

Make It Safe to Bike to School: A Protected “School Corridor” + 30 km/h Slow Zone

FOR: City DOT, school district, traffic police • **PARTNERS:** Parent/teacher groups, local bike orgs • **SDGs:** 11 • 3 • 4 • 13

One-sentence summary. Create a protected School Corridor (physically separated bike lane to the school gate), wrap it in a 30 km/h (20 mph) slow zone, and run a Safe Routes to School program—cutting child injury risk and enabling everyday, low-carbon trips to school.

Why it matters

Children gain independence, fitness, and focus when they can safely walk/bike to school—but families will not choose it if streets feel dangerous. International guidance shows that separated (protected) bike lanes and low-speed school streets prevent conflicts and injuries, especially at intersections. Converting paint-only lanes to separated lanes can cut bike-vehicle crashes by around 50%, while 30 km/h streets where traffic mixes with children reduce fatal/serious injury risk and encourage walking and cycling. Safe Routes to School (SRTS) programs that combine engineering, education, and evaluation show documented injury reductions and strong cost-effectiveness.

Evidence (key points)

- Protected beats paint: upgrading painted lanes to protected/separated lanes lowers bike-car crashes by ~50%.
- Speed kills; 30 km/h saves: 30 km/h (20 mph) is the global safety standard where traffic mixes with children.
- Children need separation: on-road painted lanes carry higher injury risk for youth than separated facilities.
- SRTS works: evaluations (e.g., NYC) show marked reductions in pedestrian injury among school-aged children and strong cost-effectiveness.
- How to build it right: FHWA/NACTO guides detail intersection design (signals, daylighting) and maintenance—critical near schools.

Options considered

Option	What it looks like	Pros	Cons
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Paint-only bike lane	Stripes by the curb, no physical barrier	Cheap, quick	≈20% higher injury risk vs separated; drivers encroach; families avoid
Protected School Corridor	Curb/median or posts buffer; bike signals at junctions	~50% fewer bike-car crashes; feels safer to families; all-ages use	Needs capital; intersection treatments required for safety
School Street + 30 km/h zone	Gate street filtered or timed car-free at bell times; area speed 30 km/h	Cuts conflicts at the door; encourages walking/biking; global best practice	Requires traffic management and community buy-in

Alt text (for accessibility): Comparison table of three options—paint-only lane, protected corridor, and School Street/slow zone—summarizing setup, pros, and cons.

Recommendations

1) Build a Protected School Corridor (1–1.5 km to the school gate). Owner: City DOT; Partners: school district and bike org. Steps (Month 0–2): choose corridor with highest catchment; audit crashes and turns; add separation (curb/planters/posts), daylight 6–10 m at corners, add bike signals and no-turn-on-red at school junctions (per FHWA/NACTO). Run (Month 3–6): quick-build posts first; upgrade to curbs after data review. Cost/time: medium.

2) Designate a 20 mph / 30 km/h School Slow Zone + School Street at bell times. Owner: traffic police + DOT. Steps: post gateway signs, paint speed roundels, manage temporary filters/bollards on the gate block for ~45 minutes AM/PM, enforce with speed feedback. Why: 30 km/h is the safe speed where kids mix with traffic. Cost/time: low–medium.

3) Launch a Safe Routes to School (SRTS) package. Owner: school district SRTS coordinator. Steps: education (routes map, helmet/visibility), encouragement (bike bus/walking school bus), and evaluation (mode counts and near-miss logs). Cost/time: low; volunteer-supported.

What to do next (60-day plan)

Weeks 1–2: agree on corridor; set targets (injuries down, mode share up). Weeks 3–4: quick-build design (posts, markings, daylighting), collect baseline speed. Weeks 5–6: install posts/signage; pilot School Street; start SRTS education. Weeks 7–8: add bike signals/turn restrictions at the main intersection; collect mode counts. Weeks 9–10: community survey; adjust loading/ADA access; prepare capital upgrade.

How we'll measure success

- Child injury crashes on the corridor: down 30–50% year-over-year.
- Mode share to school: +10–20 percentage points walking/biking in 6–12 months.
- 85th-percentile speed inside the slow zone: ≤ 20 mph / 30 km/h.
- Parent & student perceived safety: $\geq 70\%$ safe/very safe on quarterly survey.
- Near-miss reports at the school gate: down 50% vs. baseline.

Implementation notes

- Intersections: provide separate bike phases or leading bike intervals; prohibit right-on-red; daylight all crosswalks.
- Continuity: keep separators continuous; gaps invite illegal parking and force children into traffic.
- Front-door ops: add a loading bay for students with disabilities and a kiss-and-go loop away from the bike path.

- Equity: prioritize schools with higher injury burdens and lower car access.
- Communications: publish a route map; run a bike-bus with staff/volunteers for two weeks post-launch.

Credits & sources (starter set)

- NACTO Urban Bikeway Guide — protected lanes and all-ages design.
- FHWA Separated Bike Lane Planning & Design Guide — intersection treatments and signals.
- USDOT/FHWA — converting to separated lanes reduces bike-vehicle crashes by up to ~50%.
- WHO/UNICEF — 30 km/h (20 mph) is the safe speed where children mix with traffic.
- CDC & National SRTS resources — implementation and evaluation.
- NYC SRTS evaluations — injury reductions and cost-effectiveness.
- Risk comparisons — painted on-road lanes show higher injury risk than separated facilities for school travel.