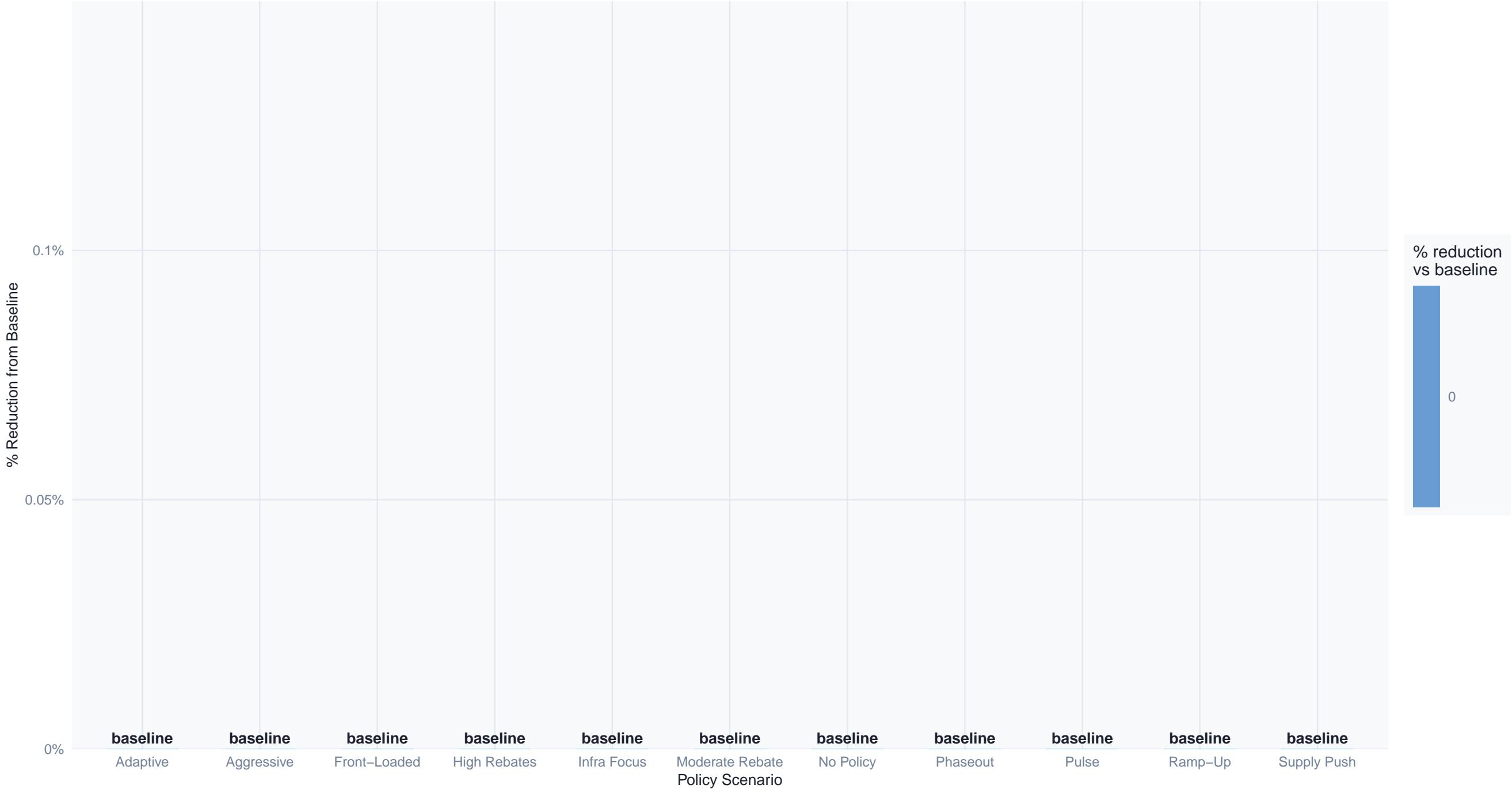


PM2.5 AV Scenarios – Year 0

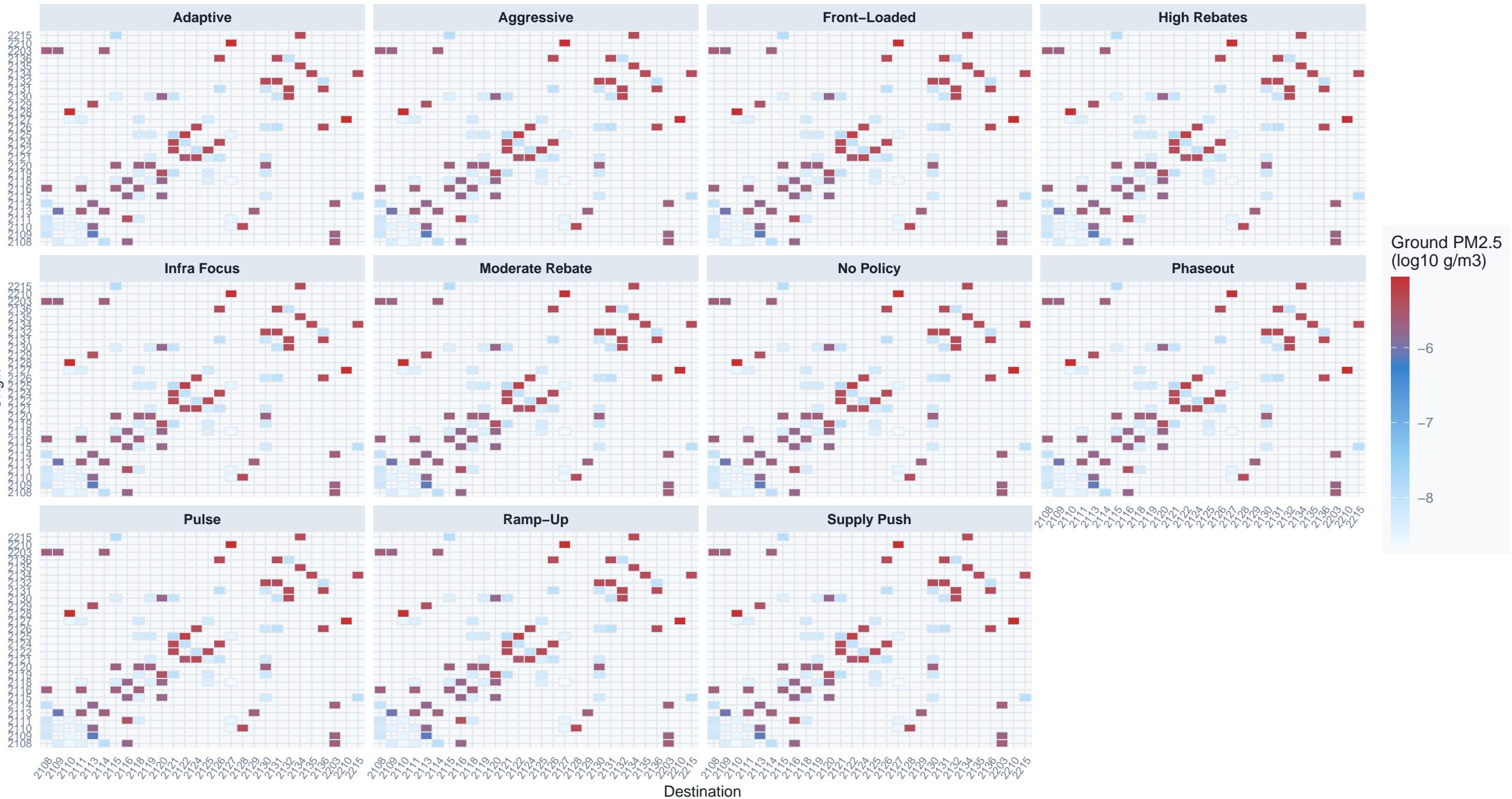
Total Network Emission Rate by Policy Scenario

Sum of E_{eff} across all active flow corridors; % reduction vs baseline scenario



Ground-Level Peak PM2.5 by Flow Pair

Each cell = one origin–destination corridor, color = peak ground concentration



PM2.5 Reduction by Corridor vs Baseline

Each point = one flow pair; x = distance, y = % reduction in ground-level PM2.5.



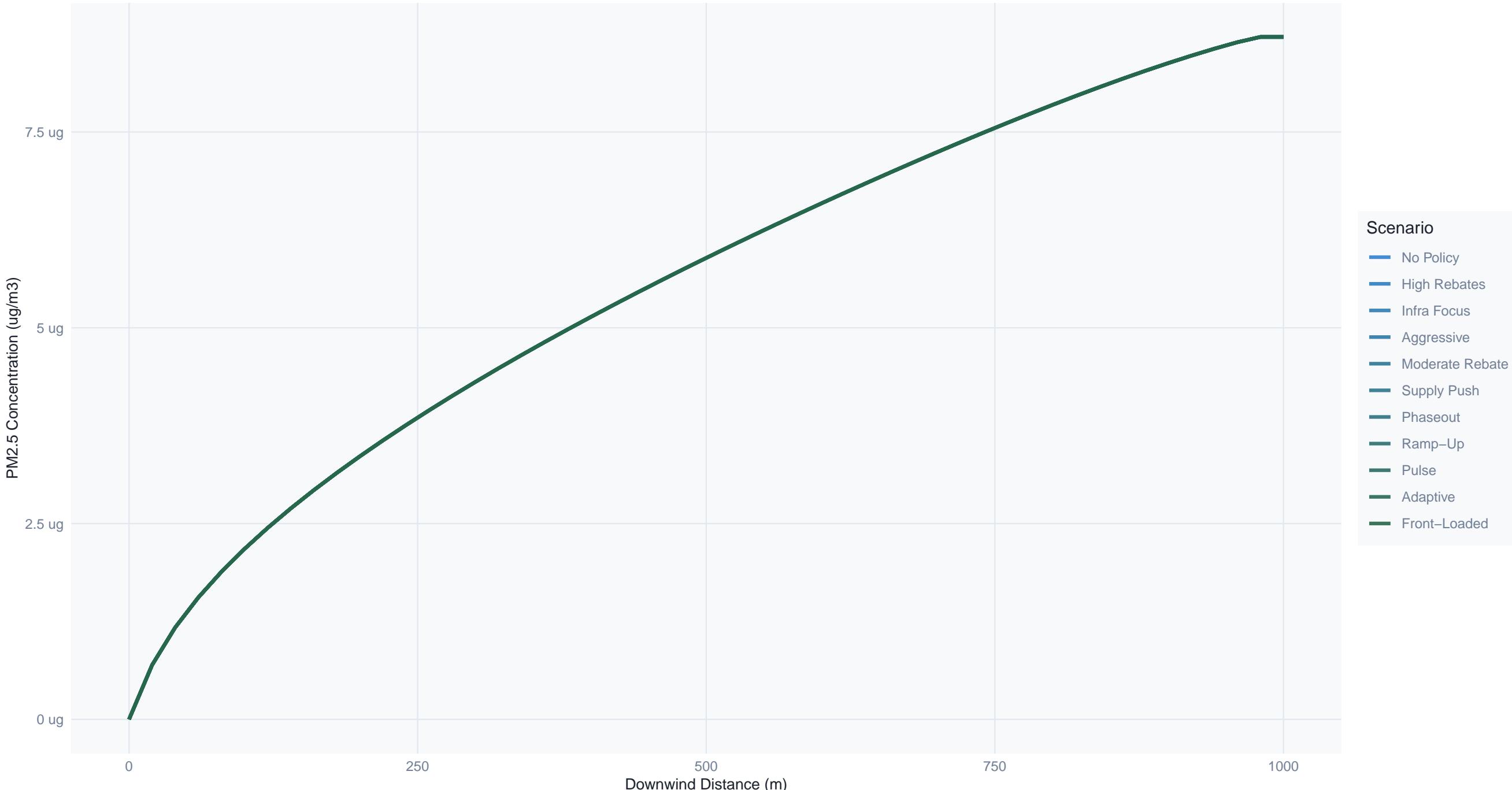
PM2.5 Plume – Busiest Corridor (2127 – 2210)

659,690 vehicles/month, 1.4 km



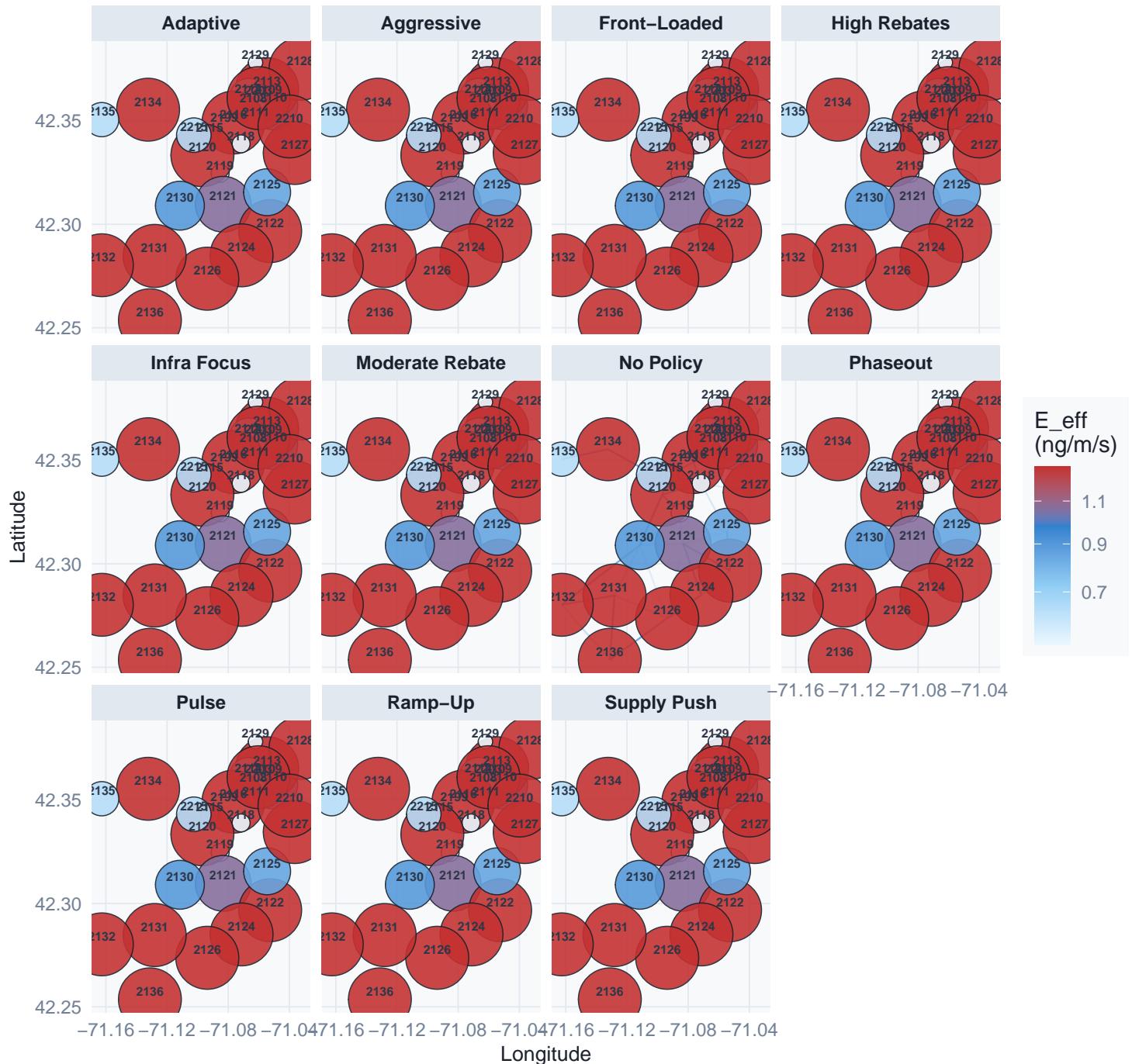
Ground-Level PM2.5 Profile – 2127 – 2210

Concentration along downwind axis at z = 0 (street level), converted to ug/m³



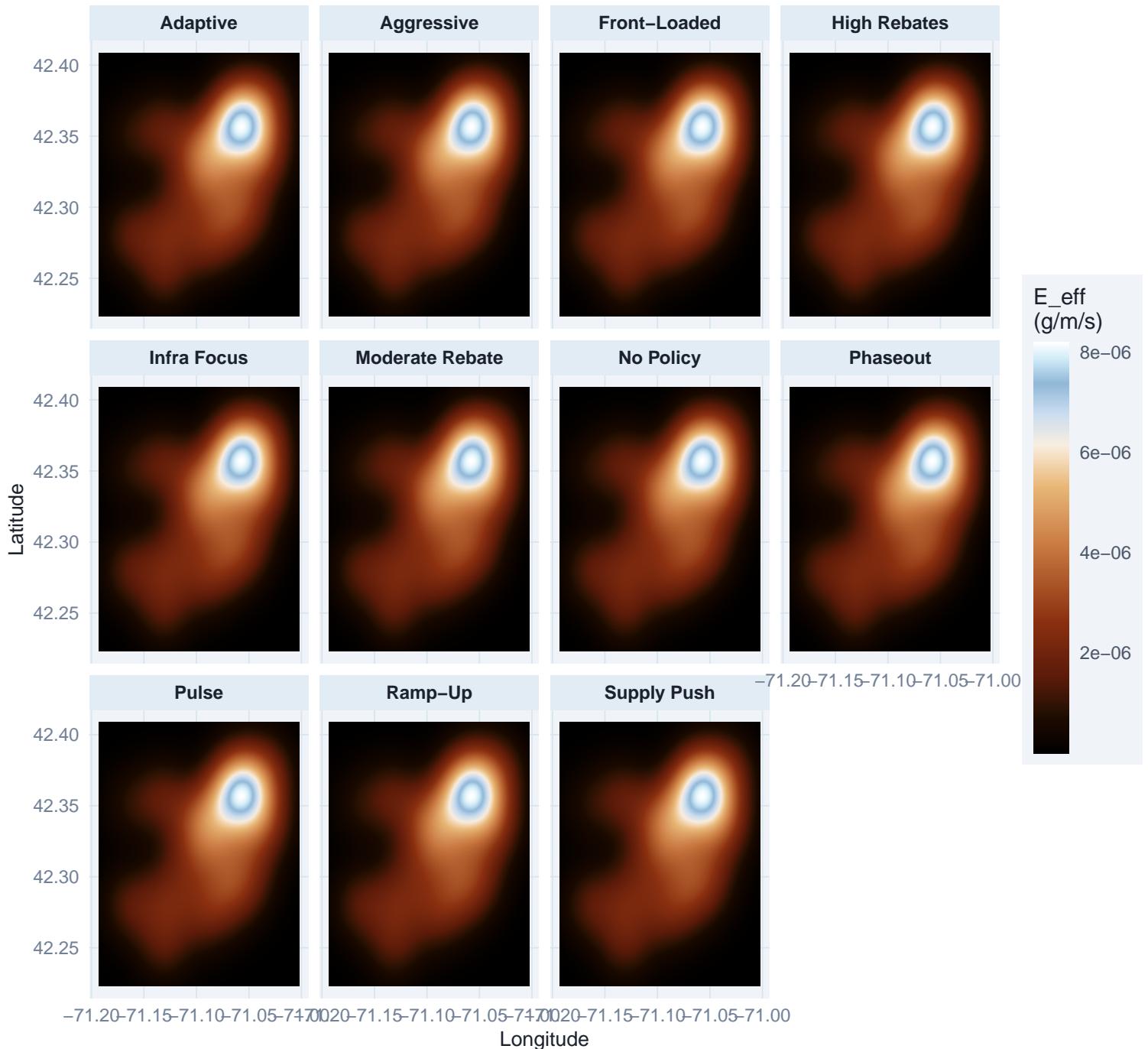
Spatial Distribution of PM2.5 Emission Burden

Node size = outbound vehicle volume, color = total emission rate



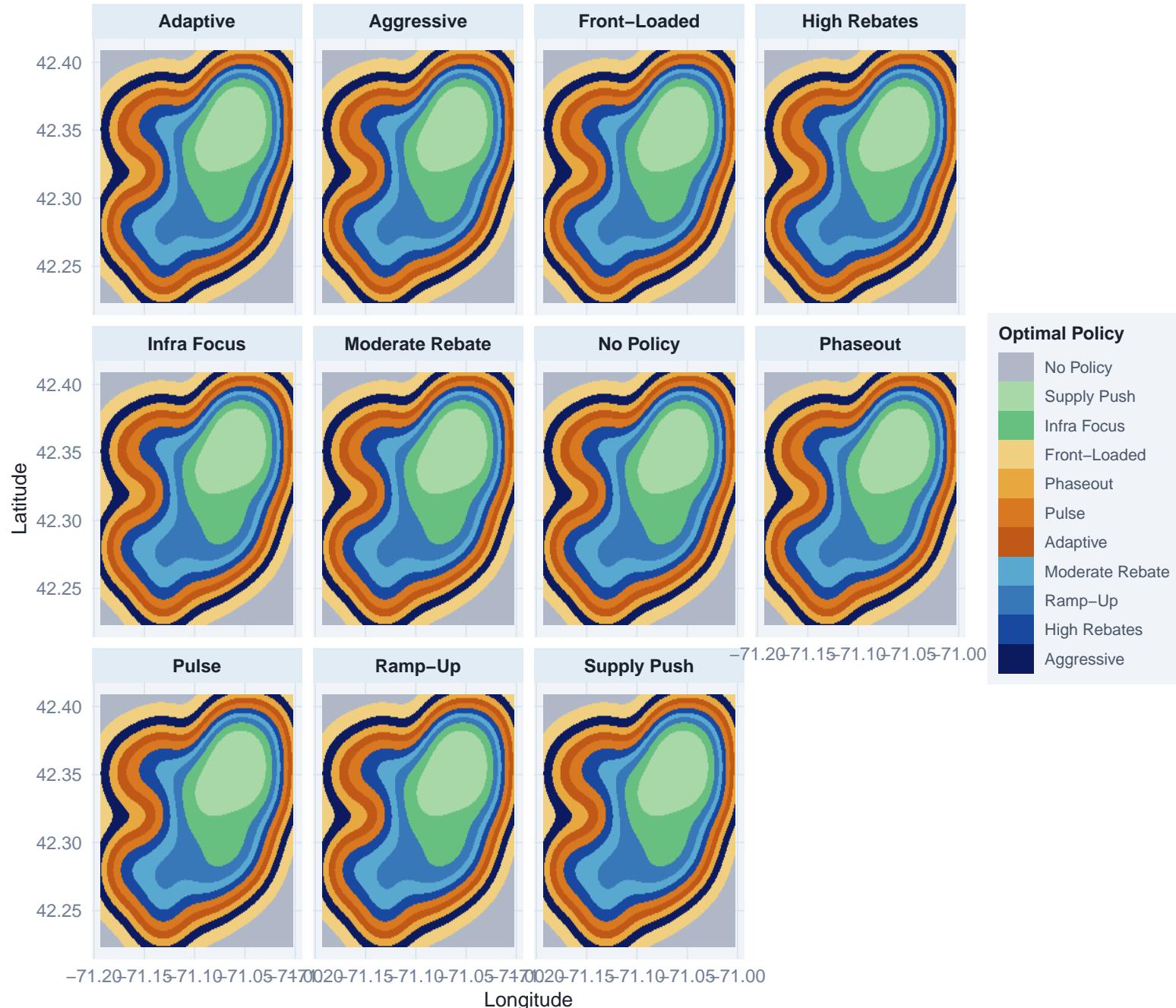
Spatial Distribution of PM2.5 Emission Burden (Absolute)

Gaussian emission surface per zone, warmer color = more pollution



Optimal Policy Assignment by Emission Zone

Minimising pollution & spend simultaneously | Reduction weight: 60% | Cost weight: 40%



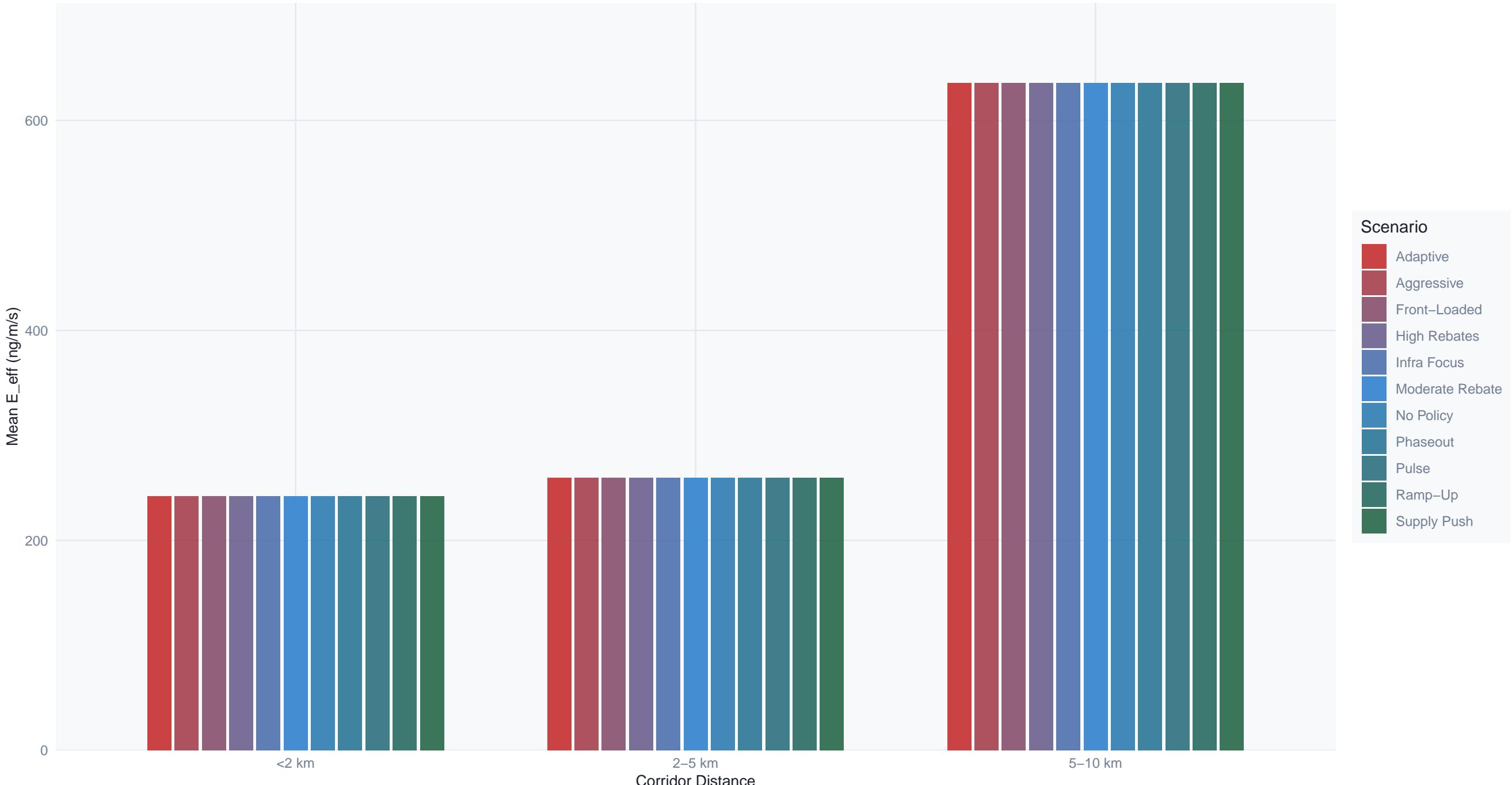
Green = low-cost sufficient · Blue = high-reduction needed · Navy = most aggressive

Spatial PM2.5 Emission Burden: Deviation from Cross-Scenario Mean

Not shown: all scenarios have identical AV fractions at this year – no variation to display.

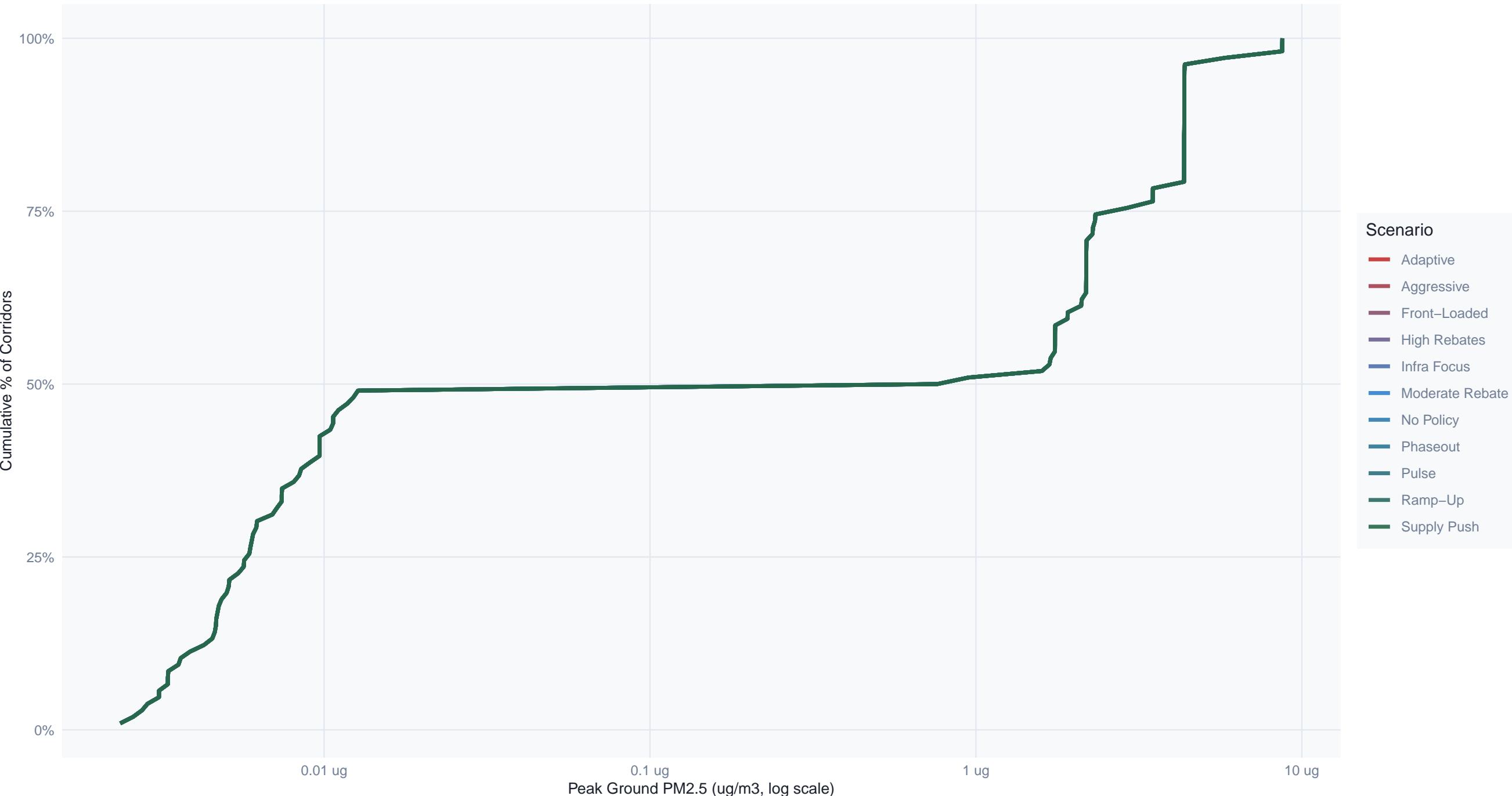
Mean Emission Rate by Corridor Distance Band

Average E_eff per corridor length category



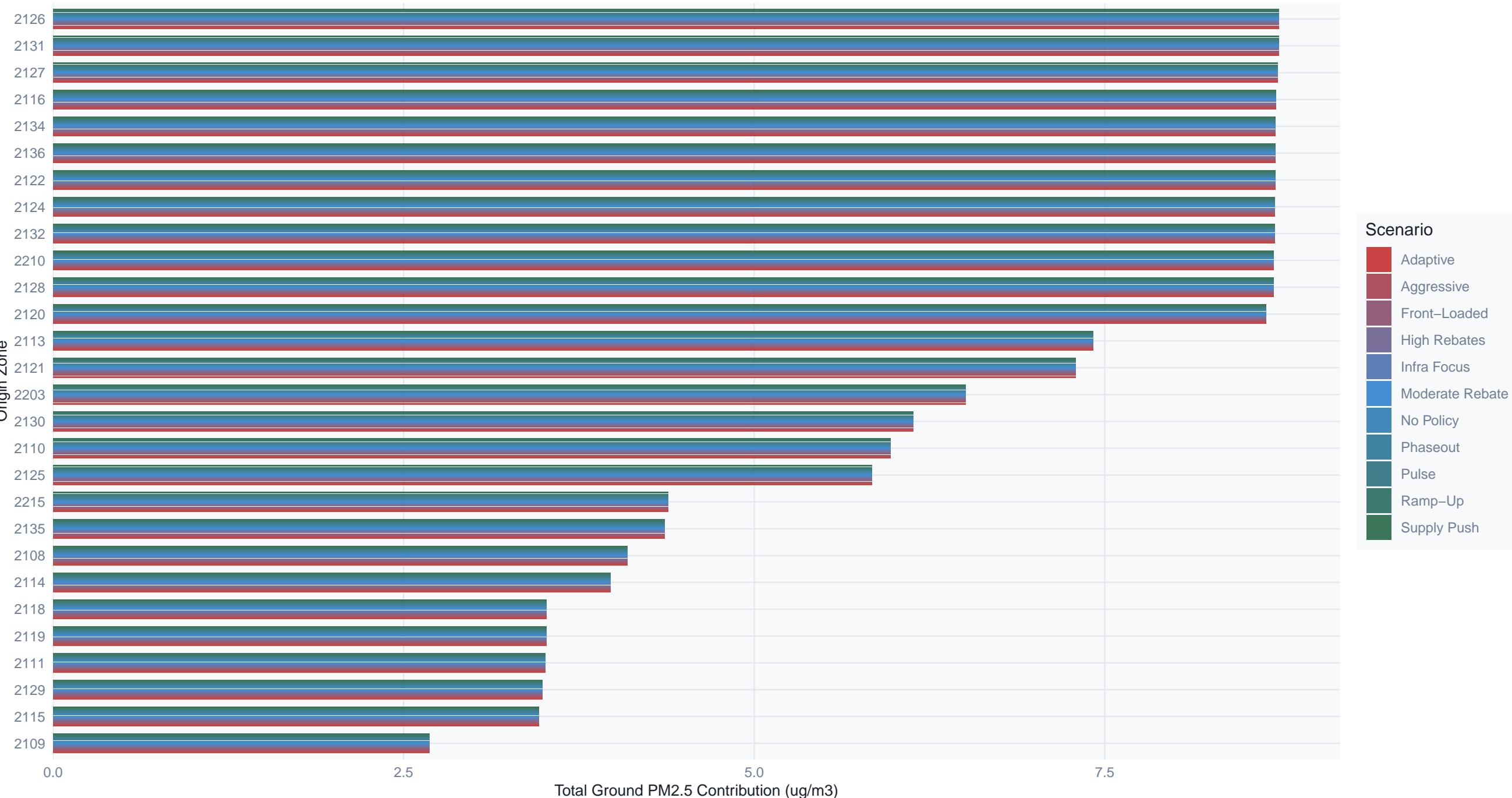
Cumulative Distribution of Peak Ground-Level PM2.5

Each point = one corridor, rightward shift = worse air quality



PM2.5 Burden by Origin Zone

Sum of peak ground concentrations across all outbound corridors per zone



Vehicle Volume vs. Peak Ground PM2.5 by Corridor

Both axes log scale, color = corridor distance

