



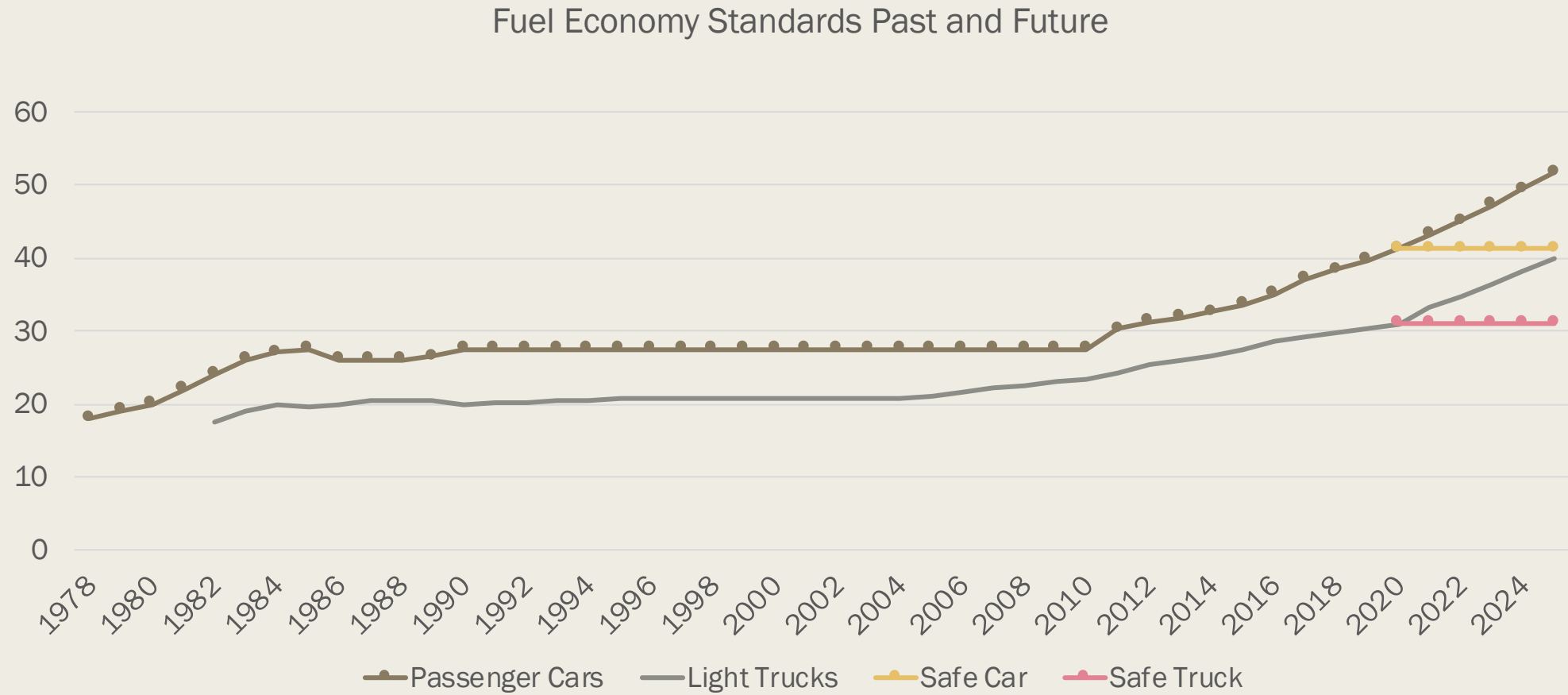
OVERVIEW OF FUEL ECONOMY STANDARDS

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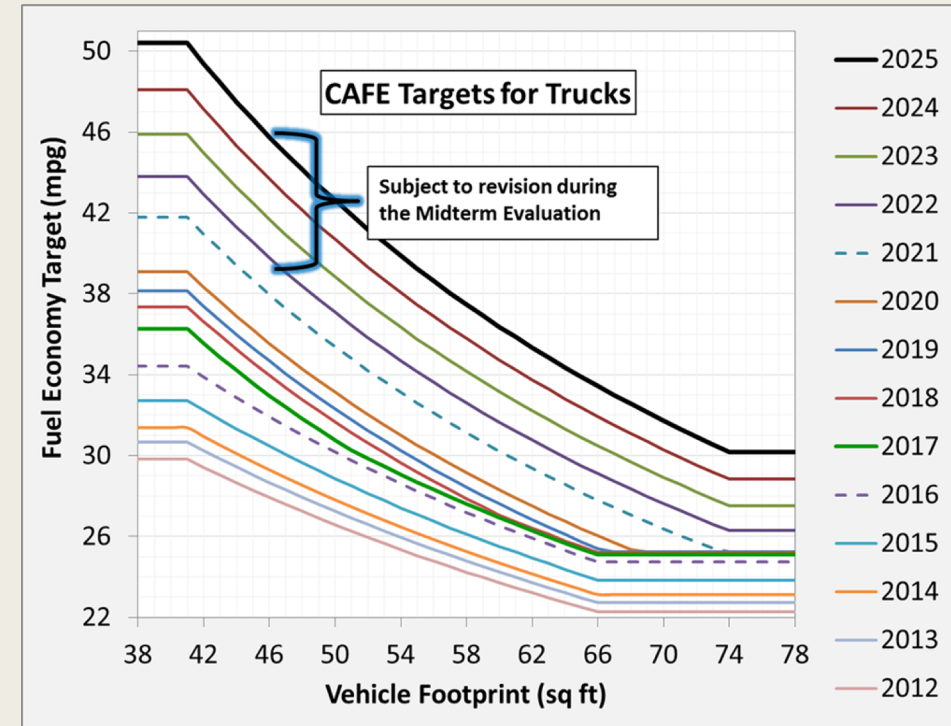
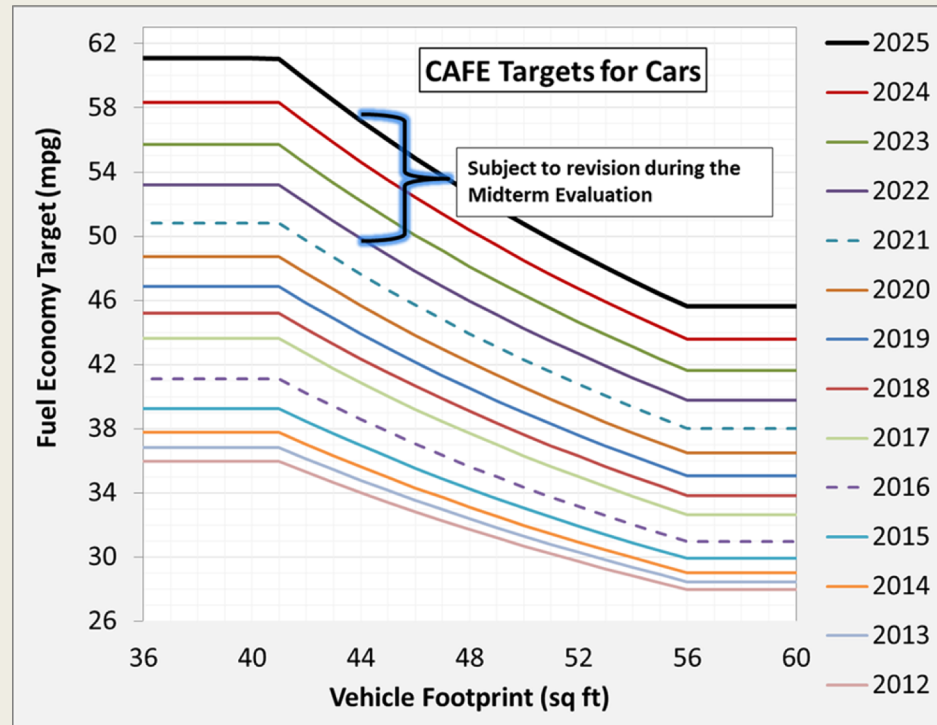
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Timeline of Fuel Economy Standards



Footprint approach since 2012 makes standard depend on vehicle size, type



Perennial Issues with CAFE

- Takeback effect
 - *Higher fuel economy lowers cost of driving and increases vehicle miles travelled (VMT)*
 - *How much is disputed – battle of high and low elasticities of VMT*
- Slower fleet turnover
 - *Higher new car cost reduces sales, keeps older cars in fleet longer*
 - *Again, magnitude and long run effect is disputed*
- Higher smog-producing emissions
 - *Tailpipe emissions standards are the same for all new vehicles and were tightened steadily*
 - *More vmt and older cars lead to higher total tailpipe emissions of HC, NOx and CO*
- Safety
 - *Smaller, lighter cars are less safe*
 - *Original CAFE rules lead to downsizing by manufacturers and mix-shifting by consumers toward smaller cars*

Evolution of Reasons for CAFE

- EPCA rules – 1978
 - *Arab oil embargo, gasoline lines and price controls*
 - *“Project Independence”*
 - *Government forecasts of rising oil prices and static consumer expectations(?)*
- Market failures
 - *Belief that auto makers ignore cost-effective ways to improve fuel economy(??)*
 - *“Oil import” and “Energy Security” premium*
- Consumer behavior
 - *Buyer’s remorse over fuel economy(???)*
- Greenhouse gas emissions
 - *Endangerment finding*
 - *California waiver*

Current Issues

- Does the footprint approach adopted in 2012 create new (or leave old) distortions and inefficiencies in the auto market?
- Do tighter CAFE standards under the footprint rule increase (Obama RIA) or decrease (Trump RIA) safety?
- Does the introduction of trading among manufacturers reduce market distortions?
- Should EPA revoke the waiver that lets California (and other states that follow it) set fuel economy standards different from Federal?