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Aayalolo Contra-Flow: Challenges, Solutions, and the Way Forward

GTPF-NA White Paper No. 1 | October 2026

Summary for Decision Makers

On September 29, 2026, the Greater Accra Passenger Transport Executive (GAPTE) began running Aayalolo buses in contra-flow lanes on the Amasaman, Adenta, and Kasoa corridors during the morning and evening peaks. GAPTE reported moving about 8,000 passengers from Adenta toward Accra in one morning peak, at about 23 minutes against a usual two and a half hours. Four transportation professionals assessed the pilot for this paper.

What we found

- Giving road space to high-capacity buses is the right instinct: a corridor should be judged by the people it moves, not the vehicles.
- The results depend on police escorts, which cannot be scaled to other corridors or sustained.
- Buses running against traffic create new conflicts at intersections, driveways, segment ends, and pedestrian crossings.
- Passengers between origin and destination cannot board, and trotros and other paratransit still carry more than 95% of Accra's trips (Prof. Adams).
- The early figures have not been independently verified, and the effect on traffic in the opposing direction has not been measured.

What we recommend

1. Publish validated operating data and monitor safety, ridership, and traffic in both directions over months, not days.
2. Restore transit signal priority on the Amasaman corridor and the Accra Traffic Management Centre, and coordinate signals along the corridors.
3. Replace police escorts with engineered control: clear markings, physical separation, and intersection treatments.
4. Integrate trotros as feeders to high-capacity bus services rather than treating them as competitors.
5. Treat contra-flow as a step toward protected bus lanes, and expand only where corridor evidence supports it.

As a next step, Prof. Adams proposes a GTPF corridor study that tests these options through traffic simulation.

About GTPF: The Ghana Transportation Professionals Forum, founded in 2009 in Washington, D.C., is a non-profit, multidisciplinary group of transportation professionals that promotes research, sound policy, and professional practice in Ghana's transportation sector. www.gtpf.org

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Disclaimer: The views and opinions expressed in this white paper are those of the individual contributors and do not necessarily reflect the views or positions of the organizations with which they are affiliated.

Part 1: Assessment and Risks

What Was Launched

The Aayalolo Quality Bus Service operates in the morning and evening peak periods, from 6:00 to 9:00 AM and 4:00 to 8:00 PM respectively. During those hours, a lane normally used by traffic in the opposing, off-peak direction is given to Aayalolo buses heading toward the peak destination, with some sections marked off with cones, reflective dividers, and signs. GAPTE wardens and the Motor Traffic and Transport Department (MTTD) enforce the lane, and buses have so far been led by police escorts that officials describe as temporary. GAPTE has indicated that other operators may later be licensed to use some stretches. Prof. Adams reports that other high-capacity buses are expected to join the current convoys of six to eight buses, and that GAPTE has proposed gazetting the contra-flow and dedicated lanes to give priority to Aayalolo and other high-capacity buses.

The arrangement targets the original Aayalolo system's central weakness. As Nadia Degbotse notes, the Bus Rapid Transit (BRT) effort launched in 2016 never secured continuous dedicated lanes, so its buses sat in the same congestion they were meant to relieve.

What the Pilot Gets Right

Dr. Boakye and Ms. Degbotse make the same core point: a corridor should be judged by how many people it moves, not how many vehicles. A full bus carries dozens of passengers in the road space of a few private cars. Road capacity is usually counted in vehicles per hour, but for transit decisions, Ms. Degbotse argues, person throughput is the more meaningful measure. Dr. Boakye adds that the pilot shows Accra can move more people by managing existing road space better, without first building more of it.

NatDave points to why contra-flow in particular suits Accra's radial corridors. Peak traffic is strongly directional, so the bus lane is borrowed from the direction that does not need it at that hour. A conventional with-flow bus lane would instead take a lane from traffic that is already saturated, which at current volumes would worsen conditions for everyone else and invite drivers to ignore it. Ghana's existing dedicated bus lanes are already widely disregarded; he calls them "ceremonial bus lanes."

A Note of Caution

Prof. Adams urges caution about commending the pilot at all. He calls it the "Motorcade-Led High Capacity Bus Service" and argues that its results depend on police escorts rather than on the contra-flow design. Praising it, in his view, risks legitimizing an unsustainable approach and encouraging decision makers to set aside sound technical advice. He notes that whatever the buses achieve, trotros and other paratransit still carry more than 95% of Accra's trips. He also warns that the arrangement encourages poor driver discipline and, if continued, could lead to disputes with trotro operators, on top of the safety issues and conflicts at intersections.

He stresses that public transport is not bus procurement but a complete system: routes, stations, operations, signal infrastructure, enforcement, fare collection, and customer service. Too often in Accra, he argues, the provision of public transport has centered on procuring buses rather than on building a system that moves people, and he asks what planning preceded the recent bus procurement.

Dr. Boakye and Ms. Degbotse share these concerns while seeing the pilot as a starting point worth building on. Dr. Boakye writes that the initiative deserves support, provided it is refined through engineering and rigorous monitoring. Ms. Degbotse sees it as an opportunity to learn and to build a system suited to Ghana's conditions rather than one copied from elsewhere. All four contributors agree that there is room for improvement, and the rest of this paper sets out what that improvement requires.

Challenges

Safety of buses running against traffic

Dr. Boakye's primary concern is safety where there is no permanent separation. Drivers entering the road and pedestrians crossing it look for traffic from the expected direction, and a bus approaching from the other side creates an unfamiliar conflict. The Institute for Transportation and Development Policy (ITDP) flags this risk for pedestrians and favors alignments that limit conflicts between buses, turning vehicles, and people on foot. The start and end of each contra-flow segment, intersections, and driveways carry the highest risk. Ms. Degbotse adds that a permanent arrangement cannot rest on the expectation that other road users will notice and yield to buses traveling in an unconventional direction. It needs clear, enforceable, and predictable traffic control.

Dependence on police escorts

All four contributors see the escorts as a problem to solve. Dr. Boakye treats them as a transitional measure that helps the public adjust. Prof. Adams goes further: contra-flow that depends on a motorcade is not a working contra-flow system. Police have a role in resolving conflicts and enforcing at intersections, he argues, but not in escorting buses. A scheme that needs a police convoy for its buses cannot be extended to other corridors or sustained once attention moves elsewhere.

Signals

Prof. Adams argues that much of Accra's congestion is a signal management problem. On the main corridors, signals are often less than 300 meters apart yet run as isolated, fixed-time installations with no coordination, and no one is clearly in charge of the network. At most main-corridor intersections, he estimates, 70 to 80 percent of traffic travels straight ahead, but the timings do not reflect this, even outside the peaks. NatDave has seen side streets with no traffic holding a green while the main corridor queues, and notes that delay of this kind feeds red-light running and wider non-compliance.

Prof. Adams also points to a precedent. The Department of Urban Roads (DUR) and GAPTE piloted transit signal priority with simple queue jumpers on the Amasaman corridor, linked to the Accra Traffic Management Centre at DUR. He reports that it worked well even without bus lanes or contra-flow, but that the system has recently been offline because of maintenance challenges. His question is: why turn to an escort-based scheme when a proven, cheaper tool on the same corridor was allowed to lapse? For the corridor from the CBD to Madina, he suggests that a green wave using signal offsets, with priority and queue jumpers for Aayalolo buses, could move much of the traffic the pilot is targeting.

Is congestion reduced or moved?

Taking a lane from the off-peak direction has a cost. Ms. Degbotse asks how capacity, intersection delay, and queues change in the opposing direction, especially where both directions are congested at once. Dr. Boakye frames the test the same way: added delay for some drivers does not mean mobility has worsened if the bus lane moves more people than the lane it replaced. Both conclude that evaluation must cover total corridor performance in both directions, not only the speed of Aayalolo buses.

Who the service reaches

Speed on the trunk is only part of the picture. Prof. Adams points out that passengers along the corridor between origin and destination cannot board at all, because the buses run in the opposing lane, where there are no stops for their direction of travel. Ms. Degbotse cautions that mode shift should not be assumed. Commuters weigh fare, comfort, safety, frequency, reliability, and the distance from stops to home and work, not travel time alone. If ridership does not grow, prime road space goes to buses running below capacity.

Ms. Degbotse also raises the livelihoods of trotro operators. A large shift of passengers could provoke resistance, while using trotros as feeders to major Aayalolo stops would extend coverage and give operators a place in the system. Prof. Adams attributes part of the original Aayalolo's failure to the government setting it up in competition with private operators who run without subsidy.

How reliable are the early numbers?

Ms. Degbotse tests the headline figure. Assuming 80 passengers per full bus, moving 8,000 passengers in two hours takes 100 bus trips, or 50 fully loaded trips per hour on one corridor. That does not disprove the figure, but it shows why GAPTE should publish the number of buses in service, their capacity, departure frequency, and how passengers were counted. Dr. Boakye agrees that the first-day results should be read as the start of the evaluation, not evidence of long-term success.

Operations and infrastructure

Several practical questions have received little public attention:

- **Bus repositioning.** After the morning run into Accra, how do buses return: through general traffic, by staging at terminals, or on the contra-flow lane under control? Dr. Boakye notes that the full operating cycle, not just the inbound trip, determines whether the service can scale.
- **Growth.** If ridership doubles, how many buses per hour can the corridor, terminals, and boarding areas safely handle? (Dr. Boakye)
- **Lane access.** If other operators are licensed to use the lane, clear standards on vehicle capacity, frequency, and stopping patterns are needed, or the lane will fill up and lose its advantage. (Ms. Degbotse)
- **Pavement.** Concentrated bus loading on particular lanes, especially at stops and intersections where buses brake and accelerate, calls for condition assessments, maintenance plans, and rehabilitation budgets. (Ms. Degbotse)

Part 2: Solutions and Recommendations

Recommendations

Immediate

- Publish operating data by corridor and direction: buses in service, departures, validated passenger counts, and travel times. (Ms. Degbotse, Dr. Boakye)
- Adopt a monitoring framework covering transit performance, traffic in both directions, safety (crashes, near misses, lane incursions, pedestrian conflicts), commuter behavior, pavement condition, and cost per passenger. Tools include GPS fleet data, automated passenger counts, video conflict analysis, before-and-after travel-time studies, and user surveys. (Dr. Boakye, Ms. Degbotse)
- Conduct a formal road safety audit of each segment's start and end, every intersection, and major pedestrian crossings. (Dr. Boakye, Ms. Degbotse)
- Prepare an incident management plan for crashes, disabled buses, and emergency vehicles. (Dr. Boakye)
- Set licensing criteria before opening the lane to other operators. (Ms. Degbotse)

Short to medium term

- Restore transit signal priority on Amasaman and the Accra Traffic Management Centre behind it, and coordinate signals along the corridors, beginning with the CBD to Madina. (Prof. Adams, NatDave)
- Replace escorts with engineered control: BUS ONLY markings, directional arrows, and advance warning signs; delineators or raised separators where feasible; protected turns or turn restrictions at conflict points; better crossings and lighting near stops, schools, and markets; speed management; and camera enforcement. These measures follow guidance from the National Association of City Transportation Officials (NACTO) and ITDP. (Dr. Boakye, Ms. Degbotse, Prof. Adams)
- Use the pilot to test alternatives, such as operating hours, bus frequencies, lane configurations, and signal timing, against baseline conditions and comparable corridors without contra-flow. (Ms. Degbotse)
- Plan trotro feeder services to major Aayalolo stops, with operators involved from the start. (Ms. Degbotse, Prof. Adams)

Long term

- Treat contra-flow as a step, not the destination. Dr. Boakye proposes a progression from mixed traffic, to peak-period bus priority, to protected bus lanes, to dedicated BRT

corridors where demand justifies it. Not every corridor needs full BRT; for some, peak-period contra-flow may remain the right and most cost-effective answer.

- Expand only on corridor-specific evidence. Directional traffic patterns, intersection spacing, road width, transit demand, and pedestrian activity vary, and a design that works on one corridor may need substantial changes on another. (Ms. Degbotse)

The Way Forward: A Corridor Study

Prof. Adams cautions that commentary alone carries little weight; proposals grounded in analysis of the actual network are more likely to be taken seriously. He proposes that GTPF take one corridor and test options through simulation:

1. Assemble a team of traffic modelers.
2. Obtain recent satellite imagery of the corridor.
3. Collect traffic data from Google, validated on the ground for traffic mix, speed, and throughput.
4. Define scenarios to test across a set of signals or part of the network.
5. Report the options and recommendations.

Applied to contra-flow, the study would look at bus stops, signal control and conflict points, and where with-flow and contra-flow operation each make sense.

About GTPF and the White Paper Series

The Ghana Transportation Professionals Forum (GTPF) is a private, non-profit, multidisciplinary group of transportation professionals, practitioners, and students, founded in January 2009 in Washington, D.C. Its mission is to promote innovation and sustainable development in transportation infrastructure and related systems through research, professional practice, policy development, and implementation. GTPF provides a platform for knowledge exchange and for collaboration with public and private leaders, agencies, and communities on transportation issues in Ghana.

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