



September 23, 2025

Impacts on Financial Responsibility

PRESENTED BY:

Laura A. Maxwell, FCAS, MAAA
Director & Consulting Actuary

Darcie R. Truttman, FCAS, MAAA
Senior Consulting Actuary

Agenda

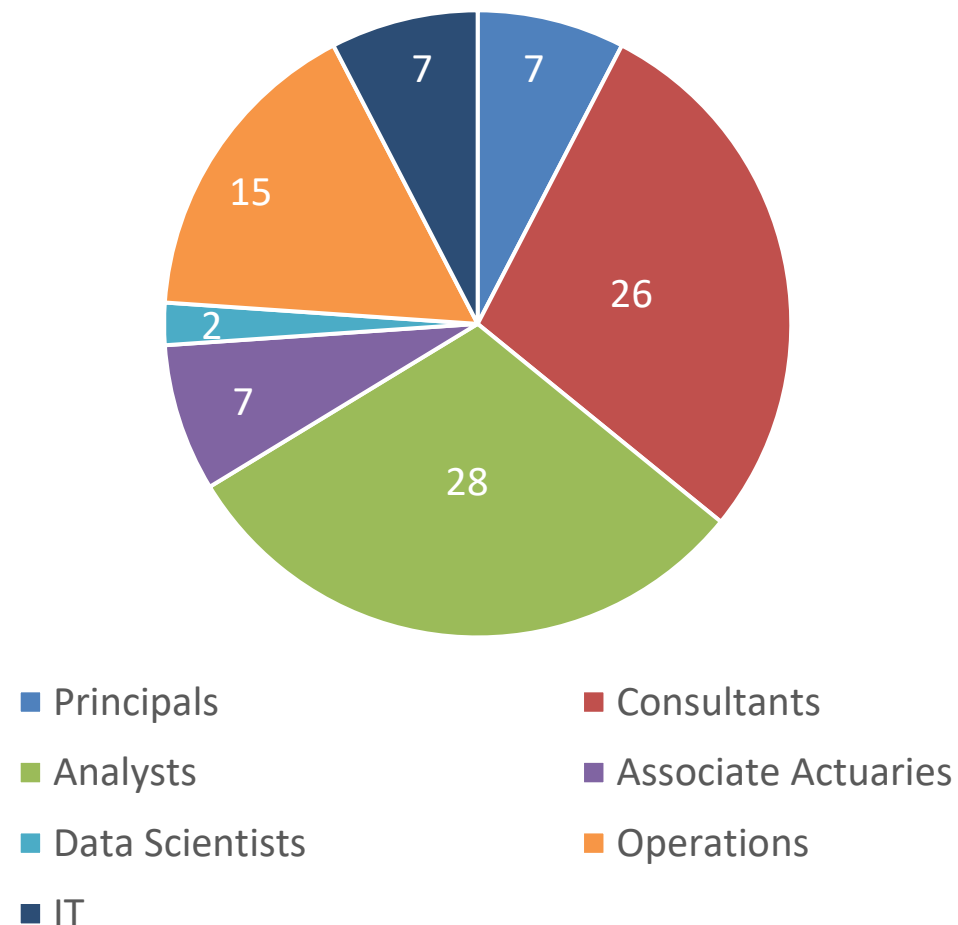
- 1 About Pinnacle
 - 2 Impacts on Revenue
 - 3 Commercial Insurance Trends
 - 4 Changing Costs
 - 5 EPA UST Performance Measures
- 

1 **About Pinnacle**



About Pinnacle

- One of the largest independent U.S. property/casualty actuarial firms
- Total staff over 90
- Over 40 credentialed actuaries
- Home office in Bloomington, IL
- Offices in 4 locations across the country
- Clientele base of 500+

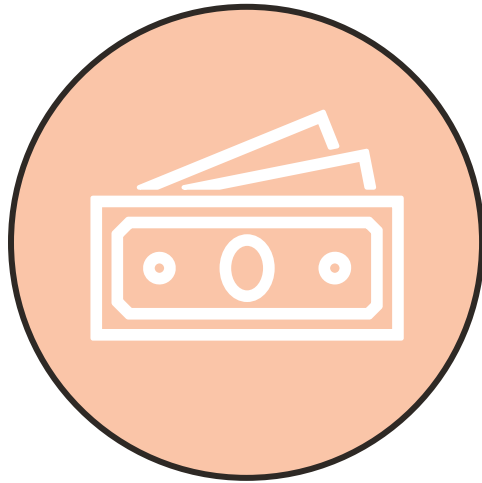


2

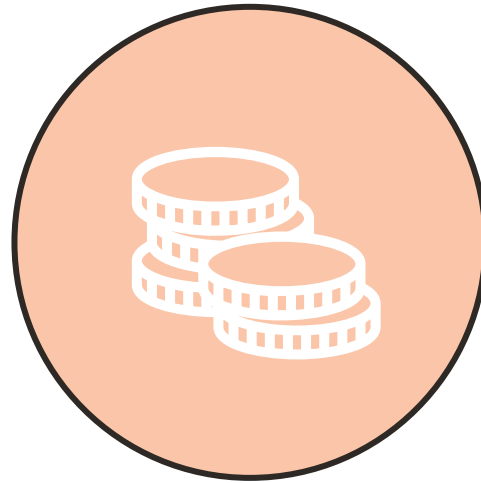
Impacts on Revenue



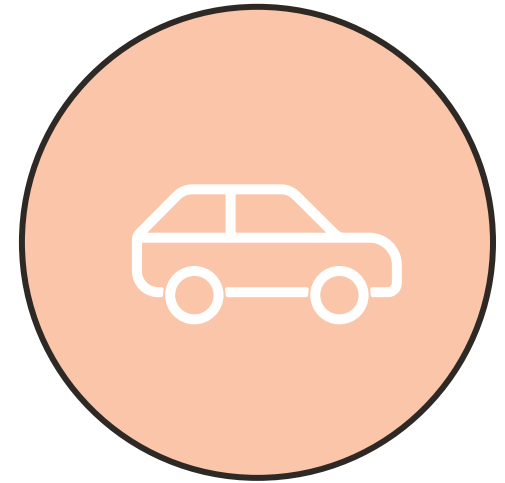
UST Fund Revenue



Registration Fees



Tank Fees



Rate Per Gallon

Impact on Fuel Taxes

California EV push could cost state \$1 billion in lost fuel tax revenue by 2027

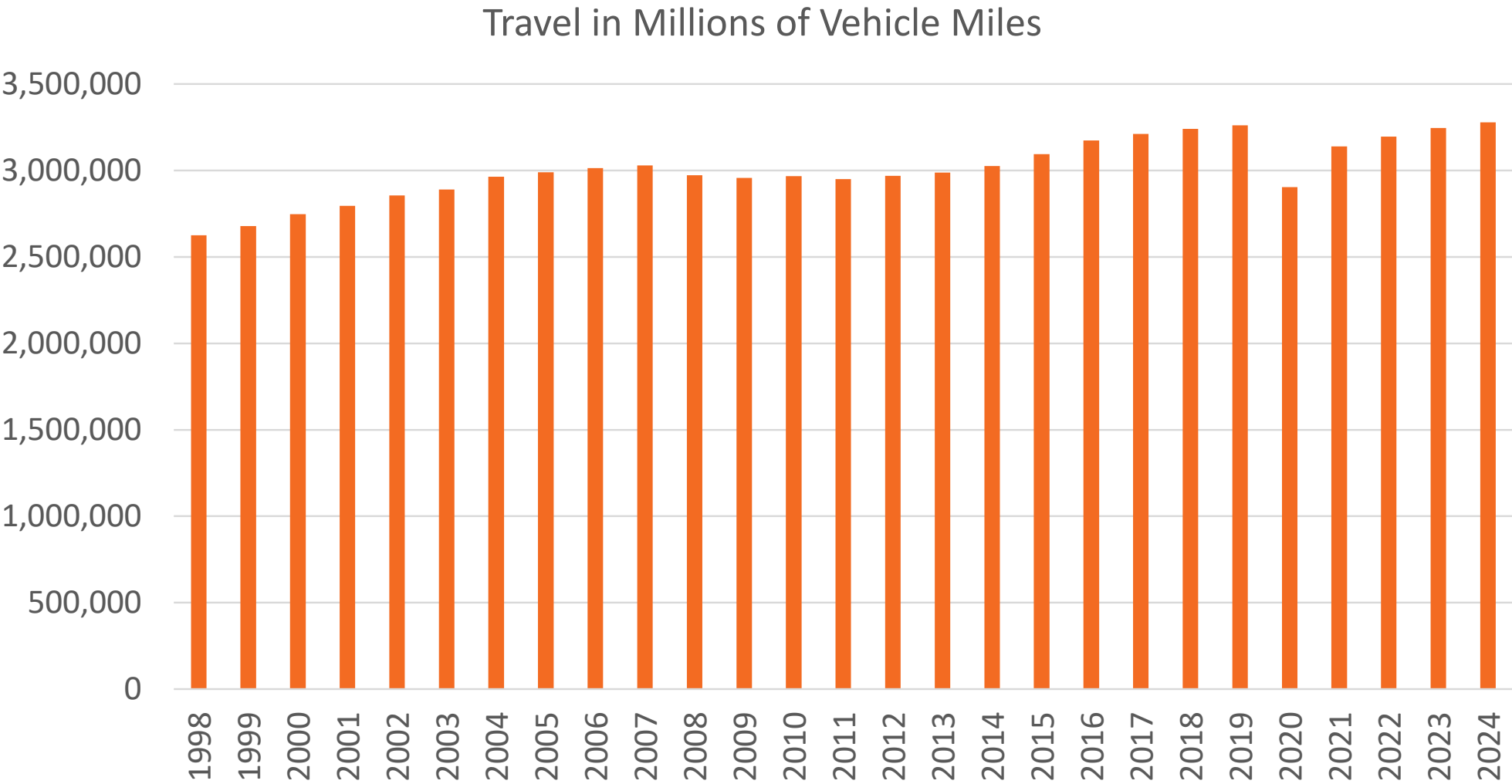
Average fuel efficiency for passenger vehicles increased more than 75 percent since 1977

How Louisiana could lose millions in gas tax revenues by 2040

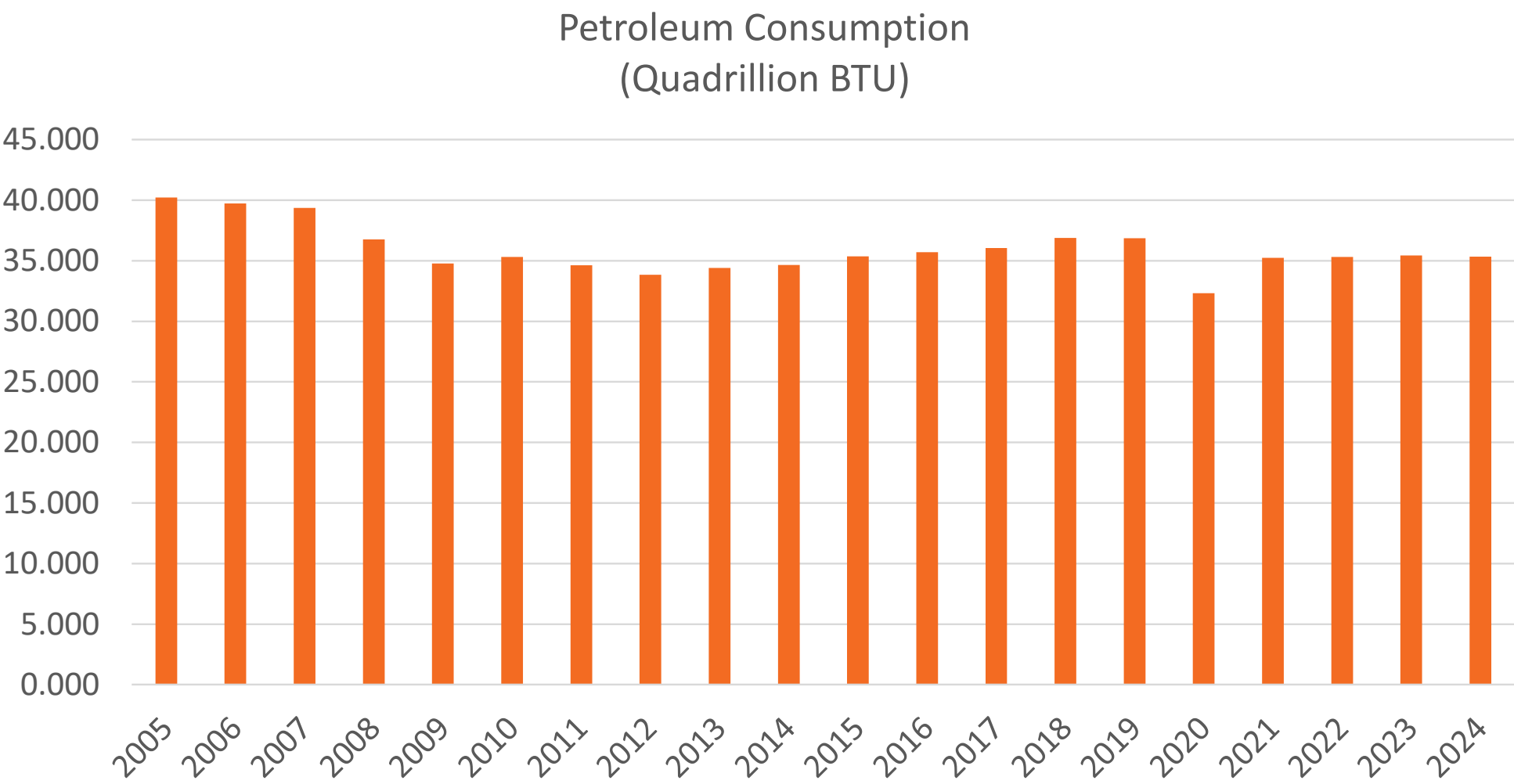
Transitioning to electric vehicles will exacerbate declines in fuel tax revenue

If EVs increase in line with forecasts, gas tax proceeds will decline by between 21% and 30% by 2035.

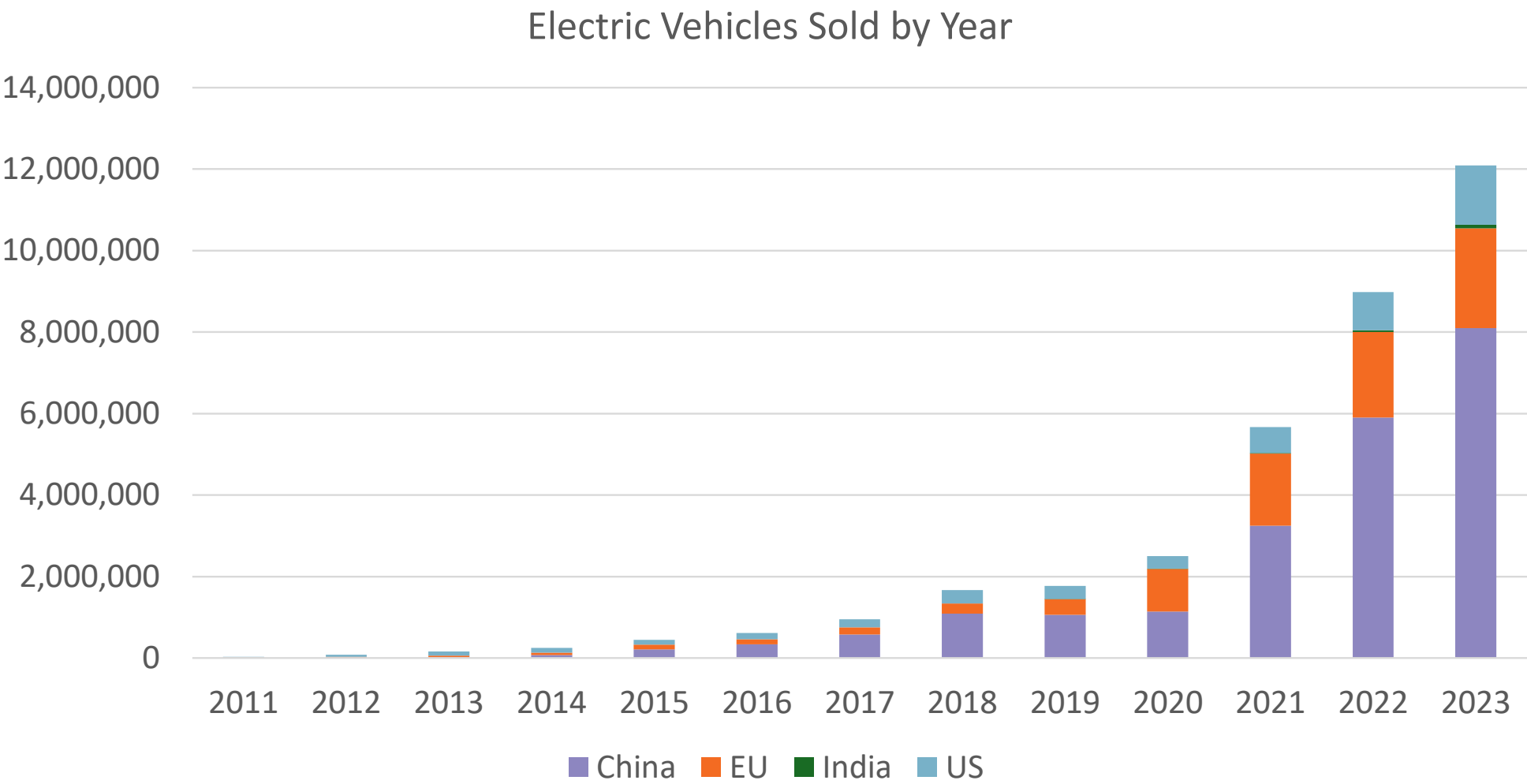
US DoT Federal Highway Administration



US Energy Information Administration

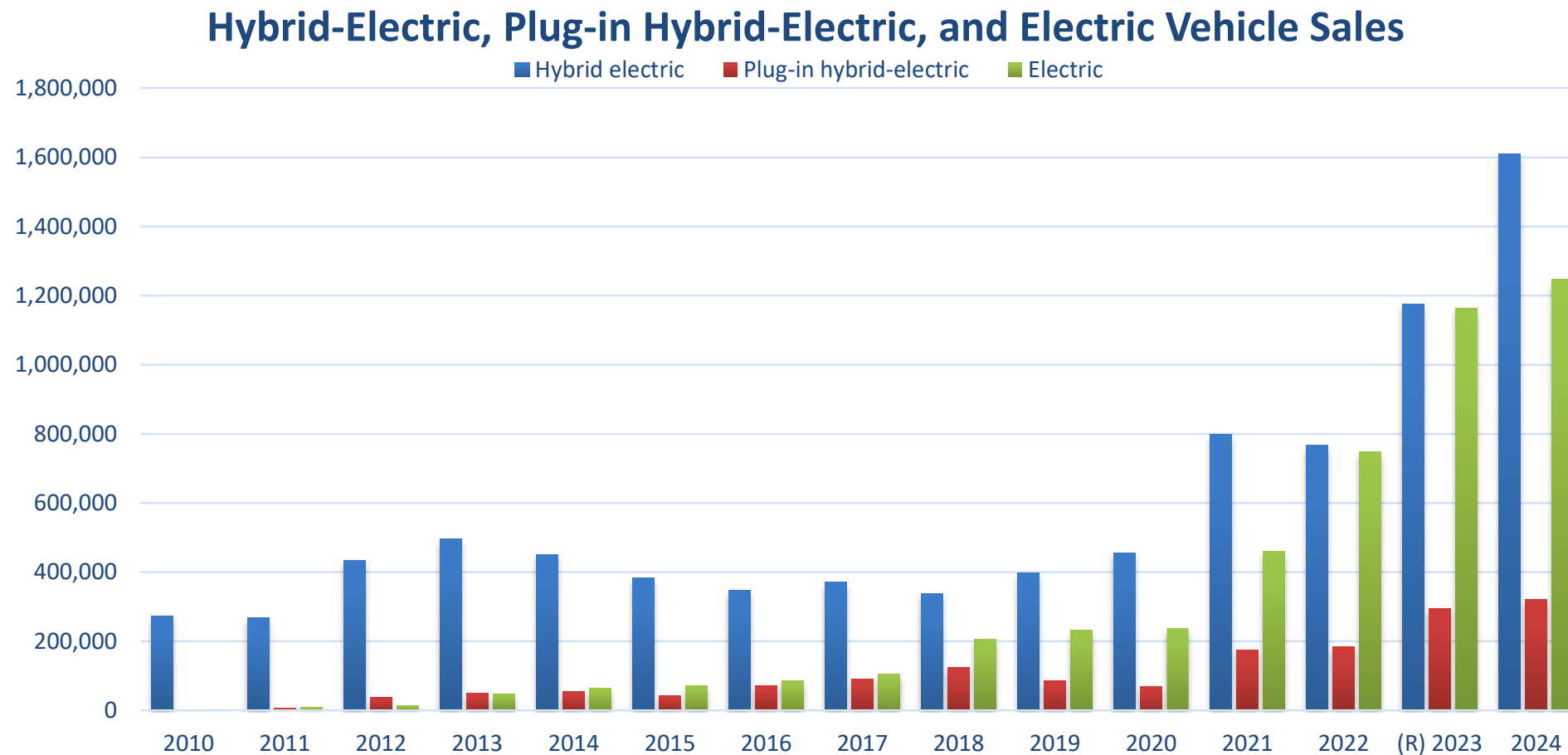


Autoinsurance.Com



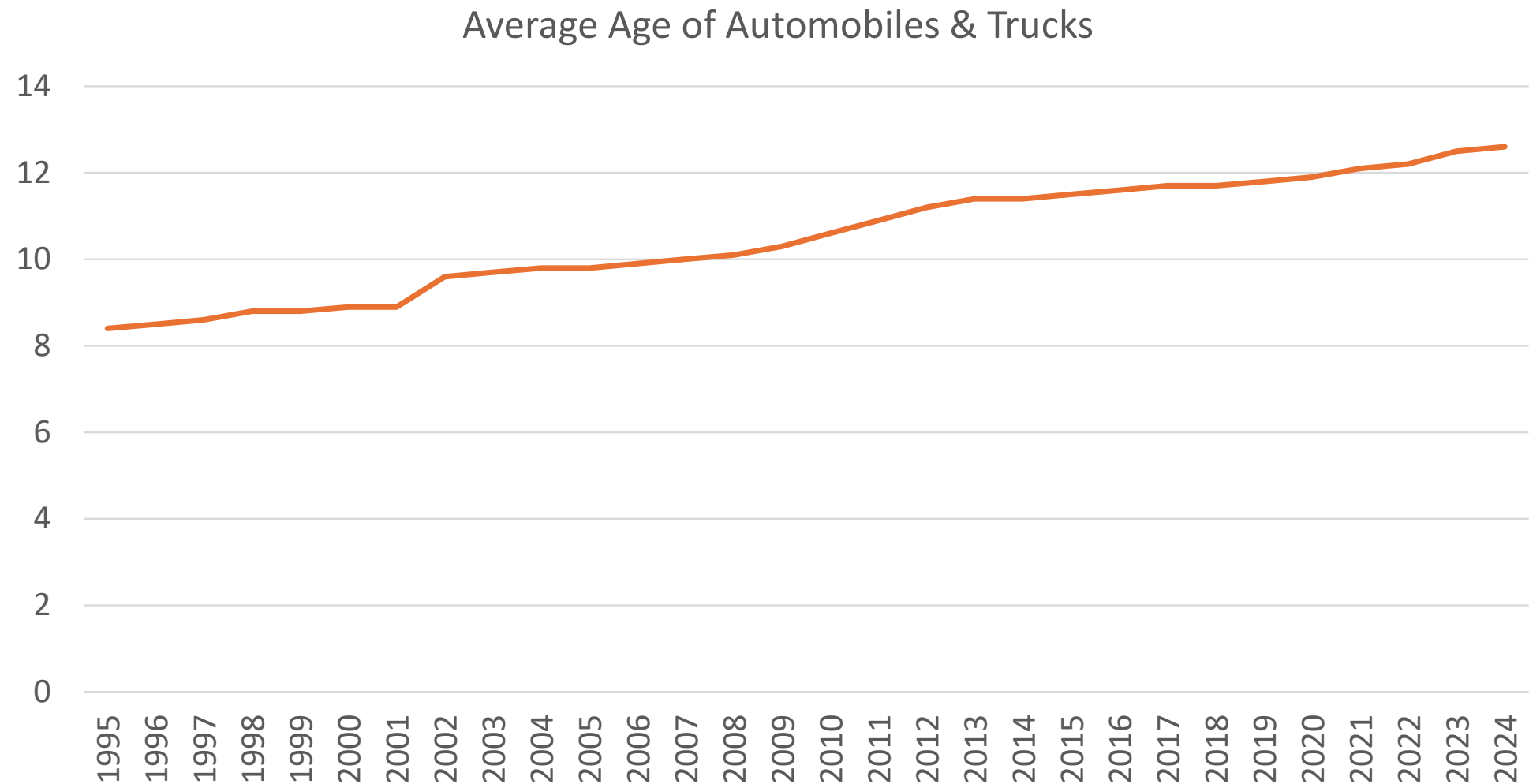
Argonne National Laboratory

Light Duty Electric Drive Vehicles Monthly Sales Updates

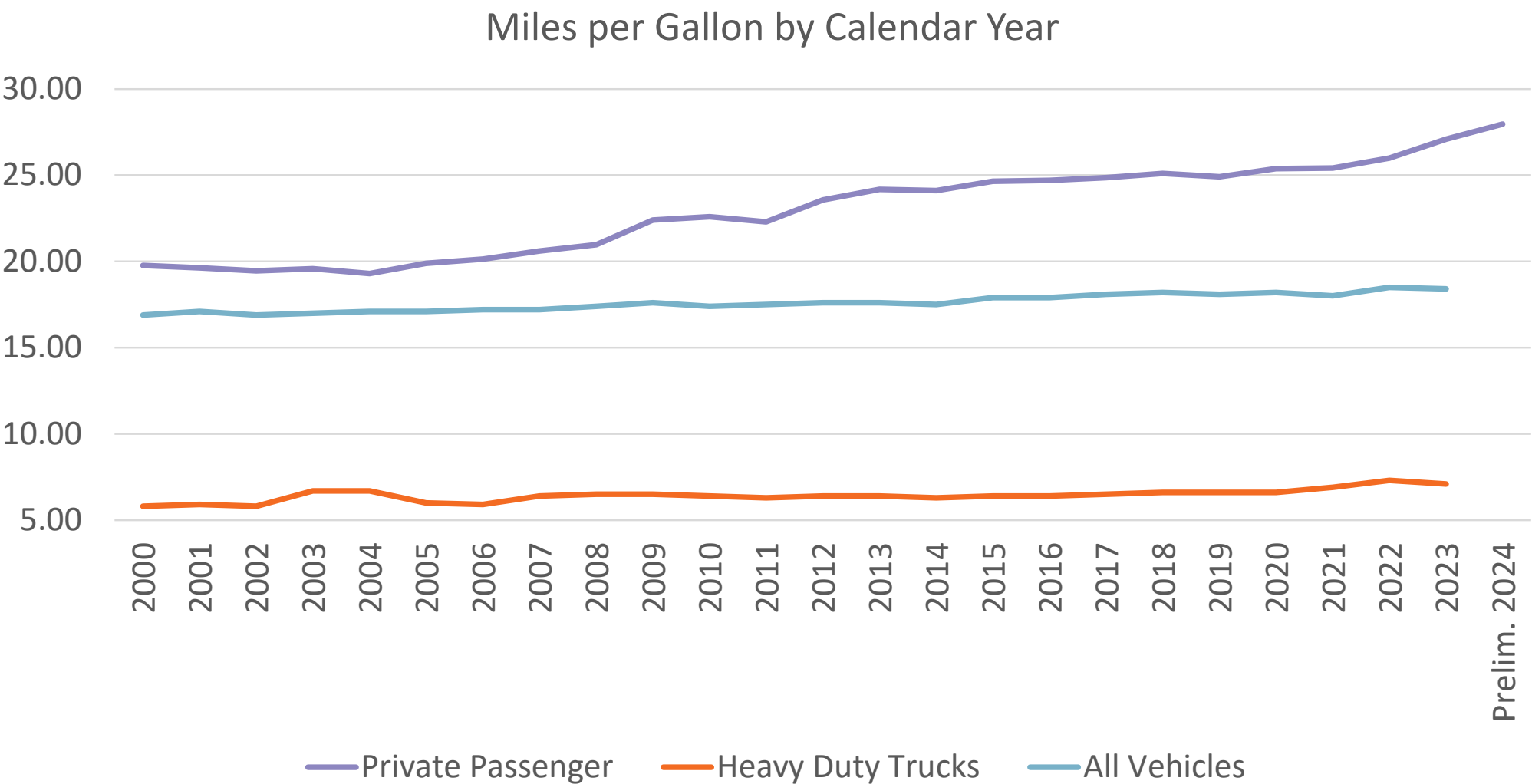


Source: <https://www.anl.gov/esia/light-duty-electric-drive-vehicles-monthly-sales-updates> as of Mar. 6, 2025.

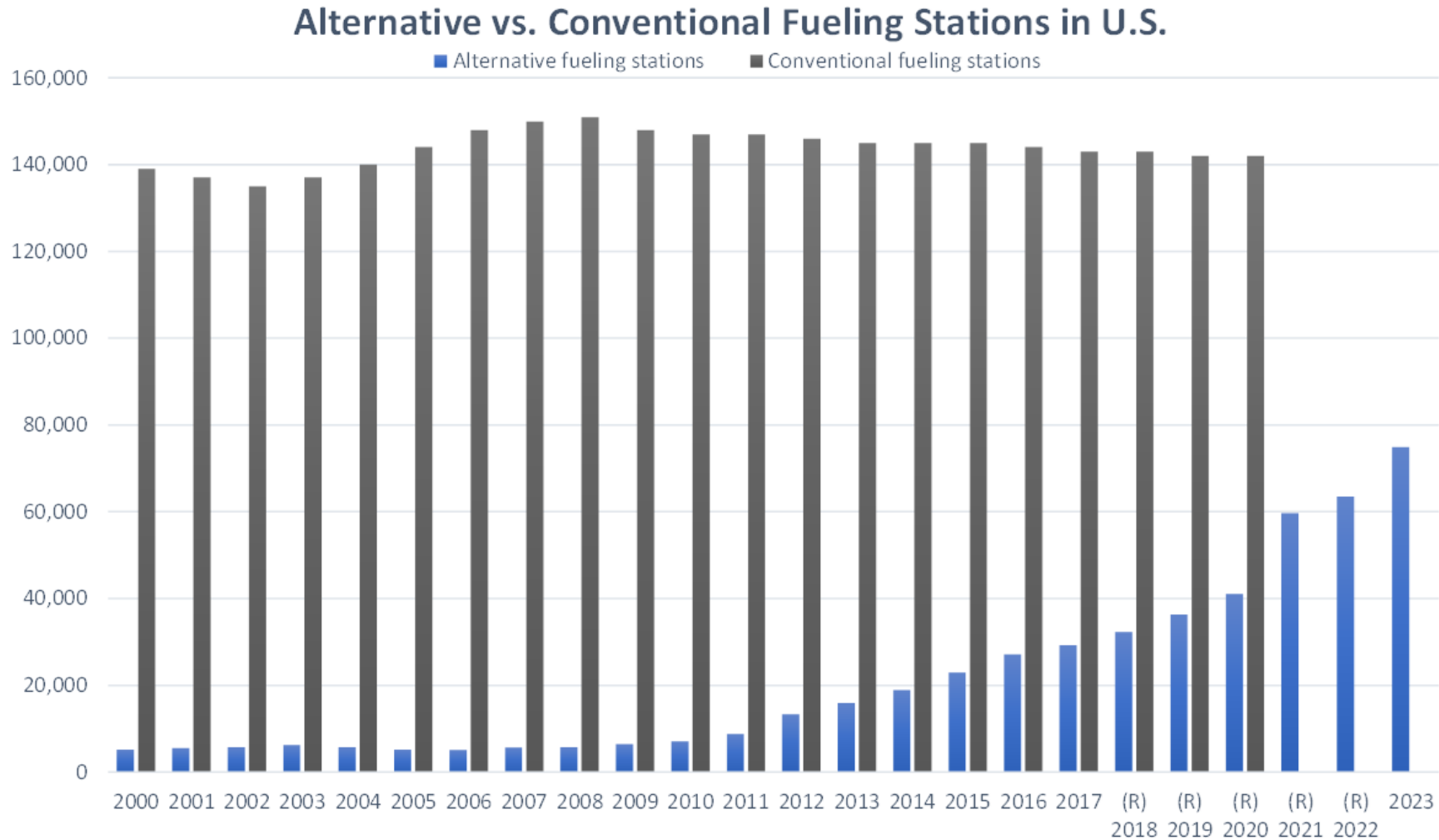
Bureau of Transportation Statistics



US Energy Information Administration



Bureau of Transportation Statistics



Considerations

Miles Driven
Increasing

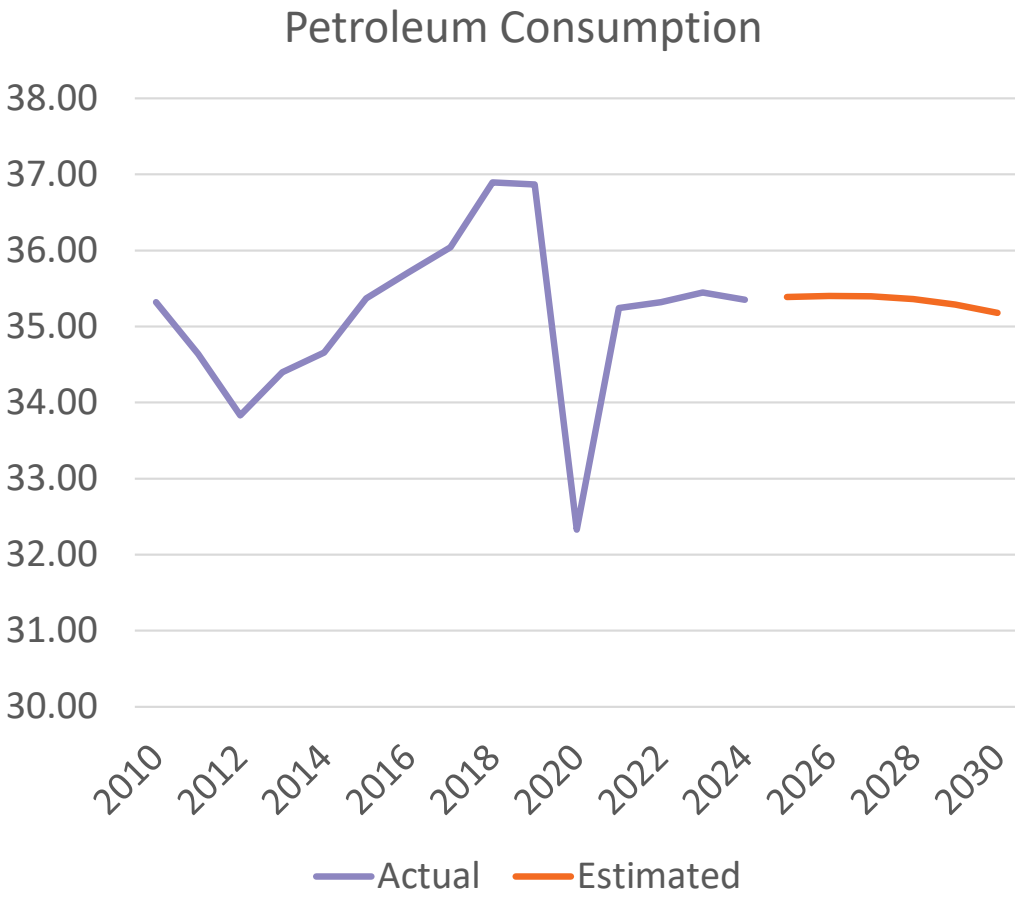
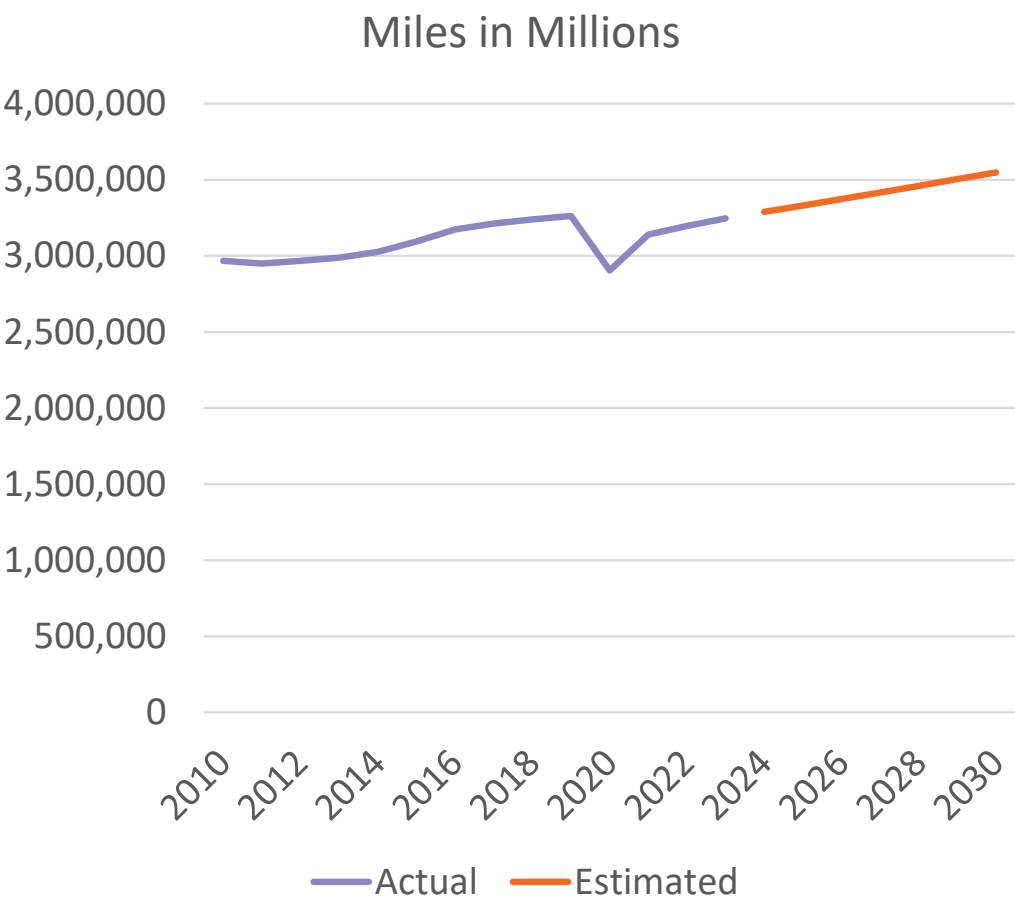
Vehicles
Lasting Longer

Driving Habits
– EV versus
Other

Miles per
Gallon
Increasing

Move towards
Hybrids and
EVs

Impact on Fuel Taxes Graph



3

Commercial Insurance Trends

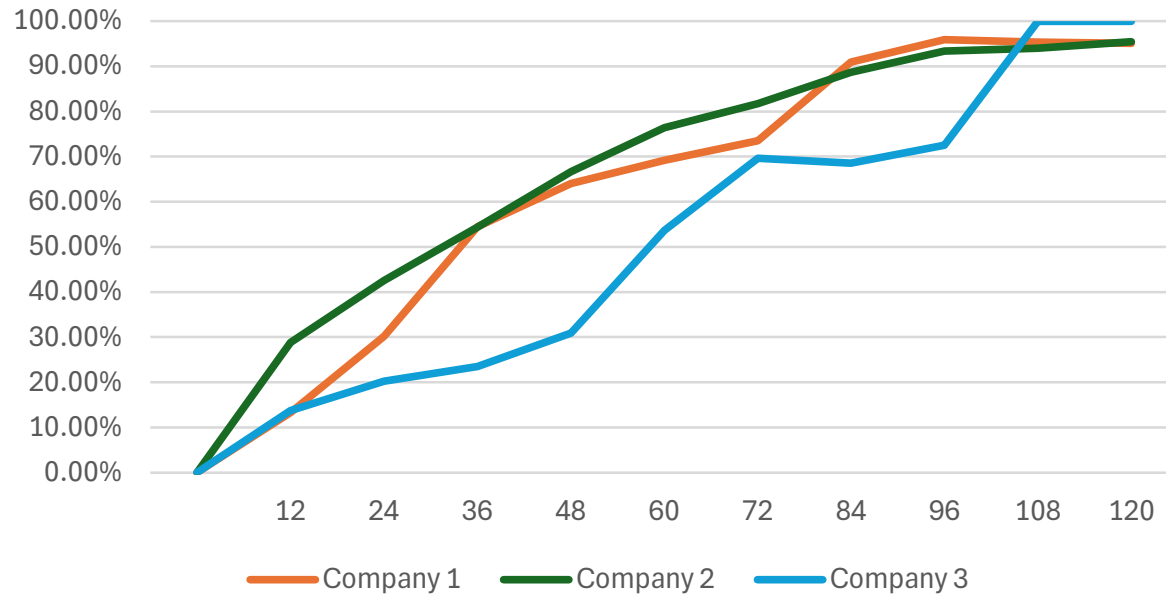


Terminology

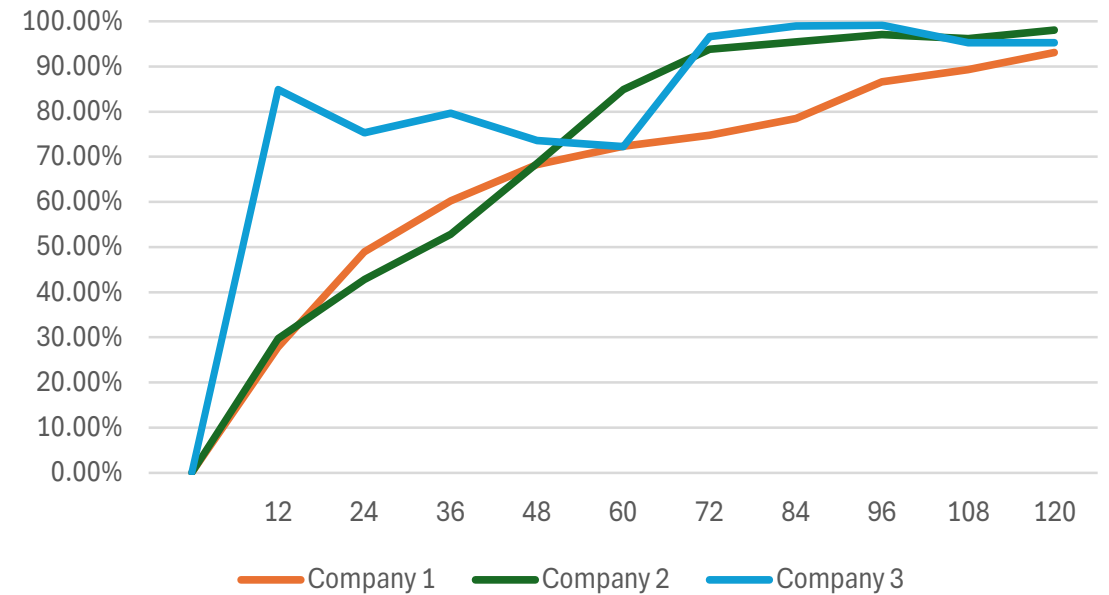
- **Case Reserves:** The estimate of unpaid loss amounts established by the claims department for unpaid claims that have been reported; For Tank Funds, we calculate this as Requested Amount – Paid Amount
- **IBNR:** Loss for claims Incurred But Not Reported. In this report, we have used the term in its broader, more general sense to represent development on current claims and unreported claims (also referred to as “pure” IBNR or IBNYR – Incurred But Not Yet Reported)
- **Paid Loss:** The amount of money that has been paid to cover the claims
- **Reported Loss:** The total of paid loss and case reserves for known claims
- **Ultimate Loss:** The total of reported loss and IBNR

Development Lag

Incurred Loss Pattern - Occurrence

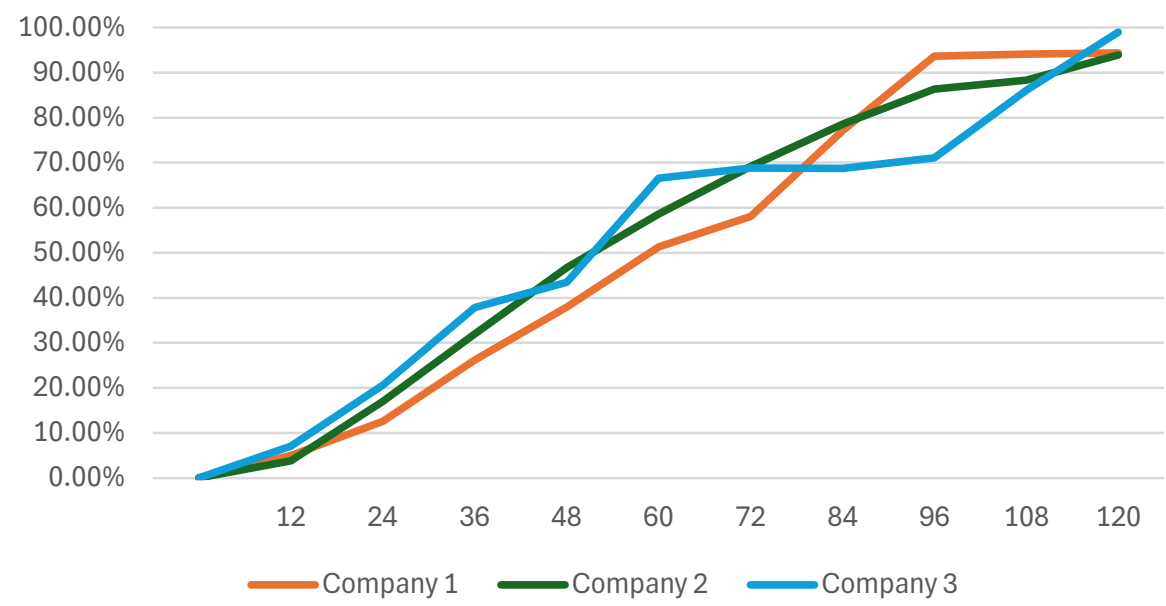


Incurred Loss Pattern - Claims Made

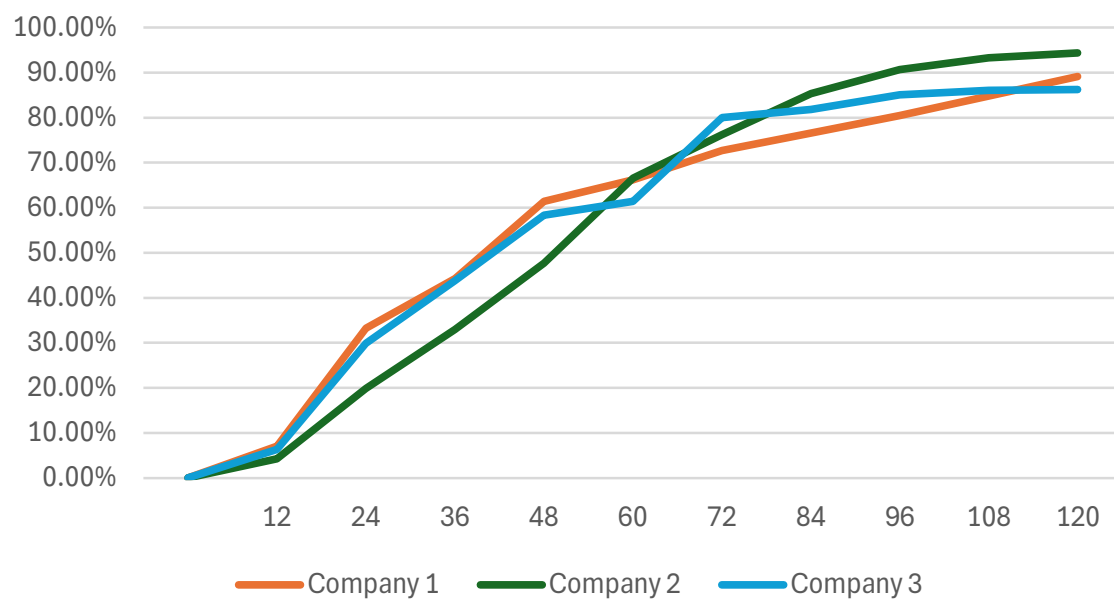


Development Lag

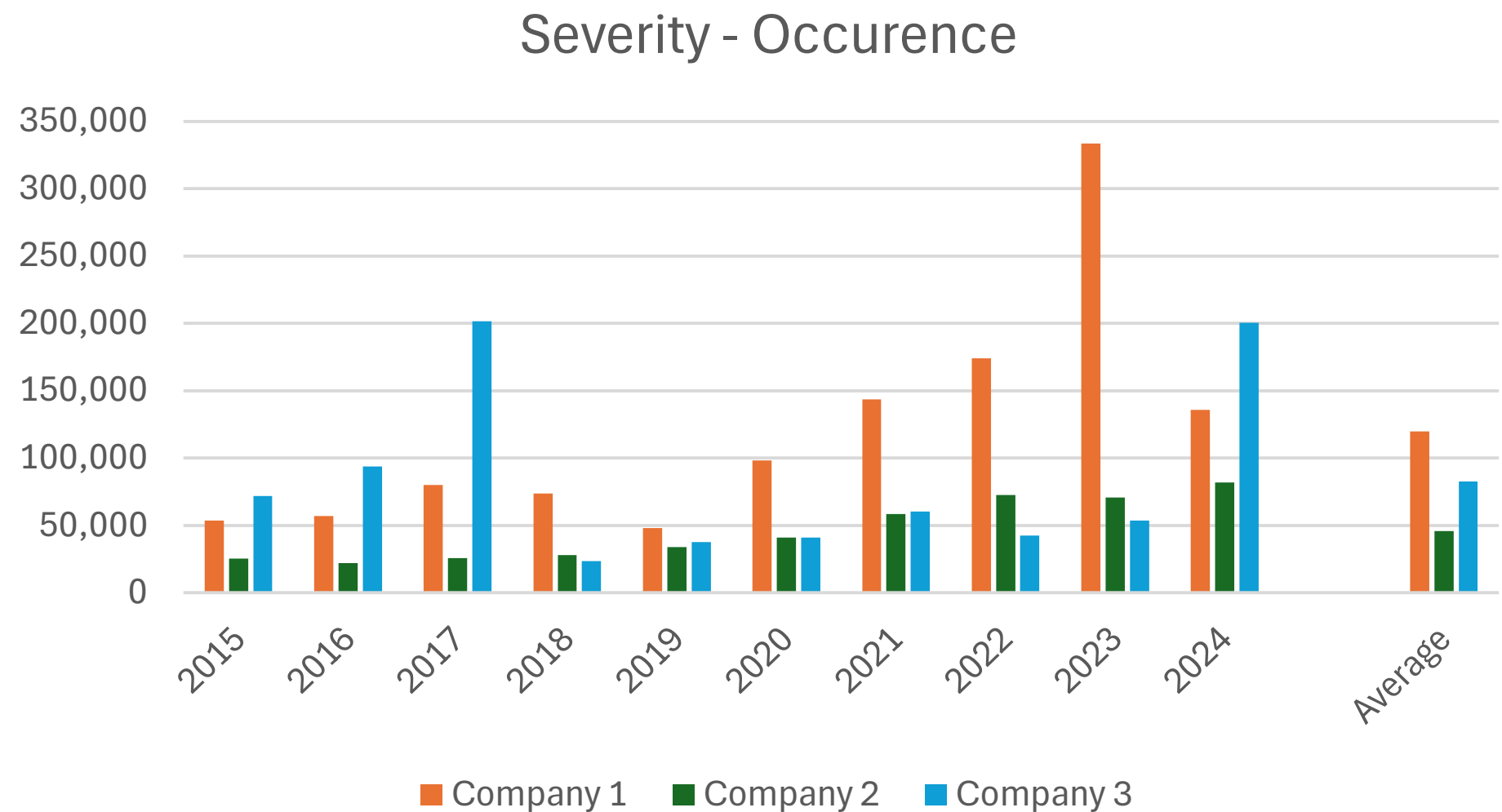
Paid Loss Pattern - Occurrence



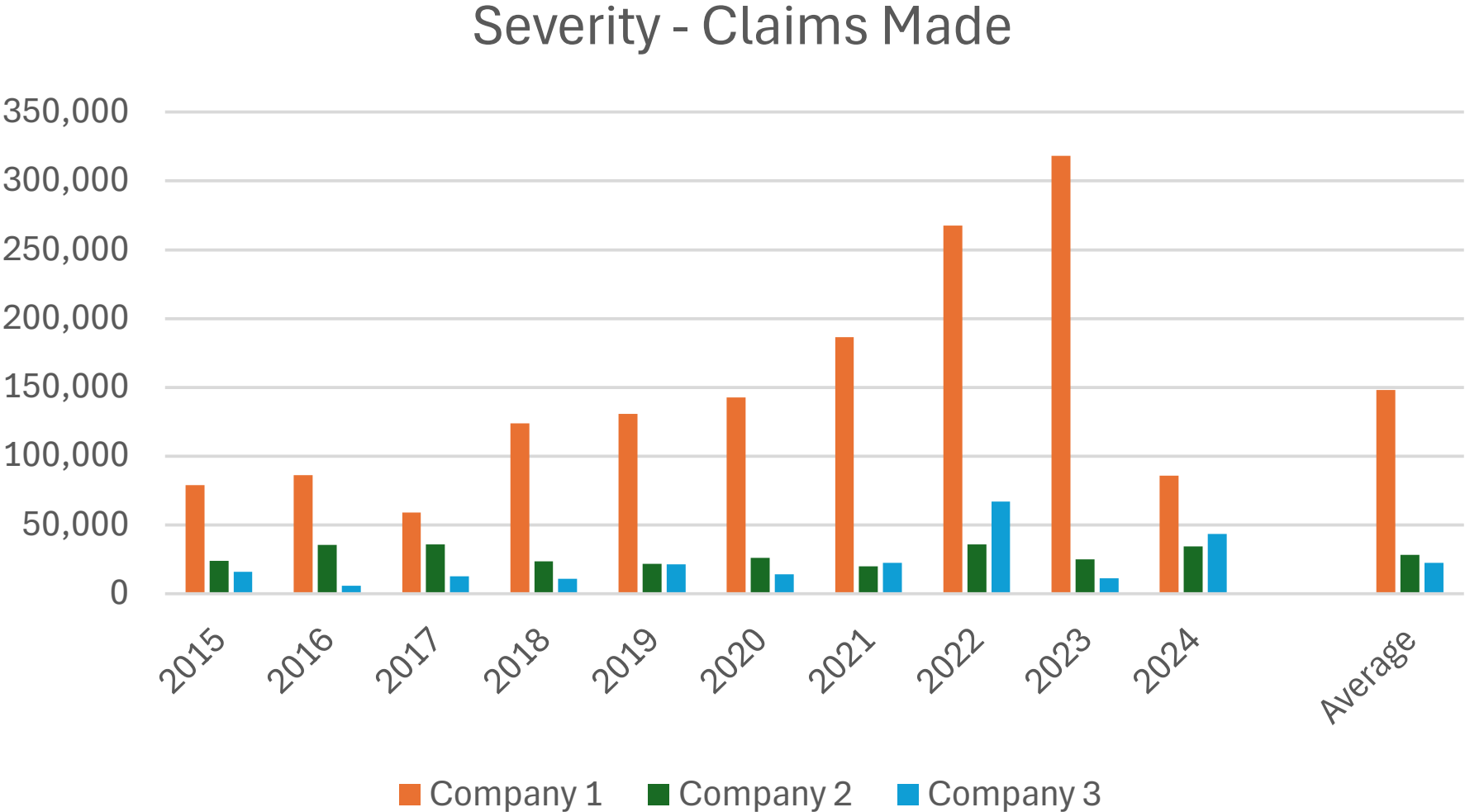
Paid Loss Pattern - Claims Made



Severity



Severity



Premium Changes

- Has been increasing due to rising cost and aging tanks
- In 1984, Congress created the UST program to protect the public against potential leaks
 - Stricter guidelines were implemented, so many tanks were replaced
 - Now hitting the 30 – 40-year age
- In 2015, the EPA revised UST regulation
 - Emphasized proper operation and maintenance
- Several State Fund fees increasing
 - i.e. Washington, Massachusetts and California
- Social inflation

Classifications

- Tank Age
- Tank Size – Gallons
- Tank Wall/Pipe Material – Steel, Plastic, Fiberglass, Cathodically Protected Steel
- Tank Wall/Pipe Construction - Double Wall, Single Wall
- Facility Characteristics
 - Close to a marina or at an airport?
 - Prior leaks?
 - Larger than 25,000 gallons?
 - What does the tank contain (non-petroleum based product)?
 - Has any UST at this location been removed, closed in place, or taken out of service?

4

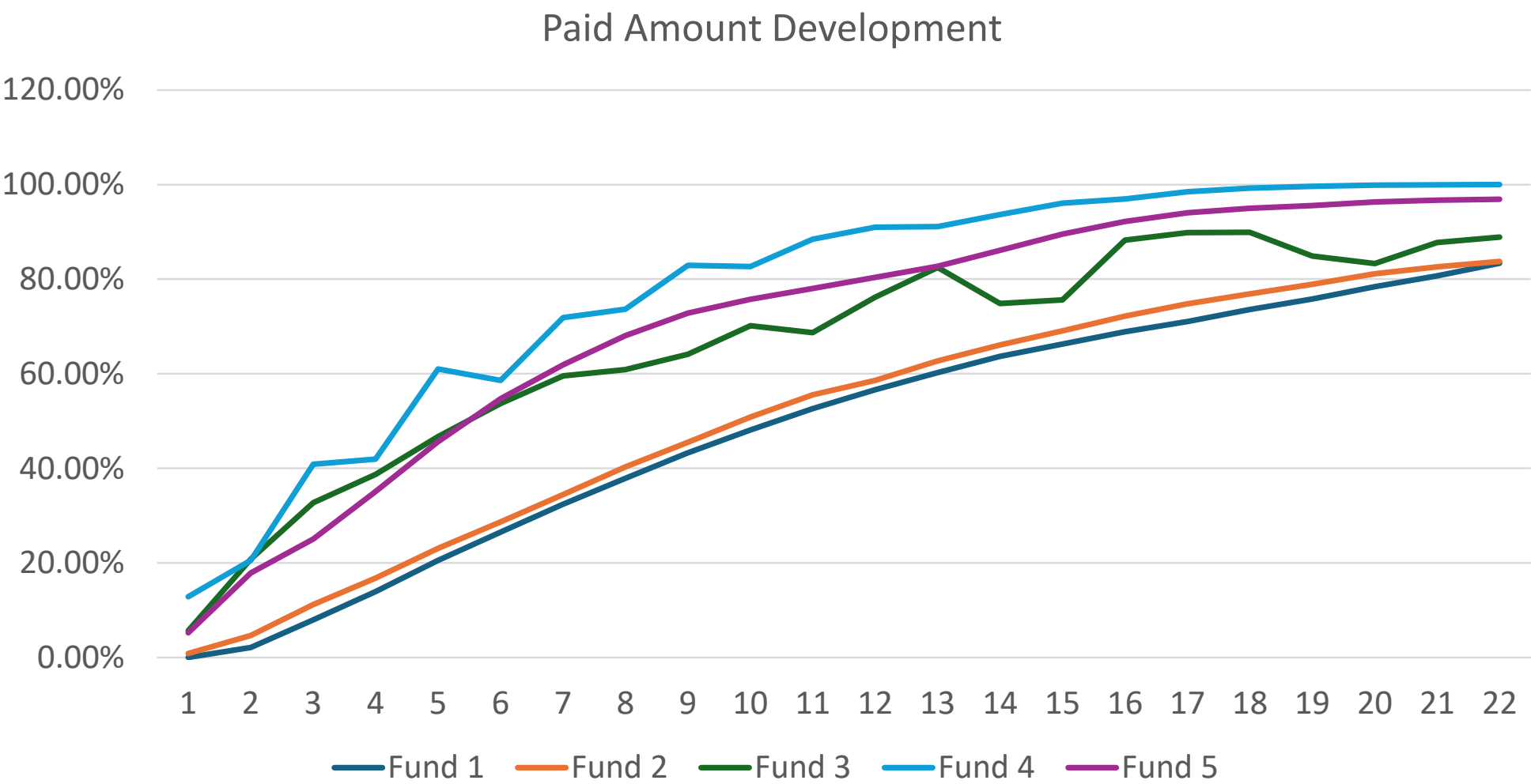
Changing Costs



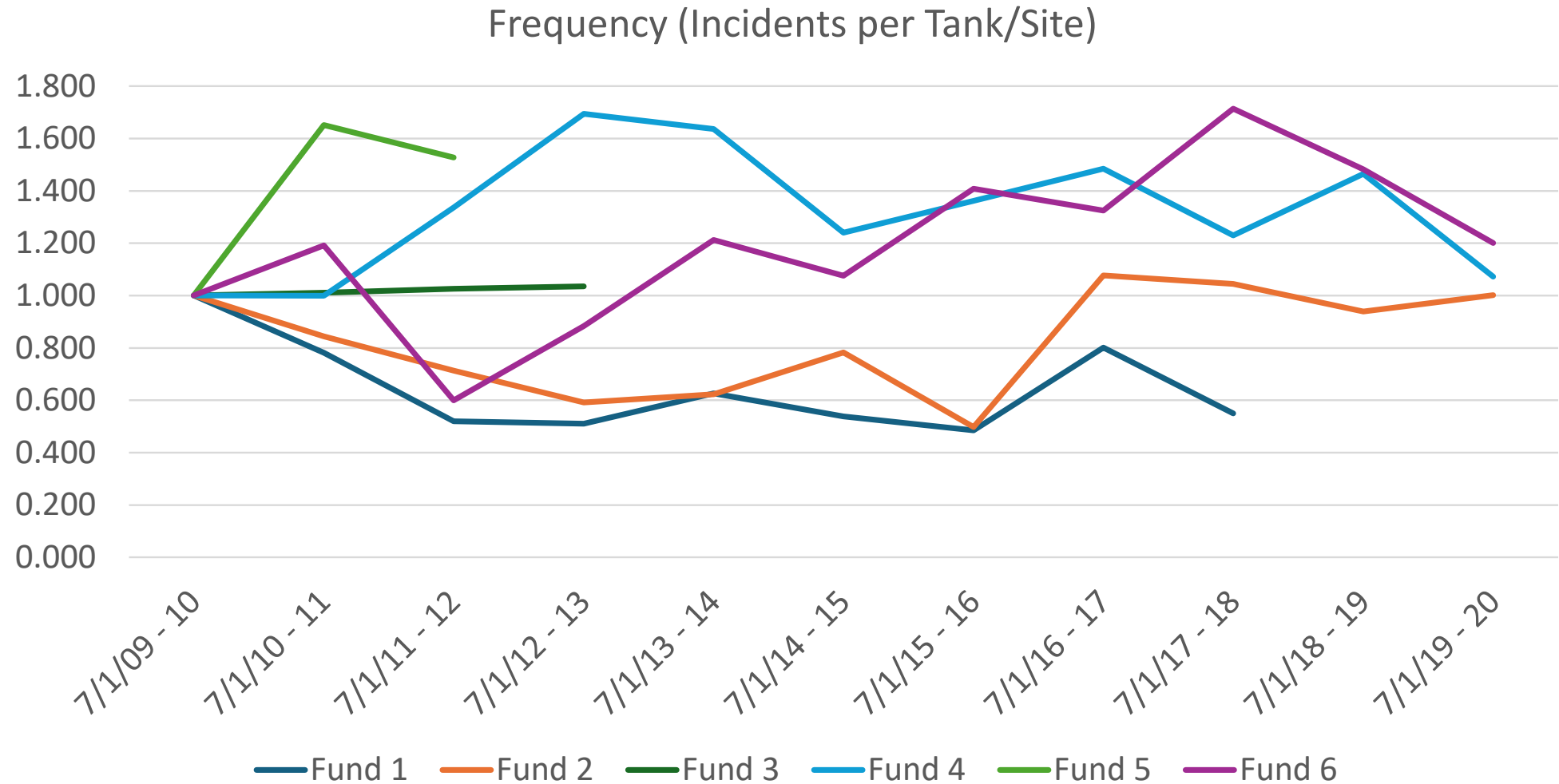
Terminology

- **Exposure:** The units in which the potential for loss is measured. In our analysis, the exposure basis is sites or tanks
- **Frequency:** The number of incidents per exposure
- **Reported Severity:** The requested amount divided by the number of incidents
- **Paid Severity:** The paid amount divided by the number of closed incidents
- **Loss Cost:** Reported (or Paid) severity divided by the exposure

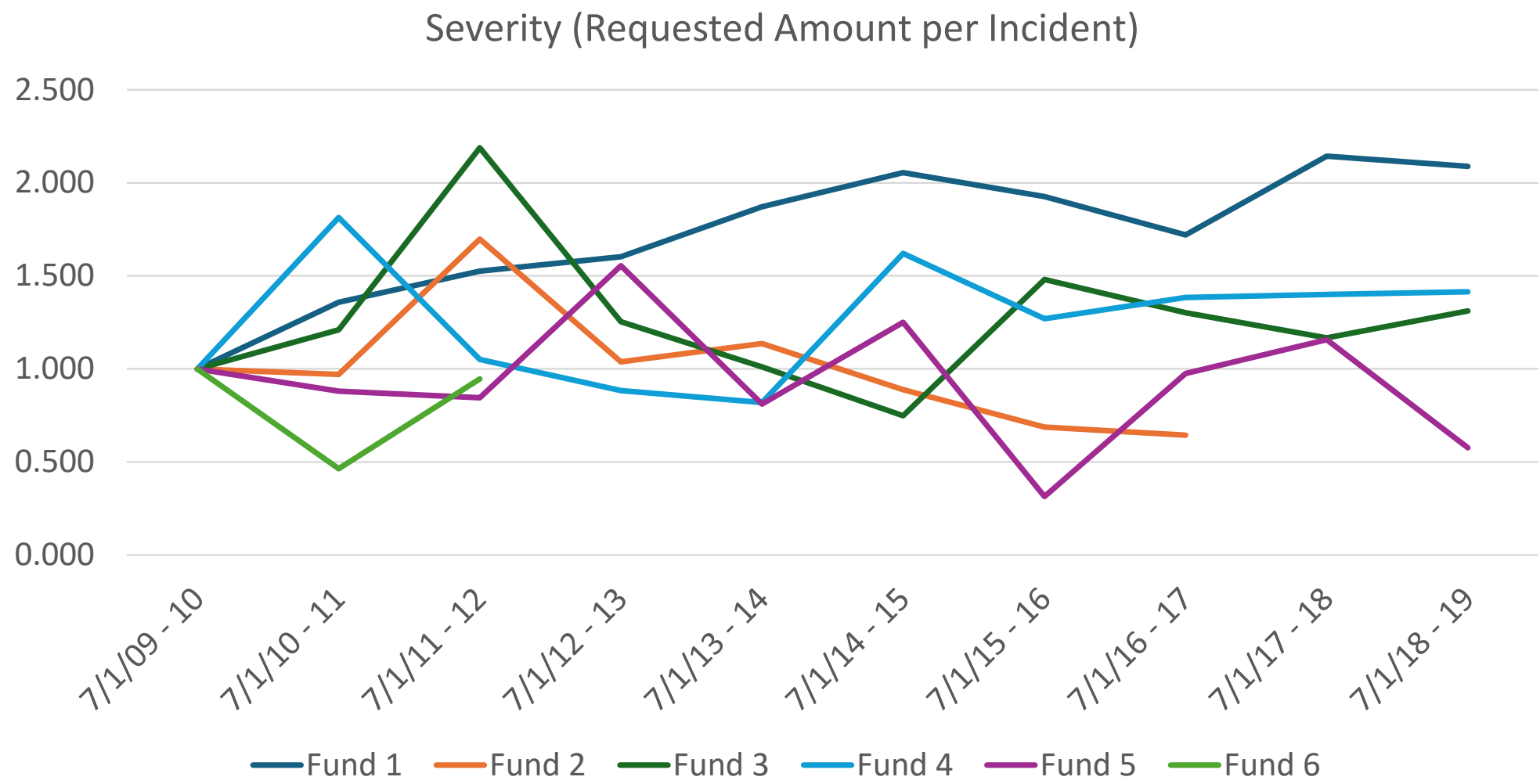
UST Fund Experience – Paid Development



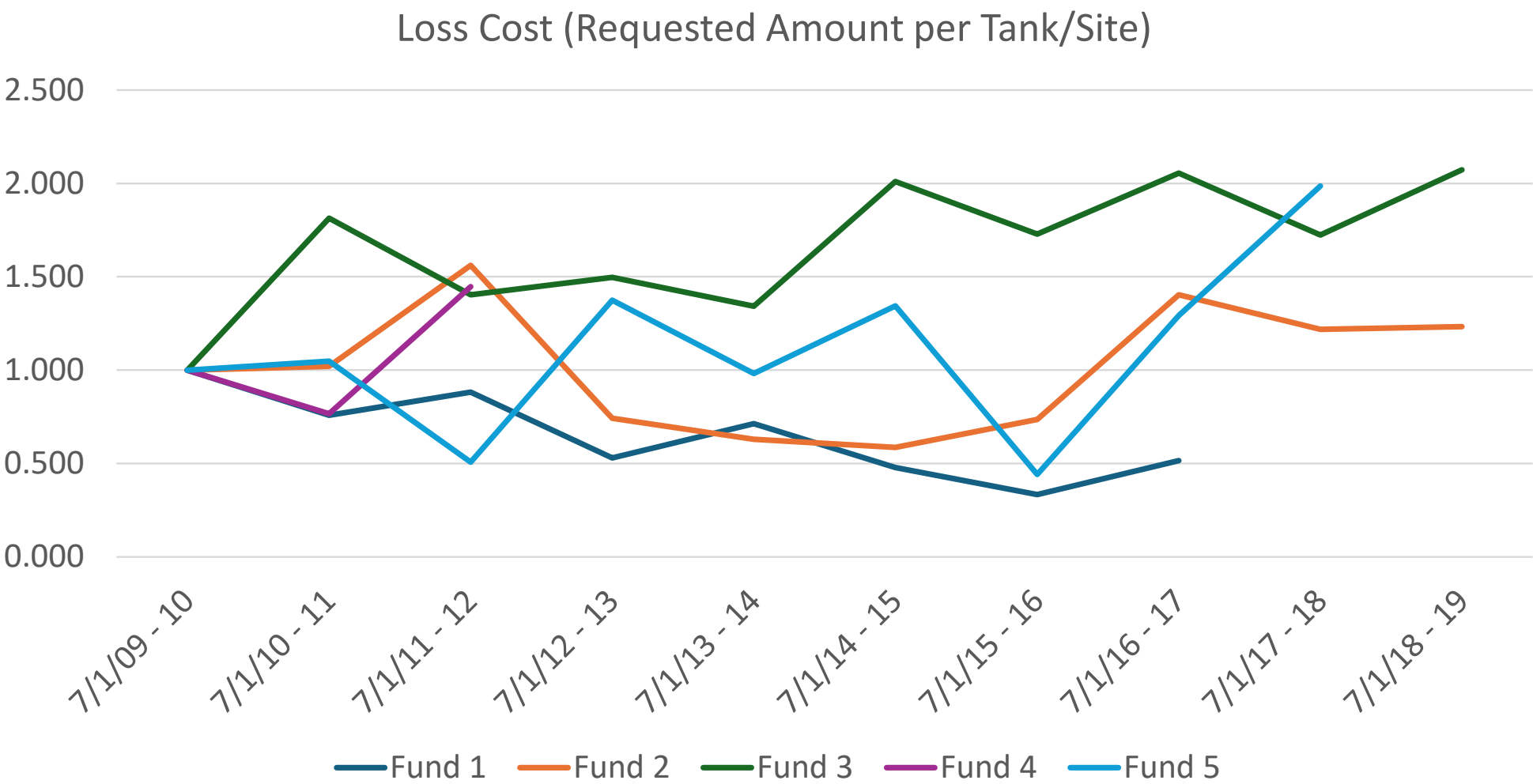
UST Fund Experience – Frequency Index



UST Fund Experience – Severity Index



UST Fund Experience – Loss Cost Index

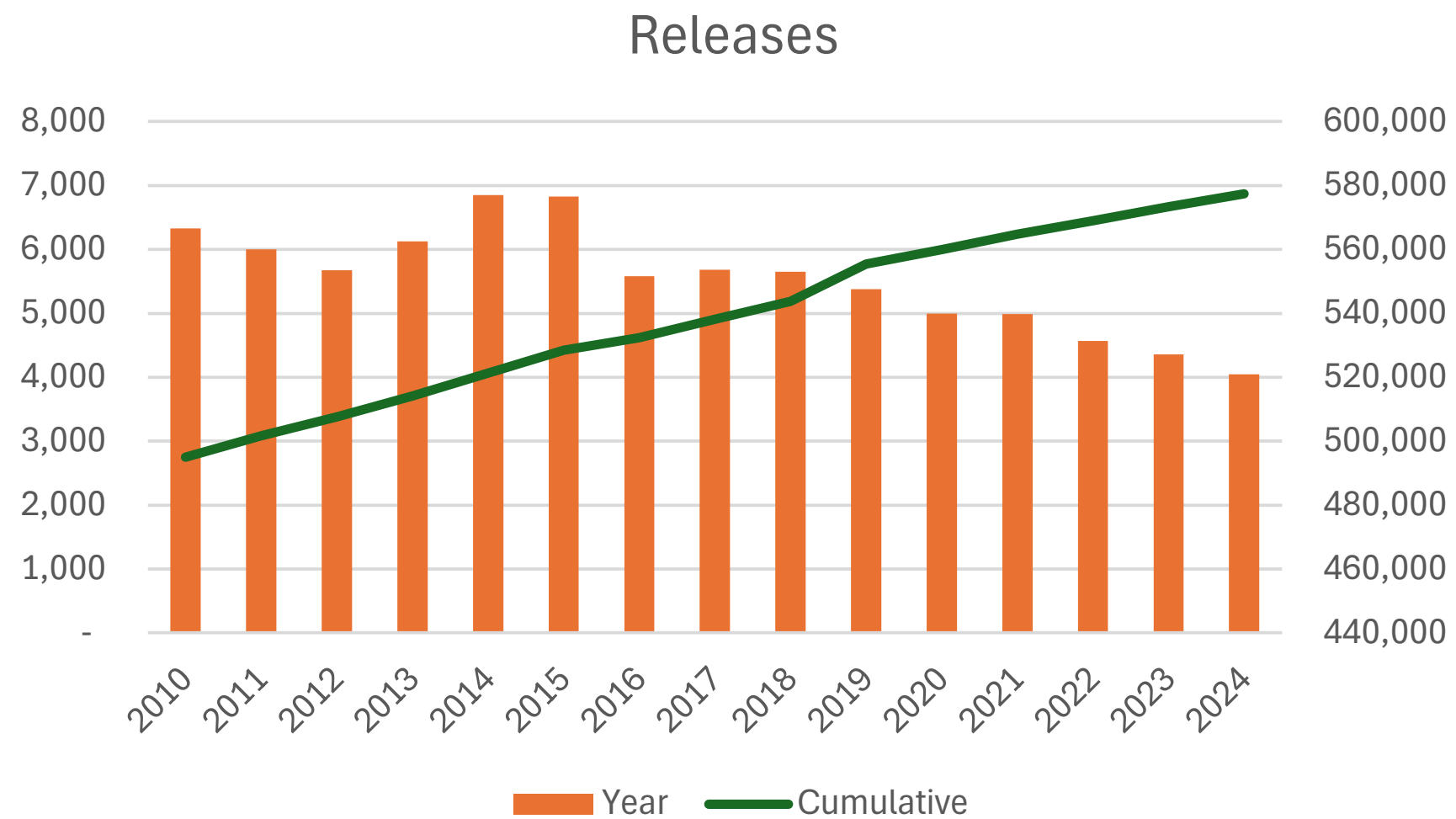


5

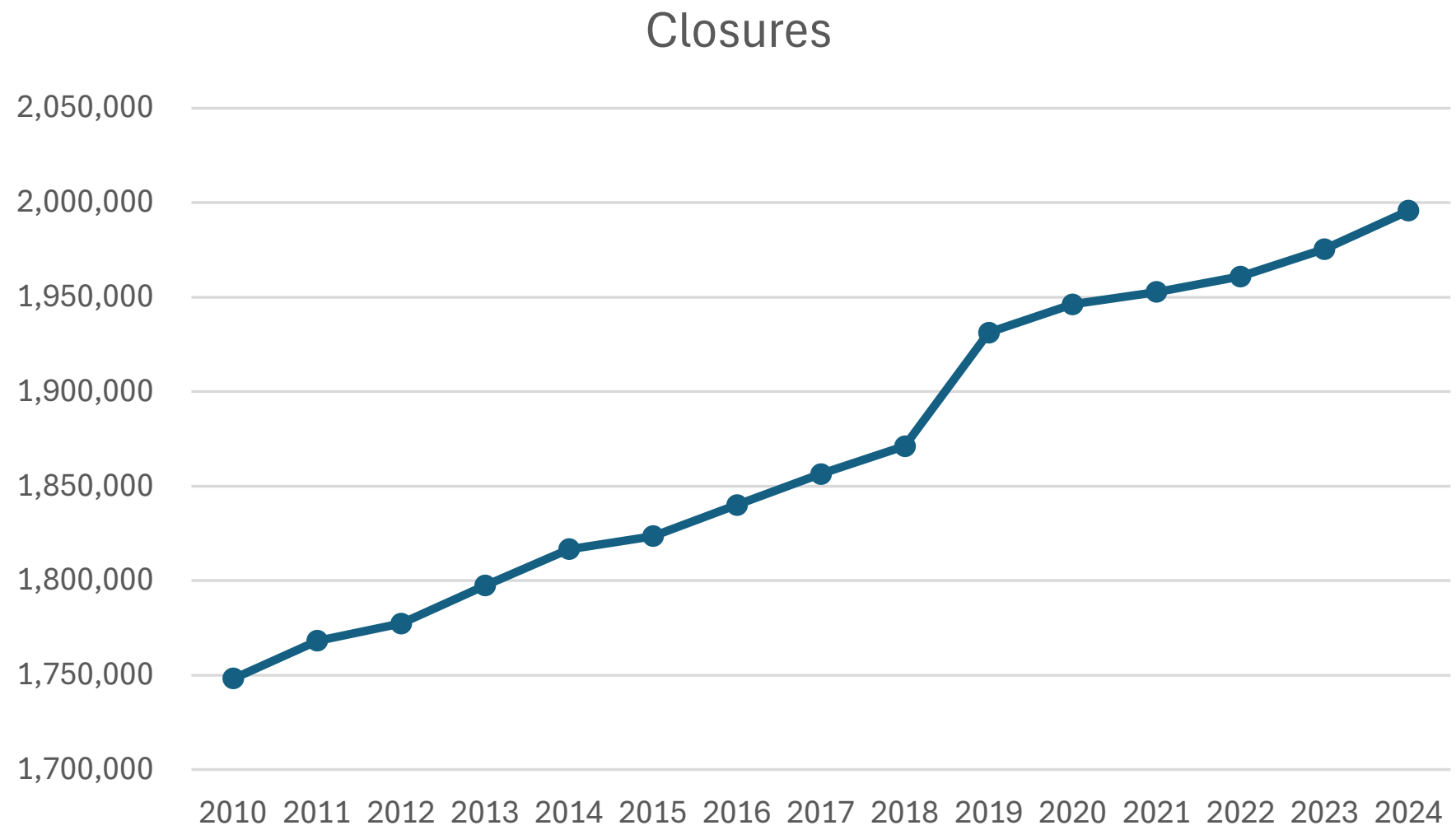
EPA UST Performance Measures



Reported Releases - Active

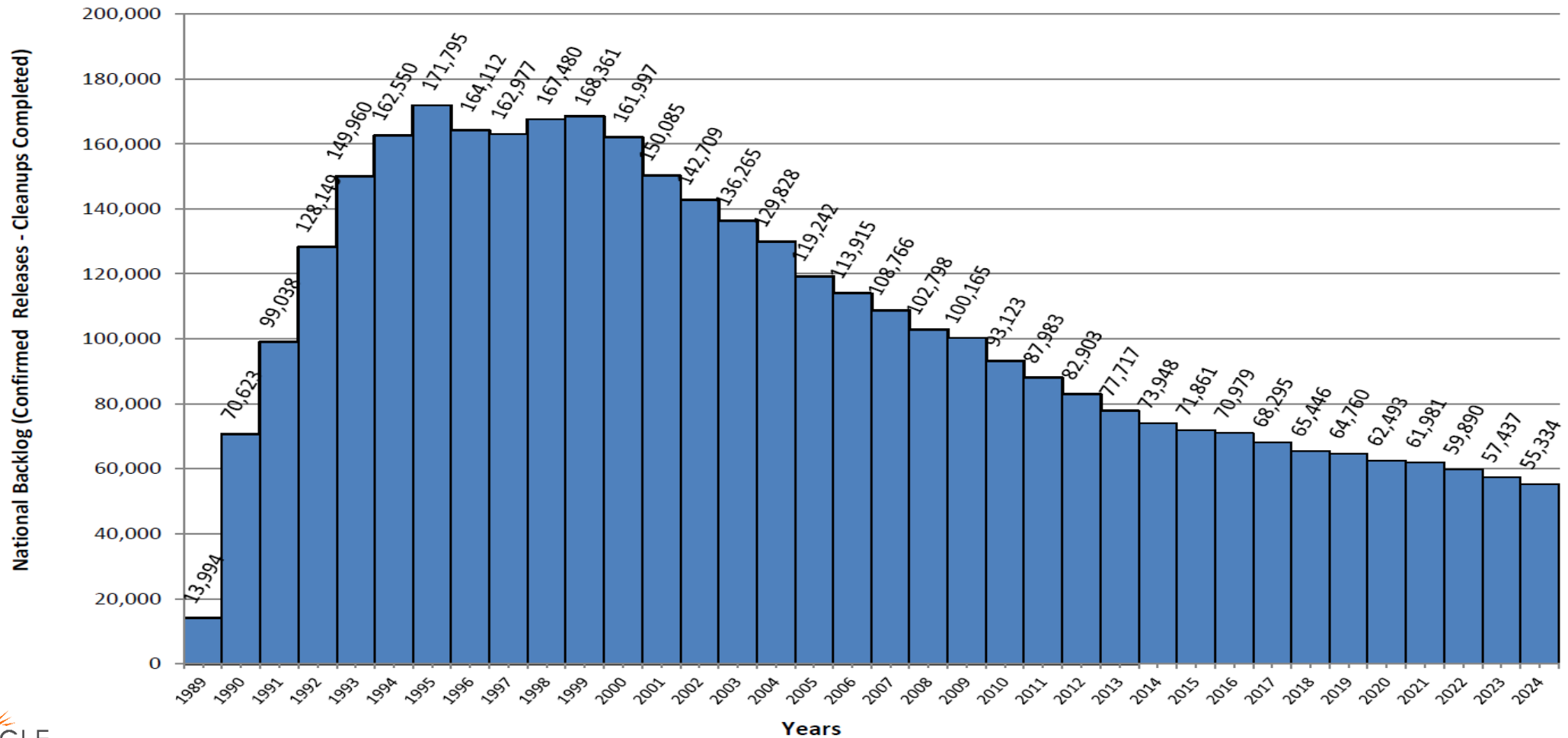


Closures



Backlog

UST National Backlog:
FY 1989 Through End-of-Year FY 2024



Thank You

Laura A. Maxwell, FCAS, MAAA, CSPA

415-692-0938

lmaxwell@pinnacleactuarial.com

Darcie R. Truttmann, FCAS, MAAA

309-807-2325

dtruttmann@pinnacleactuarial.com

