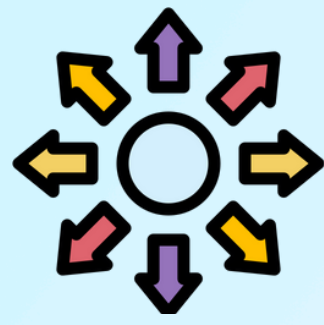


School and Suburban Connections

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Abstract

Public transport in suburban areas is often less convenient, **costly** to operate, and offers **lower user quality**. This project uses **autonomous shuttles** to cut costs, improve flexibility, and enhance **safety**. Supporting **Vision Zero**, it helps reduce traffic risks for children, with over **27,000 involved in road crashes** across Germany in 2023, including 44 fatalities (BMV, 2024)

Proposal



Waldperlach district

A demand-responsive autonomous public transport service designed to benefit both schoolchildren and the general public.

Key features:

- **On-demand booking** via app (MVGO), website or phone
- **No fixed routes or schedules**, except structured morning service for schools
- Virtual stops within walking distance
- **Fully integrated** into the Munich public transport fare system (MVG)
- **Real-time vehicle tracking** via app
- **Accessibility features** for vulnerable groups

Pilot project

A 5-year, 3-phase pilot ensuring safety, compliance, and sustainable mobility.

Phase I: Manual operation: to establish **baseline service** (1 year)

Phase II: Supervised autonomy: **deploy Level 4** autonomous shuttles (2 years)

Phase III: Full public service: **Scale to 24/7** mixed fleet operations (2 years)

How it works



Impact

- Sustainable mobility shift: **reduced car dependency**
- Equitable access: **connectivity** for **schools, 24/7 access for seniors** and shift workers
- **First/last-mile** integration
- **Safer** school routes

Challenges

- User adoption and social equity (unsupervised child)
- Regulation and governance
- Technical limitations
- Financial viability
- Operational and lifecycle

Stakeholders

