# PM2.5 AV Scenarios – Year 0

Policies: No Policy | High Rebates | Infra Focus | Aggressive | Moderate Rebate | Supply Push | Phaseout | Ramp−Up | Pulse | Adaptive | Front−Loaded

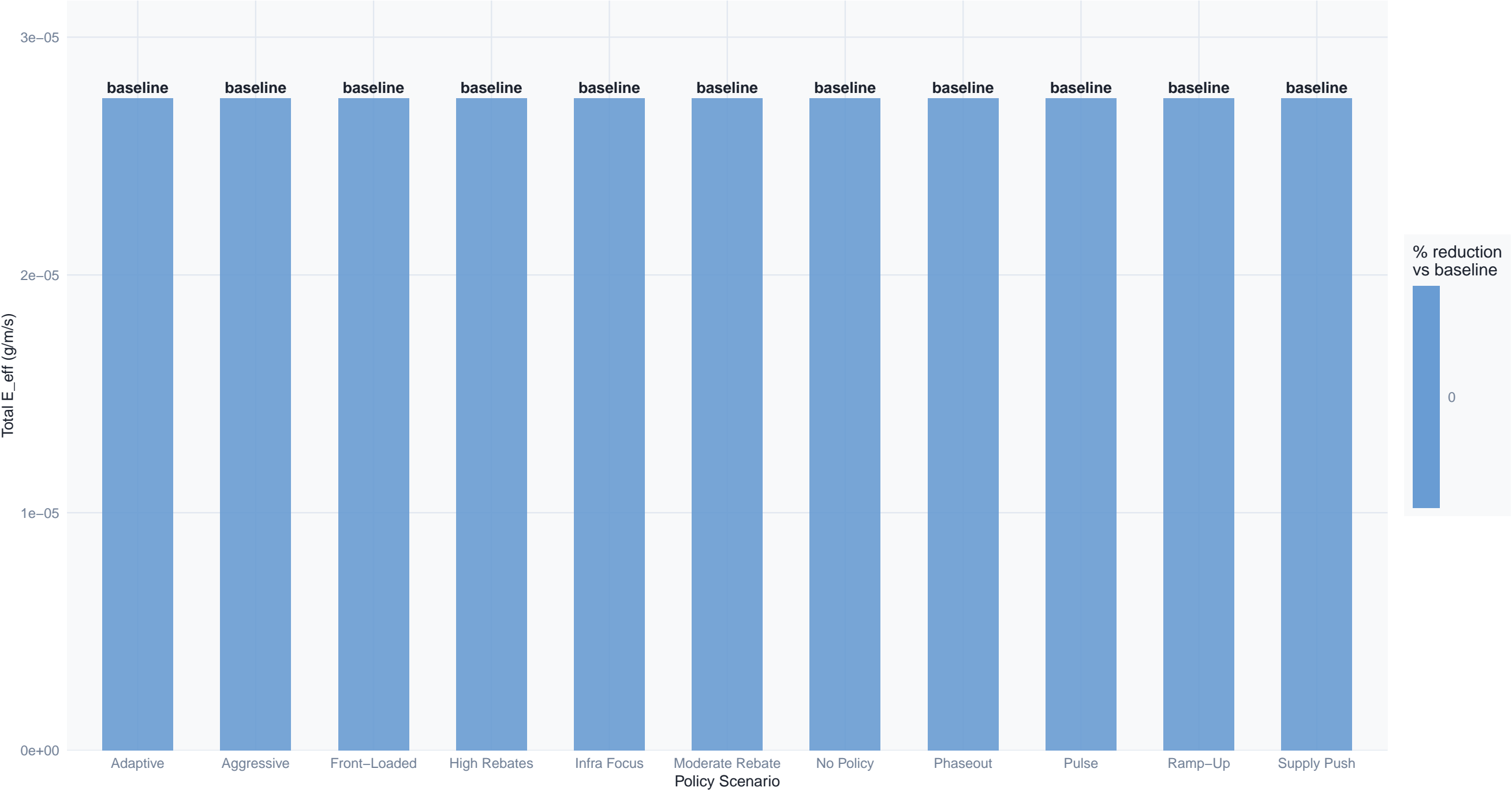# Total Network Emission Rate by Policy Scenario

Sum of E_eff across all active flow corridors; % reduction vs baseline scenario



**% reduction vs baseline**

0

Total E_eff (g/m/s)

Policy Scenario

| Adaptive | Aggressive | Front–Loaded | High Rebates | Infra Focus | Moderate Rebate | No Policy | Phaseout | Pulse | Ramp–Up | Supply Push |

# Ground–Level Peak PM2.5 by Flow Pair

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

Ground PM2.5 (log10 g/m3)
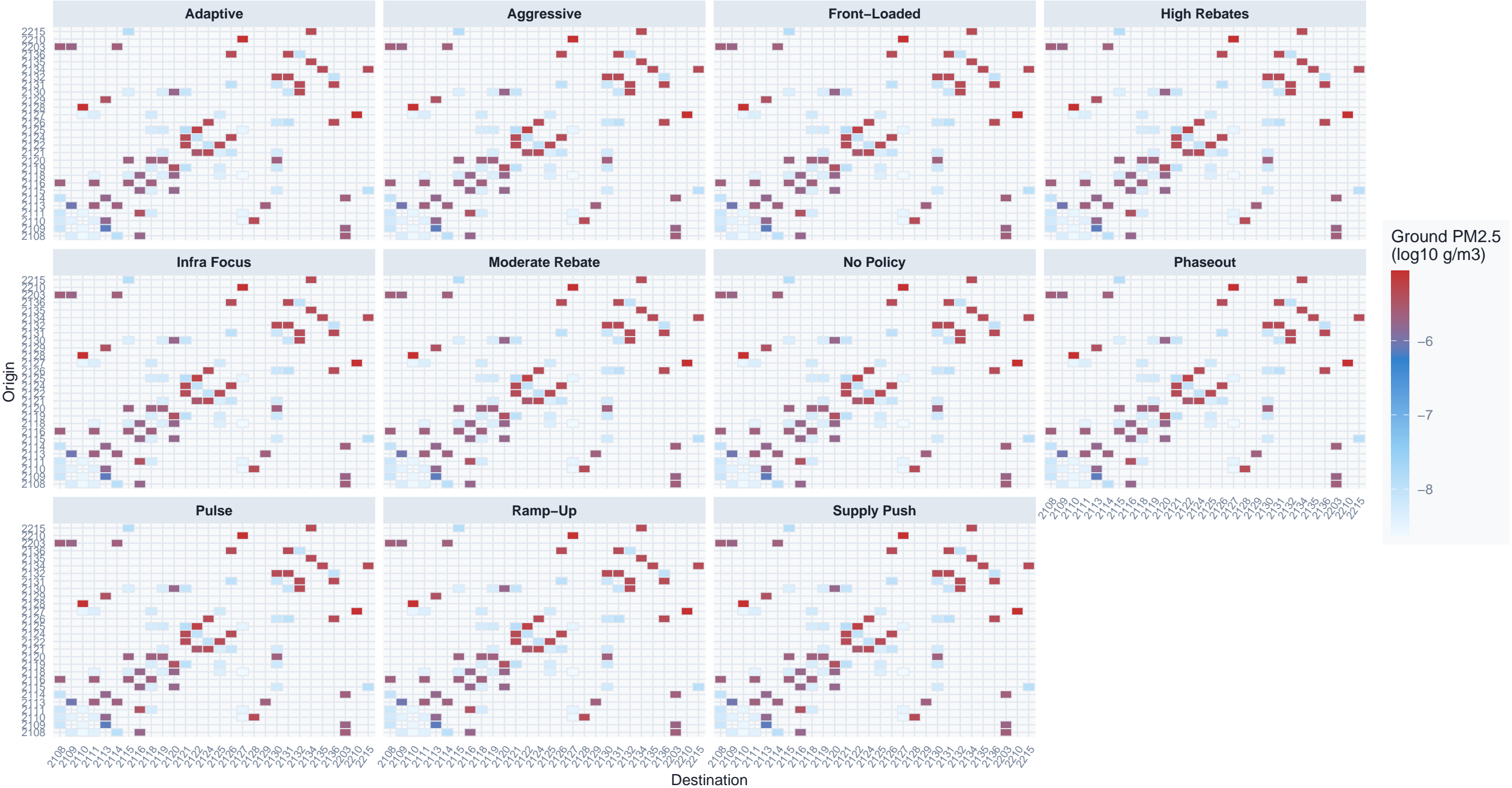
PM2.5 Reduction by Corridor vs Baseline

Each point = one flow pair; x = distance, y = % reduction in ground–level PM2.5
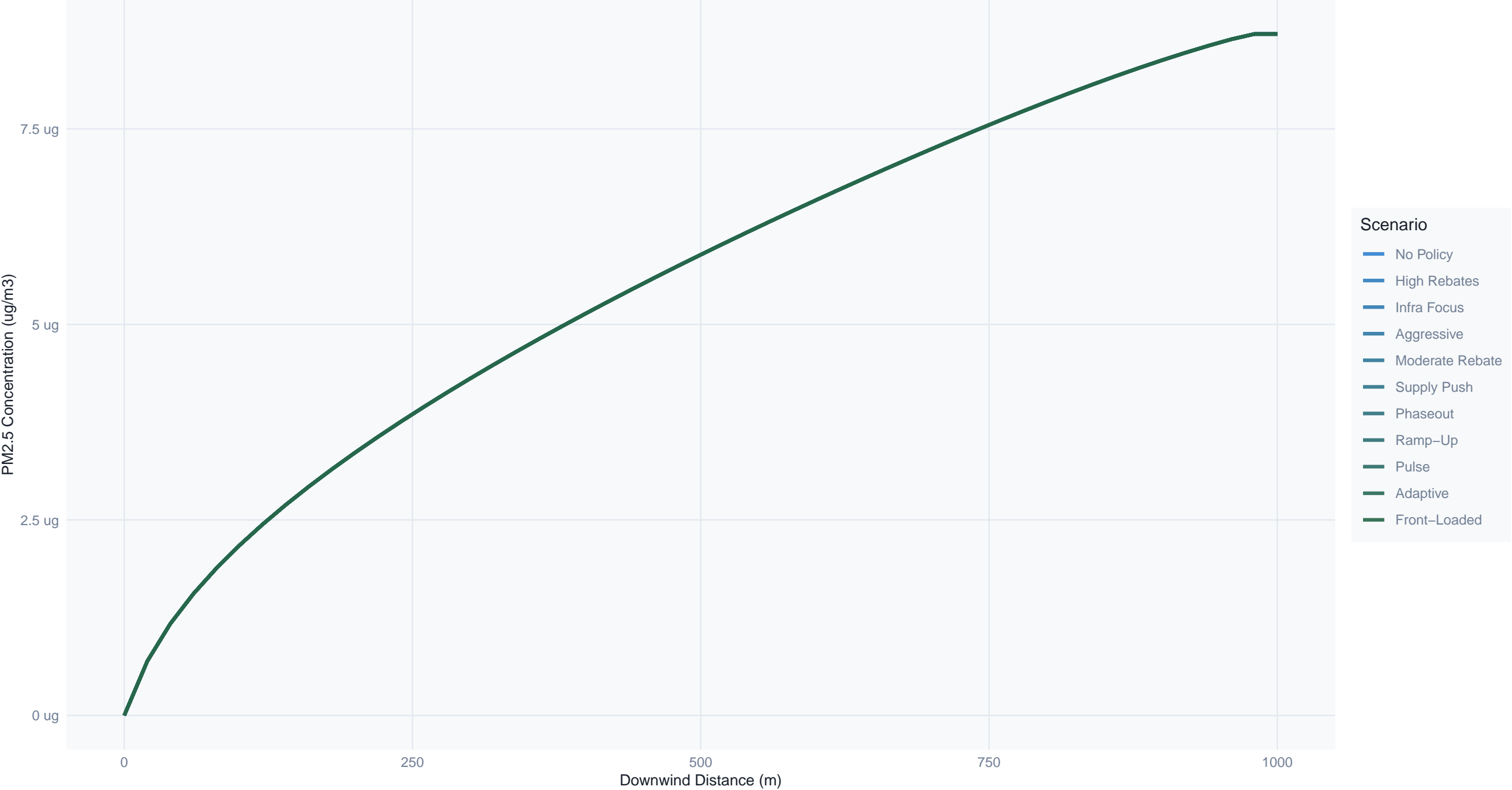
**PM2.5 Plume – Busiest Corridor (2127 – 2210)**
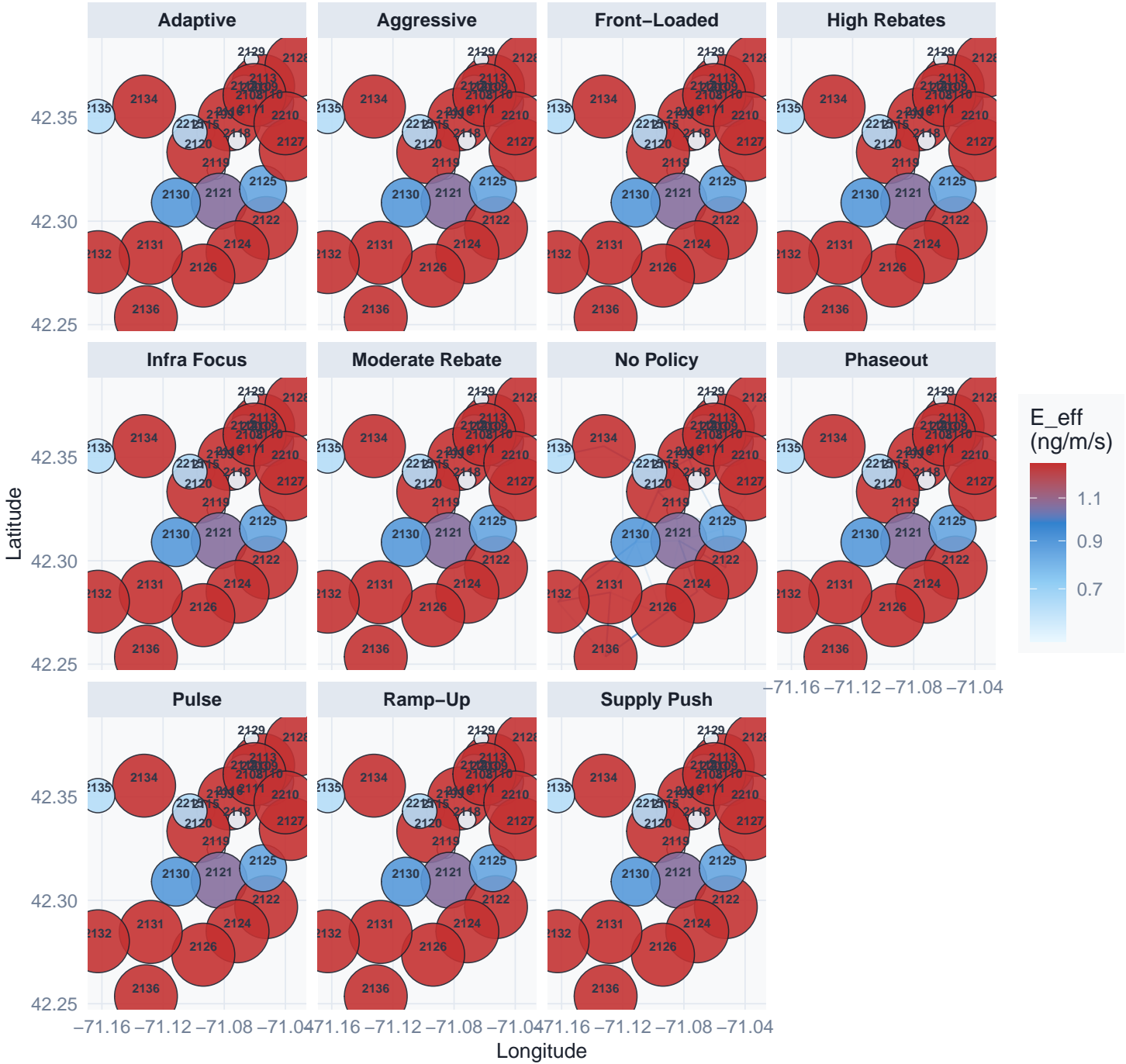
659,690 vehicles/month, 1.4 km

# Ground–Level PM2.5 Profile – 2127 – 2210

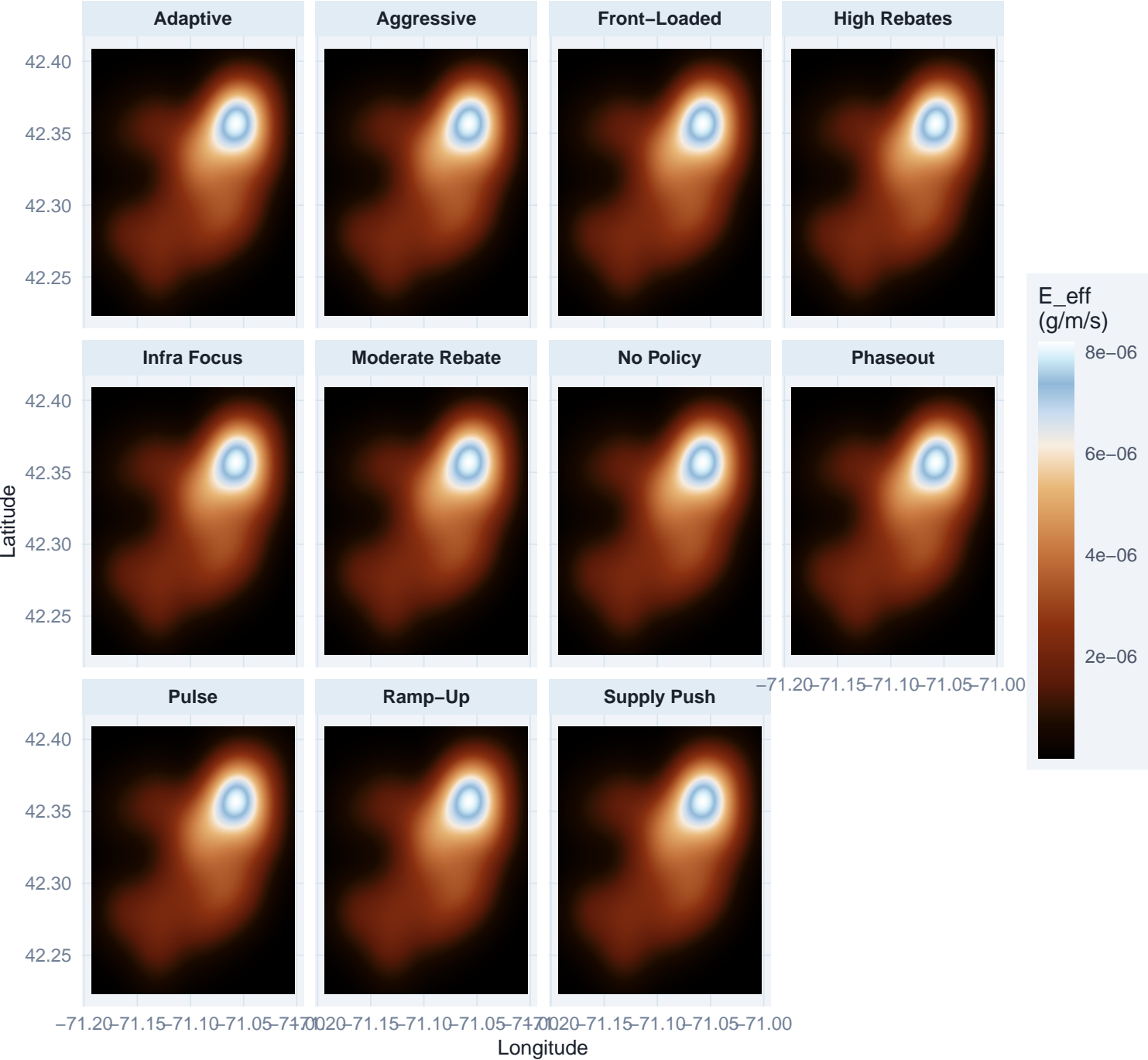Concentration along downwind axis at z = 0 (street level), converted to ug/m3

**Spatial Distribution of PM2.5 Emission Burden**

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

# Spatial Distribution of PM2.5 Emission Burden (Absolute)

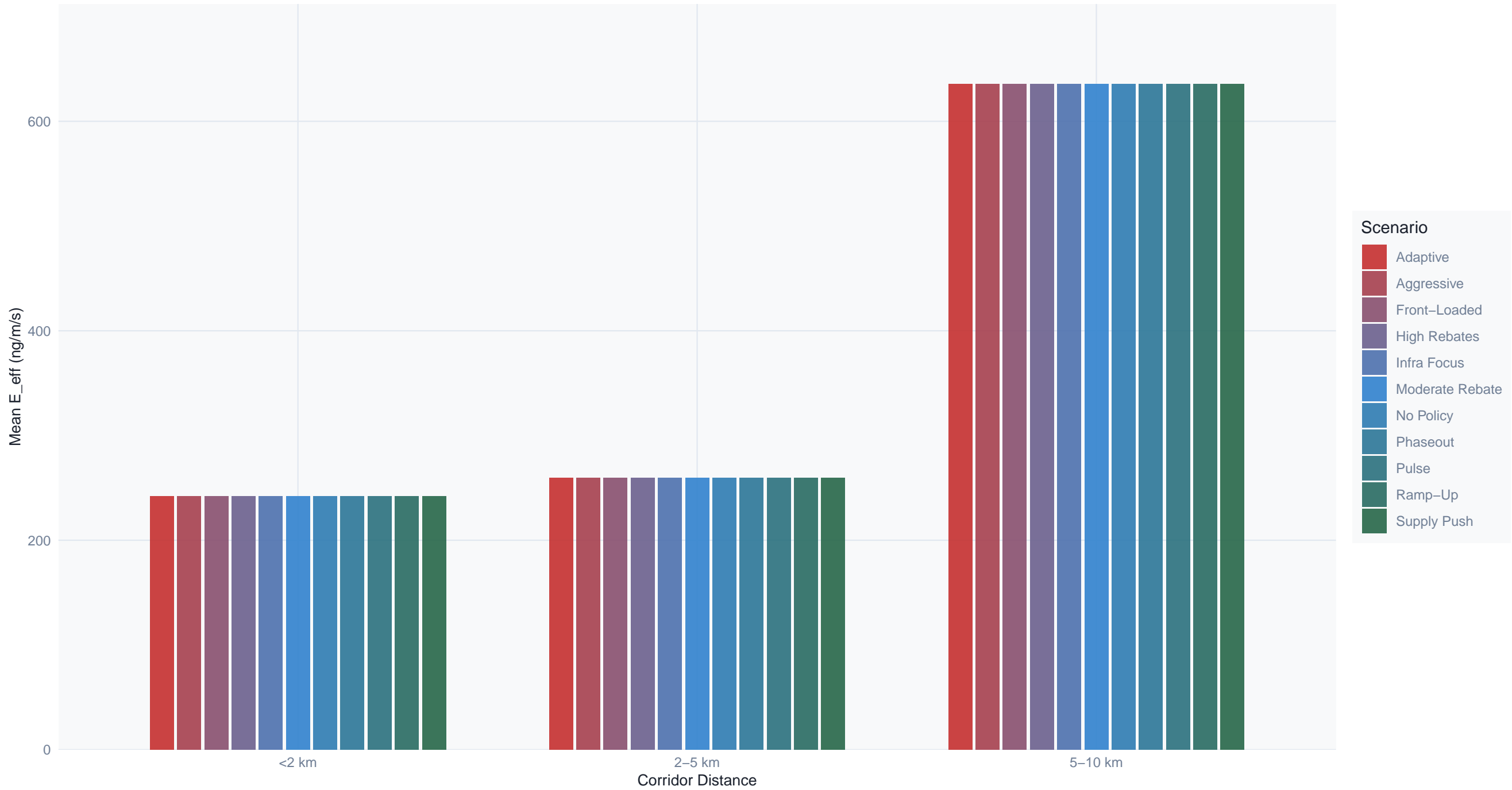Gaussian emission surface per zone, warmer color = more pollution

**Spatial PM2.5 Emission Burden: Deviation from Cross–Scenario Mean**
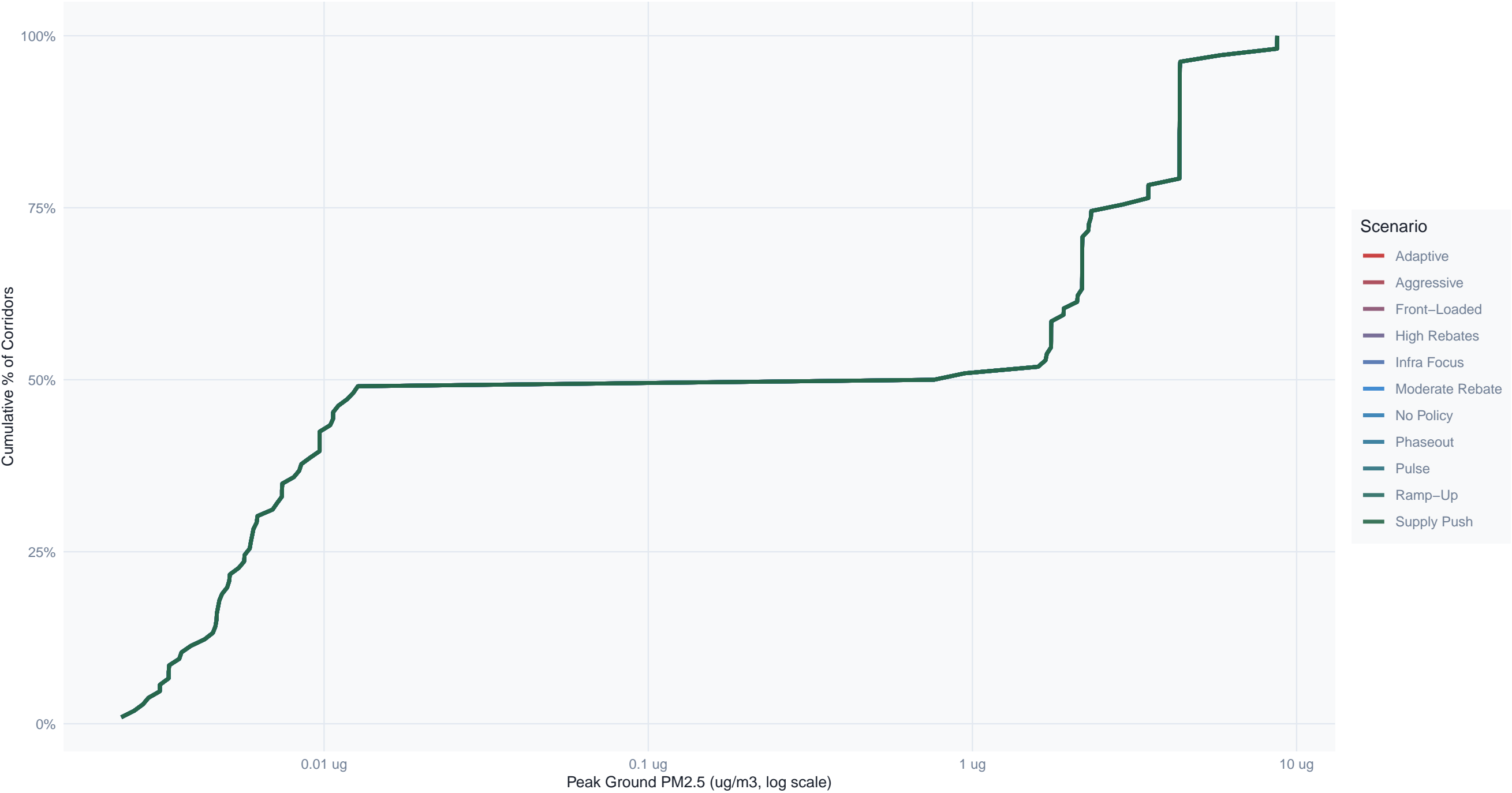
Not shown: all scenarios have identical AV fractions at this year – no variation to display.

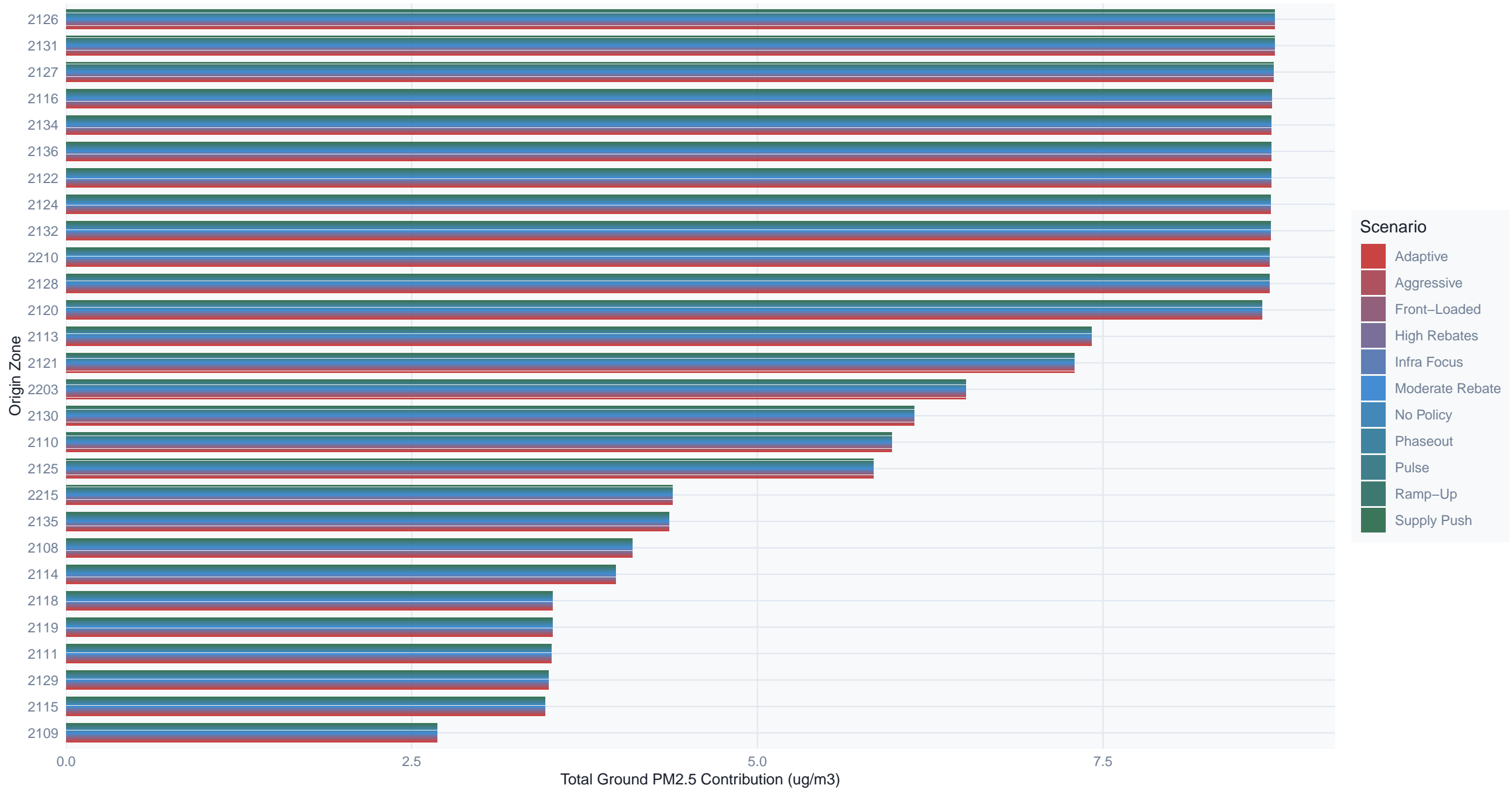# Mean Emission Rate by Corridor Distance Band

Average E_eff per corridor length category

# Cumulative Distribution of Peak Ground-Level PM2.5

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



**Scenario**
- Adaptive
- Aggressive
- Front-Loaded
- High Rebates
- Infra Focus
- Moderate Rebate
- No Policy
- Phaseout
- Pulse
- Ramp-Up
- Supply Push

Cumulative % of Corridors

Peak Ground PM2.5 (ug/m3, log scale)

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