

Clean School Buses + Anti-Idling Policy

FOR: School district, City/County Transportation, Fleet Managers • **PARTNERS:** Parents, nurses, local clean-air orgs • **SDGs:** 3 • 11 • 13

One-sentence summary. Replace the oldest diesel buses with clean models (electric where feasible), and adopt a district-wide anti-idling policy with driver training and signage—cutting tailpipe emissions linked to asthma and improving air around schools immediately.

Why it matters

EPA's Clean School Bus initiative highlights health gains for children and reduced greenhouse gases. Evidence shows that turning engines off is cleaner than idling: continuous idling for more than three minutes emits more particulate matter than a restart, and emissions after a restart are lower than idling for a 10-minute period. Cleaner buses and retrofits have measurable health benefits.

Evidence (key points)

- Clean school buses reduce exhaust linked to asthma and lower greenhouse gases (EPA Clean School Bus).
- Idling myth-busted: >3 minutes of idling produces more PM than a restart; emissions after restart are lower than idling 10 minutes (EPA).
- “10 seconds rule”: idling more than ~10 seconds wastes fuel and produces more emissions than restarting (U.S. DOE/AFDC).
- Cleaner fleets measurably improve children's health (CDC HI-5).

Options considered

Option	What it looks like	Pros	Cons
Status quo (no policy)	Engines idle at gates; aging diesel buses remain in service	No upfront work	Continued exposure to PM/NOx; fuel waste; complaints
Anti-idling policy + training	≤30–60s idling when parked/loading; signed zones; staff enforcement; winter pre-heat tech	Immediate emission cuts; low cost; fuel savings	Needs compliance & signage; winter comfort requires heaters
Bus replacement (electric/near-zero)	Retire oldest diesels; pursue grants; add depot charging	Largest health & climate benefit; quieter; lower maintenance	Capital cost; charging planning; grant timelines

Alt text: Table compares status quo, anti-idling policy, and bus replacement across setup, pros, and cons.

Recommendations

- 1) Adopt a district anti-idling policy and training. Owner: Transportation Director. Steps: set ≤ 30 –60s limit when parked/loading (with cold/heat exceptions); install “Idle-Free School” signs; train drivers; empower staff/parent volunteers to remind drivers; include penalties; add auxiliary heaters for winter comfort without idling.
- 2) Replace the oldest diesel buses first. Owner: Fleet Manager. Steps: inventory buses by model year/mileage; prioritize pre-2007 engines; apply for EPA/DERA grants; plan depot charging for electric routes; schedule driver familiarization.
- 3) Retrofit where replacement lags. Owner: Fleet Manager. Steps: diesel particulate filters, closed crankcase ventilation, and door seals to reduce in-cabin pollutants.

What to do next (90 days)

Month 1: adopt policy; order signs; training; baseline idling observations and fuel logs. Month 2: awareness push; install idle limiters where supported; submit grant pre-applications. Month 3: start procurement; publish a dashboard: idling minutes, fuel savings, complaints down.

How we’ll measure success

- Observed idling minutes at gates: ↓ 60–80% by month 3
- Fuel use per bus: ↓ 3–10% (season-adjusted)
- In-cabin/curbside PM_{2.5} during arrival/dismissal: ↓ vs baseline spot checks
- Complaints about fumes: ↓ 75%
- Oldest diesel buses retired: count & % of fleet

Implementation notes

- Set exceptions: extreme temperatures, safety/emergency equipment use.
- Use auxiliary heaters or timed pre-heat to avoid idling in winter.
- Student-designed signage; family pledge for car lines.
- Coordinate with facilities to avoid queuing near building intakes.
- Plan charging where buses lay over longest; start with predictable routes.

Credits & sources (clickable)

- [EPA — Clean School Bus Program \(benefits\)](#)
- [EPA — School Bus Idle Reduction \(restart vs idling 10 minutes\)](#)
- [DOE/AFDC — Idling >10 seconds wastes fuel/emits more](#)
- [AFDC — School Bus Idle Reduction Strategies](#)
- [CDC HI-5 — Clean Diesel Bus Fleets \(health impacts\)](#)
- [EPA — Clean School Bus Rebates/Grants](#)