



PROTERRA

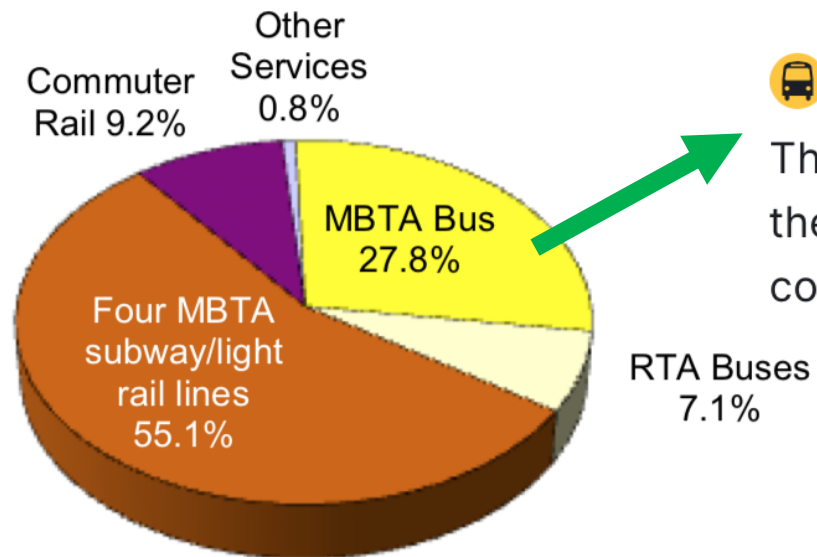


REVOLUTIONIZING TRANSPORTATION

PUBLIC TRANSPORTATION

For *all* public transportation trips, the roughly 500,000 people using our transit systems take nearly 1.4 million trips each weekday in Massachusetts – with most all on the MBTA system. The following graph illustrates the proportions of each of the major transit service categories:

Massachusetts Public Transportation Trips



 **Bus Routes 1,044 buses!**

The MBTA operates 177 bus routes and 4 rapid transit routes in the Greater Boston area, with connections to the subway and commuter rail.

Plus another 300 – 500 buses
Universities, Commercial and



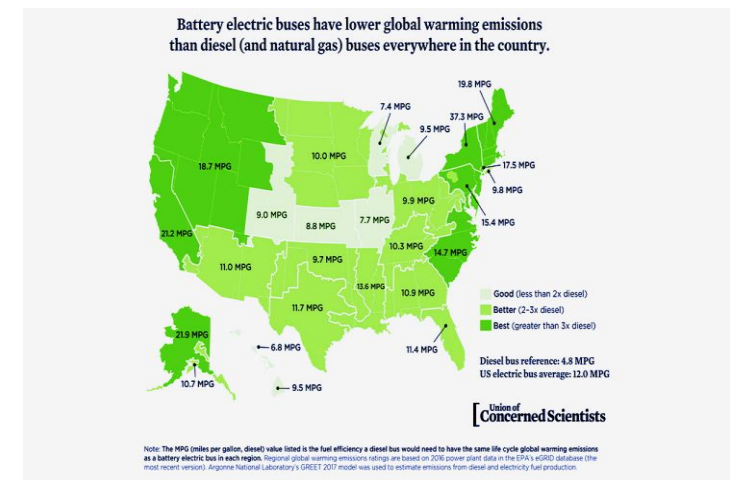
Source: Ridership data from MBTA for 2014, from RTAs for 2013 (National Transit Database).

ANNUAL TAILPIPE EMISSIONS

	PROTERRA CATALYST*	CNG	HYBRID	DIESEL
GHG Greenhouse Gases (lbs)	0	219,083	163,286	229,286
CO₂ Carbon Dioxide (lbs)	0	196,167	163,167	229,167
CH₄ (in CO ₂ e) Methane (lbs)	0	22,917	119	119
CO Carbon Monoxide (lbs)	0	2,108	24	48
NO_x Nitrogen Oxide (lbs)	0	54	107	107
PM Particulate Matter (lbs)*	0	4	4	4

*PM includes PM2.5 and PM10.
Source: GREET Model Fleet Footprint Calculator and EPA Motor Vehicle Emission Simulator

In every state, electric transit buses have lower greenhouse gas emissions than do diesel- or natural gas-powered buses.





Electrifying
34.6 CARS



OR

ELECTRIFYING
1 BUS



HOW EFFICIENT ARE YOUR EFFORTS?



For Mobility & Transportation to enable Boston's decarbonization goals:

**“We must educate decision makers
that zero emission bus solutions
have a huge impact
...And exist today”!**