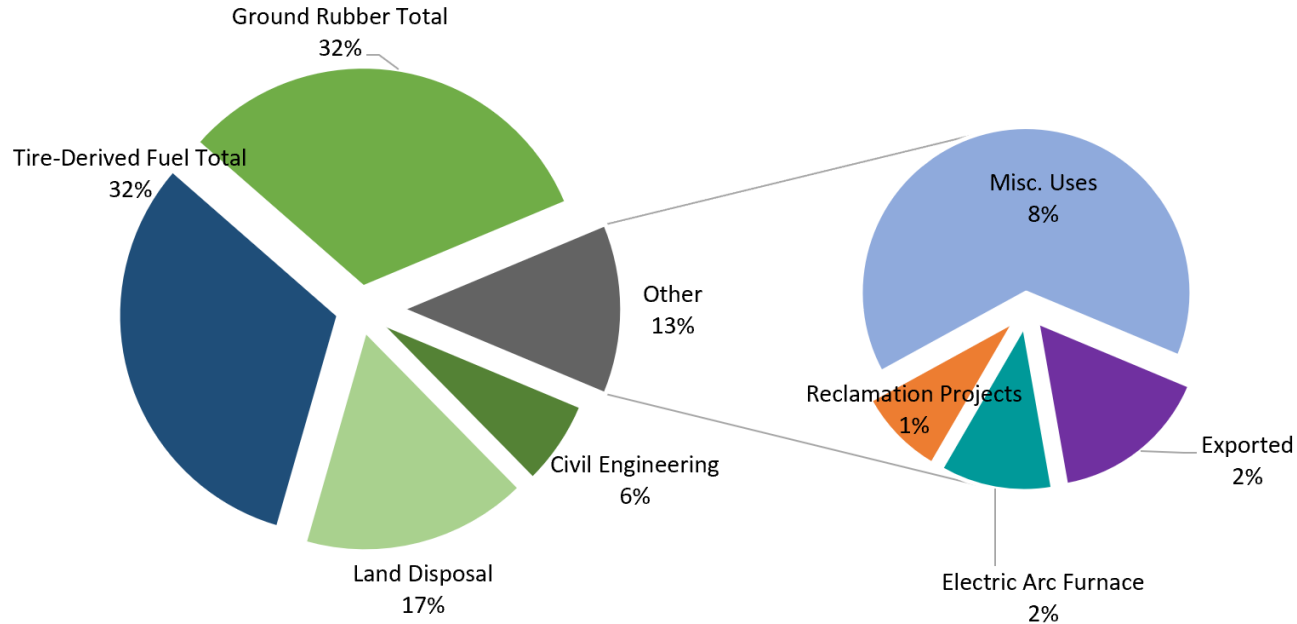
<sup>a</sup>The U.S. Scrap Tire Management Summary began tracking tires culled from scrap tire collection entering domestic passenger and light truck used tire markets in 2009 by including used tires as a market for scrap tires. The U.S. Scrap Tire Management Summary now subtracts used tires from the total tires hauled to calculate total net scrap tire generation, a practice that began with the 2011 edition

<sup>b</sup>In 2005 and 2007, annual scrap tire generation estimates were based on state-provided data. Now, these estimates are based on a calculation of replacement market tires sold and vehicles scrapped, a practices that began with the 2009 edition.

# U.S. Scrap Tire Market Trends 2013 - 2021

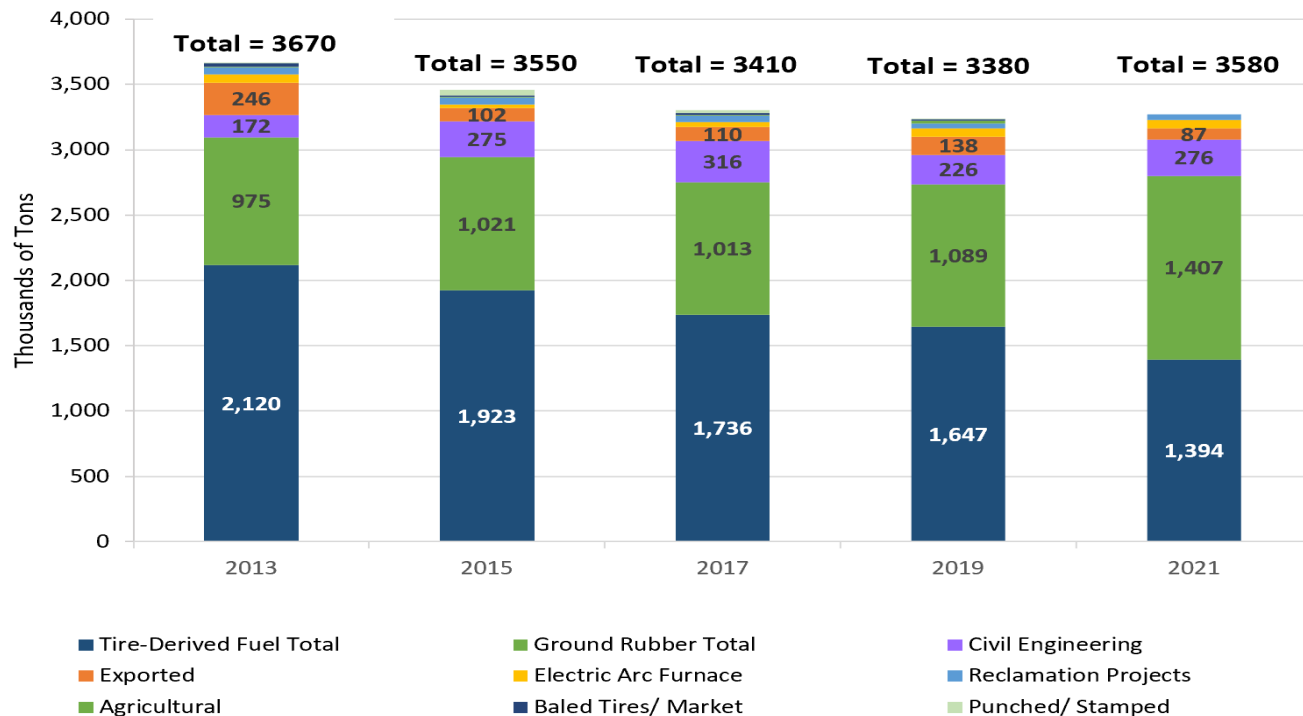


# U.S. Scrap Tire Disposition 2021





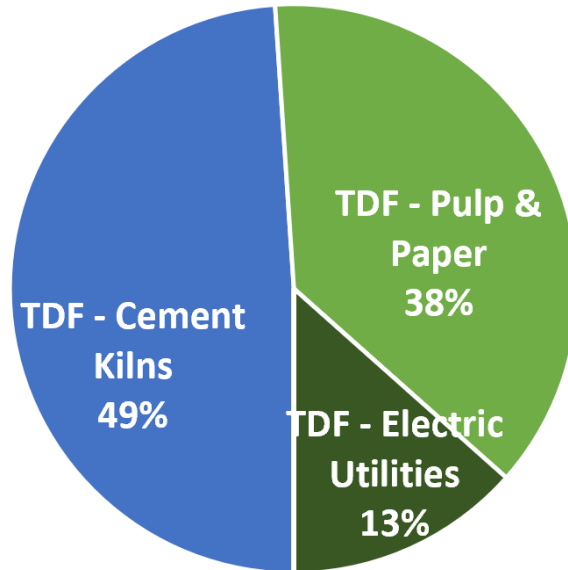
# U.S. Scrap Tire Market Trends 2013 – 2021



\*The U.S. Scrap Tire Management Summary report began tracking tires culled from scrap tire collection entering domestic passenger and light truck used tire markets in 2009 by including used tires as a market for scrap tires. The U.S. Scrap Tire Management Summary report now subtracts used tires from the total tires hauled to calculate total net scrap tire generation, a practice that began with the 2011 edition.

# U.S. Tire Derived Fuel Markets 2021

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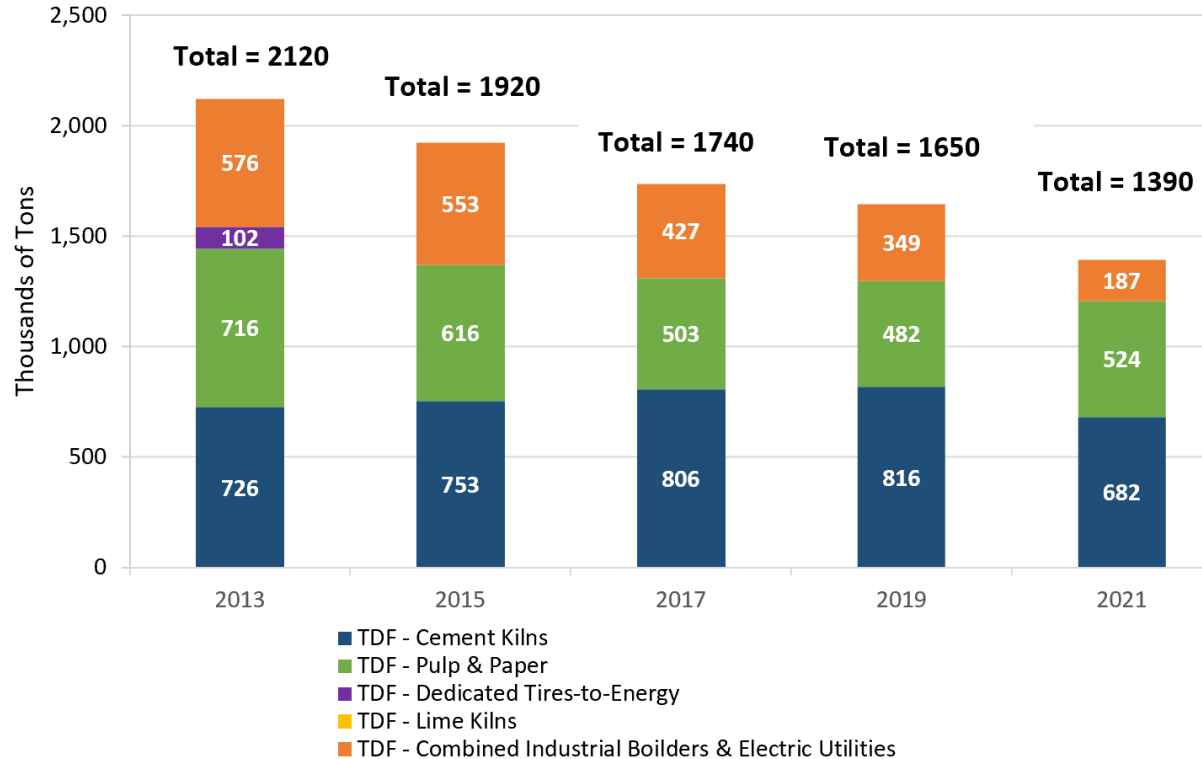


## ***Did you know?***

Total scrap tires diverted to TDF market:

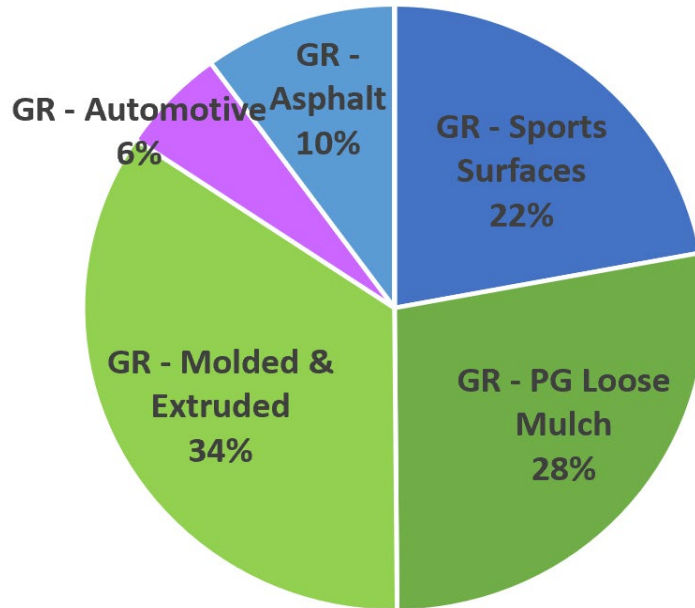
1,390,000 tons or over 76 million tires

# U.S. Tire Derived Fuel Market Trends 2013 –2021



# U.S. Ground Rubber Markets 2021

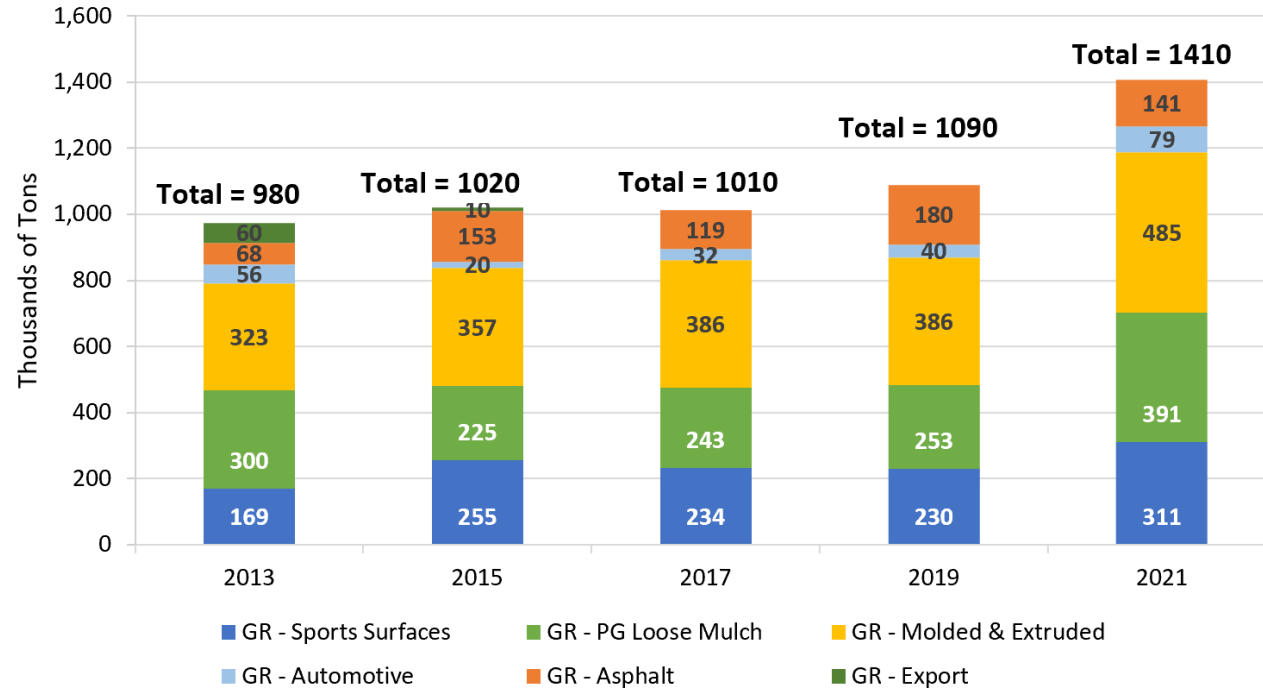
(percent of total pounds of scrap tires consumed in market)



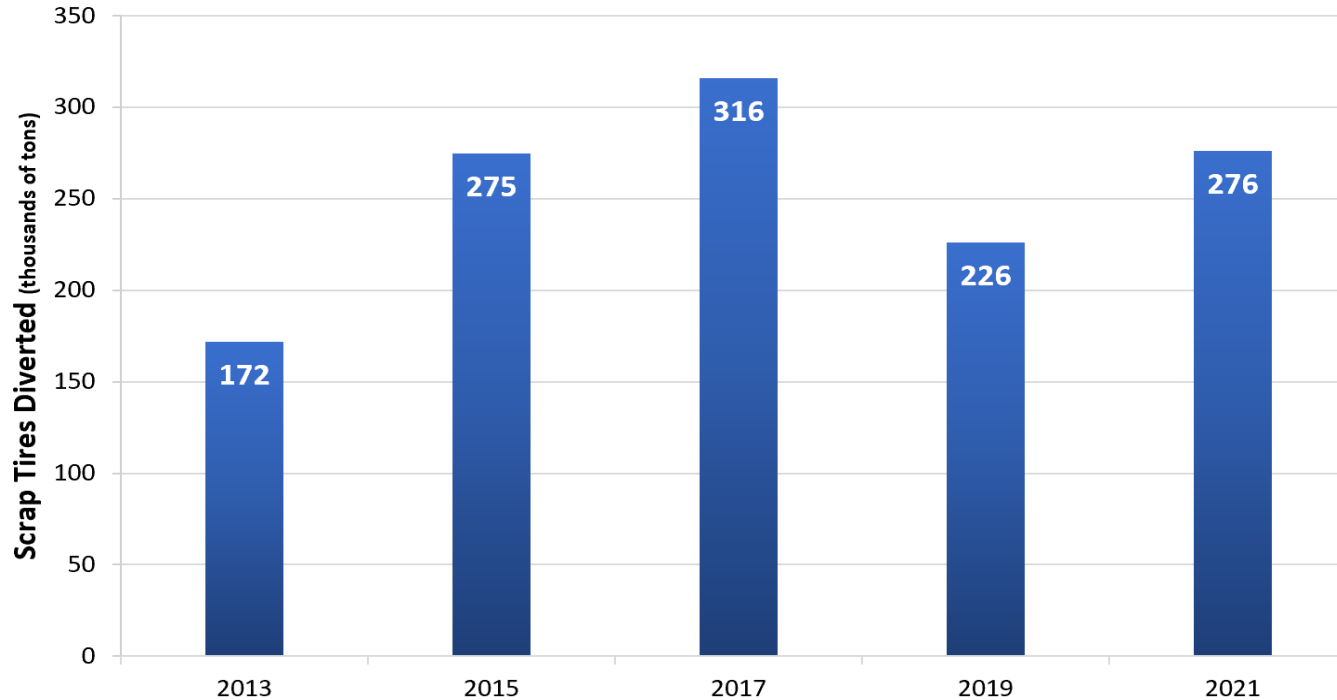
## ***Did you know?***

Total scrap tires diverted to ground rubber markets:  
*About 1,410,000 tons or over 77 million tires*

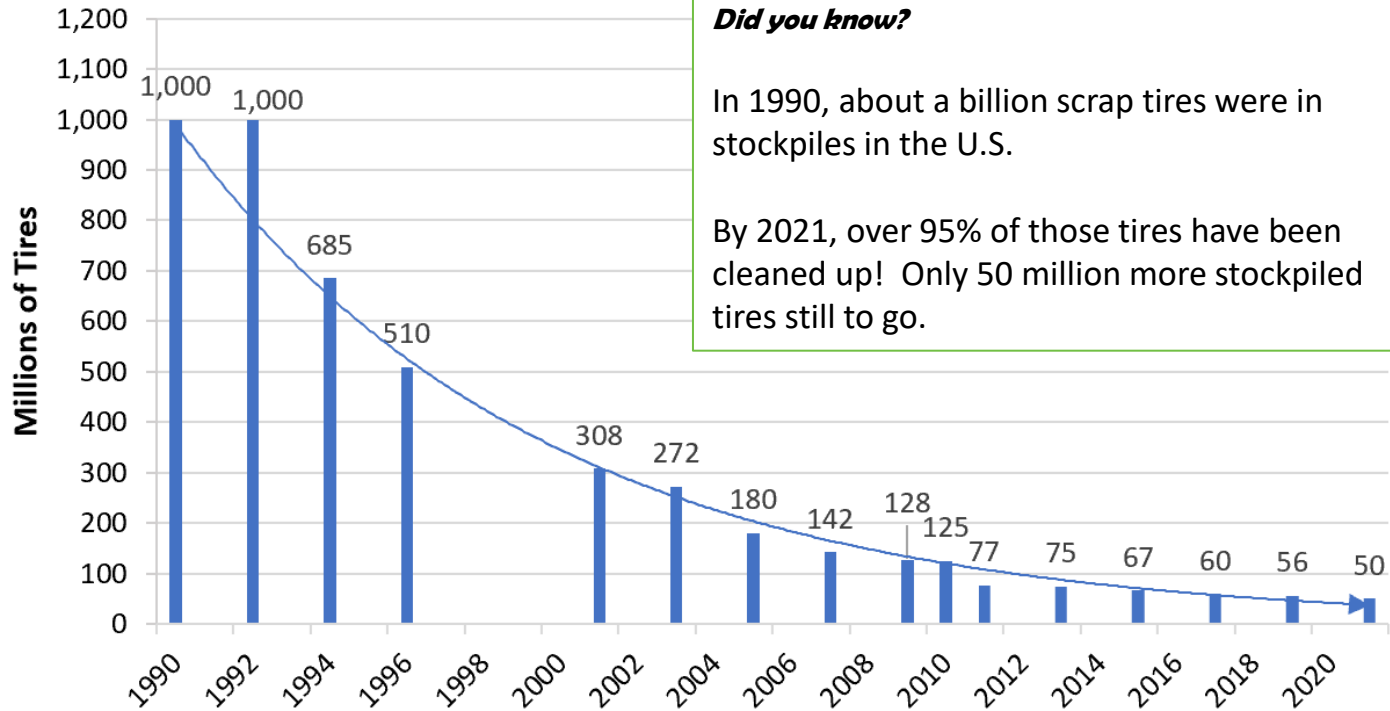
# U.S. Ground Rubber Market Distribution 2013 - 2021



# U.S. Civil Engineering Markets 2013 - 2021



# U.S. Stockpiled Scrap Tires 1990 - 2021



## ***Did you know?***

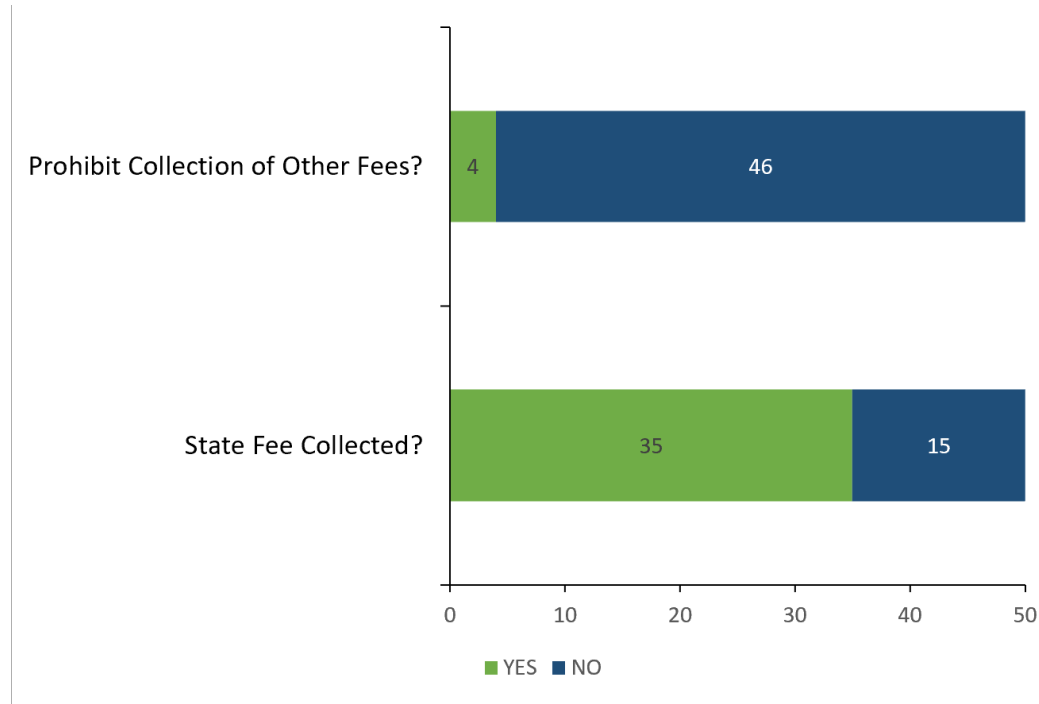
In 1990, about a billion scrap tires were in stockpiles in the U.S.

By 2021, over 95% of those tires have been cleaned up! Only 50 million more stockpiled tires still to go.

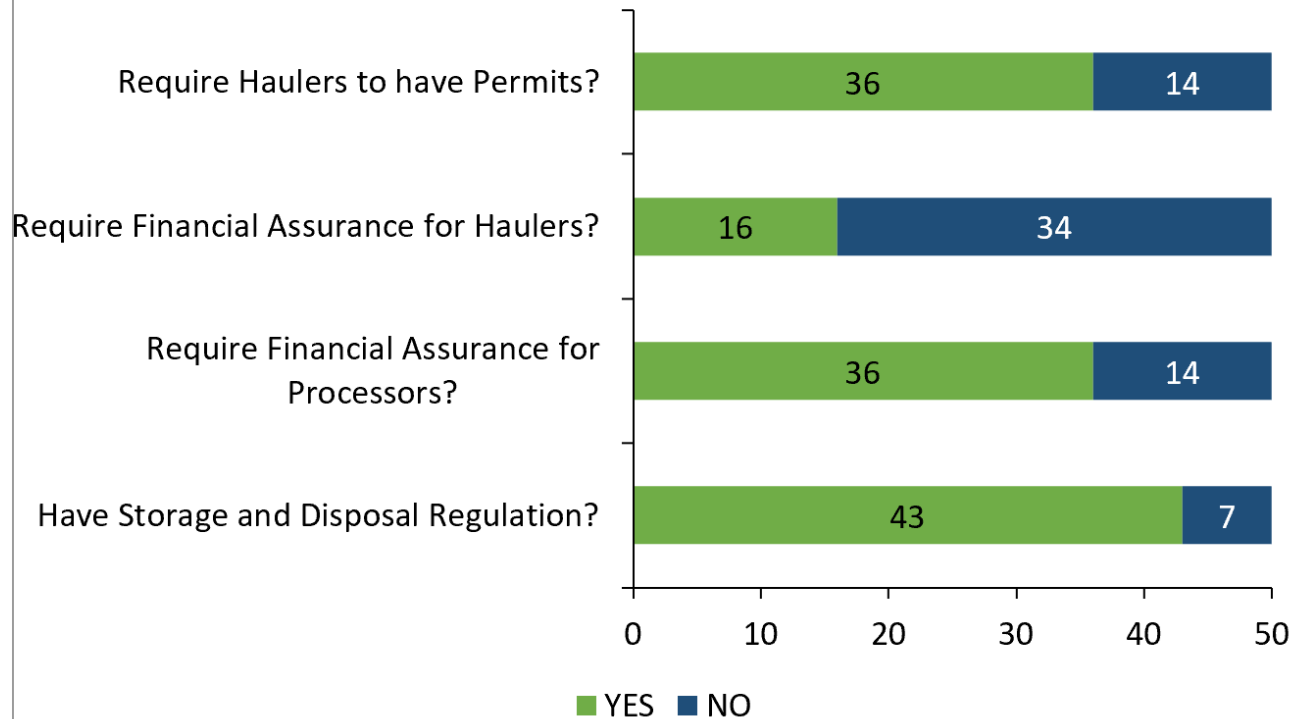




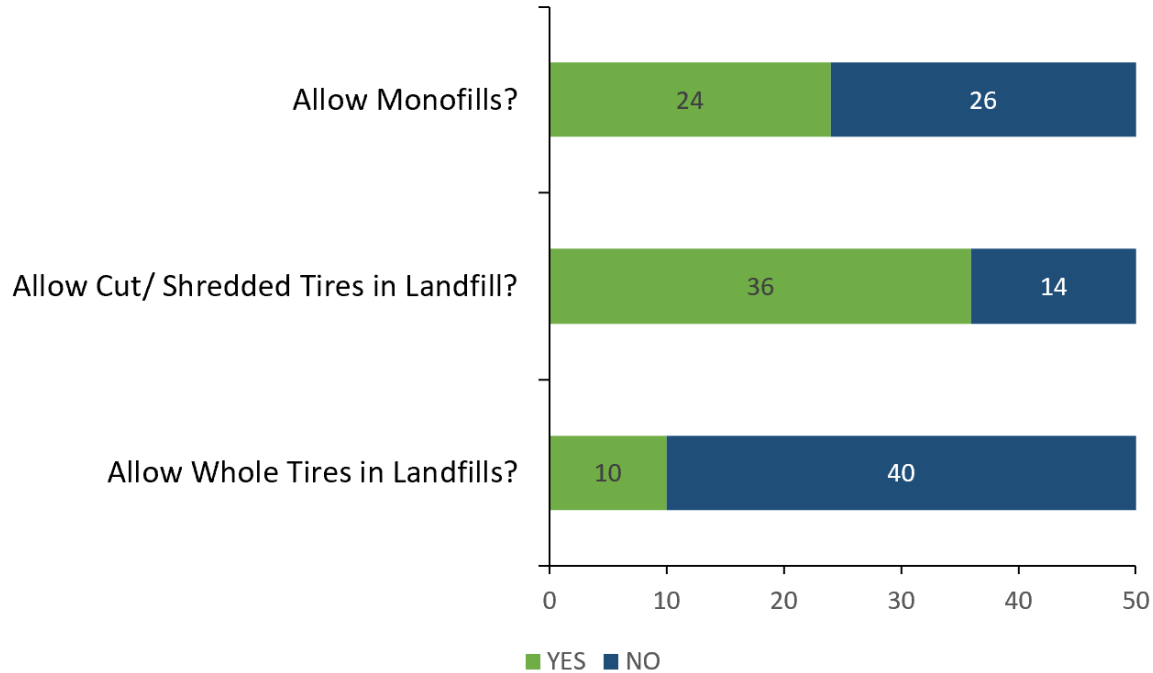
# Overview of Current State Programs



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