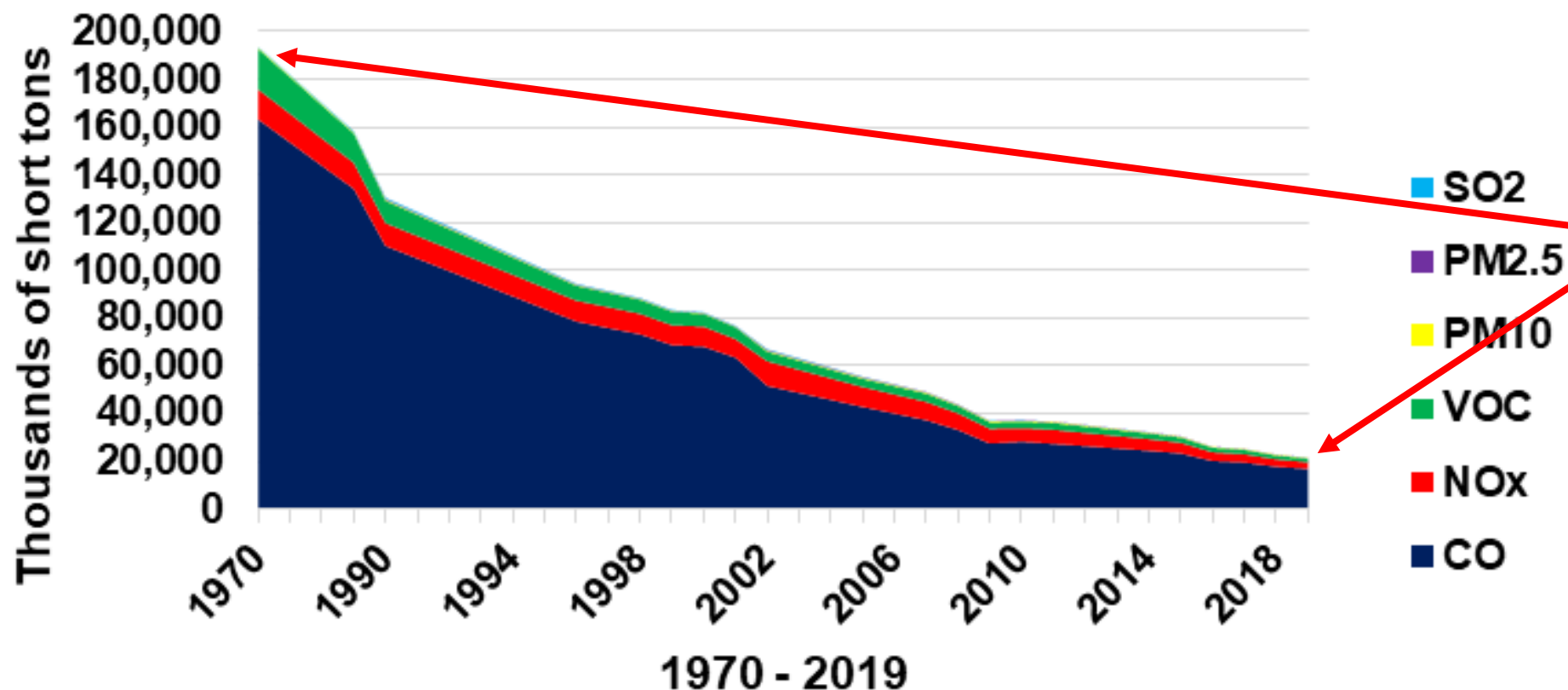




Chart of the Week 2022-11
**U.S. Motor Vehicle Pollution
Reduction Progress since 1970**

Lucian Pugliaresi
Max Pyziur
March 23, 2022
Washington, DC

Pollutants from U.S. Highway Motor Vehicles



Analysis Based on ORNL & EPA Data

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In 1970, U.S. motor vehicles emitted 387 billion pounds of criteria pollutants, the largest amount of which was carbon monoxide.

In 2018, that amount had declined to 43 billion, or 11.1% of the total in 1970.

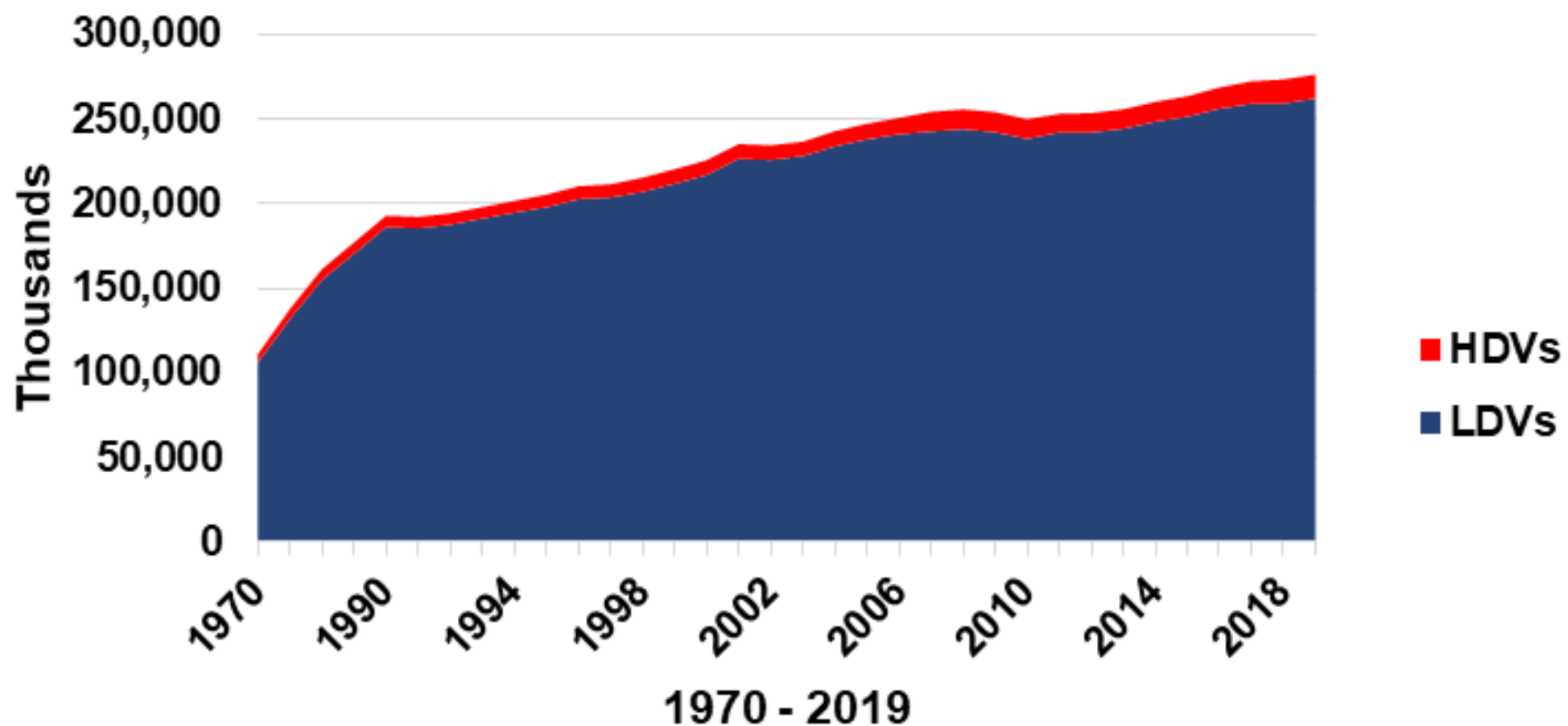
U.S. Motor Vehicle Pollution Reduction Progress since 1970



- In 1970, there were 111 million combined light- and heavy-duty motor vehicles in use in the United States. By 2018, that number had risen to 276 million.
- Light-duty vehicles comprised 94% of the total in 1970. In 2018, they made up 90%.
- The total amount of criteria pollutants emitted by all U.S. motor vehicles was 387 billion pounds in 1970. Despite the increase in vehicles, that number declined to 43 billion in 2018, or 11.1% of the 1970 total.
- In 1970, a typical light-duty vehicle emitted approximately 3,500 thousand pounds of criteria pollutants per year. By 2018 considerable progress had been made, and that total number had declined to 160 pounds, 4.6% of the 1970 average.
- Heavy-duty vehicles exhibited a similar trend, emitting on average 4,700 pounds per year in 1970, declining to 320 pounds in 2018, or 6.8% of the 1970 average.
- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Lucian Pugliaresi (loup@eprinc.org) or Max Pyziur (maxp@eprinc.org).

Additional Slides

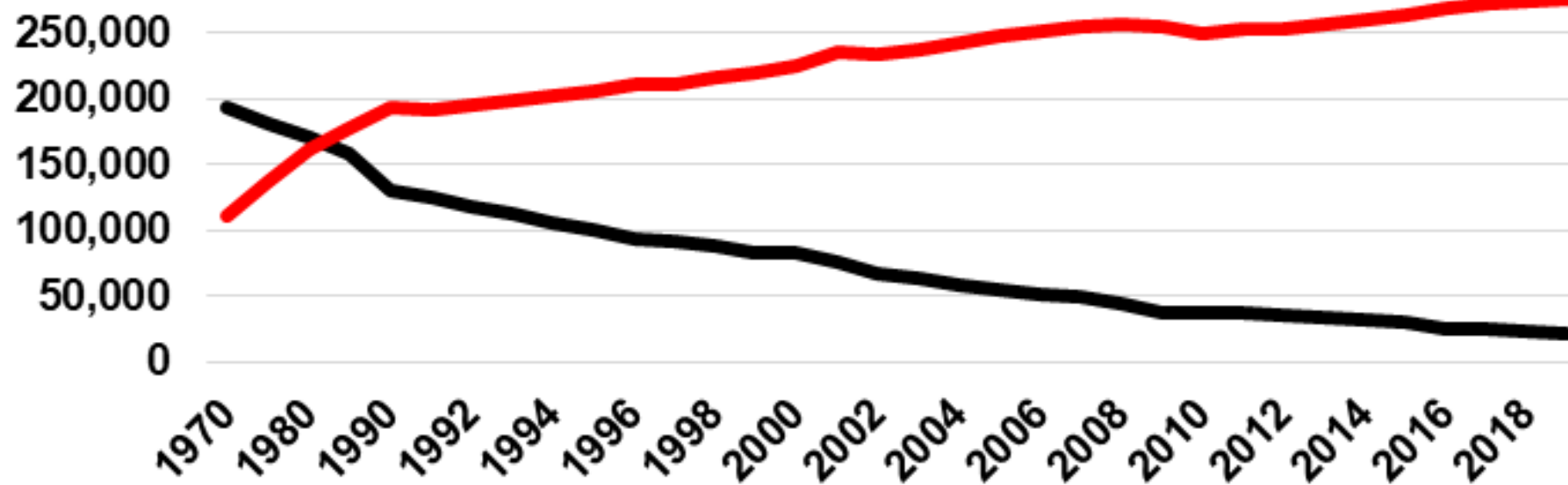
U.S. Highway Motor Vehicles in Operation by Type



Analysis Based on ORNL Data

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U.S. Highway Motor Vehicle Pollution and Number of Operating Vehicles



Vehicles and short tons of pollution in thousands
1970 - 2019

— U.S. Highway Vehicle Pollution — Total U.S. Vehicles

Analysis Based on ORNL & EPA Data

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There has been considerable progress not only in pollution reduction but also efficiency increases.

Displacement has dropped, power has recovered, and fuel economy has increased.

Ford Mustang Frank Bullitt's 1968 Mustang vs 1978, 2017 GTs				
	1968	1978	2017	2017
Model	390 V8 GT Fastback	3dr Hatchback	GT	V6
Displacement	6.4L / 390ci	5.0L / 302ci	5.0L / 305ci	3.7L / 225ci
Fuel System	4bbl Carb	2bbl Carb	Fuel Injection	GDI
Compression Ratio	10.5 to 1	8.0 to 1	11.0 to 1	10.5 to 1
Power	325hp	134hp	435	300
Analysis based on Multiple Automotive Sources			EPRINC	