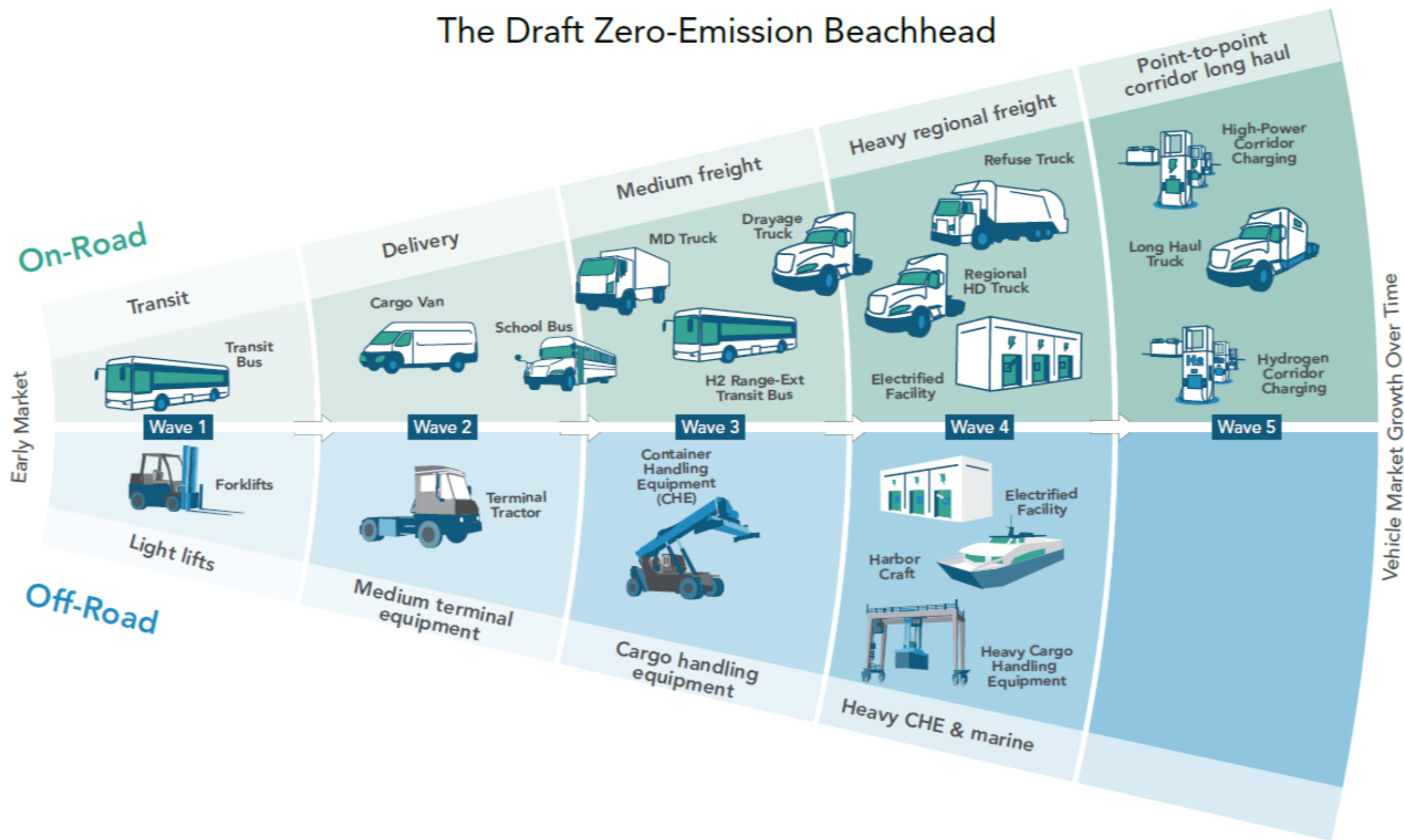
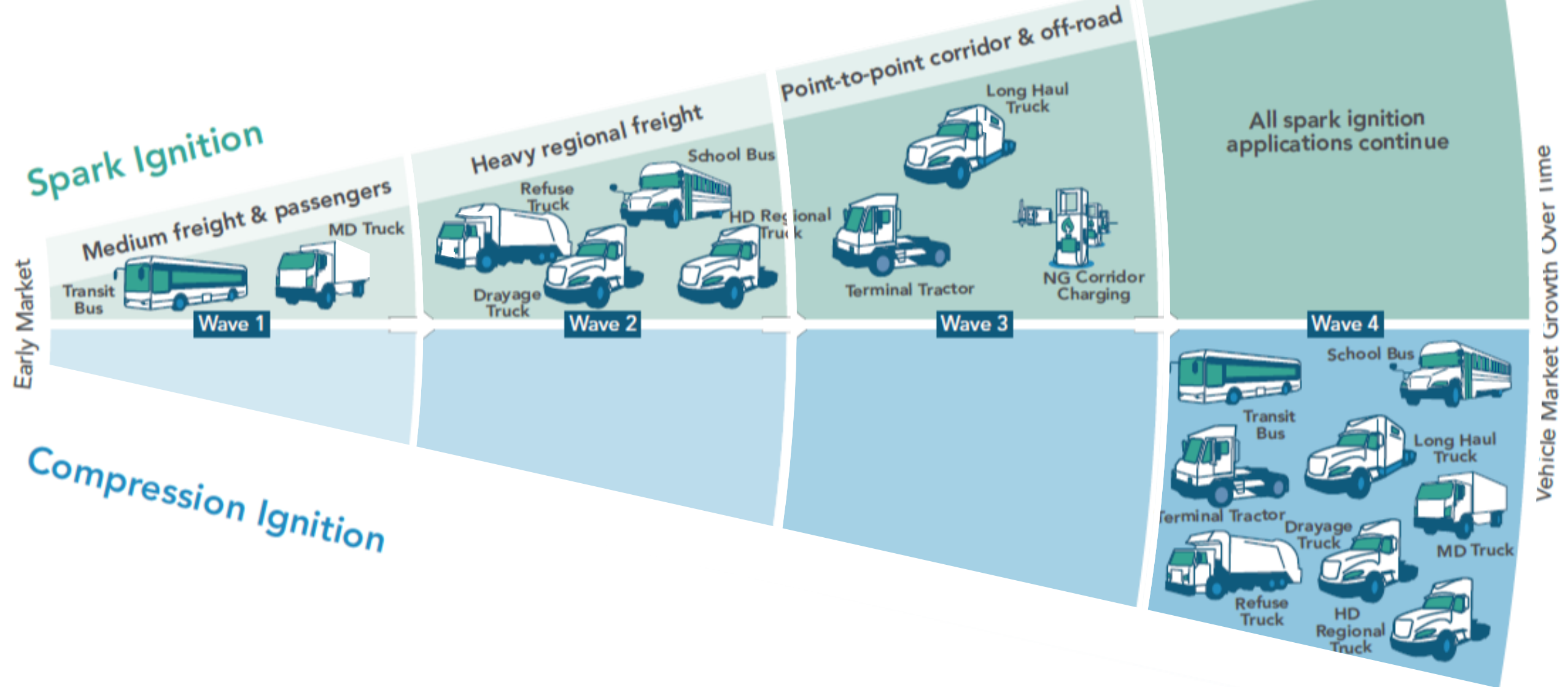


# Draft Beachheads - 2021 Update for the FY 2021-22 Long-Term Heavy-Duty Investment Strategy

# The Draft Zero-Emission Beachhead



# The Draft Combustion Beachhead



## Market Progress Over Time

Medium duty vehicles make best initial applications for spark ignition engine families

Technology upgrades and infrastructure installations enable heavier spark ignition applications

Compression engine market grows rapidly at time of regulation, impacting high volume heavy applications